

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2020

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report _____

Commission file number 001-39543

VIA optronics AG

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Federal Republic of Germany

(Jurisdiction of incorporation or organization)

**Sieboldstrasse 18
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Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
American Depositary Shares, each representing one-fifth of an ordinary share, €1.00 notional value per share	VIAO	New York Stock Exchange
Ordinary shares, € 1.00 notional value per share		The New York Stock Exchange*

*Not for trading purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

4,530,701 Ordinary Shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

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Note—Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☒

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards as issued
by the International Accounting Standards Board ☒

Other ☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report contains forward-looking statements concerning our business, operations and financial performance and condition as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements that are not of historical facts may be deemed to be forward-looking statements. You can identify these forward-looking statements by words such as “believes,” “estimates,” “anticipates,” “expects,” “plans,” “intends,” “may,” “could,” “might,” “will,” “should,” “aims” or other similar expressions that convey uncertainty of future events or outcomes. Forward-looking statements appear in a number of places throughout this annual report and include statements regarding our intentions, beliefs, assumptions, projections, outlook, analyses or current expectations concerning, among other things, our intellectual property position, results of operations, cash needs, financial condition, liquidity, prospects, growth and strategies, the industry in which we operate and the trends that may affect the industry or us.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics and industry change, and depend on economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this annual report, we caution you that forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. All of our forward-looking statements are subject to risks and uncertainties that may cause our actual results to differ materially from our expectations.

Actual results could differ materially from our forward-looking statements due to a number of factors, including, without limitation, risks related to:

- our ability to meet customers’ requirements for quality and performance or their demands as to timing or quantity;
- our dependence upon sales to certain customers and material fluctuation in purchase volumes period on period;
- our dependence upon our relationships with our strategic partners;
- our ability to develop new products and win business, to convert project wins into revenue and to manage our costs during the product development cycle;
- the impact of the ongoing novel coronavirus (“COVID-19”) pandemic;
- our ability to adapt to risks inherent in doing business on a global level and in particular in China, including tariffs, trade wars, pandemics (such as COVID-19), economic and geopolitical instability and changes in regulatory requirements;
- the length of the product development cycle for our original equipment manufacturer (“OEM”), Tier-1 Supplier, and other customers;
- our dependence upon the commercial success of our customers’ products;
- our dependence upon a limited number of suppliers for a number of our raw materials and equipment, including the silicone material used in VIA bond plus;
- delays in the production of our direct customers’ product offerings, including due to performance issues with, or supply shortages of, component parts unrelated to our solutions;
- volatility in the prices or availability of certain components and raw materials used in our business;
- our ability to protect our know how, trade secrets and other intellectual property;
- our ability to manage the expansion of our operations effectively;

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- our ability to attract and retain key management or other key personnel;
- our ability to raise additional capital on attractive terms, or at all, if needed; and
- the other risks described in “Item 3. Key Information—D. Risk Factors” of this annual report.

Any forward-looking statements that we make in this annual report speak only as of the date of such statement, and we undertake, except as may be required by law, no obligation to update such statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

The factors that could affect our future financial results are discussed more fully in “Item 3. Key Information—D. Risk Factors” and in our other filings with the U.S. Securities and Exchange Commission (the “SEC”). As a result of these factors, we cannot assure you that the forward-looking statements in this annual report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

We are organized as a German stock corporation (*Aktiengesellschaft* or *AG*), and our registered offices and most of our assets are located outside of the United States. In addition, most of the members of our management board, our supervisory board, our senior management and the experts named herein are residents of Germany and jurisdictions other than the United States. As a result, it may not be possible for you to effect service of process within the United States upon these individuals or upon VIA optronics AG or to enforce judgments obtained in U.S. courts based on the civil liability provisions of the U.S. securities laws against VIA optronics AG in the United States. Awards of punitive damages in actions brought in the United States or elsewhere are generally not enforceable in Germany. In addition, actions brought in a German court against VIA optronics AG or the members of its management board and supervisory board, its senior management and the experts named herein to enforce liabilities based on U.S. federal securities laws may be subject to certain restrictions; in particular, German courts generally do not award punitive damages. Litigation in Germany is also subject to rules of procedure that differ from the U.S. rules, including with respect to the taking and admissibility of evidence, the conduct of the proceedings and the allocation of costs. With very narrow exceptions, proceedings in Germany would have to be conducted in the German language, and all documents submitted to the court would, in principle, have to be translated into German. For these reasons, it may be difficult for a U.S. investor to bring an original action in a German court predicated upon the civil liability provisions of the U.S. federal securities laws against us, the members of our management board, supervisory board and senior management and the experts named in this annual report. In addition, even if a judgment against our company, the non-U.S. members of our management board, supervisory board, senior management or the experts named in this annual report based on the civil liability provisions of the U.S. federal securities laws is obtained, a U.S. investor may not be able to enforce it in U.S. or German courts.

PART I.

ITEM 1. Identity of Directors, Senior Management and Advisers

Not applicable

ITEM 2. Offer Statistics and Expected Timetable

Not applicable

ITEM 3. Key Information

A. Selected Financial Data

Not applicable

B. Capitalization and indebtedness

Not applicable

C. Reasons for the offer and use of proceeds.

Not applicable

D. Risk Factors

Summary of Risk Factors

The following summarizes some, but not all, of the risks provided below. Please carefully consider all of the information discussed in this Item 3.D. “Risk Factors” in this annual report for a detailed description of these and other risks.

Risks Related to Our Business and Industry

- Our solutions may not meet our customers’ requirements, which could result in a loss of customers or business.
- There are numerous potential alternatives to our display and touch technologies and materials and camera modules.
- We face intense competition within our industry and our competitors may introduce new display or touch sensor and/or camera-enabled solutions and specifications faster than we do, at lower prices or with better performance characteristics, may manage to reduce their costs at a greater rate than we do, or may benefit from support from corporate parents. Our failure to compete effectively with them could materially adversely affect our business, net assets, financial condition and results of operations.
- A limited number of customers account for a significant portion of our revenue. These customers can exert a significant amount of negotiating leverage over us, and revenue from them can be volatile. The loss of, or a substantial decline in sales to, one or more of these customers could have a material adverse effect on our revenue and profitability.
- Because we do not generally have long-term agreements with our customers and our customers generally are not obligated to purchase a minimum quantity of products or services from us, we could fail to match our production with our customers’ demand. Our results may suffer if we are not able to adequately forecast demand for our products.

Risks Related to Our Intellectual Property

- We may not be able to protect our trade secrets and other confidential information.
- If we are unable to obtain patent protection for or otherwise protect our intellectual property rights, our business could suffer.
- We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets and know-how of their former employers.
- Certain of our employees and patents are subject to German legal provisions on employee inventors.

Risks Related to Our Operations

- We may not be able to manufacture our products in the requested time frame or in volumes sufficient to meet customer demands, which could result in delayed or lost revenue and harm to our reputation.
- We may not be able to manage the expansion of our operations effectively in order to achieve projected levels of growth.
- We have identified a material weakness in our internal controls over financial reporting and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. If we fail to remediate our material weakness, we may not be able to report our financial results accurately or to prevent fraud.

General Risks

- A further or continued slowdown in the global economy could materially and adversely affect our business, results of operations and financial condition.

A description of the risks and uncertainties associated with our business is set forth below. You should carefully consider such risks and uncertainties, together with the other information contained in this annual report, and in our other public filings. If any such risks and uncertainties actually occur, our business, financial condition or results of operations could differ materially from the plans, projections and other forward-looking statements included elsewhere in this annual report and in our other public filings. In addition, if any of the following risks and uncertainties, or if any other risks and uncertainties, actually occur, our business, financial condition, or results of operations could be harmed substantially.

Risks Related to Our Business and Industry

Our solutions may not meet our customers' requirements, which could result in a loss of customers or business.

Our products must meet our customers' exacting standards for quality, performance and timely delivery. We design our solutions, usually in conjunction with our customers, on a project-by-project basis to meet specific customer specifications. By way of example, each metal mesh touch sensor must be customized to reflect the sensor pattern specified by our customers and the camera lenses in our camera modules must be aligned at the right angle within the sensor housing to enable proper viewing and functionality. Even for those projects where we have the autonomy to select certain components for integration into a finished display, we must select components that satisfy our customers' technical requirements. We have in the past had, and may in the future have, products that do not meet our customers' requirements due to production deficiencies, the inability to produce the requested amount of products on time or other reasons. Any failure to satisfy our customers' requirements in the past have resulted in, and in the future could result in, customers reducing or ceasing their business with us, or could require that we incur additional costs, for example by sourcing alternative components for use in the products that we deliver, which would have a material adverse effect on our business, financial condition and results of operations.

Our failure to develop, introduce and produce new products, solutions and technologies or enhancements to existing products, solutions and technologies on a timely basis, at sufficient quality or quantity, or at competitive prices, could harm our ability to attract and retain customers.

We and our customers operate in intensely competitive industries that are characterized by rapidly evolving technology, frequent product introductions and ongoing demands for ever greater performance and functionality. New products and new or improved technologies, such as the three dimensional glass-on frame cold forming technology developed by one of our commercial partners, Corning Research & Development Corporation (“Corning”), or new industry standards in the end-user markets, can render other existing products and services obsolete and unmarketable and motivate our customers to seek our support or the support of others in designing and manufacturing new products and/or to demand reductions in price for existing products and solutions. We therefore must continually identify, design, develop and introduce new and updated solutions for a variety of industries with improved features to remain competitive. To do this, we must:

- design innovative and performance-improving features that differentiate our products and solutions from those of our competitors, such as application to curved surfaces, enhanced touch sensitivity, expanded camera-enhanced functionality, thinner display sizes, infrared and facial recognition and seamless system integration, such that our OEM customers are able to offer products that are differentiated from their competition;
- accurately define and design new products and solutions to meet market needs, such as electronic rearview mirror replacement systems and autonomous driving solutions, which require significantly enhanced software and other technical expertise;
- anticipate changes in end-user preferences with respect to end products, such as widespread use of touch functionality and interactive display solutions;
- rapidly develop and produce our products and solutions at competitive prices and quality;
- anticipate and respond effectively to technological changes or product announcements by others; and
- provide effective post-sales support to our direct customers for defects in our new products and solutions following deployment.

The process of developing new products and solutions and enhancing existing products and solutions is complex, lengthy, costly and uncertain. In certain instances, we may be dependent on collaborations with commercial partners to develop new products and solutions, such as Corning with respect to cold-formed glass applications or Integrated Micro-Electronics, Inc. (“IMI”), an affiliate of our majority shareholder, with respect to camera module design and functionality. If we are unable to maximize these or other collaborations or are unable to find future collaboration partners, or if the commercial relationship were to break down, our ability to develop new solutions may be adversely impacted. If we fail to anticipate our customers’ changing needs or emerging technological trends, our market share and results of operations could materially suffer. We must make long-term investments in our research and development capabilities, including product development and equipment customization, develop or obtain appropriate know-how and intellectual property and commit significant resources, including to enhance and prepare our production capacity and software design capabilities, before knowing whether our predictions will accurately reflect customer demand for our products and solutions. As we design and develop new technological solutions, including interactive display solutions, we may face challenges and additional costs, in particular in areas like camera module design and software development where we have less experience. Furthermore, we may incur development costs on specific customer projects, and we may not be able to recoup such costs if our customers do not purchase the number of units that we expect. If we are unable to adapt our products to new technological industry standards or customer requirements, including with respect to the incorporation of enhanced features (such as interactive camera module technology or facial recognition) or functionality (such as glove functionality and software interactivity), the market’s acceptance of our products and solutions could decline and our results would suffer. Furthermore, even if we are able to develop new products and solutions or enhance our existing products to meet our customers’ expectations, if we are unable to achieve such developments on a cost effective basis or at sufficient quality or quantity, our customers may elect not to purchase our products or solutions and we may lose market share.

There are numerous potential alternatives to our display and touch technologies and materials and camera modules.

Optically bonded displays are more expensive than organically bonded (or air-gapped) displays and, as a result, may not be best suited for applications, specifically within the consumer electronics market, in which the highest quality performance characteristics (such as highly responsive touch functionality, sunlight readability and shock and temperature resistance) are not required. A number of companies produce organically bonded displays that do not have these high-quality performance characteristics, but can compete with our display offerings in other ways. In addition, our optically bonded displays must compete with displays that are optically bonded using different techniques than the ones we employ, including liquid or dry optical bonding using epoxy or polyurethane. Companies are making substantial investments in, and conducting research to, improve the characteristics of these organically bonded displays and alternative optical bonding techniques that may improve functionality or lower the cost of their optically bonded displays. This could cause our customers to choose such products over our offerings. With respect to the cold forming technology we are developing with our collaborator, Corning, alternatives in the market exist, including “hot formed” products. The hot forming process is more complicated and more expensive as compared to the cold forming process, which produces flat glass which is then shaped or molded after processing and held in place by a frame. In the hot forming process, glass is heated and shaped and, once formed, processed (for example, coated or colored). The technical complexities of the process of handling a non-flat glass also results in a significantly lower yield, which increases production costs of hot formed glass. The advantage of hot formed glass, however, is that it is not under mechanical tension after forming, unlike cold formed glass which needs to be held in place by a frame after forming.

Our metal mesh touch sensor technology is subject to competition from other producers of metal mesh touch sensors that use copper as the conductive material, silver mesh sensor and nano layer technologies that facilitate touch-enabled display capability, and from the integration of in-cell or on-cell touch sensing functionality into displays. Advances in these technologies may result in increased competition to our metal mesh touch sensor technology, the impact of which may be compounded as enhanced touch-enabled displays replace existing conventional displays. In addition, our camera modules and related solutions are subject to competition from other producers. See “Business— Competition.”

We face intense competition within our industry and our competitors may introduce new display or touch sensor and/or camera-enabled solutions and specifications faster than we do, at lower prices or with better performance characteristics. Our competitors may manage to reduce their costs at a greater rate than we do, or may benefit from support from corporate parents. Our failure to compete effectively with them could materially adversely affect our business, net assets, financial condition and results of operations.

We face global competition in the market for display solutions and competition for our touch sensor and camera-enabled solutions. Some of our current and potential competitors may have a number of advantages over us, including:

- a longer operating history;
- greater name recognition and marketing power;
- preferred vendor status with our existing and potential customers, including OEMs and Tier-1 suppliers;
- significantly greater financial, technical, research and development, personnel, sales and marketing and other resources, including benefiting from support from governments or corporate parents;
- the ability to respond more quickly to new or changing opportunities, technologies and customer requirements;
- more experience developing and manufacturing specific technologies and/or related software;
- broader product and services offerings to provide more complete solutions; and
- lower cost structures.

Consolidation among our competitors could also result in the formation of larger competitors with greater market share and greater financial and technological resources than we have, further increasing competition in the markets we serve. Furthermore, in some cases, our customers for certain products or services, such as consigned optical bonding services, may also be our competitors with respect to other aspects of our business, such as producing enhanced display solutions, and they could cease purchasing products or services from us.

Despite our planned investments in research and development and engineering, our products and process technologies may fail to keep pace with our competitors' ability to produce new technologies, higher quality display solutions at a lower cost, and our competitors may be able to offer their products on a more price-competitive basis than we can. If our development fails to keep pace, and as a result of the intense competition in the market for display solutions and competition for touch sensor solutions, we may encounter significant pricing pressure and/or suffer losses in market share. For example, our competitors have in the past and may again in the future lower prices in order to increase their market share, which would ultimately reduce the prices we may realize from our customers. If we are unable to defend our market share by continually developing new products and solutions and/or reducing our own cost base, the pricing pressure exerted by our competitors could cause us to lose important customers or lead to falling average selling prices and declining margins. We may not be able to offset the effects of any price reductions with an increase in the number of products sold, cost reductions or otherwise, which could adversely affect our business, financial condition and results of operations. See "Business—Competition" for more information on competition in our business.

A limited number of customers account for a significant portion of our revenue. These customers can exert a significant amount of negotiating leverage over us, and revenue from them can be volatile. The loss of, or a substantial decline in sales to, one or more of these customers could have a material adverse effect on our revenue and profitability.

For 2020 and 2019, we derived 80.9% and 73.7%, respectively, of our revenue from our five largest customers Dell, Pegatron, Toppan, AU Optronics and TOA, and 38.8% and 30.5%, respectively, of our revenue from our largest customer. We expect to continue to derive a significant percentage of our revenue from a limited number of customers for the foreseeable future, and our results of operations may fluctuate materially as a result of changes in such customers' buying patterns. For the year 2020 we experienced an increase of 12.2 % in our display solution segment compared to the comparable period in 2019, principally due to higher than anticipated demand from our key customers Dell and Pegatron. This increase was caused by a strong increase in laptop demand in general and especially in the ruggedized industrial sector for laptops. During the year ended December 31, 2019, for example, our revenues declined approximately 24.6% in our display solutions segment as compared to the comparable period in 2018, principally due to lower than anticipated sales to three key consumer end-market customers, Dell, AU Optronics and Mutto. The decline in revenue from Dell during this period resulted from delays in Dell's production cycle that were triggered by a shortage in microprocessor chips, which are central to Dell's product offerings. As a result of these production delays, Dell reduced its purchases with us during this period. The decline in revenue from AU Optronics during 2019 resulted from lower sales by AU Optronics to one of their customers that experienced production declines during this period, which led AU Optronics to correspondingly reduce their purchases from us during the relevant period. While the simultaneous combination of these events was unusual for our business, we are not necessarily able to anticipate or influence external events, such as customer production delays and the availability of component parts, and one or more such events could occur at any time or from time to time which, individually or in combination, could materially and adversely impact our sales, revenues and profitability.

Moreover, our top customers may decide not to continue to purchase products from us at current levels or at all. The loss of any significant customer (or customers that in the aggregate represent a significant portion of our revenue) or a material reduction in the amount of business we undertake with such customers could have a material adverse effect on our revenue and profitability. In addition, our customers can demand and have in the past demanded reduced prices or other pricing, quality or delivery commitments as a condition to their purchasing from us or increasing their purchase volume, which can, among other things, result in reduced gross margins in order to maintain or expand our market share. If we are unable to retain and expand our business with our customers on favorable terms, or if we are unable to achieve gross margins that are similar to or more favorable than the gross margins we have historically achieved, our business, financial condition and results of operations may be materially adversely affected.

Our customers' negotiating leverage can also result in customer arrangements that may contain liability risk to us. For example, some of our customers require that we provide them with indemnification against certain liabilities,

including claims of losses by their customers caused by our products. Any increase in our customers' negotiating leverage, including with respect to indemnification, may expose us to increased liability risk, which, if realized, may have a material adverse effect on our business, financial condition and results of operations.

Because we do not generally have long-term agreements with our customers and our customers generally are not obligated to purchase a minimum quantity of products or services from us, we could fail to match our production with our customers' demand. Our results may suffer if we are not able to adequately forecast demand for our products.

It is not industry practice to enter into firm, long-term purchase commitments. Sales to our customers and arrangements for prototype development are generally governed by framework agreements that do not include minimum purchase quantity requirements. Although we consult with major customers who typically provide us with forecasts of their product requirements, customers may choose to operate under non-binding arrangements, may not contract for products as forecasted, may cancel orders that they do place or reduce the quantities ordered from us for a number of reasons and with limited or no notice. They may also discontinue their relationship with us at any time, potentially without penalty. The timing of customer orders can have a material impact on our revenue and result in volatility of revenue period-on-period. If we are unable to predict accurately the amount of products needed to meet customer requirements, or if customers were to unexpectedly cancel or reduce a large number of orders simultaneously, as we experienced in 2019, our production could significantly exceed our customers' demand and, due to the bespoke nature of many of our products, it would be difficult to find alternative customers for the unsold products and we would be unable to quickly transition production to alternative projects. This could materially and adversely affect our business, financial condition and results of operations.

In addition, in the automotive end-market we may be required to deliver products over a long period of time without having any commitments from our customers to purchase minimum volumes of such products throughout that period and/or maintain replacement inventory and spare parts to support post-sale maintenance obligations. This means that our production facilities need to maintain the capability to produce such products over a long period of time, potentially on short notice, including through reserving or re-tooling machines which could be used for other projects, in order to meet demands for our products over time. As a result, we also need to maintain spare inventory in good working condition for extended periods which can be difficult and involve significant expense. In addition, until we are awarded a project and the relevant operating procedures are determined, changes in design, product specification, quantities and materials may occur which could make it difficult for us to meet the customer's demand on the schedule the customer requires. Failure to meet the demands of our customers in the automotive end-market could materially and adversely affect our business, financial condition and results of operations, as well as harm our reputation and relationships with our automotive customers.

We are highly dependent on the success of our customers and their sales to certain end-markets.

Our customers are not the end users of our product offerings, but rather they use our products and solutions as a part of their products, which are ultimately sold to an end user. In the case of metal mesh touch sensors, we usually function as a component supplier selling touch sensors to third parties for incorporation into their own finished products, which are subsequently sold to OEMs, Tier-1 suppliers and other suppliers for inclusion in end-user products. Our success depends in large part on the ability of our customers to market and sell their end products that incorporate our products. In 2020 Dell was able to support increased market demand very well, so we could participate from that increase. If any of our customers' end product marketing efforts are unsuccessful or if our customers experience a decrease in demand for such products such as with AU Optronics in 2019, our sales and/or profitability will decline. Some of the end-markets in which our customers operate are characterized by intense competition, rapid technological change and economic uncertainty, and as such we may be unable to replace the revenue associated with the loss of any one key customer with new business relationships. If we are unable to collaborate with and secure design wins with successful OEMs, we may not create meaningful demand for our products. Moreover, if any of our customers choose to focus their efforts on programs and end products that do not incorporate our products and solutions, we may experience decreased demand for our products. Any of these circumstances may materially and adversely affect our business, financial condition and results of operations.

Our business and financial condition may be materially and adversely affected by the ongoing novel COVID-19 pandemic.

A significant outbreak of contagious diseases in the human population that causes a widespread health crisis could adversely affect the economies and financial markets of many countries, resulting in an economic downturn that could affect our operating results. In particular, the impact of the COVID-19 pandemic, including widespread illness, market downturns, restrictions on business and individual activities, changes in consumer behavior, and uncertainty regarding the future course of the pandemic, has created significant volatility in the global economy and led to a steep drop in economic activity and a sharp reduction in demand for certain of the end products in which our products are installed, including automobiles. We have taken numerous steps to mitigate the impact of the pandemic on our cost base and results of operations, including implementing a work-from-home policy for non-manufacturing employees and alternative production shifts for our manufacturing operations. Furthermore, we engaged in cost reduction activities such as ceasing the recruitment of personnel. As a result of the pandemic, there was a notable impact in revenue during the first quarter of the year 2020 which was offset by higher demand in consumer and industry sector in the following three quarters for the year ended December 31, 2020. Nevertheless, the pandemic can adversely affect our supply chains, logistics, and the availability of our workforce, and there can be no assurance that our cost saving initiatives will be successful or that COVID-19 won't have an adverse impact on our revenue in future.

We derive a significant portion of our revenue from China and have manufacturing facilities in China and Japan. As a result of the COVID-19 pandemic, our operations have experienced certain delays and disruptions, including temporary suspension of operations. In March 2020, the Chinese government imposed temporary closures of all factories, including our production facilities located in Suzhou, China for a period of one week. In addition, due to travel restrictions within China as a result of the COVID-19 pandemic, it took several weeks after re-opening for our facilities to return to 100% production capacity. In Japan, VTS temporarily halted production for two weeks in March 2020 due to decreased order volume but has since resumed normal production capacity. In addition, the COVID-19 pandemic has significantly disrupted, and may continue to disrupt, the industries in which our customers and suppliers do business, including in particular the automotive industry. Such disruptions include the manufacturing, delivery, overall supply chain of our customers and suppliers and a reduction in automobile sales globally. As a result, we may experience declines in the production and distribution of our products, and the loss of sales and production volumes may be volatile. If the global economic effects caused by the pandemic continue or increase, overall customer demand in certain markets may continue to decline which would have a material and adverse effect on our business, results of operations and financial condition.

A prolonged downturn in regional and global economic conditions would likely result in us experiencing a significantly negative cash flow.

In addition, if the COVID-19 pandemic continues or worsens and a significant portion of our workforce, our suppliers' workforce, or our customers' workforce are affected, either directly or due to new or extended government closures, associated work stoppages, facility closures or other similar occurrences could halt or further delay production.

The full impact of the COVID-19 pandemic on our financial condition and results of operations will depend on future developments, such as the ultimate duration and scope of the outbreak, its impact on our customers and suppliers, how quickly, and to what extent normal economic and operating conditions, and the demand for our products across our end-markets can resume and whether the pandemic leads to recessionary conditions in any of our key markets that may continue to impact customer demand and the financial instability or operating viability of our suppliers and customers. While we have not experienced prolonged supply chain interruptions or material cancellations of orders, the rapid development and fluidity of the situation presents uncertainty and risk with respect to our business, financial condition and results of operations.

As of April 2021, multiple variants of the COVID-19 virus are circulating globally that are highly transmissible, and there is uncertainty around vaccine effectiveness on the new strains of the virus. Uncertainty around vaccine distribution, supply and effectiveness will impact when the regional and global economic effects as a result of COVID-19 will subside or end and the timing of such recovery may affect our financial condition.

We are dependent upon our relationship with Toppan Touch Panels Products Co., Ltd., (“Toppan”), the minority owner of VTS-Touchsensor Co., Ltd., Higashi Omi, Japan (“VTS”), with respect to the production and sale of our metal mesh touch sensor technology.

We produce and sell our metal mesh touch sensors and films through VTS, our subsidiary in which Toppan is the minority investor. In 2020 and 2019, 16.7% and 17.4%, respectively, of our revenue was generated by VTS. VTS’s business operations were established through a series of commercial agreements between us (or VTS) and Toppan. These agreements include: a shareholder agreement, an intellectual property transfer agreement, an intellectual property license agreement, facility lease agreements, employee secondment agreements, a business assistance agreement and an R&D and consignment agreement. Pursuant to these agreements, Toppan transferred patents and patent applications relating to its sensor technologies to VTS. Additionally, Toppan agreed to lease to VTS plant buildings for two manufacturing sites in Japan to produce VTS’s products, and to provide the majority of plant employees. The employee secondment arrangements with Toppan had an original expiration date in March 2021 and we are currently in negotiations to extend them. If the extension is not successfully concluded, we run the risk of not having sufficient employees to staff our manufacturing sites, potential delays as a result of hiring, onboarding and training new employees and increased salary costs associated with replacing or supplementing our staffing requirements, any of which could materially affect our operations. VTS’s research and development activities are delegated to Toppan under an R&D and consignment agreement. The shareholders agreement also includes certain non-competition, lock-up and deadlock put/call provisions that govern certain of our and Toppan’s rights and obligations with respect to VTS. The deadlock put/call provisions additionally provide that in the event of a deadlock between us and Toppan, we could be entitled to or become obligated to acquire all of Toppan’s interest in VTS at certain pre-negotiated price thresholds. Under the commercial agreements with Toppan, if Toppan ceases to own an equity interest in VTS, Toppan is permitted to terminate these commercial agreements without our consent. Accordingly, the continuation and success of our metal mesh business is highly dependent on Toppan and on our agreements with Toppan. There can be no assurance that we will be able to complete the registration process for any patent applications transferred by Toppan to VTS to perfect VTS’s rights in such intellectual property or that VTS will have access to the most qualified Toppan personnel for purposes of carrying out its operations. If any of the commercial agreements with Toppan were to terminate, our relationship with Toppan were to deteriorate or if Toppan elected to prioritize its wholly-owned business over that of VTS, VTS’ business operations would be materially and adversely impacted and it would have a material adverse effect on our ability to produce and sell metal mesh touch sensors and recognize the related revenue. In addition, if we were obligated pursuant to the put/call provisions in the shareholders agreement to acquire all of Toppan’s interest in VTS our cash flow in the relevant period would be materially and adversely affected. The occurrence of these or related events would have a material adverse effect on our business, financial condition and results of operation and financial condition.

We may not be able to maximize the benefits of our strategic partnership with Toppan or effectively collaborate with them in the future.

On March 29, 2018, we acquired a 65% interest in VTS from Toppan. We may not be able to maximize the benefits of our strategic partnership with Toppan in the future or may not collaborate with them effectively, and our failure to do so successfully may have a material adverse effect on our business, financial condition and results of operations, including, among other things, through disruption of operations at facilities we lease from Toppan, loss of Toppan employees providing services to VTS, failure to successfully execute on and maximize the benefits to us under ongoing agreements with Toppan, potential infringement of third-party intellectual property rights by products manufactured by VTS based on intellectual property rights licensed/obtained from Toppan or those developed by VTS with the assistance of Toppan and issues relating to regulatory compliance in production processes operated by Toppan employees.

Winning business is often subject to a competitive selection process that can be lengthy and requires us to incur significant expense, and we may not be selected.

In many cases, we must win competitive selection processes, resulting in so-called “design wins”, before we can supply customers with our products and solutions. These selection processes can range from approximately six months to 30 months, depending on the end-markets and the customers and can require us to incur significant design and development expenditures. We may not win the competitive selection process and may never generate any revenue despite incurring significant design and development expenditures, including prototype development and tooling costs. The new product selection processes we seek to enter are determined by our sales team based on their judgment and

experience. Even if we are successful in obtaining design wins, there is no guarantee that our sales team will have identified and pursued the most lucrative selection processes or those that will generate revenue. Because we typically focus on only a few customers in a given product area, the loss of a design win may result in our failure to have our technologies added to new generation products in that area. This can result in lost sales and could hurt our position in future competitive selection processes to the extent we are not perceived as being a technology leader.

After winning a product design for one of our customers, we may still experience delays ranging from one quarter to eight quarters (depending on the end-market and the specific life cycle of each product) in generating revenue as a result of lengthy customer development and design cycles or we may be unable to ramp up production for customers, in particular new customers, on a timely basis. In addition, a change, delay or cancellation of a customer's plans could significantly adversely affect our financial results, as we may have incurred significant expense and generated no revenue or materially less revenue than we expected. Finally, even if a design is introduced, if our customers fail to successfully market and sell their products, it could materially adversely affect our business, financial condition, and results of operations.

We may not realize our strategies, including our goal of becoming a leading provider of interactive display solutions, in particular to OEMs and their Tier-1 suppliers.

Our goal is to become a leading provider of interactive display solutions, in particular to OEMs and their Tier-1 suppliers, specifically within the automotive and industrial/specialized markets, and to continue to deliver innovative products for our customers in the consumer end-market. However, we may be unsuccessful in achieving this goal. We believe our primary risk to achieving this goal is related to maintaining and developing required design resources in timely manner. In addition, overall demand and market conditions may impact our ability to achieve this goal.

Furthermore, even if we are able to collaborate with key OEMs as a design partner to incorporate our products and solutions into their end products and produce attractive interactive display solutions, there are always unforeseeable risks such as technical problems, which could result in OEMs reducing their use of our products and solutions or ceasing their collaborations with us entirely.

Our OEM, Tier-1 supplier and other customers' product offerings can be subject to lengthy development periods, making it difficult to predict when and whether we will receive revenue for our products that are incorporated into their offerings.

The product development process for our OEM, Tier-1 supplier and other customers can be lengthy, and in some instances may last for longer than two years, in particular when we are developing prototypes for evaluation and use by new customers. We may not earn revenue from our solutions unless and until products featuring our technologies are shipped to our customers, and prior to such time we may incur unreimbursed costs, which at times may be significant, for product development. Throughout the product development process, we face the risk that a manufacturer or supplier may delay the incorporation of, or choose not to incorporate, our technologies into its products, making it difficult for us to predict the revenue we may receive, if any. Furthermore, the expectations set out by our OEM and supplier customers in our framework agreements with respect to the timing for shipment of end-user products and realization of related revenue and ongoing sales forecasts may be inaccurate in whole or in part. After a product launches, our revenue still depends on market acceptance of the end-user product and the option packages if our technology is an option (for example, a navigation or entertainment unit), which are likely to be determined by many factors beyond our control.

Our products and solutions are one of many components incorporated into our customers' product offerings and our business may be harmed, potentially significantly, if our direct customers experience delays in the production of their product offerings, including due to performance issues with, or supply shortages of, component parts unrelated to our products and solutions.

Our customers generally use our products and solutions as one of the components or portions of their offerings to their own customers, who in turn sell these offerings to end users. Accordingly, our success depends in large part on the ability of our customers to market and sell their offerings that incorporate our products and solutions. Our customers' product offerings are usually complex and may involve many different systems and components, and their ability to sell their products depends on many factors, including the availability of component parts, raw materials and other necessary services; the proper functioning of each of these components and the timeliness and effectiveness of their own processes.

Supply delays, raw material shortages or the failure or under-performance of components unrelated to our products and solutions may impact our business even when we are able to deliver our products and services timely and defect-free. These factors may cause delays in our customers' production cycles, may cause our customers to cut back or delay their purchases of our products and solutions or may lead them to cease purchases from us entirely or for periods of time while they address their production issues. Because our customer agreements typically do not specify minimum order requirements by our customers, our customers usually have no obligation to purchase our products or solutions if they experience supply issues unrelated to our products or solutions, or to make any prepayments to us. For example, during the year ended December 31, 2020, our revenues increased 12.2% in our display solutions segment as compared to the comparable period in 2019, principally due to higher sales to two key consumer and industrial end-market customers, Dell and Pegatron. On the other hand, sales to Mutto declined significantly due to Mutto's decision to perform its requisite optical bonding process in-house pursuant to a license granted by us.

The decline in revenue from AU Optronics in 2019 resulted from lower sales to one of their customers that experienced production declines during this period, which led AU Optronics to correspondingly reduce their purchases from us during the relevant period. During any period in which one or more key customers materially reduces or suspends purchases of our products or solutions, we may incur stranded costs or accumulate inventories that cannot be readily sold to other customers or at all, and we may be unable to shift our production capacity to other projects that have equivalent or more favorable cost structures. Production issues or delays like these may occur in the future, often with little or no advance notice. As a result, any issues with respect to the manufacture or production of our customers' products could materially and adversely affect our ability to sell our products and solutions and may materially and adversely affect our business, financial condition and results of operations.

We depend on a limited number of suppliers, some of which are sole sources, and our business could be disrupted if they are unable to meet our needs.

We depend on a limited number of suppliers of our key materials, including bonding materials and custom equipment used to manufacture and test our products, and key design tools used in the design, testing and manufacturing of our products. We currently source all of our requirements for the silicone base materials used in our *VIA bond plus* from a sole supplier, Wacker Chemie AG ("Wacker"), or Wacker. With suppliers other than Wacker, we do not have long-term agreements and instead purchase materials and equipment through a purchase order process. As a result, these suppliers may stop supplying us materials and equipment, limit the allocation of supply and equipment to us due to increased industry demand or significantly increase their prices at any time and with little or no advance notice. From time to time, our suppliers have limited supply or change their pricing terms with little or no advance notice, and our agreements with them generally do not provide remedies for such events. The impact to us of such adverse actions by our suppliers in the future could be heightened because of our reliance on sole source suppliers or a limited number of suppliers and could result in delivery problems, reduced control over product pricing and quality, including because our sole source suppliers could prioritize other customers' business over ours. These suppliers could also exert a significant amount of negotiating leverage over us, which may require us to accept higher prices or other obligations in order to maintain or expand our relationship. Some of our suppliers may experience financial difficulties that could prevent them from supplying us materials, or equipment used in the design and manufacture of our products. In addition, our suppliers, including our sole source suppliers, may experience manufacturing delays or shutdowns due to circumstances beyond their control such as labor issues, political unrest or natural disasters. Our suppliers, including our sole source suppliers, could also determine to discontinue the manufacture of materials, components, equipment or tools that may be difficult for us to obtain from alternative sources. In addition, the suppliers of design tools that we rely on may not maintain or advance the capabilities of their tools in a manner sufficient to meet the technological requirements for us to design advanced products or provide such tools to us at reasonable prices.

Further, the industry in which our suppliers operate is subject to a trend of consolidation. To the extent this trend continues, we may become dependent on even fewer suppliers to meet our material and equipment needs. In the event we need to establish relationships with additional suppliers, doing so may be a time-consuming process and would require significant training and education of such suppliers, and there are no assurances that we would be able to enter into necessary arrangements with these additional suppliers in time to avoid supply constraints in sole sourced components or that such suppliers would be able to immediately perform at levels required to meet our requirements and/or specifications.

We are dependent upon Wacker as the sole source of the base silicone material used in our VIA bond plus adhesive. Should Wacker become unable to supply us with sufficient quantities of these materials, we may be unable to replace these supplies with alternative materials quickly, on reasonable terms or at all.

Wacker is the sole supplier to us of the base silicone material we use to prepare our *VIA bond plus* adhesive, a critical element in our optical bonding process. We are party to a Framework Cooperation Agreement with Wacker, dated April 8, 2019, that replaced an earlier agreement between Wacker and us originally signed in 2013. Wacker currently produces silicone materials in accordance with specifications we have provided, and in the context of our commercial relationship with Wacker, those specifications have been refined and developed over a period of years under the prior agreement. With respect to the continued supply of silicone materials, the new Framework Cooperation Agreement provides as follows: (i) Wacker is required to exclusively provide us with the base silicone material used in our *VIA bond plus* adhesive per the specifications set forth in such agreement so long as we satisfy a minimum delivery amount per calendar year, (ii) we are required to purchase all of our requirements of our silicone materials from Wacker, if the silicone material is suitable for the project and approved by our customer and except to the extent that Wacker is unable to meet our requirements (which Wacker is required to confirm in writing within one week of our request for material) in which event we are permitted to obtain a suitable different material, (iii) the price of such material shall be mutually negotiated each year during the fourth quarter, with the contract being terminable if the parties are not able to agree on terms and (iv) Wacker's liability is limited as it solely warrants that the silicone material will meet the specifications provided in the agreement. The Framework Cooperation Agreement has an initial term ending December 31, 2021 and thereafter automatically renews for successive one year terms unless it is earlier terminated on six months' advance notice.

The new Framework Cooperation Agreement also establishes Wacker and us as development partners for materials in the area of optical bonding. The agreement further provides that it is not intended to affect any pre-existing intellectual property rights of the parties or to effect any cross-licensing of intellectual property.

We have qualified an alternative supplier for a different silicone material to use in the preparation of the bonding adhesive employed in our optical bonding process if Wacker is at any time unable to fulfill our requirements. However, we may be unsuccessful in obtaining alternative sources of supply if such supplier, or any alternative suppliers, are unable to deliver silicone materials of the same quality or quantity, on similar commercial terms or in as timely a manner as Wacker has delivered silicone materials in the past. We must also ensure that we do not infringe any intellectual property rights of others, including Wacker, in our sourcing from alternative suppliers. Further, Wacker could insist on price increases that will not be acceptable to us, including price increases effective in 2021, and therefore result either in the termination of the agreement, which could cause uncertainties in the sourcing of the base silicone material, or, if we have no reasonable alternative to accepting the higher prices, could cause our margins to decrease. If we are not able to secure an alternate source of supply for our bonding material, on commercially reasonable terms, our ability to fulfill customer orders could be materially and adversely impacted and we could experience a material and adverse effect on our financial condition, results of operations or cash flows.

We have a limited number of suppliers and our business may be harmed if they were to interrupt supply or increase prices.

Any supply deficiencies in the industry relating to the quantities of materials, equipment or tools we use to design and manufacture our products, or a reduction in the quality of such materials, equipment or tools, could materially and adversely affect our ability to fulfill customer orders and, as a result, our results of operations. Our manufacturing operations depend upon obtaining deliveries of base equipment at reasonable prices and on a timely basis to enable our customization and utilization of such equipment in our manufacturing process. Our proprietary equipment is sophisticated and complex and it may be difficult for us to rapidly substitute one supplier for another or one piece of equipment for another. We aim to have multiple suppliers for all equipment needed in our production processes including camera modules. However given that we operate in a highly technologically driven market, there may be a limited number of suppliers available for certain customized production equipment.

In addition, lead times for the purchase of certain materials, equipment and tools from suppliers have increased and in some instances have exceeded the lead times provided to us by our customers. In some cases, these lead time increases have limited our ability to respond to or meet customer demand. We have in the past, and may in the future, experience delays or reductions in supply shipments, which could reduce our revenue and profitability. In addition, potential regulatory changes, including tariffs or other restrictions imposed by the United States or others, could in the

future prohibit, or increase our costs relating to, the use of suppliers in certain regions, including China. If key components or materials are unavailable or limited in availability, our costs would increase and our revenue would decline.

The expansion of production facilities by us or malfunction of our current equipment may put additional pressure on our supply chain. If we are unable to obtain any equipment necessary to expand our production capacity in a timely manner, we may be unable to ramp up production according to our plan or fulfill our customer orders, which could negatively impact our business, financial condition and results of operations.

We operate without contracts with some of our suppliers.

In the ordinary course of business and consistent with industry practice, we operate without contracts with some of our suppliers, particularly in Asia. These suppliers currently include suppliers of off-the-shelf displays that we incorporate into certain product offerings when required by our customers or when it is cost effective to do so because our enhanced display capabilities are not needed. In the event that we encounter any disruptions or disagreements with these suppliers, we may face difficulty in seeking remedies and enforcing judgments in the absence of a contract governing our commercial relationship with these suppliers. In addition, some agreements with our suppliers have expired and have not been re-negotiated. Any inability to enter into new agreements with these suppliers in a timely manner could result in us having to agree to less favorable terms, could disrupt our supply of materials and could increase our risk of litigation in the event that these suppliers cease performing under the prior contracts during the course of our negotiations with them.

We may face volatility in the prices or availability of certain components and raw materials used in our business, which could adversely impact the competitive position of our products or may result in a decrease of margins and profits.

We use various components, including silicones, cover lenses, backlights, display housings, and raw materials, such as copper, in our products. The costs of components and raw materials depend to a large extent on the world market prices, which may be subject to significant fluctuations beyond our control.

If the prices for raw materials and purchased components were to rise, our manufacturing costs could increase. If our manufacturing costs increase, we could be forced to cover our need for these raw materials and purchased components with higher prices of our products, which could result in lower sales, or if we are not able to increase prices due to fixed price contracts, competitive pressure or otherwise, to lower margins and profitability. We do not hedge raw material prices. Furthermore, to the extent that we rely on components that are pre-assembled or manufactured for others, a shortage in such components would require us to find alternative manufacturers of these components or to manufacture these components ourselves, which may be time consuming, costly or not possible. Shortages of necessary raw materials or component parts may also cause a sharp rise in their prices. In the event of any disruption or delay in supply, it may be difficult to locate alternative sources of components from one or several suppliers and doing so may require a significant amount of time and resources. A delay in the delivery of necessary raw materials or component parts could result in delays in projects or delivery of products, which could ultimately delay deliveries of our products to our customers. If we were permanently to lose a supplier of or access to important raw materials or component parts, we also might be forced to alter the design of certain of our products in order to use raw materials or component parts from other suppliers. In extreme cases, this could mean that we would be at least temporarily unable to produce, supply or service certain of our products. Such inability could impair our relationship with our customers and have a material adverse effect on our business, financial condition and results of operations.

We utilize floating and fixed pricing arrangements with our customers. Unless specifically agreed with customers, if a contract with a customer provides for fixed prices, it is generally difficult for us to pass on increased prices for raw materials and purchased components. Sustained increases in prices for raw materials and purchased components that cannot be passed onto our customers would have a material adverse effect on our business, financial condition and results of operations.

We face payment risk from our customers.

We are subject to a number of trade risks including long accounts receivable payment cycles and difficulties in collecting accounts receivable in certain countries. For example, our accounts receivable are generally subject to 60 to 90

day payment cycles. We may be unable to successfully manage all of these risks, many of which are outside our control, which could lead to payment default by a customer. We currently have no insurance coverage for such payment defaults. Delays in the implementation of, or in payments related to, significant orders and projects may also have a negative effect on the timing of our revenue, which may adversely impact our operating results and our ability to make capital expenditures or investment in research and development. Any interruption in the realization of our revenues could require us to engage in short term borrowings under our existing working capital financing facilities, or require us to seek additional sources of financing, in order to meet our working capital requirements, which would result in increased borrowing costs. These would impact our profitability, assuming we are able to source such borrowings; if we are unable to finance our capital expenditures or research and development activities in full or in part, it could materially affect our business, financial condition, and results of operations.

We may misallocate our research and development resources or have insufficient resources to conduct the necessary level of research and development to remain competitive.

As interactive display technology becomes more advanced, and as we implement our strategies, we expect our research and development costs to grow, including as a percentage of our revenues, and we may be unable to keep increases in these costs from adversely affecting our profitability. We may also devote significant research and development resources to technologies or products that turn out to be unsuccessful or to secure new customers that ultimately do not purchase products. Commitments to developing any new products must be made well in advance of sales, and customer demands and technology may change while we are in development, rendering our products and solutions outdated or uncompetitive before their introduction and therefore difficult to sell profitably or at all. We must therefore anticipate both future demand and the technology features that will be required to supply such demand. If we suffer from reduced revenues or cash flows or incur losses as a result of a market downturn or otherwise, we may not be able to devote sufficient resources to the research and development needed to remain competitive in a timely manner or at all. Our failure to properly allocate research and development resources could materially and adversely affect our business, financial condition and results of operations.

If there is a decline in the average selling prices of display or touch sensor solutions we sell, or if prices decrease faster than we are able to reduce our costs, our margins may be adversely affected.

The average selling prices of our display solutions, including optical bonding, camera module and metal mesh technology, may decline as a result of, among other factors, technological advancements leading to cost reductions and increased competition. In general, the prices of new products in our target markets generally decline over time. Although we seek to focus our efforts on technologically advanced solutions that we believe to be less susceptible to these downward pressures on selling prices, we may not succeed in prioritizing these higher margin products in our product mix, or prices of these products may also fluctuate or decline, albeit at a slower rate. The average selling price for the display solutions we produce may decrease faster than we anticipate and are able to reduce our manufacturing costs. We may also be unable to keep pace with technological advancements in our end-markets, enabling our competitors to produce more competitive technologies for which our customers are willing to pay higher prices. The potential loss of customers, competitive lead, and market share would adversely affect our gross margins would decrease, and our business, financial condition and results of operations may be materially and adversely affected.

Products that contain, or are perceived to contain, defects or errors or that are otherwise incompatible with their intended end use may not be readily marketable or could impose significant costs on us.

The design and production processes for our display solutions are highly complex. It is possible that we may produce products that contain or are perceived to contain defects or errors, or are otherwise incompatible with their intended uses. We may incur substantial costs in remedying such defects or errors, which could include material inventory write-downs. Moreover, if actual or perceived problems with nonconforming, defective or incompatible products occur after we have shipped the products, we might not only bear direct liability for providing replacements or otherwise compensating customers but could also suffer from long-term damage to our relationship with important customers or to our reputation in the industry generally.

Our product offerings are complex and may contain undetected defects, which could lead to product reworks or recalls and harm our reputation and future sales.

Our enhanced display head assemblies and subassemblies involve the production and combination of several highly technical components, many of which involve fragile materials. Our metal mesh touch sensors and camera modules are customized to meet customer specifications and involve a multi-stage process to generate a metal mesh film, imprint the touch sensor panel and blacken the conductive copper material. A defect or error could occur in any step of our production process, including defects that would not be readily apparent upon completion of production. Any failure to provide high quality and reliable products, whether caused by our own failure or failures of our suppliers or OEM customers, could damage our reputation and reduce demand for our products and services. Our products have in the past contained, and may in the future contain, defects, some of which may go undetected for some time. For example, certain displays made for one of our customer experienced peeling issues in the past. Some deficiencies in our products may only be discovered after a customer's product incorporating our solution has been delivered to end users or may only be detected in use under certain operating conditions. Given the technical sophistication of most of our products, we may encounter problems or delays with our products, despite the technical validation processes and testing we implement. In addition, some of our product offerings may be used in connection with safety features, such as advanced driver assistance systems in cars, which may expose us to particularly heightened risks if our products are defective. Any defects discovered in our products after delivery could result in reworking of returned products or product recalls, including recalls of our customers' products to the extent a defect is only discovered after commercial release of our customers' products. Any defects, reworks or product recalls could result in loss of revenue, loss of customers, and increased service and product liability and/or warranty costs, any of which may have a material adverse effect on our business, financial condition and results of operations.

We have substantial sales and operations in China, which exposes us to risks inherent in doing business there.

Our business operations in China and our sales to Chinese customers are critical to our success. As of December 31, 2020, we had approximately 450 employees, including contractors, at our production facility in Suzhou. Moreover, in 2020, 37.5% of our revenues were derived from China. As a result, downturns in the Chinese economy could materially adversely affect our results of operations. For example, our revenues declined 20.1% in 2019 in part due to an economic slowdown in China. China's overall economy has been negatively affected by the COVID-19 pandemic in the year ended December 31, 2020. The Chinese economy differs from the economies of other developed countries in many respects, including the level of government involvement, level of development, growth rate and control of foreign exchange and allocation of resources. The Chinese economy to some extent has been in a long-term transition from a planned economy to a more market-oriented economy. Despite some reforms of this nature, the government continues to exercise significant control over China's economy by way of the allocation of resources, control over foreign currency-denominated obligations and monetary policy and provision of preferential treatment to particular industries or companies. We cannot predict the future economic policies of the Chinese government or their effect on the regional or global economy, or on us or our business and industry, and we cannot predict other governments' economic policies toward China.

The imposition of tariffs and trade restrictions as a result of international trade disputes, trade wars, or changes in trade policies may adversely affect our sales and profitability. For example, in recent years the U.S. government imposed and proposed, among other actions, new or higher tariffs on specified imported products originating from China in response to what it characterizes as unfair trade practices, and China has responded by imposing and proposing new or higher tariffs on specified products including some semiconductors fabricated in the United States. There can be no assurance that these trade tensions will improve or that a broader trade agreement will be successfully negotiated between the United States and China to reduce or eliminate these tariffs or that trade tensions will not expand to other markets, including the European Union. These tariffs, and the related geopolitical uncertainty between the United States and China, and potentially other countries, may cause decreased end-market demand for our products from distributors and other customers, which could have a material adverse effect on our business, financial condition and results of operations. For example, certain of our future foreign customers may respond to the imposition of tariffs or threat of tariffs on products we produce in China by delaying purchase orders, purchasing products from our competitors or developing their own products. While we have been able to adapt to these risks through maintaining integrated manufacturing capabilities outside China, we may need to further expand our manufacturing operations in countries other than China, such as the Philippines, or move our operations out of China in order to meet customer demands, which would be expensive and could consume significant management resources. Ongoing international trade disputes and changes in trade policies and the political and economic environment could also impact economic activity and lead

to a general contraction of customer demand. Future actions or escalations by either the United States or China, or other countries that affect trade relations may also impact our business, or that of our suppliers or customers, and we cannot provide any assurances as to whether such actions will occur or the form that they may take.

Our ability to operate in China may also be materially adversely affected by changes in Chinese laws and regulations such as those related to, among other things, taxation, environmental regulations, land use rights, intellectual property, currency controls, network security, employee benefits and overtime policies and other matters. Our operations in China are subject to numerous laws, regulations, rules and specifications relating to human health and safety and the environment. Applicable laws, rules and regulations often lack clarity and it is difficult to predict how any of these laws, rules and regulations will be enforced. If we or our employees or agents violate, or are alleged to have violated, any of these laws, rules and regulations, we or our employees could be subject to civil or criminal penalties, damages or fines, or our employees or agents could be detained, imprisoned or prevented from entering China, any of which could materially adversely affect our business, financial condition and results of operations.

We may be subject to product liability suits and losses in sales, which could adversely affect our business.

Products or systems we develop or inputs third parties produce for inclusion in our product offerings may have quality defects or fail to meet specifications and requirements. If such a defect were to arise, it could result in a product recall or a product liability claim against us and we have been subject to immaterial product liability claims from time to time. Some of our customers also require that we provide them with indemnification against certain liabilities, including claims of losses by their customers caused by our products. In addition, some of our product offerings may be used in connection with safety features, such as advanced driver assistance systems in cars, which may expose us to particularly heightened risks if our products are defective. Any such recalls or product liability claims could be costly, could harm our reputation, could lead to customer losses or affect our ability to sell our products and could have a material adverse impact on our business, results of operations and financial condition or cause our products to be less attractive to customers than those of our competitors.

We face risks relating to our contractual and statutory warranties.

We grant comprehensive contractual warranties to our customers on the products we develop and sell, which typically last for 12 months and in some cases up to 36 months and in some rare cases longer. This includes, to some extent, guarantees on the performance of our products and services for contractually determined periods of time. In addition, statutory warranties also apply to our products. In the future we could be subject to substantial claims under warranties, especially in the case of an unexpectedly large volume of product failures. As of December 31, 2020, we recognized a provision of €0.6 million related to warranties based on historical warranty data associated with similar products and services.

Risks Related to Our Intellectual Property

We may not be able to protect our trade secrets and other confidential information.

While some of our technology is covered by patents that we own or have applied for, or is licensed under patents belonging to others, such as Corning with respect to their cold forming technology, Toppan with respect to a part of our metal mesh touch sensor technology and IMI with respect to their patent-pending 6-axis active alignment technology, much of our key technology is not protected by patents. We have devoted substantial resources to the development of our technology, trade secrets, know-how and other unregistered intellectual property rights. In order to protect our trade secrets, know-how and proprietary information, we rely in significant part on confidentiality arrangements and invention assignment agreements with our employees, licensees, independent contractors, advisers, resellers and customers. We have not have entered into confidentiality arrangements or invention assignment agreements with all of our past and present employees, licensees, independent contractors, advisers, resellers and customers. This exposes us to the risk that these persons could claim that we use or infringe on their intellectual property rights. Even when we have entered into such an agreement, these arrangements may be difficult and costly to enforce and may not be effective to convey ownership of inventions, may not be effective to prevent willful or unintentional disclosure of confidential information, including trade secrets or may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Also, effective trade secret and know-how protection may not be or, due to changes in trade secret or employment law, may no longer be available in every country in which our services are available or where we have employees or independent contractors. In addition, if others independently discover trade

secrets and proprietary information we would not be able to assert trade secret rights against such parties. Because we cannot legally prevent one or more other companies from developing similar or identical technology to our unpatented technology, it is likely that, over time, one or more other companies will be able to replicate our technology, thereby reducing the technological advantages we believe we possess today. Our customers, including certain licensees who are also our competitors, could misappropriate our intellectual property. If we do not adequately protect our technology or are legally unable to do so, or are unable to develop new technology that can be protected by patents or as trade secrets, we may face increased competition from other companies using technology similar to ours, which may adversely affect our business, financial condition and results of operations.

If we are unable to obtain patent protection for or otherwise protect our intellectual property rights, our business could suffer.

We rely on a combination of patents, trademarks, trade secrets and confidentiality agreements and other contractual arrangements with our employees, customers and others to protect the intellectual property that is important to our competitive position. Our success depends, in part, on our ability to obtain patent protection for or maintain as trade secrets our proprietary products, technologies and inventions and to maintain the confidentiality of our trade secrets and know-how, operate without infringing upon the proprietary rights of others and prevent others from infringing upon our business proprietary rights.

Any of our existing or future patents or other intellectual property rights may be challenged, invalidated or circumvented, or may otherwise fail to provide us with meaningful protection or any competitive advantage. In addition, our pending patent applications may not be granted, and we may not be able to obtain foreign patents or may choose not to file applications for patents corresponding to our U.S. and European patents in other jurisdictions. The laws of certain countries outside the United States and Europe may not provide the same level of patent protection as in the United States and Europe, so even if we assert our patents or obtain additional patents in countries outside of the United States and Europe, effective enforcement of such patents may not be available.

For example, the legal regime of intellectual property protection in China is still evolving. The level of protection available for intellectual property in China differs in significant respects from that of other jurisdictions and may be viewed as insufficient under certain circumstances due to local judicial protectionism, challenges in obtaining evidence and comparatively small damage awards. It is often difficult to register, maintain and enforce intellectual property rights in China. Statutory laws and regulations are subject to judicial interpretation and enforcement and may not be applied consistently due to the lack of clear guidance on statutory interpretation. Protection of intellectual property in China can be costly, and we may be unable to promptly become aware of and police any unauthorized use of our intellectual property in China. If the measures we take to protect our intellectual property under Chinese law are inadequate, we may incur losses arising from infringement of our intellectual property by parties providing services or selling products that employ our technology or are based on it and that are competitive with our services or products. In 2016, we filed a patent dispute claim against a competitor in Chinese court, alleging infringement by the competitor and disputing ownership of four patents relating to our optical bonding process, and we ultimately withdrew the case after determining we had a low likelihood of success. We may face similar scenarios in the future.

Furthermore, patents are jurisdictional in nature and therefore only protect us in certain markets, rather than globally. In addition, patents and some other intellectual property rights are only granted for a limited period of time and our ability to compete may suffer from the expiration of some of these rights.

In addition, competitors may infringe, misappropriate or otherwise misuse our intellectual property. Costly and time consuming litigation could be necessary to enforce our intellectual property against such third-party infringement, and such litigation may be unsuccessful in whole or in part. We may not have sufficient financial or other resources to conduct such actions, which typically last years before a legal judgment or settlement is obtained. If we are not adequately protected, our competitive position and results of operations could be harmed.

We may be subject to claims that our intellectual property infringes the rights of others. These claims may be expensive and time-consuming to defend, and we may be prevented from manufacturing, licensing or selling products or marketing services that are determined to infringe upon the rights of others.

While we strive to avoid infringing the intellectual property rights of third parties, we may fail to avoid infringement claims being made against us. Our products and technology, including the technology that we obtain from

third parties, may infringe the intellectual property rights of third parties. Patent applications in the United States and most other countries are confidential for a period of time until they are published, and the publication of discoveries in scientific or patent literature typically lags actual discoveries by several months or more. As a result, the nature of claims contained in unpublished patent filings around the world is unknown to us, and we cannot be certain that we were the first to conceive inventions covered by our patents or patent applications or that we were the first to file patent applications covering such inventions. Furthermore, it is not possible to know in which countries patent holders may choose to extend their filings under the Patent Cooperation Treaty or other mechanisms. In addition, patent infringements may also result from our use of processes and products, and our other activities in the ordinary course of business. We may be subject to intellectual property infringement claims from individuals, vendors and other companies, including those that are in the business of asserting patents, but are not commercializing products in our or adjacent business fields.

Any claims that our products or processes infringe the intellectual property rights of others, regardless of the merit or of the final resolution of such claims, could cause us to incur potentially significant costs in responding to, defending and resolving such claims. In connection with the enforcement of our intellectual property rights, opposing third parties from obtaining patent rights or disputes related to the validity or alleged infringement of our or third-party intellectual property rights, including patent rights, we have been and may in the future be subject or party to claims, negotiations or complex, protracted litigation. We may be prevented from using technology that a contracting party may claim was developed jointly with it. We may be required to enter into license agreements, to resolve these claims, obligating us to pay royalty fees, which may be material, to make use of third parties' intellectual property, to develop non-infringing substitute technology (which may be time consuming, costly or ultimately unsuccessful) or to enter into costly settlement agreements on terms that are unfavorable to us, for example by preventing us from manufacturing or licensing certain of our products or technologies with respect to which we currently believe we have unfettered rights. We may also find ourselves required to indemnify our sales agents, our customers or the end users of our products or services against infringement claims made against them based on our products or services. Moreover, customers have previously requested indemnity for infringement claims that we do not believe implicate our technology. Such a refusal of indemnity can lead to a dispute with sales agents, customers and/or end users. We may also be subjected to injunctions restricting our sale of allegedly infringing products and our use of allegedly infringing technology. This could cause severe disruptions to our operations or the markets in which we compete. Furthermore, an adverse decision in any legal action involving intellectual property rights or an unfavorable settlement agreement could limit the scope of our intellectual property rights and the value of the related technology.

Therefore, any infringement by us or our licensors of the intellectual property rights of third parties may have a material adverse effect on our business, financial condition and results of operations.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets and know-how of their former employers.

Certain of our past and present employees, consultants and independent contractors were previously employed at other display solutions companies, including our competitors or potential competitors. Some of these employees, consultants and independent contractors may have executed invention assignment agreements and/or non-disclosure and non-competition agreements in connection with their previous employment. Even in the absence of such agreements, such employees, consultants and independent contractors may be prohibited from sharing proprietary information or know-how of their former employers. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these persons have used or disclosed intellectual property, including trade secrets or other proprietary information, of their former employers, which may lead to disputes regarding ownership of intellectual property created by such employees, consultants or independent contractors. We are not currently aware of any threatened or pending claims related to these matters, but in the future litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable personnel or intellectual property rights. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management. As we expand our operations into the United States and elsewhere, we may face similar claims with regard to our future employees in these countries.

Certain of our employees and patents are subject to German legal provisions on employee inventors.

Many of our employees work in Germany and are subject to German employment law. Ideas, developments, discoveries and inventions made by such employees and consultants in connection with their work are subject to the provisions of the German Act on Employees' Inventions, which regulates the ownership of, and compensation for inventions made by employees. Under this Act, an employer may generally demand rights to an invention made by an employee and is deemed to have done so if the employer does not "release" the invention within four months after the employee gives notice of the invention. The employer must pay appropriate consideration, generally in the form of a single payment or royalties on the future revenue derived from such invention, and this might have to be revised, if the circumstances on which the calculation of the consideration was based change so significantly that the previous agreement becomes unacceptable for one side. Disputes can occur, and have occurred, between our current or former employees pertaining to alleged violations of the Act on Employees' Inventions. Any such actions may be costly to defend and may take up our management's time and efforts whether or not we ultimately prevail in the dispute. If we are required to pay additional compensation or face other disputes under the Act on Employees' Inventions, our business, financial condition and results of operations could be adversely affected.

Obtaining and maintaining our intellectual property protection depends on compliance with various procedural, documentary, payment and other requirements imposed by governmental agencies, and our patent and other intellectual property protections could be reduced or eliminated if we fail to comply with these requirements.

Periodic maintenance fees on any issued patent, trademark and design and utility model are due to be paid to the U.S. Patent and Trademark Office (USPTO) and other intellectual property agencies in countries in which we currently hold patents (such as Japan, Taiwan, China and Germany), in several stages over the lifetime of these rights. The USPTO and various other governmental agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our exclusive licensors fail to maintain the patents and patent applications covering our products and processes, our competitive position would be adversely affected.

Risks Related to Our Operations

We may not be able to manufacture our products in the requested time frame or in volumes sufficient to meet customer demands, which could result in delayed or lost revenue and harm to our reputation.

Given the high level of sophisticated functionality embedded in our products, our manufacturing processes are complex. We may need significant time and resources to set up manufacturing lines and tailor their processes to meet specific customers' product requirements. Therefore, it may take us longer than anticipated or cost us more than we had budgeted to set up our production lines.

The complexity of our manufacturing processes may also make it difficult for us to ramp up our production volumes to the levels required to fulfill our customers' orders on time or cause us to be unable to fulfill their orders at all. These difficulties may result in lower manufacturing yields and may make it more difficult for us to scale to higher production volumes in respect of certain products or overall. If we are unable to manufacture our products in the requested time frame or in volumes sufficient to meet demand, our customers could postpone or cancel orders, or seek alternative suppliers for these products. They could also seek to replace the products they had ordered from us with products that are easier to manufacture and that accordingly produce less revenue. Any of these events would harm our reputation and ability to win additional business, adversely affecting our results of operations, including our ability to generate revenues from new customers.

If we are successful in winning additional contracts and increasing our order levels, we may need to add additional facilities in the future to meet customer demand. If we are not able to build or acquire and open such facilities in a timely and cost-effective manner, we may not be able to produce our products in volumes or at the times required. Furthermore, even if we are able to open new production facilities, if the operations at those facilities or at our existing

facilities are materially disrupted, whether by pandemics, natural disasters, demonstrations, acts of terror, or otherwise, we would be unable to fulfill customer orders for the period of the disruption, we would not be able to recognize revenues on orders, we could suffer damage to our reputation, we could also suffer lost orders or cancellations, and we might need to modify our standard sales terms to secure the commitment of new customers during the period of the disruption and perhaps longer. These risks could be amplified as we seek to design and manufacture increasingly technically sophisticated products and solutions, including interactive display solutions. Depending on the cause of the disruption, we could incur significant costs to remedy the disruption and resume product shipments. Such a disruption could have an adverse effect on our business, financial condition and results of operations.

We may not be able to manage the expansion of our operations effectively in order to achieve projected levels of growth.

We have expanded our operating capacity significantly in recent years, including relocating our headquarters and one of our manufacturing facilities to Nuremberg, Germany in April 2018 and installing a new production line in 2020. Our current business plan calls for further expansion and operating improvements over the next several years, including cold forming production, e.g. in Germany related to a new customer project improvement in automation in our facilities in Germany and Japan and expanding our geographical operations including, for example the Philippines. If we do not make these expansions, in time, volume or quality, we may be unable to grow our business as quickly as we aim to and may be unable to get design wins for certain customer projects, such as the manufacturing of large displays in capacities that exceed what we are currently capable of producing. If we are unable to improve and increase automation of production, we may be unable to improve the scaling of our margin. We anticipate that further development of our infrastructure and an increase in the number of our employees will be required to achieve the planned broadening of our product offerings and client base and our ongoing international growth. Failing to adequately upgrade our production infrastructure, including increasing automation of our manufacturing process, or to maximize our production capacity, could have a negative impact on our ability to satisfy our customers' orders and could adversely affect our results of operations. In addition, we must increase our engineering, marketing and services staff in multiple geographies in order to support new development, marketing and service activities to meet the needs of both new and existing customers. Our ability to successfully increase our development, marketing, organizational capabilities and service efforts is not guaranteed, and if we are not able to successfully increase such efforts, our ability to grow our business as intended may be hindered, which could adversely affect our business, financial condition and results of operations.

We may be unable to recoup our investments if we bring new production facilities online in times of overcapacity.

It is difficult to predict future supply and demand in the market for our display solutions. It takes up to two years to plan, finance, construct and equip a new facility. Therefore, we must make any decision to build a new facility, or to re-equip or re-organize an existing facility, with a forecast of what the supply and demand ratio is likely to be when the facility comes online. We must also consider that the supply and demand ratio may be subject to change due to changes in market conditions. In addition, our investments in new facilities may not generate a return due to there being no addressable market, or the former addressable market shifting between the time planning on the facility commences and the time the facility comes online. The capital expenditures required to construct and equip a new facility would be significant, partially as a result of our need to ensure that any new facility complies with environmental, health and safety and other regulatory requirements.

If prices decline during the time when we are ramping up production at new facilities, or if we fail to receive the necessary amount of customer orders, this could force us to decide to suspend manufacturing at these facilities. This would also prevent us from recouping our investments as planned or at all, which could have a material and adverse effect on our business, financial condition and results of operations.

We may not be able to effectively manage the expansion of our workforce in order to support our projected levels of growth.

Because our products are often designed in close collaboration with our customers, our manufacturing and production teams, along with our sales and research and development personnel, are often actively involved in multiple stages of our customers' product design, development and production processes. As our business continues to grow, we intend to expand our operations within these groups over the next several years, including cold forming production and improvement in automation in our facilities in Germany and Japan. To support these upgrades and enhancements, we intend to increase our engineering, marketing and services staff in multiple geographies in order to support new

development, marketing and service activities to meet the needs of both new and existing customers. We may not be able to successfully manage this expansion. We may not be able to hire, retain, or accurately predict the size, skills or experience of the workforce needed to increase and support such efforts. If we fail to successfully increase our development, marketing, organizational capabilities and service efforts, we may not be able to grow our business as intended, which could adversely affect our results of operations.

Our operations could suffer if we are unable to attract and retain key management or other key scientific or other personnel.

Our success depends on the continued service and performance of our senior management and other key personnel, including personnel provided by Toppan in connection with our subsidiary, VTS. Our senior management team particularly Jürgen Eichner, our Chief Executive Officer, is critical to the global management of our business and operations, as well as to the development of our strategy and our technology. The loss of any members of our senior management team, particularly Mr. Eichner, could delay or prevent the successful implementation of our growth strategy or could otherwise adversely affect our ability to manage our company effectively and carry out our business plan. Members of our senior management team may resign at any time, even though they have service agreements with us. High demand exists for experienced senior management and other key personnel in our industry, and there can be no assurance that we will be able to retain such senior management or key personnel. We do not carry key-man insurance on any member of our senior management team. Our growth and success will also depend on our ability to attract and retain additional highly qualified scientific, technical, sales and managerial personnel as well as accounting and finance personnel with appropriate public company experience. We have experienced and expect to continue to experience intense competition for qualified personnel. While we intend to continue to provide competitive compensation packages to attract and retain key personnel, some of our competitors for these employees have greater resources and more experience than us, making it difficult for us to compete successfully for key personnel. If we cannot attract and retain sufficiently qualified technical personnel, we may be unable to develop and commercialize new products or new applications for existing products. Furthermore, possible shortages of key personnel (including any limitation on the performance of their duties or short term or long-term absences as a result of COVID-19), including engineers, in the regions surrounding our facilities could require us to pay more to hire and retain key personnel, thereby increasing our costs and negatively affecting our profitability.

Our management team has limited public company experience.

Prior to our initial public offering, we have never operated as a public company. Our entire management team, as well as other company personnel, need to devote substantial time to compliance, and may not effectively or efficiently manage our transition into a public company. We need to continue to develop the expertise necessary to comply with the numerous regulatory and other requirements applicable to publicly listed companies, including requirements relating to corporate governance, listing standards, notification requirements and securities and investor relations issues, which will divert management attention and may prove costly. As a newly public company, we will need to continue to add new functions, such as investor relations, and will need to devote attention to compliance and to the controls required of public companies and related training of personnel. We will incur additional costs and expenses in connection with those functions. For instance, we may need to hire additional employees to satisfy those functions or may need to rely on consultants for certain purposes. If we utilize the assistance of consultants to aid with compliance as we transition to being a public company, we may incur increased consultancy fees. If we are unable to effectively comply with the regulations applicable to public companies or if we are unable to produce accurate and timely financial statements, which may result in material misstatements in our financial statements or possible restatement of financial results, our stock price may be materially adversely affected, and we may be unable to maintain compliance with the listing requirements of The New York Stock Exchange. Any such failures could also result in litigation or regulatory actions by the SEC or other regulatory authorities, loss of investor confidence, delisting of our securities, harm to our reputation and diversion of financial and management resources from the operation of our business, any of which could materially adversely affect our business, financial condition, results of operations and growth prospects.

We have identified a material weakness in our internal controls over financial reporting and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. If we fail to remediate our material weakness, we may not be able to report our financial results accurately or to prevent fraud.

Our management is responsible for establishing and maintaining internal controls over financial reporting, disclosure controls, and complying with the other requirements of the Sarbanes-Oxley Act of 2002, as amended (the “Sarbanes Oxley Act”), and the rules promulgated by the SEC thereunder. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with international financial reporting standards. A material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company’s annual or interim financial statements will not be prevented or detected by the company’s internal controls on a timely basis.

Prior to our initial public offering in September 2020, we had been operating as a private company that was not required to comply with the obligations of a public company with respect to internal controls over financial reporting. We have historically operated with limited accounting personnel and other resources with which to address our internal controls over financial reporting.

Our auditors identified a recurring material weakness, primarily related to the lack of sufficient accounting and supervisory personnel at the corporate level with the appropriate level of training and sufficient processes and procedures. These deficiencies constitute a material weakness in our internal controls over financial reporting in both design and operation. Management failed to identify audit adjustments in various areas. The material weakness remained unremediated as of December 31, 2020.

We have commenced a plan to remediate this material weakness; however, our overall control environment is still immature and may expose us to errors, losses or fraud. Our remediation plan includes the hiring of additional staff that have begun to address this weakness. Additionally, we intend to document and implement consistent accounting policies and procedures and provide additional training to our accounting and finance staff as well as hire a financial consultant. We currently expect that we will have completed our plan to remediate this weakness, assuming that we do not identify any additional deficiencies and that implementation of our plan progresses in accordance with present expectations. However, we cannot at this time, provide an estimate of the costs we expect to incur in connection with implementing our plan to remediate this material weakness. These remediation measures may be time consuming, costly, and might place significant demands on our financial and operational resources. If we are unable to successfully remediate this material weakness or successfully rely on outside advisors with expertise in these matters to assist us in the preparation of our financial statements, our financial statements could contain material misstatements that, when discovered in the future, could cause us to fail to meet our future reporting obligations and cause the price of our American depositary shares (“ADSs”) to decline.

Political events, trade sanctions, war, terrorism, public health issues, natural disasters and other circumstances could have a material adverse effect on our financial condition and operating results.

War, terrorism, geopolitical uncertainties, public health issues (including but not limited to the COVID-19 pandemic), trade sanctions and other business interruptions have caused and could cause damage or disruption to international commerce and the global economy, and thus could have a strong negative effect on our business and our suppliers, logistics providers, contract manufacturers and customers. Our business operations are subject to interruption by natural disasters, fire, power shortages, nuclear power plant accidents, terrorist attacks, and other hostile acts, labor disputes, public health issues, and other events beyond our control. For example, in response to the COVID-19 pandemic, in March 2020, the Chinese government imposed temporary closures of all factories, including our production facilities located in Suzhou, China for a period of one week. In addition, due to travel restrictions within China as a result of the COVID-19 pandemic, it took several weeks after re-opening for our facilities to return to 100% production capacity. In Japan, VTS temporarily halted production for two weeks in March 2020 due to decreased order volume, but has since resumed normal production capacity. Such events could also decrease demand for our products, make it difficult or impossible for us or our contract manufacturers to make and deliver products to our customers or receive components from our suppliers, and create delays and inefficiencies in our supply chain. Major public health issues, including pandemics, can cause, and in the case of COVID-19, have caused, our business to be negatively affected by, for example, more stringent employee travel restrictions, additional limitations in freight services, governmental actions

limiting the movement of products between regions, delays in production ramps of new products, and disruption in the operations of our contract manufacturers and suppliers. Certain critical business operations, including certain of our suppliers and contract manufacturers, are in locations that could be affected by natural disasters. In the event of a natural disaster, losses, significant recovery time and substantial expenditures could be required to resume operations and our financial condition and operating results could be materially adversely affected.

We may undertake mergers, acquisitions or investments to diversify or expand our business, which may pose risks to our business and dilute the ownership of our existing shareholders, and we may not realize the anticipated benefits of these mergers, acquisitions or investments.

As part of our growth and product diversification strategy, we intend to continue to evaluate opportunities to acquire or invest in other businesses or existing businesses, intellectual property or technologies. We also intend to expand the breadth of markets we can address or enhance our technical capabilities by adding capabilities or technology that we do not have in-house, including by expanding our in-house software capabilities. We aim to become an interactive display system provider in all of our markets by combining system design, interactive displays, other hardware components and software functionality to create fully interactive display systems. We may seek to complement our organic growth by acquiring new technologies or personnel, including by acquiring other companies or assets adding value to our service offerings, particularly by enhancing our interactive solutions for automotive and/or industrial/specialized markets and software competencies relating to sensor technologies which may in the future include voice and facial recognition and other sensor technologies such as gesture, proximity and hovering.

Mergers, acquisitions or investments that we have entered into and may enter into in the future entail a number of risks that could materially and adversely affect our business, operating and financial results, including, among others:

- problems integrating the acquired operations, technologies or products into our existing business and products;
- diversion of management's time and attention from our core business;
- conflicts with joint venture partners;
- adverse effect on our existing business relationships with direct or indirect customers;
- need for financial resources above our planned investment levels;
- failures in realizing anticipated synergies;
- difficulties in retaining business relationships with suppliers and customers of the acquired company;
- risks associated with entering markets in which we lack experience, including entering markets that ultimately prove to be unprofitable or incompatible with our technology;
- potential tax risks associated with acquiring companies or assets;
- potential loss of key employees of the acquired company;
- potential write-offs of acquired assets; and
- potential risks associated with transparency, quality, and reliability of financial information of business we acquire.

Any acquisition that we do make would pose risks related to the integration of the acquired business or technology with our business. We cannot be certain that we will be able to achieve the benefits we expect from any particular acquisition or investment. Our failure to address these risks successfully may have a material adverse effect on our business, financial condition and results of operations. Any such acquisition or investment will likely require a significant amount of capital investment, which would decrease the amount of cash available for working capital or capital expenditures. In addition, if we use our equity securities to pay for acquisitions, the value of the ADSs and the

underlying ordinary shares may be diluted. If we borrow funds to finance acquisitions, such debt instruments may contain restrictive covenants that can, among other things, restrict us from distributing dividends.

We may need to raise additional capital from time to time to meet our growth goals and may be unable to do so on attractive terms, or at all.

We intend to continue to make investments to support the growth of our business and may require additional funds to respond to business challenges, including the need to complement our growth strategy, increase market share in our current markets or expand into other markets, or broaden our technology, intellectual property or service capabilities. Accordingly, we may require additional investments of capital from time to time, and our existing sources of cash and any funds generated from operations may not provide us with sufficient capital. For various reasons, including any non-compliance with existing or future lending arrangements, additional financing may not be available when needed, or may not be available on terms favorable to us. If we fail to obtain adequate capital on a timely basis or if capital cannot be obtained on terms satisfactory to us or in an amount or manner permitted by any restrictive covenants contained in lending or other arrangements in place as of such time, we may not be able to achieve our planned rate of growth, which will adversely affect our business, financial condition and results of operations.

The manufacture, supply and shipment of our products and related product costs are dependent upon effective logistics management of our global supply chain and any failure to manage these logistics could increase our costs, negatively impact our relationships with our customers and have a material adverse effect on our revenues and profitability.

The manufacture, supply and shipment of our product offerings involve multiple parties within a global supply chain, including raw material providers and component and module manufacturers who provide inputs such as cover lenses, display housing, backlights and related components. Managing the costs of logistics related to our supply chain is critical to our ability to sell our products at competitive prices. For example, fluctuations in the cost or time required to route bonding materials and touch sensors among our production facilities in Germany, China and Japan could have a material impact on the end costs of our products. We may be unable to manage the logistics of our global supply chain effectively, which may hinder us from meeting customer demands or could cause our logistics costs to increase. Any of these developments could have a material adverse effect on our revenues and profitability.

We utilize distributors to market certain of our products and solutions, and they may not be successful in doing so.

We maintain strategic relationships with distributors to market certain of our products and solutions and support certain functionality. If we are unsuccessful in establishing or maintaining our strategic relationships with these distributors or if our distributors are unable to successfully market our products, our ability to compete in the marketplace, to reach new customers and geographies or to grow our revenue could be impaired and our operating results could suffer. Although we believe we could develop relationships with new or replacement distributors if necessary, we may be unable to sufficiently educate those distributors on our product portfolio or may be unable to sufficiently incentivize their sales and distribution efforts on our behalf.

We rely on our information technology systems to manage numerous aspects of our business and customer and supplier relationships, and a disruption of these systems could adversely affect our results of operations.

We rely on our information technology, or IT, systems to manage numerous aspects of our business and provide analytical information to management. Our IT systems allow us to efficiently manage development projects, purchase products from our suppliers, provide procurement and logistic services, ship products to our customers on a timely basis, maintain cost-effective operations, provide historical and projected financial reports, comply with fiscal and regulatory requirements, and provide services to our customers. Our IT systems are an essential component of our business and growth strategies, and a disruption to our IT systems could significantly limit our ability to manage and operate our business efficiently. Although we take steps to secure our IT systems, including our computer systems, intranet and internet sites, email and other telecommunications and data networks, the security measures we have implemented may not be effective and our systems may be vulnerable to, among other things, damage and interruption from power loss, including as a result of natural disasters, computer system and network failures, loss of telecommunication services, operator negligence, loss of data, security breaches, computer viruses and other disruptive events. Any such disruption could adversely affect our reputation, brand and financial condition.

Some of our employees are employed subject to local laws that are less favorable to employers than the laws of the United States.

A large portion of our employees are employed in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the United States. Such favorable employment rights require us to expend greater time and expense in making changes to employees' terms of employment or making staff reductions, and to work collaboratively with the legal representatives of the employees to effect any changes to labor arrangements. As of December 31, 2020, we had approximately 693 persons working for us under employment, service and secondment agreements, and agreements with external dispatch firms, including 68 employees from Toppan providing services to VTS pursuant to secondment agreements and the Business Assistance Agreement and 50 workers dispatched to VTS from professional dispatch firms. None of our employees are currently unionized. Our employees in Nuremberg, Germany, have established a works council in the second half of 2020 comprising of 5 members. Since establishment of the works council, we are subject to information, consultation and cooperation obligations towards the works council in Nuremberg, such as, for example, any proposed changes in the collective working conditions, staff changes and restructuring efforts we may pursue in the future are subject to consultation with, and eventual approval by the works council, to the extent our employees in Nuremberg are affected. We cannot rule out that some of our employees are, or will become in the future, also members of unions or will decide in the future to establish works councils at any of our other locations, in which cases we would be subject to information, consultation and cooperation obligations towards such further works councils or unions as determined by the relevant applicable laws. The limits of the local laws to which we are subject, including whether our employees decide to become members of unions or establish additional works councils at other locations, may limit management's flexibility in making changes to elements of our business that concern our workforce. Further, any significant dispute with our employees could result in a significant disruption of our operations or higher ongoing labor costs.

Labor disruptions could materially adversely affect our business, financial condition and results of operations.

Although we believe that we have a good working relationship with our employees, a strike, work stoppage, slowdown or significant dispute with our employees could result in a significant disruption of our operations or higher ongoing labor costs. While we have not experienced any material work stoppages at any of our facilities, any stoppage or slowdown could cause material interruptions in manufacturing, and we cannot assure you that alternate qualified capacity would be available on a timely basis, or at all. As a result, labor disruptions at any of our facilities could materially adversely affect our business, financial condition and results of operations.

Workplace accidents could result in substantial remedial obligations and damage our reputation.

We have had and may in the future experience, workplace accidents or incidents. Accidents or other incidents that occur at our facilities or involve our personnel or operations, could result in claims for damages or governmental remedial action against us. The amount of any costs, including fines or damages payments that we might incur under such circumstances could substantially exceed any insurance we have to cover such losses. Any of these events, alone or in combination, could have a material adverse effect on our business, financial condition and results of operations and could adversely affect our reputation.

We may become involved in litigation and regulatory proceedings, including relating to intellectual property infringement, which could require significant attention from our management and result in significant expense to us and disruptions in our business.

We have been and may become involved in lawsuits and/or regulatory actions relating to our business, such as commercial contract claims, employment claims or other examinations and investigations. Some of these proceedings may claim significant damages or cause reputational harm. Due to the inherent uncertainties of litigation and regulatory proceedings, we cannot accurately predict the ultimate outcome of any proceeding. An unfavorable outcome could materially adversely affect our business, financial condition and results of operations or limit our ability to engage in certain of our business activities. In addition, regardless of the outcome of any litigation or regulatory proceeding, any proceedings are often expensive, time-consuming, disruptive to normal business operations and require significant attention from our management.

Risks Related to Our International Operations

Our business activities and international expansion activities outside of Germany and the European Union subject us to various risks and our failure to manage these risks could adversely affect our results of operations.

Our business is subject to a wide range of risks associated with doing business globally. Our sales outside of the European Union represented 97.6% and 96.6% of our total revenue in 2020 and 2019, respectively. One element of our growth strategy is to pursue opportunities for our business in several areas of the world, any or all of which could be adversely affected by the risks set forth below, or the risks of which we are currently unaware.

Accordingly, we face significant operational risks as a result of doing business internationally, such as:

- fluctuations in foreign currency exchange rates;
- potentially longer sales and payment cycles;
- potentially greater difficulties and delays in collecting accounts receivable;
- potentially adverse tax consequences;
- challenges in providing solutions across a significant distance in different languages and among different cultures;
- different, complex and changing laws governing intellectual property rights, which in certain countries sometimes afford reduced protection of intellectual property rights;
- difficulties in staffing and managing foreign operations, particularly in new geographic locations;
- restrictions imposed by local labor practices and laws applicable to our business and operations;
- rapid changes in government, economic and political policies and conditions, political or civil unrest or instability, terrorism or pandemics (including but not limited to the COVID-19 pandemic) and other similar outbreaks or events;
- operating in countries with a higher incidence of corruption and fraudulent business practices;
- seasonal reduction in business activity in certain parts of the world;
- costs and difficulties of customizing products for foreign countries;
- compliance with a wide variety of complex foreign laws, treaties and regulations;
- transportation delays;
- tariffs, trade barriers and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets; and
- becoming subject to the laws, regulations and court system of multiple jurisdictions.

Our failure to manage the market and operational risks associated with our international operations effectively could limit the future growth of our business and adversely affect our results of operations.

Our international operations pose currency risks, which may adversely affect our operating results and net income.

Our operating results may be affected by fluctuations in currency exchange rates and our ability to effectively manage our currency transaction and translation risks. Our business in terms of purchases and sales is mainly processed in the local currencies of our group entities, which are their functional currencies (euro, Chinese renminbi, U.S. dollar and Japanese yen). We use euro as a group presentational currency. As we realize our strategy to further expand internationally, our exposure to currency risks will increase. In addition, there is a possibility that currency exchange rates will experience greater fluctuation if a country currently using the euro as its currency ceases to do so. We do not manage our foreign currency exposure in a manner that would eliminate the effects of changes in foreign exchange rates. Therefore, changes in exchange rates between these foreign currencies and the euro will affect our revenue, cost of goods sold and operating expenses and margins, and could result in exchange losses in any given reporting period.

We incur currency transaction risks whenever we enter into either a purchase or a sale transaction using a different currency from the currency in which we receive revenue. In such cases we may suffer an exchange loss because we do not currently engage in currency forward contracts, options, swaps or other instruments to address this risk.

The volatility of exchange rates could hinder our ability to effectively manage or hedge our currency transaction risks and any volatility in currency exchange rates could have an adverse effect on our revenue or results of operations.

We are subject to international tax laws, tariffs and potential tax audits that could affect our financial results.

We are subject to international tax laws, tariffs and potential tax audits. The application of these laws and their interpretation in different jurisdictions affect our international operations in complex ways and are subject to change, and some changes may be retroactively applied. Our tax liabilities in the different countries where we operate depend, in part, on transfer pricing and administrative charges among us and our subsidiaries.

These arrangements require us to make judgments with which tax authorities may disagree, potentially resulting in the assessment of material additional taxes, penalties, interest or other charges to resolve these issues.

We also could be materially affected by the resolution of issues arising from tax audits or examinations. Tax authorities could impose additional tariffs, duties, taxes, penalties and interest on us, for example if tax audits find that permanent establishments for tax purposes exist, if net operating losses are found not to be available to offset taxable income, if the deduction of business expenses or interest expenses is denied for tax purposes, if payments are held to be subject to withholding taxes, or if taxable services are deemed to have been rendered.

German corporate income tax, trade tax and VAT tax audits have not yet been conducted for 2015 and onwards for VIA optronics GmbH. Formal Chinese tax audits have not been conducted for 2017 and onwards. None of the group companies has been subject to tax audits in the U.S., Japan or in Taiwan.

Transactions that we have structured in light of current tax rules could have material and adverse consequences for us if tax rules change. Tax audits, changes in tax laws, their application and interpretation or imposition of any new or increased tariffs, duties and taxes could increase our tax burden and materially and adversely affect our sales, profits and financial condition and could have an adverse effect on our business, net assets, or results of operations. Such factors could also cause us to expend significant time and resources and/or cause investors to lose confidence in our reported financial information.

Risks Related to our ADSs and Capital Structure

The price of our ADSs may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of the ADSs.

The stock market generally, including our ADSs, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of listed companies. Broad market and industry factors may negatively affect the market price of our ADSs, regardless of our actual operating performance. The

market price and liquidity of the market for our ADSs may fluctuate and may be significantly affected by numerous factors, some of which are beyond our control. These factors include:

- significant volatility in the market price and trading volume of securities of companies in our sector, which is not necessarily related to the operating performance of these companies;
- material weakness in our internal controls;
- the mix of our products and solutions during any period;
- delays between our expenditures to develop and market new products and solutions and the generation of sales from those products and solutions and the related risk of obsolete inventory;
- changes in our expenditures to promote our products and solutions;
- success or failure of our research and development projects and those of our competitors;
- announcements of acquisitions by us or one of our competitors;
- the general tendency towards volatility in the market prices of shares of companies that rely on technology and innovation;
- changes in regulatory policies or tax guidelines;
- changes or perceived changes in earnings or variations in operating results;
- any shortfall in revenues or net income from levels expected by investors or securities analysts; and
- general economic trends and other external factors.

We have no present intention to pay dividends on our ordinary shares in the foreseeable future and, consequently, an ADS holder's only opportunity to achieve a return on their investment during that time is if the price of the ADSs appreciates.

We have no present intention to pay dividends on our ordinary shares in the foreseeable future. Any recommendation by our management and supervisory boards to pay dividends will depend on many factors, including our financial condition, results of operations, legal requirements and other factors. Accordingly, if the price of the ADSs declines in the foreseeable future, ADS holders will incur a loss on their investment, without the likelihood that this loss will be offset in part or at all by potential future cash dividends.

ADS holders may not receive distributions on our ordinary shares represented by the ADSs or any value for them.

Under the terms of the deposit agreement, the depositary for the ADSs has agreed to pay to ADS holders the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. ADS holders will receive these distributions in proportion to the number of our ordinary shares their ADSs represent. However, in accordance with the limitations set forth in the deposit agreement, it may be unlawful or impractical to make a distribution available to holders of ADSs. In addition, distributions of rights to subscribe for additional ordinary shares or ADSs, distributions payable in cash or additional ordinary shares or ADSs at the election of the recipient or distributions of property other than cash, ordinary shares or rights to subscribe for additional ordinary shares or ADSs will only be made to holders of ADSs if we request such rights be made available to holders of ADSs. We have no obligation to take any other action to permit the distribution of the ADSs, ordinary shares, rights or anything else to holders of ADSs. This means that ADS holders may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical for us to make them available. These restrictions may have a material adverse effect on the value of the ADSs.

Holders of ADSs are not treated as shareholders of our company.

Holders of ADSs are not treated as our shareholders, unless they withdraw the shares underlying the ADSs from the depositary. The depositary is the holder of the shares underlying the ADSs. Holders of ADSs therefore do not have any rights as shareholders of our company, other than the rights that they have pursuant to the deposit agreement.

ADS holders may not be able to exercise their right to vote the shares underlying their ADSs.

Holders of ADSs may exercise voting rights with respect to the shares represented by the ADSs only in accordance with the provisions of the deposit agreement. Holders may instruct the depositary to vote the number of whole deposited shares their ADSs represent. The depositary will notify holders of shareholders' meetings or other solicitations of consents and arrange to deliver our voting materials to holders if we ask it to. Those materials will describe the matters to be voted on and explain how holders may instruct the depositary how to vote. For instructions to be valid, they must reach the depositary by a date set by the depositary.

Holders may instruct the depositary to vote the shares underlying their ADSs. Otherwise, holders will not be able to exercise their right to vote, unless they withdraw the shares underlying the ADSs they hold. We cannot assure ADS holders that they will receive the voting materials in time to ensure that they can instruct the depositary to vote their shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions provided that any such failure is in good faith. This means that ADS holders may not be able to exercise their right to vote and there may be no remedies available to them if the shares underlying their ADSs are not voted as requested. If we do not instruct the depositary to obtain ADS holders' voting instructions, ADS holders can still instruct the depositary how to vote, and the depositary may vote as they instruct, but it is not required to do so.

The right of holders of ADSs to participate in any future preemptive subscription rights issues or to elect to receive dividends in shares may be limited, which may cause dilution to their holdings.

Under German law, the existing shareholders have a preemptive right to subscribe for shares offered in proportion to the amount of shares they hold in connection with any offering of shares. However, a shareholders' meeting may vote, by a majority that represents at least three quarters of the share capital represented at the meeting, to waive this preemptive right for all shareholders provided that, from the company's perspective, there exists good and objective cause for such waiver.

Certain non-German shareholders may not be able to exercise their preemptive subscription rights in our future offerings due to the legislation and regulations of their home country. For example, ADS holders in the United States will not be entitled to exercise or sell such rights unless we register the rights and the securities to which the rights relate under the Securities Act of 1933, as amended (the "Securities Act"), or an exemption from the registration requirement is available. In addition, the deposit agreement provides that the depositary need not make rights available to holders unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act or exempted from registration under the Securities Act. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, ADS holders may be unable to participate in our rights offerings and may experience dilution in their holdings. In addition, if the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case ADS holders will receive no value for these rights.

U.S. holders of ADSs may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

A non-U.S. corporation will be classified as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of "passive" income or (ii) 50% or more of the value of its assets (determined on the basis of a quarterly average) during such year produce or are held for the production of passive income. Passive income generally includes dividends, interest, royalties, rents, annuities, net gains from the sale or exchange of property producing such income and net foreign currency gains. In addition, a non-U.S. corporation will be treated as owning its proportionate share of the assets

and earning its proportionate share of the income of any other corporation in which it owns, directly or indirectly, more than 25% (by value) of the stock.

In the event we were treated as a PFIC, U.S. holders (as defined in “Item 10. Additional Information—E. Taxation—U.S. Taxation”) of the ADSs could be subject to adverse U.S. federal income tax consequences. These consequences include the following: (i) if the ADSs are “marketable stock” for purposes of the PFIC rules and a U.S. holder makes a mark-to-market election with respect to its ADSs, the U.S. holder will be required to include annually in its U.S. federal taxable income an amount reflecting any year end increase in the value of its ADSs, (ii) if a U.S. holder does not make a mark-to-market election, it may incur significant additional U.S. federal income taxes on income resulting from certain distributions on, or any gain from the disposition of, the ADSs, as such income generally would be allocated over the U.S. holder’s holding period for its ADSs and subject to tax at the highest rates of U.S. federal income taxation in effect for such years, with an interest charge then imposed on the resulting taxes in respect of such income, and (iii) dividends paid by us would not be eligible for reduced individual rates of U.S. federal income tax. In addition, U.S. holders that own an interest in a PFIC are required to file additional U.S. federal tax information returns. Because PFIC status is based on our income, assets and activities for the entire taxable year, which we expect may vary substantially over time, it is not possible to determine whether we will be characterized as a PFIC for any taxable year until after the close of the taxable year. Moreover, we must determine our PFIC status annually based on tests that are factual in nature, and our status in future years will depend on our income, assets and activities in each of those years. There can be no assurance that we will not be considered a PFIC for any taxable year. A U.S. holder may in certain circumstances mitigate the adverse tax consequences of the PFIC rules by either electing to mark their ADSs to market, provided the ADSs are considered “marketable” for the purposes of the PFIC rules, or by filing an election to treat the PFIC as a qualified electing fund, or a QEF. In the event that we are or become a PFIC, we do not intend to comply with the reporting requirements necessary to permit U.S. holders to elect to treat us as a QEF. See “Item 10. Additional Information—E. Taxation—U.S. Taxation—Additional United States Federal Income Tax Consequences—PFIC Rules.”

U.S. investors may have difficulty enforcing civil liabilities against our company and members of our supervisory board and management board.

Certain members of our supervisory board and management board are non-residents of the United States, and all or a substantial portion of the assets of such persons are located outside the United States. As a result, it may not be possible, or may be very difficult, to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in Germany. An award for monetary damages under the U.S. securities laws would be considered punitive if it does not seek to compensate the claimant for loss or damage suffered and is intended to punish the defendant. The enforceability of any judgment in Germany will depend on the particular facts of the case as well as the laws and treaties in effect at the time. Litigation in Germany is also subject to rules of procedure that differ from the U.S. rules, including with respect to the taking and admissibility of evidence, the conduct of the proceedings and the allocation of costs. With very narrow exceptions, proceedings in Germany would have to be conducted in the German language, and all documents submitted to the court would, in principle, have to be translated into German. For these reasons, it may be difficult for a U.S. investor to bring an original action based upon the civil liability provisions of the U.S. federal securities laws against us, certain members of our supervisory board and management board in a German court. The United States and Germany do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters, though recognition and enforcement of foreign judgments in Germany is possible in accordance with applicable German laws.

ADS holders may be subject to limitations on transfers of ADSs.

ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

Our principal shareholder owns a significant percentage of our ordinary shares and will be able to exert significant influence over matters subject to shareholder approval.

Two shareholders hold approximately 66% of our outstanding ordinary shares (including ordinary shares represented by ADSs) and our largest shareholder, Cooperatief IMI Europe U.A., holds approximately 50% of our ordinary shares (including ordinary shares represented by ADSs). Cooperatief IMI Europe U.A. has effective control over the outcome of all matters requiring shareholder approval, including elections of members of our supervisory board, amendments to our organizational documents and the approval of any merger, spin-off, sale of assets or other major corporate transaction. We are eligible to be treated as a “controlled company” within the meaning of the corporate governance standards of the New York Stock Exchange. Under these corporate governance standards, a “controlled company” may elect not to comply with certain corporate governance requirements, including the requirements that:

- a majority of its board of directors consist of “independent directors” as defined under the rules of the New York Stock Exchange;
- its director nominees be selected, or recommended for its board of directors’ selection by a nominating/governance committee comprised solely of independent directors; and
- the compensation of its executive officers be determined, or recommended to the board of directors for determination, by a compensation committee comprised solely of independent directors.

We do not take advantage of any of the applicable exemptions under the New York Stock Exchange corporate governance standards except to the extent we are exempt from such standards as a foreign private issuer under the Securities Exchange Act of 1934, as amended (the “Exchange Act”); however, there can be no assurance that we will not elect to do so in the future if we are eligible. Cooperatief IMI Europe U.A.’s ownership position and/or our future election to utilize exemptions available to a “controlled company” may prevent or discourage unsolicited acquisition proposals or offers for our ordinary shares or ADSs that shareholders may feel are in their best interest. The interests of our major shareholders may not always coincide with the interests of other shareholders and they may act in a manner that advances their best interests and not necessarily those of other shareholders, including seeking a premium value for their ordinary shares, which might affect the prevailing market price for the ADSs.

We are limited in our ability to increase our share capital under German law, which may make it difficult for us to raise additional capital to fund our operations in a timely manner.

Under German law and according to our articles of association, an increase of our share capital requires a resolution passed at our shareholders’ meeting with both a simple majority of the share capital represented at the meeting, unless a capital increase can be executed using the authorized capital of the Company. A capital increase from authorized capital requires a resolution of the management board to such effect and the approval of the supervisory board. The aggregate nominal amount of the authorized capital created by the shareholders may not exceed one-half of the share capital existing at the time of registration of the authorized capital with the commercial register and the authorized capital may only be created for a period of up to five years. In addition, every holder of ordinary shares is generally entitled to subscription rights (commonly known as preemptive rights) relating to any new shares issued in connection with a capital increase in proportion to the number of shares he or she holds in the corporation’s existing share capital, and a minimum subscription period of two weeks must be provided for the exercise of such subscription rights, although holders of ordinary shares may resolve to exclude subscription rights under certain circumstances. Given these and other restrictions under German law, it may be difficult for us to access capital markets quickly to raise additional capital that may be needed to fund our operations. See Item 10. Additional Information—B. Memorandum and Articles of Association.

Rights as a shareholder in a German corporation may differ from rights as a shareholder in a U.S. corporation.

We are organized as a stock corporation (*Aktiengesellschaft* or AG) under the laws of Germany. The rights of shareholders of a German stock corporation under German law differ in important respects from those of shareholders of a U.S. corporation. These differences include, in particular:

- Under German law, certain important resolutions, including, for example, capital decreases, measures under the German Transformation Act (*Umwandlungsgesetz*), such as mergers, conversions and spin-offs, the issuance of

convertible bonds or bonds with warrants attached and the dissolution of the German stock corporation apart from insolvency and certain other proceedings, require the vote of a 75% majority of the capital represented at the relevant shareholders' meeting (*Hauptversammlung*). Therefore, the holder or holders of a blocking minority of more than 25% or, depending on the attendance level at the shareholders' meeting, the holder or holders of a smaller percentage of the shares in a German stock corporation may be able to block any such votes, possibly to our detriment or the detriment of our other shareholders.

- As a general rule under German law, a shareholder has no direct recourse against the members of the management board (*Vorstand*) or supervisory board (*Aufsichtsrat*) of a German stock corporation in the event that they have breached their duty of loyalty or duty of care to the German stock corporation. Apart from insolvency or other special circumstances, only the German stock corporation itself has the right to claim damages from members of the management board or the supervisory board. A German stock corporation may waive or settle such damage claims only if at least three years have passed since the violation of a duty occurred and the shareholders approve the waiver or settlement at the shareholders' meeting with a simple majority of the share capital represented at such meeting, unless a minority holding, in the aggregate, 10% or more of the German stock corporation's share capital objects to the shareholder resolution approving the waiver or settlement and has its objection formally recorded in the minutes of the shareholder meeting by a German civil law notary.
- Holders of ADSs are not treated as shareholders of the Company. See Item 10. Additional Information—B. Memorandum and Articles of Association.

Exchange rate fluctuations may reduce the amount of U.S. dollars ADS holders receive in respect of any dividends or other distributions we may pay in the future in connection with ADSs.

We do not currently intend to declare or pay any dividends in the foreseeable future. Under German law, the determination of whether we have made sufficient profits to pay dividends is made on the basis of our unconsolidated annual financial statements prepared in accordance with German generally accepted accounting principles as set forth in the German Commercial Code (*Handelsgesetzbuch*). Exchange rate fluctuations may affect the amount in U.S. dollars that our shareholders receive when we declare and pay in euros cash dividends or other cash distributions, if any. Such fluctuations could adversely affect the value of the ADSs and, in turn, the U.S. dollar proceeds that holders receive from the sale of the ADSs.

In the event that the ADSs do not qualify as ADRs under the ADR Tax Circular, U.S. treaty beneficiaries and German tax resident holders of ADSs could be subject to adverse consequences.

In the event that the ADSs do not qualify as ADRs under the ADR Tax Circular (both as defined in "Item 10. Additional Information—E. Taxation—German Taxation of ADSs—General"), the U.S. and German tax consequences of acquiring, owning and disposing of the ADSs applicable to U.S. treaty beneficiaries (as defined in "Item 10. Additional Information—E. Taxation—German Taxation of ADSs—Taxation of Non-German Resident U.S. Holders") and German tax resident holders of ADSs could differ significantly from the U.S. and German tax consequences described in "Item 10. Additional Information—E. Taxation." The qualification of the ADSs for German tax purposes in this case is uncertain. In particular, in the event that the ADSs fail to qualify as ADRs, U.S. treaty beneficiaries and German tax resident holders of ADSs could be subject to adverse U.S. and German tax consequences, respectively, which could include the following: (i) the U.S. treaty beneficiaries will not be entitled to claim a refund of the portion of the otherwise applicable 26.375% German withholding tax on dividends relating to the ADSs that exceeds the applicable Treaty (as defined in "Item 10. Additional Information—E. Taxation—German Taxation of ADSs—Taxation of Non-German Resident U.S. Holders") rate and (ii) the German tax resident holders will not be entitled to any tax exemptions in relation to dividends and capital gains relating to the ADSs (see "Item 10. Additional Information—E. Taxation—German Taxation of ADSs—Taxation of German Resident Holders").

ADSs holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depository

arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by a federal or state court in the City of New York, which has non-exclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs.

If any holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, such holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and / or the depositary. If a lawsuit is brought against us and/or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action. Nevertheless, if this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

If securities or industry analysts cease publishing research, or publish inaccurate or unfavorable research about our business, our ADS price and trading volume could decline.

The trading market for our ADSs depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who covers us downgrades our shares or ADSs or publishes inaccurate or unfavorable research about our business, our share and ADS price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our shares and ADSs could decrease, which might cause our share and ADS price and trading volume to decline.

General Risks

Natural disasters and other unforeseeable events could result in delays in or cancellations of shipments of products and lead to a loss of production facilities and thereby negatively affect our business activities.

We have production sites and other operations in locations subject to natural occurrences such as severe weather and geological events that could disrupt operations. A natural disaster that results in a prolonged disruption to our operations may adversely affect our results and financial condition including preventing us from fulfilling orders and the loss of customer qualification of certain production facilities may cause us to suffer damage to our reputation.

We may be at risk for non-compliance with applicable laws and regulations, including the risk of extortion and violation of anticorruption laws.

Operating a global business, including in certain countries where corruption is considered to be widespread, requires us to comply with the laws and regulations of various jurisdictions. In particular, our operations are subject to anticorruption laws and regulations, which include the U.S. Foreign Corrupt Practices Act of 1977, or the FCPA, the UK Bribery Act of 2010, and anti-bribery laws and regulations in other countries, including those having implemented the OECD Anti-Bribery Convention. Anticorruption laws prohibit corporations and individuals from paying, offering to pay, or authorizing the payment of anything of value to another person, including but not limited to a government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise improperly influence a person; the laws are broad and many apply to private as well as public bribery and also penalize the receipt as well as the giving of bribes. In the course of establishing and expanding our commercial operations and

seeking regulatory approvals in the EU, the United States, and internationally, we will need to establish and expand business relationships with various third parties and will interact more frequently with various officials, including regulatory authorities who may be deemed to be “foreign officials” under the FCPA or similar laws, or who may otherwise be candidates for illicit payments in exchange for improper benefits. We are subject to the risk that our employees and others over whom we have less control, such as Toppa employees who are seconded to VTS, distributors and other agents, may fail to comply with such laws and regulations. It is not always possible to identify and deter misconduct by our employees, distributors and other third parties, and the precautions we take to detect and prevent prohibited activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations.

Our operations may also be subject to applicable laws and regulations on economic sanctions and export controls, including those administered by the United States and the EU, which are complex and may be violated inadvertently. Such laws may restrict or prohibit the export or sale of our products to certain countries or persons altogether. Changes to export and economic sanctions laws and regulations, or changes in the countries, governments, persons, or technologies targeted by such laws and regulations could result in our decreased ability to sell or export our products, and adversely affect our business, financial condition, and results of operations. If we violate any of the anti-bribery, economic sanctions, export control and abuse laws, we could be subject to fines, confiscation of profits or legal sanctions, such as termination of authorizations, licenses, concessions and financing agreements, suspension of our operations or prohibitions on contracting with public authorities. Any such violation could have a material adverse effect on our financial condition, business, prospects and results of operations. In addition, any alleged violations of these laws could damage our reputation and ability to do business.

We may not have adequate insurance for potential liabilities, including liabilities arising from product warranty claims and litigation.

In the ordinary course of business, we have been, and in the future may be, subject to various product and non-product related claims, lawsuits and administrative proceedings seeking damages or other remedies arising out of our commercial operations, including litigation related to defects in our products. We maintain insurance to cover potential exposures; however, our insurance coverage is subject to various exclusions, self-retentions and deductibles, may be inadequate or unavailable to protect us fully, and may be cancelled or otherwise terminated by the insurer.

Furthermore, we face the following additional risks under our insurance coverage:

- we may not be able to continue to obtain insurance coverage on commercially reasonable terms, or at all;
- we may be faced with types of liabilities that are not covered under our insurance policies, such as environmental contamination or terrorist attacks, and that exceed any amounts that we may have reserved for such liabilities;
- the amount of any liabilities that we may face may exceed our policy limits; and
- we may incur losses resulting from interruption of our business that may not be fully covered under our insurance policies.

Even a partially uninsured claim of significant size, if successful, could have a material adverse effect on our business, financial condition, results of operations and liquidity. Moreover, even if we successfully defend ourselves against any such claim, we could be forced to spend a substantial amount of money on litigation expenses, our management could be required to spend valuable time in the defense against these claims and our reputation could suffer, any of which could adversely affect our results of operations.

A large or a number of smaller product liability judgments against us could exceed our insurance coverage and might result in a material loss to us. In addition, publicity resulting from an actual or perceived problem with one of our products could harm our reputation and reduce demand for our product offerings. Actual or threatened product liability suits may adversely affect our business, financial condition and results of operations.

Changes in data privacy and data protection laws and regulations, or any failure to comply with such laws and regulations, could adversely impact our business.

Our business is subject to a wide variety of laws and regulations in the United States and internationally designed to protect the privacy of clients, customers, employees and other third parties. The interpretation and application of such laws and regulations is uncertain and evolving and it is possible that changes in the interpretation of these laws could require us to change our practices. For example, the EU General Data Protection Regulation, or GDPR, which went into effect in May 2018, imposes a range of new compliance obligations and increases financial penalties for non-compliance and extends the scope of the EU data protection law to all companies processing data of EU residents, regardless of the company's location. We are currently in compliance with the data protection and privacy regulations under the GDPR and have engaged a professional adviser to serve as our external compliance officer as permitted by the GDPR. Complying with the GDPR and other privacy and data protection laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business. In addition, if we fail to comply with these laws or regulations, we could be subject to significant litigation, monetary damages, regulatory enforcement actions or fines in one or more jurisdictions.

Our business and operations could suffer in the event of cybersecurity breaches or disruptions to our information technology environment.

As with all enterprise information systems, our systems, which contain critical information about our business (including intellectual property and confidential information of our customers, vendors and employees), could be penetrated by outside parties intent on extracting information, corrupting information, or disrupting business processes.

Despite our efforts to protect sensitive information and confidential and personal data and to comply with and implement data security measures, our facilities and systems may be vulnerable to security breaches and other data loss, including cyber-attacks. It is not possible to predict the impact on our business of the future loss, alteration or misappropriation of information in our possession related to us, our employees, former employees, customers or suppliers. Depending on their nature and scope, these threats could potentially lead to improper use of our systems and networks, manipulation and destruction of proprietary or key data or product non-compliance. Unauthorized access and breaches of our security measures could disrupt our business operations and could result in failures or interruptions in our computer systems and in the loss of assets (including our intellectual property and confidential business information). Such breaches could also result in inadvertent disclosure, or unapproved dissemination of proprietary, sensitive or confidential information about the company, our employees, our vendors, or our customers and could result in litigation, violations of various data privacy regulations in some jurisdictions, and also potentially result in liability to us. This could damage our reputation, or otherwise harm our business, financial condition, or results of operations. Additionally, the devotion of additional resources to the security of our information technology systems in the future could significantly increase the cost of doing business.

We are subject to environmental, health and safety laws and regulations, which could subject us to liabilities, increase our costs or restrict our business or operations in the future.

Our manufacturing operations and our products are subject to a variety of environmental, health and safety laws and regulations in each of the jurisdictions in which we operate or sell our products. These laws and regulations govern, among other things, the handling and disposal of hazardous substances and wastes (such as the cleaning chemicals used in our production facilities and the chemicals used in the copper etching process for our metal mesh touch sensors) employee health and safety and the use of hazardous materials in, and the recycling of, our products. Failure to comply with present and future environmental, health and safety requirements, or the identification of contamination, could cause us to incur substantial costs, monetary fines, civil or criminal penalties and curtailment of operations.

The identification of environmental issues, including instances of non-compliance and/or accidents, could subject us to substantial remedial obligations or liabilities, increase our costs, or restrict our business or operations in the future.

We are subject to a number of environmental and health and safety laws and regulations that have become more stringent over time. More vigorous enforcement of current environmental, health and safety requirements by regulatory agencies, the enactment of more stringent laws and regulations or other unanticipated events may result in the identification of presently unidentified environmental conditions, or liabilities of which we are currently unaware. The

results of these environmental conditions or liabilities could restrict our ability to use or expand our facilities, require us to incur additional expenses or require us to modify our manufacturing processes or the contents of our products. This could have a material adverse effect on our reputation, business, financial condition and results of operations.

As a consequence of having become a public company, we are subject to additional regulatory compliance, including Section 404 of the Sarbanes-Oxley Act. Any failure to comply could have a significant and adverse effect on our business and reputation.

As a public company and for as long as we are an “emerging growth company” under the Jumpstart Our Business Startups Act (the “JOBS Act”), we are eligible to take advantage of exemptions from various reporting requirements. See “*We are eligible to be treated as an “emerging growth company”, as defined in the JOBS Act, and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our ADSs less attractive to investors” for more information.* Beginning with our annual report for the fiscal year ending December 31, 2021, we will be required to comply with the SEC’s rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which require our senior officers to certify financial and other information in our annual reports and attest to the effectiveness of control over financial reporting. Furthermore, once we cease to be an emerging growth company, our independent registered public accounting firm will only be required to attest to the effectiveness of our internal controls over financial reporting depending on our market capitalization. As a result, for so long as we are entitled to avail ourselves of such relief or exemptions we will not obtain an independent assessment of the effectiveness of our internal controls which could detect problems that our management’s assessment might not and our management cannot guarantee that our internal controls and disclosure controls will prevent all possible errors or all instances of fraud.

If we are not able to establish and maintain an effective system of internal controls and otherwise implement the requirements of Section 404 in a timely manner or with adequate compliance, our independent registered public accounting firm may issue an adverse opinion due to ineffective internal controls over financial reporting and we may be subject to sanctions or investigation by regulatory authorities, such as the SEC. As a result of misstatements or restatements in our financial statements or an adverse assessment by management or auditors about the effectiveness of our internal controls, there could be a negative reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. In addition, we may be required to incur costs to improve our internal controls system and to hire additional qualified personnel. Any such action could negatively affect our business and reputation. To achieve compliance with Section 404 within the prescribed period, we will be engaged in documenting and evaluating our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Hence, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404, which could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. As a result, the market price of the ADSs could be negatively affected, and we could become subject to investigations by the stock exchange on which the ADSs are listed, the SEC or other regulatory authorities, which could require additional financial and management resources, and have a significant and adverse effect on our business and reputation.

If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us.

Prior to our initial public offering we were not required to maintain internal controls over financial reporting that complied with the obligations of a public company and there is no guarantee that we will be able to implement adequate procedures in a timely manner, or at all. Consequently, we may be unable to detect and react to risks arising in the course of our business. In addition, any failure to establish or maintain an effective system of internal controls over financial reporting could limit our ability to report our financial results accurately and in a timely manner or to detect and prevent fraud.

An inability to adapt our internal controls as well as our reporting and risk management procedures to the requirements of a public company could have a material adverse effect on our business, financial condition, results of operations and prospects. See “Risk Factors – Material Weakness” for more information.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices. As a public company, and particularly if we were to lose our status as an emerging growth company in the future, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”), the listing requirements of The New York Stock Exchange and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance. We are evaluating these rules and regulations and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

As a foreign private issuer, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the SEC than U.S. companies. This may limit the information available to holders of ADSs.

We are a “foreign private issuer,” as defined in the SEC rules and regulations, and, consequently, we are not subject to all of the disclosure requirements applicable to companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act. In addition, members of our management board and supervisory board and our principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. public companies. Accordingly, there may be less publicly-available information concerning our company than there is for U.S. public companies.

As a foreign private issuer, we file an annual report on Form 20-F within four months of the close of each year ended December 31 and furnish reports on Form 6-K relating to certain material events promptly after we publicly announce these events. However, although we intend to issue quarterly financial information, because of the above exemptions for foreign private issuers, we are not required to do so, and, therefore, holders of ADSs will not be afforded the same protections or information generally available to investors holding shares in public companies organized in the United States.

As a foreign private issuer, we are not subject to certain New York Stock Exchange corporate governance rules applicable to U.S. listed companies.

We rely on provisions in the New York Stock Exchange Listed Company Manual that permit us to follow our home country corporate governance practices with regard to certain aspects of corporate governance. This allows us to follow German corporate law and the German Corporate Governance Code, which differ in significant respects from the corporate governance requirements applicable to U.S. companies listed on the New York Stock Exchange. In accordance with our New York Stock Exchange listing, our Audit Committee is required to comply with or satisfy an exemption from the provisions of Section 301 of the Sarbanes-Oxley Act and Rule 10A-3 of the Exchange Act, both of which are also applicable to listed U.S. companies. Because we are a foreign private issuer, however, we generally are permitted to follow home country practice in lieu of the corporate governance standards provided in the New York Stock Exchange Listed Company Manual. In particular, we are not required to comply with the requirements that the members of our Audit Committee satisfy financial literacy standards, that a majority of the members of our supervisory board must be independent, that our Audit Committee and Compensation and Nomination Committee adopt written charters and that we adopt and disclose corporate governance guidelines. If some investors find the ADSs less attractive as a result of

these differences, there may be a less active trading market for the ADSs and the price of the ADSs may be more volatile.

We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses.

While we currently qualify as a foreign private issuer, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter. In the future, we would lose our foreign private issuer status if we fail to meet the requirements necessary to maintain our foreign private issuer status as of the relevant determination date. Our foreign private issuer status will be tested on June 30 of each year and in the future we may lose our status. This could occur if, for instance, a majority of our shareholders of record were U.S. citizens or residents and a majority of our executive officers or directors were U.S. citizens or residents or if a majority of our assets were located in the United States. The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly more than the costs we incur as a foreign private issuer. If we cease to be a foreign private issuer, we could be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive in certain respects than the forms available to a foreign private issuer. We would be required under current SEC rules to prepare our financial statements in accordance with U.S. GAAP rather than IFRS. Such conversion of our financial statements to U.S. GAAP would involve significant time and cost, and we would still be required to prepare financial statements in accordance with IFRS. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on United States stock exchanges that are available to foreign private issuers such as the ones described above and exemptions from procedural requirements related to the solicitation of proxies.

We are eligible to be treated as an "emerging growth company", as defined in the JOBS Act, and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our ADSs less attractive to investors.

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including (1) the ability to include only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure; (2) an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act; (3) to the extent that we no longer qualify as a foreign private issuer, (a) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and (b) exemptions from the requirements of holding a nonbinding advisory vote on executive compensation, including golden parachute compensation; and (4) an exemption from compliance with the requirement that the PCAOB has adopted regarding a supplement to the auditor's report providing additional information about the audit and the financial statements.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1.07 billion in annual revenue, have more than \$700 million in market value of our shares held by non-affiliates, or issue more than \$1.0 billion of nonconvertible debt over a three-year period. We may choose to take advantage of some but not all of these reduced burdens. For example, 58 Section 107 of the JOBS Act provides that an emerging growth company that uses U.S. GAAP for financial reporting can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Given that we currently report and expect to continue to report under IFRS we have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required by the IASB.

A further or continued slowdown in the global economy could materially and adversely affect our business, results of operations and financial condition.

A further or continued slowdown in the global economy could adversely affect demand in our markets and negatively impact the electronic products sales from which we generate our income. A further or continued global economic downturn could also lead to a prolonged slowdown in our business, with side effects including significant decreases in orders from our customers, insolvency of key suppliers resulting in raw material constraints and product

delays, inability of customers to obtain credit to finance purchases of our products and/or customer insolvencies and counterparty failures negatively impacting our operations. In addition, a further or continued downturn in the economy could slow down the adoption of new technologies by our customers or cause our customers to shift their purchases to lower cost, less demanding technologies as opposed to more expensive, newer technologies we may develop. Because of such factors, we believe the level of demand for our products and projections of future revenue and operating results will be difficult to predict. If any economic downturn occurs in the future or the current downturn worsens or is prolonged, our business, results of operations and financial condition may be affected materially and adversely.

ITEM 4. Information on the Company

A. History and Development of the Company

Our business is conducted through VIA optronics GmbH, registered in the commercial register of the local court (*Amtsgericht*) of Nuremberg under HRB 22650, and its subsidiaries. VIA optronics GmbH was established on May 12, 2006 with an initial share capital of €25,000. The company has its registered seat in Schwarzenbruck. Our principal executive offices are located at Sieboldstr. 18, 90411 Nuremberg, Germany Telephone: +49 911 597 575 0.

Because a company in the form of a GmbH cannot be used for an initial public offering, the shareholders of VIA optronics GmbH decided to create a new company in the form of a German stock corporation (*Aktiengesellschaft* or *AG*), VIA optronics AG, to serve as a holding company for the VIA optronics group and as the vehicle issuing the ADS for the initial public offering and listing on the New York Stock Exchange. On January 4, 2019, the shareholders of VIA optronics GmbH incorporated VIA optronics AG, which was registered in the commercial register of the local court of Nuremberg under HRB 36200 on March 18, 2019 with an initial share capital of €100,000. The shareholders of VIA optronics GmbH contributed all shares they held in VIA optronics GmbH to VIA optronics AG on June 25, 2019 by way of a contribution in kind against issuance of shares (*Sachkapitalerhöhung*). As a result of this contribution, VIA optronics AG became the holding company for VIA optronics GmbH and its subsidiaries.

Our website is www.via-optronics.com. This website address is included in this annual report as an inactive textual reference only. The information and other content appearing on our website are not part of this annual report. Our agent for service of process in the United States is VIA optronics, LLC, located at 6220 Hazeltine National Dr., Suite 120, Orlando, FL 32822, telephone number (407) 745-5031. The SEC maintains an internet site at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

B. Business Overview

Our Technology

We are a leading provider of enhanced display solutions for multiple end-markets in which superior functionality or durability is a critical differentiating factor. Our customizable technology is well-suited for our target end-markets, in particular customers operating in high-end markets that have unique specifications, and in demanding environments that pose technical and optical challenges for displays, such as bright ambient light, vibration and shock, extreme temperatures and condensation. Our solutions combine our expertise in interactive display head assembly, comprising a display, cover lens and potentially touch sensors, and proprietary bonding technologies. We also develop, manufacture and sell customized and application-specific metal mesh touch sensors and electrode base film materials for use in touch modules or other touch products. Recently, we have introduced integrated, camera-enhanced and interactive displays, or interactive display solutions, that leverage our expertise in display solutions and touch sensor technology, as well as camera module design and related software capabilities. We believe that interactive display solutions will be critical to support the evolution of everyday life digital applications, such as touch- and camera-enabled consumer electronics, and the development of complex applications, such as advanced driver assistance systems. Our portfolio of offerings enables thin display assemblies and high optical clarity, which decreases power consumption and increases readability. We provide a wide range of customized display solutions, including curved display panels and solutions integrating multiple display touch assemblies under a single cover lens. In the future, we aspire to become one of the leading technology platforms for interactive display solutions in our target end-markets.

Our differentiated technologies include our proprietary silicone-based bonding material, or *VIA bond plus*, our patented optical bonding processes, or *Max VU*, display enhancement technologies, our metal mesh touch sensor technology and camera module design capabilities. Our optical bonding processes utilize *VIA bond plus* for display head assemblies, or DHAs, without using potentially damaging mechanical force, to eliminate air gaps and other distorting features common to conventional technologies.

Our metal mesh touch sensor technology enables high precision functionality and is based on a metal grid patterned on a transparent electrode base film that can be laminated to virtually any type, size and shape of cover lens material. In addition to our proprietary technologies and processes, we have expertise in working with collaborators to implement specialized production methods, such as cold forming technology, that enable innovation in product

development. We custom-design camera modules for contract manufacturing by IMI, an affiliate of our majority shareholder and commercial partner, for integration into our solutions or our customers' end-solutions, such as driver monitoring systems. We believe our suite of differentiated technologies and our related intellectual property, engineering expertise and commercial collaborations give us a competitive edge.

Our customers operate in the automotive, consumer electronics and industrial/specialized applications markets.

- Our automotive solutions can be found in the products of companies such as BMW, Ferrari, General Motors and Rolls Royce. Our automotive applications include displays for navigation, instrument clusters, rear seat entertainment and infotainment systems and, increasingly, interactive display systems.
- Our consumer electronic solutions can be found in the products of companies such as Dell, HP, Lenovo, Mutto and Sharp. Our consumer applications include solutions for notebooks, tablets and all-in-one monitors.
- Our industrial/specialized application solutions can be found in the offerings of companies such as 3M, Dell, Emirates Airlines, GE, Honeywell, John Deere and Siemens. Our industrial/ specialized applications include in-flight entertainment displays, ruggedized laptops, marine navigational systems and fish-finders, agricultural equipment, surround views, digital signage, interactive conference room displays and defense applications.

As of December 31, 2020 we had over 550 projects in process, either in the acquisition, development or industrialization phase or in production, for a combination of existing and potential new customers. These projects include arrangements we entered into during the course of 2019 and 2020, including with several automotive OEMs that produce luxury and electric vehicles to design prototypes relating to enhanced automotive solutions, including an interactive complete dashboard display cluster assembly using Corning's cold-formed glass technology, an optically bonded display head assembly using a plastic cover lens (which represents a unique material application within the automotive market) and advanced automotive camera module technologies. The advanced automotive camera module technologies we are developing in these prototypes include driver assistance features and autonomous driver support, such as driver monitoring (including facial recognition and other driver recognition technologies and driver alertness features) and surround view, which are technologies that promote enhanced vehicle performance and safety.

We expect to complete development of these OEM prototypes during 2021. These potential customers are not contractually obligated to purchase a minimum quantity of units until a purchase order is executed. However, we believe this current development pipeline supports our goal of becoming a leading provider of high-end interactive display solutions for OEMs, as well as suppliers that supply parts directly to OEMs, which are referred to as Tier-1 suppliers.

For the year ended December 31, 2019, we generated revenue, net loss and EBITDA of €137.2 million, € 13.4 million and € (4.4) million, respectively, and for the 12 months ended December 31, 2020, we generated revenue, net loss and EBITDA of €152.6 million, €3.6 million and €6.3 million, respectively. In our segments display solutions and sensor technologies we generated revenue of €113.4 million and €23.9 million for the year ended December 31, 2019 and €127.1 million and 25.5 million for the 12 months ended December 31, 2020, respectively despite production-related delays and other challenges that we and our customers have faced as a result of the COVID-19 pandemic. Our performance in 2020 may not be indicative of our full-year performance 2021. We are headquartered in Nuremberg, Germany and had over 693 staff working on our sites worldwide as of December 31, 2020, including through secondment and service agreements as well as agreements with professional dispatch firms. We maintain production facilities in Germany, China and Japan and, through our subsidiaries, operate sales offices in Taiwan and the United States. In 2019, we served over 70 customers and in 2020, we served over 80 customers around the world.

Our Competitive Strengths

We believe the following key strengths will help us to maintain and enhance our competitive position:

Proprietary bonding materials, patented processes and innovative technology. We believe that our proprietary silicone-based bonding material, patented optical bonding processes and metal mesh touch sensor technology as well as camera module design competence and in-house design capabilities are key enablers of our success in our target end-markets. We have a differentiated portfolio of patented optical bonding and metal mesh touch sensor technology and in-house manufacturing capabilities. In combination with VTS, as of December 31, 2020, we had an aggregate of 124 granted patents and 33 additional pending patent applications relating to our optical bonding processes, metal mesh

touch sensor technology and component parts used in our customized production equipment. *VIA bond plus* is our proprietary silicone-based bonding material utilized for all of our bonding applications. In contrast to organic substances such as acrylates, *VIA bond plus* is repairable, non-shrinking, non-yellowing, environmentally friendly and stable at extreme temperatures. *Max VU* is our patented dry-bonding process that enables display head assembly without potentially damaging mechanical force, thereby increasing production yield, reducing potential LCD damage and minimizing undesired optical side effects. In addition, our copper-based metal mesh touch sensor technology offers significantly higher conductivity that enhance touch performance, including stylus/pen sensitivity and glove functionality. Cutting-edge technology in viewing and sensing applications as well as a combination of those technologies improves interactive display solutions, for example driver monitoring and surround view systems in automobiles. The key technical advantages of our camera modules and sensing applications include custom design, thermal management, durability, and access to IMI's patent-pending 6-axis active alignment technology.

Technological expertise well-suited for complex applications and demanding environments. We are a pioneer in designing and developing customizable display solutions that address the most demanding technological and environmental challenges. These challenges include, but are not limited to, bright ambient light, vibration and shock, extreme temperatures, condensation, dust and other specialized conditions, as well as the need for enhanced touch sensitivity, curved form factors and designs that incorporate multiple interactive displays under a single formed cover lens. Our technological expertise in combination with our deep customer and commercial partner collaborations, including our collaboration with Corning, with respect to cold form glass technology, enables us to meet these challenges and act as a sole source supplier for certain customers, including, for example, select customers in ruggedized applications and the automotive industry. We continue to dedicate significant research and development resources to address these challenges and expand our interactive display solutions capabilities, touch sensor technology, as well as camera module design and related software capabilities. Further, we leverage the experience we have gained in the high-end consumer market, which is generally characterized by early adoption of new technologies and shorter product life cycles, to anticipate industry trends and innovate solutions for our automotive and industrial/specialized applications markets.

Efficient global production with integrated, automated and scalable capacity. With our modern production sites in Germany, China and Japan, we have the ability to meet customers' specific requirements with regards to design, volume and manufacturing location. Our production sites in Germany and China operate on an integrated basis so that a project initiated in one site can be moved to another site without needing to incur costly or time-consuming delays in production site customization, which enables more nimble production capacity. Our flexible production lines can provide solutions for a wide range of display screen sizes. Our bonding facilities are equipped with manual, semi-automated and fully automated production lines capable of handling various production volumes, from specialized small-batch runs to high volume production. We leverage our customized equipment and manufacturing knowledge to quickly clean, re-tool and ramp up our production lines to maximize utilization.

Highly integrated supply chain for our core technology. We design and/or manufacture the majority of the subassemblies (e.g., enhanced displays, touch modules, display touch assemblies and camera modules) used in our interactive display systems and purchase specific components from third parties (e.g., camera sensors or LCD open cells), including IMI, an affiliate of our majority shareholder, as needed. This provides us with flexibility to produce a wide range of metal mesh sensors, which enables us to offer a broad selection of products to our customers to fit their particular needs. In addition, our largely integrated models provide our customers with their own production efficiencies to the extent that they opt to use us as their single source supplier for interactive displays. Our business model also allows us to integrate more of our own metal mesh technology into the interactive display systems that we produce. We believe the level of our supply chain integration differentiates us from our competitors and adds value to our production capabilities. Our key raw materials are silicone, glass and plastics in addition to key components like LCDs. The prices for LCDs are currently volatile, affected by the global IC shortage which also reduces the available quantities. A series of strategic partnerships with suppliers helps us overcome volatile pricing in components like LCDs and also the availability of raw materials, in particular silicone.

Early and deep design collaboration with Original Equipment Manufacturers. Due to the increasing integration of display, touch, and/or camera module functionality into novel design assemblies, we often engage with OEMs, either directly or through third-party suppliers, early in their design and development processes. We utilize our deep engineering and research and development resources and operating expertise to partner with OEMs on product design, qualification, manufacturing and testing and collaborate with them to provide comprehensive and customized solutions that meet their specific requirements. We believe this approach creates a competitive advantage for us, as it has

enabled us to form long-term relationships with our OEM customers and it has provided us with an understanding of the OEMs' technology roadmaps, allowing us to develop innovative and advanced solutions to meet their current and future needs. The combination of our technological expertise and our collaborative relationships allows us to develop new applications, such as touch-enabled controls on an automotive center console, and enables us to be a sole source supplier for certain OEMs.

Proven engineering and experienced management team. We have assembled a team of talented technical professionals with significant knowledge and expertise across our technologies. We also have an experienced global management team with extensive expertise in enhanced display solutions, system integration and manufacturing, and a strong track record of management experience at companies.

Commitment to innovation. We have committed significant resources in recent periods to technological advancements in our product offerings, including acquiring touch sensor technology from VTS in 2018 and enhancing our camera module development capabilities in 2019. Such technological advancements include our interactive display solutions which leverage our expertise in display solutions and touch sensor technology, as well as camera module design and related software capabilities. We believe that interactive display solutions will be critical to support the development of advanced and complex applications, such as advanced driver assistance systems, and we believe that we are well positioned to meet the next generation of innovation challenges for these technologies.

Our Growth Strategy

Our goal is to become a leading provider of interactive display solutions, in particular to OEMs and their Tier-1 suppliers, specifically within the automotive and industrial/specialized markets, and to continue to deliver innovative products to our customers in the consumer end-market. The key elements of our strategy to achieve this goal are:

Expand our interactive display systems capabilities. We aim to expand our capabilities to serve as an interactive display system provider in the automotive, consumer electronics and industrial/specialized applications markets by combining system design, camera modules, software functionality and other hardware components. We plan to achieve this goal by utilizing our extensive intellectual property portfolio, process know-how, and optical bonding and metal mesh touch sensor and camera module technologies to expand our in-house technological capabilities. We also plan to expand our research and development efforts through increased investment in our engineering and software development activities, including the hiring of additional personnel. We may also seek to augment our solutions by acquiring new technologies and expertise with an initial focus on embedded systems and software development, including by acquiring other companies or assets, hiring technical teams or entering into strategic alliances.

Leverage our metal mesh technology for touch-enabled displays. We believe our metal mesh touch sensor technology is particularly well-suited for large display sizes and flexible form applications, and we intend to accelerate its broader adoption across our end-markets. Our goal is to expand our touch sensor technology beyond the consumer market by focusing on embedding metal mesh touch displays into the product offerings of new and existing automotive and industrial/specialized customers. To accomplish this, we intend to leverage our ability to produce both the electrode base film and related metal mesh touch sensors, which enables us to offer our customers both component parts as well as complete display solutions. We believe offering this optionality positions us to become a one-stop touch solutions provider. In addition, to increasingly attract higher margin solutions for automotive and industrial/specialized customers, we also intend to leverage our ability to customize our metal mesh touch sensor technology and integrate customized touch sensors into our interactive display solutions. We expect that an increasing number of these customers will adopt our in-house metal mesh display touch sensor technology as high-precision touch functionality continues to become more desired by end users.

Deepen our existing customer base. We intend to expand our relationships with existing customers across our three markets—automotive, consumer and industrial/specialized—and our aim is to capture an increasing amount of their business across the technologies that we offer, with a special focus on interactive display business. Our objective is to be the supplier of choice and to service all of our customers' needs in this space. To achieve this, we plan to continue leveraging and developing our technological capabilities, engineering talents and sales and marketing proficiency. For example, with respect to our automotive customers, we are increasingly collaborating in the early stages of the OEM design and development process on interactive display systems for car interiors, which have become, and we believe will continue to be, differentiating factors for the driver experience. We are similarly engaged at early stages with our industrial/specialized customers in order to provide them with highly customized solutions for their projects. We expect

to convert these close, early-stage collaborations for higher margin solutions into even deeper long-term relationships with customers. With respect to our consumer customers, we see significant potential to increase our share of their business in the areas of display, touch and display head assembly, especially in light of the recent surge in remote working, which has further increased demand for the types of products that house our components.

Continue to expand our customer base. We intend to acquire new customers particularly within our automotive and industrial/specialized markets. We believe we are well-positioned to further penetrate these markets given our technological expertise, our differentiated touch sensor technology, our ability to produce products for use in demanding environments, our collaboration with Corning to utilize cold forming technology, our increasing focus on developing advanced camera modules and related software and our strong reputation within the automotive industry. We believe our technological capabilities, production know-how and research and development expertise will enable us to continue to improve our products' functionality and performance and will facilitate our ability to develop products and enhancements, enable new applications and expand our customer base within our core end-markets.

Industry Overview

Digital displays have become pervasive in everyday life. Technological advancements, quality improvements and cost reductions have collectively helped to make displays ubiquitous in nearly every industry. In response to the growing demand and broadening applications of display technology, optical bonding, touch sensor and camera module integration technologies have become critical to achieving the diverse and highly specific requirements of customers in various end-markets. These products may be offered as stand-alone products or may be fully integrated into an interactive display system. Advanced driver-assistance systems, or ADAS, is an example of technological innovation in the automotive industry which utilizes these integrated technologies. In addition, ADAS uses software systems to support the automobile operator's decision-making process. As technologies advance, these software systems will be capable of replacing human-operator decision-making and may support fully autonomous drive functionality. This trend will increase the importance of the electronic control unit and related software and applications that are included in interactive display systems.

Optical Bonding and Display Enhancement

Optical bonding is a process in which a clear, optical-grade adhesive, such as silicone or acrylate, is placed between various components of the DHA, which may include an LCD panel, touch sensor layer and cover lens, to bind the components of the DHA and eliminate the presence of an air gap. It is an alternative process to the traditional method of applying an adhesive tape or material around the edge of the display, which leaves a layer of air in between the various components. Displays that contain an air gap generally have lower optical performance (e.g., lack of sunlight readability, lower brightness) due to reflections occurring at the internal optical surfaces of a display assembly (such as the LCD panel and cover lens). Optical bonding eliminates nearly all internal reflection due to better matching of the index of refraction of the optical surfaces. A number of benefits can be achieved by using optical bonding rather than traditional methods, such as reduced internal reflection that results in improved readability while reducing backlight power requirements, preventing moisture and impurities from penetrating the display assembly stack, and reducing sensitivity to shock and vibration. As a result, displays with optical bonding are generally easier to read and more durable, and facilitate a longer battery life. Optical bonding also results in a higher degree of stability of displays, which permits thinner displays to be produced. Importantly, optical bonding can be used with many types of display technologies, including the two most common types, LCD and Organic Light Emitting Diode, or OLED, and new microLED technology. As such, optical bonding is becoming the de facto standard for a wide range of display solutions. The clarity achieved with optical bonding enables readable in sunlight. In addition, our technology allows us to optimize the optical film stack, increase backlight brightness and apply film to the glass, which can add a transreflective component, so that the light that is not reflected on the surface of the display can enter and support the backlight system.

Touch Sensors

The global market for touch-enabled displays has gained significant momentum over the past few years as users have adopted the simplicity of point and touch as a mode of input. In addition, it has become less costly to integrate touch sensors directly into a display due to, among other things, decreased component costs.

First generation resistive touch sensor technology required pressure to complete a circuit between electrode layers. As a result, this legacy technology was only responsive to touch when pressure was applied by objects such as a

fingertip or a stylus pen, leading to slow response time, less precision and generally an inability to respond to multiple touchpoints.

In recent years, the touch technology market has focused on projective capacitive, or PCAP, touch sensor technologies. PCAP touch screens use two transparent electrode layers that are placed between a cover lens and the display. A touch is detected when a touching object (such as a fingertip or pen) changes the capacitive field created by the combination of two electrode layers oriented on the x- and y-axes rather than by applying physical pressure to the cover lens. The electrode layers are designed in a specific pattern (typically a grid for metal mesh sensors), with the potential points of touch recognition corresponding to the number of intersections between the rows and columns contained within the grid. Capacitive touch screens can be self-capacitive (meaning the device only recognizes a single touch point at a time) or mutual capacitive (meaning the device can recognize multiple touch locations simultaneously).

Metal mesh is a type of projected capacitive PCAP technology in which the electrode layer is made of a very thin layer of a conductive metal grid, either copper or silver. Compared with indium tin oxide, or ITO, a conductive electrode material used in traditional PCAP technologies, metal mesh provides certain advantages, including higher conductivity and a higher tolerance to bending, while maintaining the same transparency and providing more accurate touch functionality across multiple touch locations. The advantages of using metal mesh technology are well-suited for large display sizes and flexible form factors, which are currently costlier to produce when using existing PCAP technology. The performance of a metal mesh touch sensor is largely dependent upon the conductive metal utilized in the electrode layer, such as copper or silver. While some of our competitors use silver, we believe the physical properties of copper give it a number of advantages over silver, such as higher durability and reliability, lower cost and lower tendency to oxidize, which causes the metal to lose efficiency as an electrical conductor. While there are greater technological challenges to working with copper as opposed to silver, such as achieving optical transparency with a darker material, we believe the benefits of using copper outweigh the challenges.

Cameras

Cameras have been traditionally used for surveillance or viewing applications. As camera module technology has developed, cameras are also increasingly being used as sensors to detect traffic signs, people, cars and other objects. This technology depends on a clean image covering the desired viewing angle and algorithms to detect objects in the camera's image stream. Like our interactive system displays, cameras are sensitive to environmental conditions, in particular heat. Heat resistance is critical to camera performance as heat impacts image quality and can disrupt the precisely designed and aligned camera lens. We custom design our camera modules to ensure proper lens alignment as a part of our production process. In addition, we use a "bare die" sensor, or an unpackaged sensor, in our camera modules. The absence of sensor packaging enhances camera module performance because it allows us to achieve a smaller sensor footprint within the camera module as compared to a packaged part and also brings the thermal conductive potting material used in our module into direct contact with the sensor's semiconductor which is more efficient for regulating temperature of the component thereby maintaining image quality and functionality.

Electronic Control Unit

The electronic control unit is a device responsible for controlling the interactive display system. All displays, camera modules and touch screens are connected to the electronic control unit. We develop drivers for our components (display, touch, camera module) to achieve maximum performance. Depending on a customer's need, we develop functions like hovering, gesture recognition for touch screens, glove compatibility or add commercially available library elements to support other functions such as object recognition.

Interactive Display System

An interactive display system is comprised of several elements: a display, camera module and touch sensors with an ECU, allowing the user to interact with a display and, in some cases, allowing the display to observe and react to the user or other external inputs.

Our Market Opportunity

The proliferation of tablets, smartphones and other personal devices has increased the prevalence of displays in the consumer market, while the rising demand for dynamic visual communication, the increasing use of interactive

displays and lower costs for these displays are driving the growth of displays in non-traditional verticals beyond the consumer electronics end-market. In addition, the rapid expansion of the flexible display market, the rising demand for OLED-based devices and the technological development of more energy-efficient and higher specification displays are emerging as key drivers of sustained display market growth.

We believe a number of trends are expanding our market opportunity:

The number and complexity of displays in automotive applications continue to increase.

The increasing electrification of vehicles and the shift towards a more autonomous or assisted driving experience are propelling the demand for displays in the automotive market. Automotive displays, as of today, consist primarily of instrument cluster, center infotainment unit and rear seat entertainment. Increasingly, the market has introduced cars with cameras and display combinations instead of traditional mirrors as mirror replacement systems, or eMirrors. In addition to the number of displays in vehicles increasing, auto manufacturers are interested in incorporating previously manually controlled elements (such as temperature controls and stereo functions) into a single, frequently touch-enabled, display solution. Accordingly, the complexity and form factors have expanded to include multi-panel and non-standard shapes and configurations, requiring significant display assembly manufacturing and integration expertise. Displays used in automotive applications are integral to vehicle operation and performance, and must meet a variety of stringent requirements such as broad viewing angles, high brightness, wide temperature ranges and extended product lifetimes and, for certain displays, other operational and safety requirements.

Industrial and other specialized display applications are a demanding and high-growth segment.

The increasing demand to improve user experience, information communication and advertising are driving the proliferation of digital displays in a number of sectors such as transportation, heavy machinery, retail, education, finance, defense, avionics and marine applications. The proliferation of digital technology, decrease in product cost and increase in touch-panel size are also expanding the application of interactive, touch-enabled displays. Examples of industrial/specialized applications include touch monitors used for shopping mall directories, digital signage for advertisement inside and outside of banks, large touch-enabled digital canvases used by professional animation studios, touch displays used in classrooms, cockpit displays used in aircraft, heat-resistant displays used by firefighters and ruggedized displays for industrial and military operators.

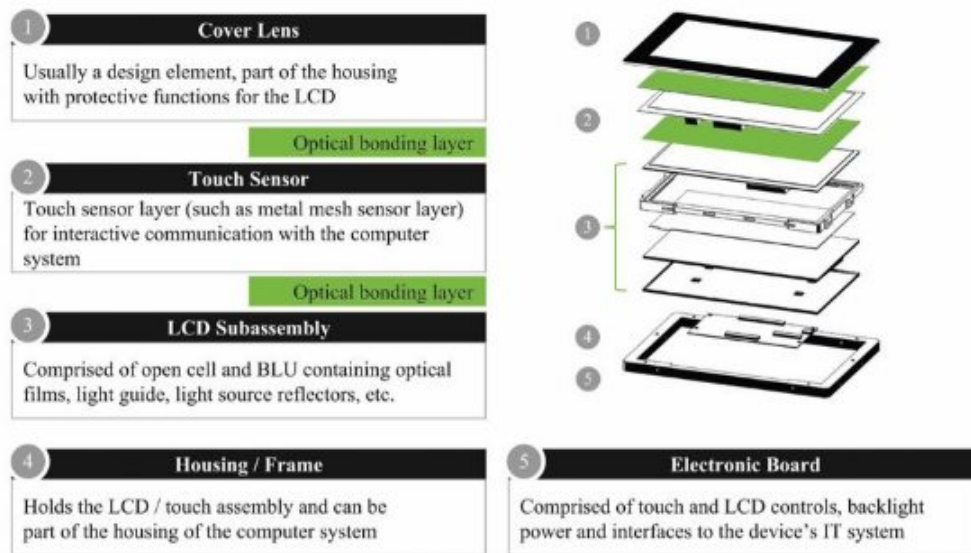
Consumer electronics remain the mature foundation of the display market. In the consumer market, tablets and notebooks have become a popular alternative to stationary desktops. Given the portability of these devices and their use in outdoor environments, attributes such as sunlight readability, durability, touch functionality and thin and light design remain essential. Over the last decade, consumer device displays have changed from being bulky and space-consuming to slim and bezel-less, driving the need for increasingly complex customization of display solutions.

The market is also adopting emerging technologies such as flexible display and OLED that could enable more rugged, lighter weight and even thinner display solutions, as well as give rise to novel applications, such as transparent displays. The confluence of the need for portability, increasing design customization and emerging display technologies are driving the demand for enhanced display solutions, a trend we have experienced during the COVID-19 pandemic. As such, we believe we will continue to gain market share from conventional display solution providers.

Enhanced Display Solutions

Currently, our enhanced display solutions include DHAs and sub-assemblies such as touch panel assemblies and LCD-touch assemblies. A DHA is a subsystem, consisting of multiple optical and electrical overlays that are designed to be combined with or integrated into another system. The component layers of our DHAs, and their subassemblies, are assembled using our proprietary *Max VU* optical bonding processes and can incorporate a touch panel if desired. A touch panel subassembly consists of a cover lens and a touch sensor. An LCD subassembly includes an open cell (without backlight) LCD glass matrix and a backlight unit, or BLU, containing optical films, light guide, light source reflectors and other layers.

The image below demonstrates the structure of a typical DHA with touch functionality.



As an enhanced display solutions provider, we are able to design DHAs by identifying the required components and deliver finished DHAs incorporating components sourced from a combination of in-house and third-party suppliers.

Optical Bonding

Our optical bonding technologies include our proprietary *VIA bond plus* material, our patented *Max VU* bonding processes (mainly *Max VU II* or *Max VU III*, our dry bonding processes) and related equipment customization.

- *VIA bond plus Materials.* *VIA bond plus* is our proprietary inorganic silicone-based optical bonding material used for all of our bonding applications. *VIA bond plus* supports long lasting, optically enhanced and sunlight readable display solutions. It enables slim product design as well as flexible applications on bendable, foldable and curved display surfaces.

We believe our inorganic silicone-based optical bonding material offers several advantages over organic bonding materials, such as acrylates. For example, acrylate-based materials shrink by approximately 2-3% or more over time, gradually deteriorating the optical bonding layer. Acrylates also react to UV light and become yellow over their lifetime. As a result, images from displays change color, become dimmer due to decreased transparency and require additional power consumption to compensate for the loss in optical performance. Moreover, displays bonded with acrylate materials usually cannot be repaired because the hardened material cannot be removed from the display components without destroying them. As a result, acrylate-based display assemblies are less environmentally friendly because the component parts often cannot be recycled and reused.

We believe *VIA bond plus* provides the following key benefits compared to competing bonding materials:

VIA Bond Plus Competing Technologies

<i>VIA Bond Plus</i>	Competing Technologies
• Clear, transparent and non-yellowing • Fully repairable (production and field) • High stability at extreme temperatures • Tailorable hardness • No external activators required; self-curing • Non-shrinking (<0.1%)	• Yellows over time • Limited or no reparability • Less stability at extreme temperatures • No flexibility for hardness • Require an external activator to cure (UV or heat) • Subject to shrinkage (2-3% or more)

- Non-toxic and environmentally friendly
- Generates fumes that require additional production precautions and component parts often cannot be recycled

Pursuant to the terms of our Framework Collaboration Agreement with Wacker, Wacker is our exclusive supplier of the base materials used in our *VIA bond plus*. We are the inventor and sole owner of the proprietary formula relating to the combination of silicon base materials used to create *VIA bond plus*, and the method of application of *VIA bond plus* to display components. We currently source all of our requirements for the silicon base materials used in our *VIA bond plus* from a sole supplier. We are actively working to develop alternative sources of materials to be used in our bonding processes, including by developing our own internal supply.

- *Max VU II and III Bonding Processes (Max VU)*. *Max VU II and III*, our patented optical bonding processes, are also known as dry bonding or hybrid bonding. We first apply our *VIA bond plus* liquid silicone-based optical bonding material onto a substrate, such as the cover lens, touch panel or the display. As a material capable of fully curing without any external activation such as UV light, the *VIA bond plus* liquid is pre-cured to become a soft and gel-like layer with favorable adhesive properties. In the next step, the substrate with the adhesive layer is optically bonded (laminated) to a second substrate (such as a cover lens, touch panel or display) without mechanical force (i.e., without pressure). After, *VIA bond plus* self-cures until the material is fully cured. For pre-curing as well as final curing, moderate heat may be applied to accelerate the process, but is not necessary to complete the curing process. This curing process without external activation and optical bonding process without mechanical force are distinguishing features of *Max VU*.

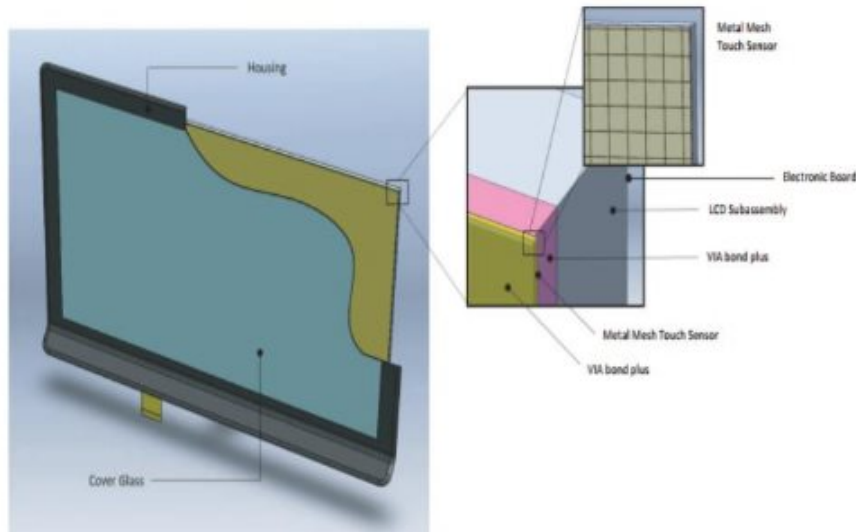
Unlike *Max VU*, competing technologies typically use a wet process that dispenses a liquid adhesive onto a display, and then applies pressure to the cover lens with mechanical force to squeeze the liquid adhesive from the middle of the substrate to the edges of the display. We believe *Max VU* provides the following key benefits compared to bonding processes that apply mechanical force:

<i>Max VU</i>	Competing Technologies
• No adhesive will flow into the backlight and damage the LCD • Superior control on bond line thickness and tolerance • No sealing required, which preserves any available LCD warranty • No pressure or glow marks	• Liquid may be squeezed into the BLU and damage the LCD • Difficult to control the amount of liquid and pressure that needs to be applied • Sealing invalidates LCD warranty as the seal may not be capable of being removed or repaired • Pressure on LCD may cause glow marks
• <i>Bonding Services and Licensing</i>. We provide optical bonding services to customers who provide us with display components they have independently defined and/or sourced from third parties. Additionally, for selected customers who wish to employ our optical bonding process within their own production facilities, we offer a licensing model pursuant to which we provide our <i>VIA bond plus</i> material, optical bonding process know-how and customized equipment necessary to facilitate our <i>Max VU</i> process directly to the licensee customer. Through our dedicated service and support, we believe we are able to provide seamless installation and a high level of quality control to our licensee customers. Licensing is a small portion of our business and accounted for 1.1% of our revenue in 2020.	

Metal Mesh Touch Sensors

Through VTS, our majority-owned subsidiary acquired in March 2018 in which Toppan is the minority owner, we develop and manufacture a complete suite of metal mesh touch sensors and electrode base film materials for use in touch panels. A touch-enabled display requires a touch panel including a touch sensor in order to deliver the desired touch functionality. Our touch sensors utilize copper-based metal mesh technology. Metal mesh technology has been successfully introduced into the market as a replacement for legacy ITO technologies and offers several advantages, the most important of which is the higher conductivity of the metal material as compared to ITO. Improved conductivity enhances touch performance and enables features and functions such as use with thick cover lenses and in larger display sizes, as well as pen and glove functionality.

The image below demonstrates the structure of a typical display that includes a metal mesh touch sensor



Electrode Base Film. We produce our copper electrode base films by applying a copper layer to a substrate, such as Polyethyleneterephthalate, or PET, or Cyclo-Olefin-Polymer, or COP, using a sputtering process. Sputtering is a technique in which thin films of atomic material are deposited onto a substrate surface. We produce our electrode base films at our production facility in Saitte, Japan on a roll-to-roll, high volume basis, which maximizes cost efficiencies. We intend to leverage our ability to produce both the electrode base film and the related metal mesh touch sensors differentiates us from our competitors. Our ability to produce both component parts necessary to complete a metal mesh touch sensor enables us to control the supply chain, provides flexibility to develop all types of metal mesh sensors and provides our customers with production efficiencies by turning to us as a single source supplier. Additionally, our production capabilities and engineering allow us to use third-party electrode base films in our touch sensor production, which enables us to produce touch sensors using materials other than copper and to mitigate potential capacity shortages in our electrode base films.

- *Touch Sensors.* Each metal mesh touch sensor must be customized for the specific sensor pattern needed for the active display area of the finished display. Each touch sensor requires two electrode layers (oriented on the x- and y- axes), which can be produced on two different substrates, commonly referred to as an FF structure, or on the top and bottom of a single substrate, commonly referred to as an F2 structure. F2 structures are generally preferable because they facilitate slimmer design and provide superior optical performance due to the presence of only a single substrate layer. F2 structures are also more efficient to produce because the x- and y-layers of a sensor can be produced in a single production step. FF structures are commonly used in medium, large and ultra large display sizes, whereas F2 structures are more commonly used in small and medium displays, principally within the automotive and consumer electronics products. Based on our patented patterning technology and proprietary production process, we have the ability to produce both FF and F2 structures. We believe there is currently only one other company in the market that is capable of higher volume production of metal mesh based F2 structures.

Our copper-based mesh sensors are produced using a multi-step photolithography process. First, a photoresist material is applied to the copper electrode base film. Second, as the result of a UV exposure process, the sensor layout is realized on the photoresist level with the assistance of a customized photomask. Finally, a copper etching process is performed to realize the customized metal mesh sensor structure, followed by a cleaning process to remove any remaining photoresist. Our metal mesh touch sensors can be used with different types of cover lenses and in different shapes, which we believe will enable us to continue to develop touch sensors that meet future requirements of our current end-markets as well as for new fields of application.

We believe our copper-based metal mesh touch sensors provide the following key benefits compared to competing touch sensors using ITO technology:

VTS Touch Sensors	Competing Technologies
• Fast response time due to high conductivity and transmissivity • Precise touch sensitivity • Superior glove and pen functionality • Flexibility, bendability and narrow wiring design enabling design freedom, including application on curved surfaces and narrower display housing borders or zero bezel designs • High reliability due to the stability of the copper material • Better optical performance and higher transmittance • Screen sizes up to 85 inches	• Slower response times • Decreased touch sensitivity due to lower conductivity • Limited glove and pen functionality • Limitation of application due to non-flexibility/bendability • Lower reliability due to instability of indium • Lower transmittance depending on ITO-layer thickness • Screen sizes up to 65 inches

We expect that an increasing number of our customers will adopt our in-house metal mesh touch sensor technology as high-precision touch functionality becomes more prevalent.

Cameras

We also custom design camera modules using image sensors we purchase from third-party suppliers to address the fast-growing demand in the automotive and industrial/specialized markets for integrated, camera-enhanced and interactive displays. Whether they are part of an ADAS system in a car, surround view for agriculture equipment or a monitoring system on a ship, we see the demand for our dynamic, advanced camera module technology rapidly increasing. We design camera modules, adjust the camera lens to the viewing angle of the image sensor and align the sensor, utilizing IMI's patent-pending 6-axis-active alignment technology that we access pursuant to our Service and Support Agreement with IMI. We then integrate this assembly into an ultra-lightweight housing that is resistant to temperature, shock and vibration for automotive and industrial/specialized applications. We are supporting this development through camera module engineering and research and development personnel, including through the services of an experienced camera module design team currently seconded to us by IMI. We believe this is another important step towards realizing our aspiration of becoming an interactive display system provider that offers not only components and subsystems, but also complete systems that fully integrate components in a seamless offering. An example of such an offering is eMirror systems combining camera modules, interactive displays, electronic control units and software interface in a tightly integrated package.

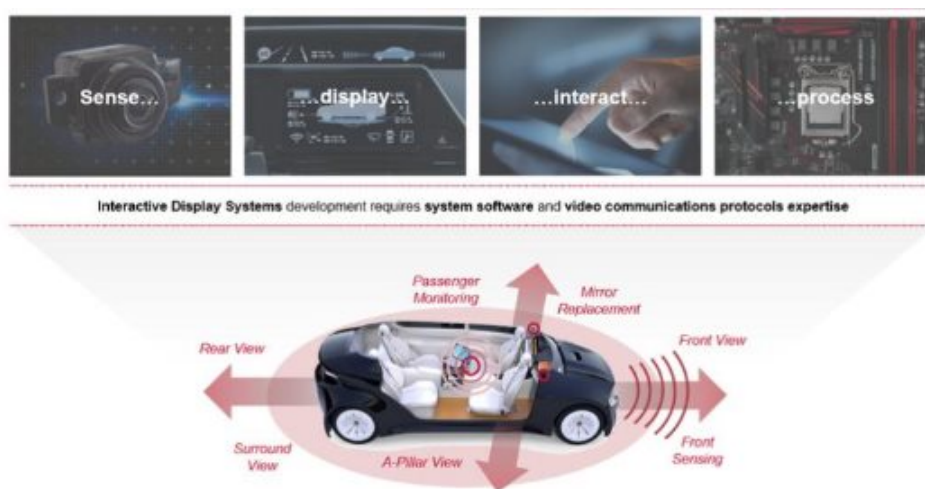
Electronic Control Unit (ECU)

The ECU is a device responsible for controlling the interactive display system. All displays, camera modules and touch screens are connected to the ECU. We develop drivers for our components (display, touch, camera module) to achieve maximum performance. Depending on a customer's need, we develop functions like hovering, gesture recognition for touch screens, glove compatibility or add commercially available library elements to support other functions such as object recognition.

Interactive Display System

An interactive display system is comprised of several elements: a display, camera module and touch sensors with an ECU. We are able to design and produce displays, camera modules and touch sensors in-house and perform any related optical bonding processes necessary to manufacture the interactive display system. Almost all of our interactive display systems are designed specifically for individual client projects. Components we purchase from third-party suppliers for inclusion in an interactive display system differ based on customer specifications and can include glass, open cell LCD glass matrices, light guides and films, electronic components, housing and sensors or subassemblies where commercially appropriate.

The image below illustrates the ingredients of an interactive display system.



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Cold Form Glass Collaboration with Corning

In 2019 we entered into a strategic partnership with Corning, whereby we are seeking to leverage our core competencies in the area of displays, optical bonding, copper metal mesh touch sensor technology and automotive camera module technology combined with Corning's core competencies in the area of cold forming glass. As part of this collaboration, we are designing the production equipment used for the cold form process. In January 2020, we initiated mass production of automotive interior curved display systems utilizing these technologies.

Sales and Marketing

We market and sell our products and solutions primarily through our internal direct sales force, supported by outside sales representatives and distributors. Our direct sales force is organized among our four sales offices in Germany, China, Taiwan and the United States. We currently have two sales agents or distributors in Asia, with territories covering Japan and Korea, and one sales agent in the United States. In addition, we employ a direct sales manager who is primarily focused on automotive customers, globally. Our sales personnel receive substantial technical assistance and support from our internal technical marketing and engineering teams. Sales frequently result from multi-level sales efforts that involve senior management, engineers, and our sales personnel interacting with our customers' decision-makers throughout the product design, development and order process. Our customers often provide our sales force with insight into how our products will be integrated into our customers' solutions and frequently look to us as a design partner. This sales process requires us to develop strong customer relationships and to work collaboratively with our customers to fulfill their needs. The period of time from our initial contact with a prospective or current customer to the receipt of an actual purchase order (including time relating to the qualification process) depends on the end-markets and is frequently a year or even more, with such period being longer for more complex solutions such as in the automotive and industrial/specialized applications. Prospective customers often perform extensive testing before our products and solutions are incorporated into their own product offerings. This phase of our sales cycle can take several months and purchase arrangements may not be entered into until after this phase is completed.

Our customers' product life cycles typically last multiple years, with consumer electronics being approximately 1-1.5 years, automotive being approximately 3-7 years and industrial/specialized applications being approximately 3-10+ years. With respect to metal mesh touch sensors and film produced by VTS, both we and Toppan have dedicated sales teams who provide sales services. Our dedicated sales force, as well as Toppan's, is contracted under a bilateral distribution agreement, providing distributor services to VTS. See "Business—Strategic Alliance Agreements" for a description of the distribution agreement and other material agreements with Toppan. As of December 31, 2020, we employed 38 sales and marketing professionals, with such professionals based in each of our locations. For the year

ended December 31, 2019, our selling expenses totaled €4.3 million and represented 3.1% of revenue and for the 12-month ended December 31, 2020 our selling expenses totaled €3.4 million and represented 2.2% of revenue.

Strategic Alliance Agreements

Agreements with Toppan Printing Co., Ltd.

We have entered into a series of agreements in connection with our acquisition of a majority interest in VTS and the establishment of the governance and other operational and commercial rights and obligations of VIA, VTS and Toppan relating to VTS. These agreements and the material terms thereof are summarized below.

On November 30, 2017, we entered a Framework Agreement with Toppan to establish VTS in Japan for the purpose of developing, manufacturing and marketing (i) copper touch sensors used in touch panel modules and (ii) copper PET film used in touch panel sensors. Pursuant to the Framework Agreement, Toppan incorporated VTS-Touchsensor Co., Ltd. (f/k/a Toppan Touch Panel Products Co., Ltd.) as its wholly-owned subsidiary and transferred certain assets forming the business operations of VTS through a corporate spin-off proceeding (*kaisha bunkatsu*) under the Companies Act of Japan.

On March 23, 2018, we entered into a Share Purchase Agreement with Toppan, pursuant to which we obtained 65% of the outstanding shares of common stock of VTS-Touchsensor Co., Ltd. from Toppan for upfront cash consideration of 211,231,000 Japanese Yen (excluding tax). The purchase price for our shares was later reduced to 168,146,444 Japanese Yen (excluding tax) in accordance with the final determination of an inventory-based purchase price adjustment provided for in the Share Purchase Agreement.

Concurrently with our acquisition of our shares in VTS, we entered into a Shareholders Agreement with Toppan that governs the rights and obligations of the parties as shareholders of VTS. The material terms of the Shareholders Agreement are as follows:

- The Shareholders Agreement provides that the Board of Directors of VTS shall consist of up to 3 members, with two members designated by us and one designated by Toppan. Additionally, we have the right to designate the Representative Director of VTS from among our directors, who has the authority to execute the decisions of the Board of Directors pursuant to the Companies Act. We also are entitled to appoint a statutory auditor, who assumes the supervisory and monitoring role over directors under the Companies Act.
- The Shareholders Agreement provides that certain actions must not be taken unless approved by resolution of the Board of Directors with the affirmative vote of the member designated by Toppan. Such board reserved matters include modification of VTS's business plan, consummating investments in new business lines, as well as the purchase of assets, incurrence of indebtedness, the leasing of real property, or other expenditures exceeding certain threshold amounts. The Shareholders Agreement also provides that certain actions must not be taken unless approved by resolution of the shareholders with the affirmative vote of Toppan. Such shareholder reserved matters include the taking of certain material corporate actions, such as mergers, corporate spin-off or business transfer, as well as the amendment of the articles of incorporation, the establishment of subsidiaries, the issuance of new shares in VTS, and remuneration of directors. We may exercise a call option for the shares held by Toppan, and Toppan may exercise a put option for the shares held by Toppan, under the following circumstances:
 - In case of a deadlock (defined as lack of resolution on a matter after consideration at two successive board meetings or shareholder meetings, as applicable, for the respective reserved matter), we may purchase the shares held by Toppan at 103% of an agreed going concern valuation based on the price a buyer would pay for all of VTS in an arm's length transaction (adjusted for net debt), or the Going Concern FMV, or Toppan may sell its shares to us at 97% of such valuation.
 - In case of "material breach" of certain provisions of the Shareholders Agreement (including the board appointment and removal provisions, the lock-up restrictions, the right of first refusal, the tag-along and the restrictive covenant provisions), if the breaching party is Toppan, we may purchase the shares held by Toppan at 50% of the Going Concern FMV, and if we are the breaching party, Toppan has the right to sell its shares to us at 150% of the agreed going concern valuation.

- If VTS generates net losses for three consecutive years and if the shareholders are unable to reach a viable plan for VTS, we may purchase, or Toppan may request us to purchase, Toppan's shares in VTS at an agreed net asset valuation.
- During a non-compete period ending on the later of (i) either shareholder ceasing to hold any shares in VTS or (ii) March 28, 2021, neither shareholder shall, directly or indirectly (i.e., through its affiliates), manufacture copper touch sensors used in touch panel modules or copper PET film used in touch panel sensors, in each case, anywhere in the world.
- Following the expiration of the lock-up period, neither shareholder may sell its interest in VTS to a third party purchaser for value without first offering the other party a right of first refusal to acquire its interest on the same terms and conditions proposed by the third party purchaser.

In accordance with the Framework Agreement, VTS also entered into certain commercial agreements with Toppan (or its affiliate, as applicable), to obtain the necessary assets, technologies, human resources and facilities to carry on VTS's business operations.

The material terms of these commercial agreements are as follows:

- *Employee Secondment Agreements:* On March 29, 2018, VTS entered into employee secondment agreements with each of Toppan and Toppan Electronics Products Co., Ltd., or TEP, a wholly owned subsidiary of Toppan, pursuant to which Toppan seconded 16 employees and TEP seconded 38 employees at two VTS manufacturing sites located in Shiga and Sate Japan. The secondment period for each secondee is set on an individual basis, with most secondees serving a three-year secondment period which ended in March 2021 and are in process of being extended for another two years. As of December 31, 2020, the seconded employees represented approximately 45.8% of VTS's employees at the Shiga and Sate sites.

VTS may request the extension of the secondment period or convert a secondee to a direct employee of VTS by providing six months' prior notice before the expiration of the applicable secondment period, and VTS and Toppan agree to engage in good faith negotiation to accommodate VTS's request, subject to the consent of the seconded employee. VTS may also request that secondees be replaced or their positions adjusted by delivering written notice to Toppan and engaging in mutual negotiation with Toppan following such request. Under the secondment agreements Toppan is responsible for the administration of the secondees' employment terms, conditions and benefits and Toppan's service policies, including holiday and vacation policies, apply. The cost of the secondees' salaries, pensions, employee-related government taxes and benefits are allocated to VTS. The secondment agreements may be terminated upon an insolvency event of either party, either party's uncured material breach of the agreement, if we cease to control a majority interest in VTS or if Toppan no longer holds any interest in VTS.

- *Facility Lease Agreements:* On March 29, 2018, VTS entered two facility lease agreements with Toppan relating to the manufacturing facilities located in Shiga and Sate. Both facilities are located within the premises owned by Toppan and certain administrative services associated with the leases are provided by Toppan Techno Co., Ltd., an affiliate of Toppan. The Shiga lease provides for an initial term of five years with an option in favor of VTS to renew the term for an additional five years. The Sate lease provides for a term of two years and may be extended by mutual agreement by the parties and has been extended under its terms through March 31, 2021. Each lease provides for rental amounts to be paid in equal monthly installments during the life of the lease, except that (i) rental payment for the first year of each lease may be made in 48 equal monthly installments with the first payment deferred until April 2019 and (ii) rental payment for the second year of each lease was paid in one lump sum in March 2020, subject, in each case, to the application of 2% interest. Both lease agreements allocate a portion of certain shared maintenance and administrative costs to VTS. The lease agreements may be terminated upon an insolvency event of either party, either party's uncured material breach of the agreements, if we cease to control a majority interest in VTS or if Toppan no longer holds any interest in VTS.
- *Business Assistance Agreement:* Under this agreement, effective March 26, 2018, Toppan provides VTS with certain operational support services, such as sales and production control (including pricing and quotation proposal), manufacturing design operation, procurement, accounting, environmental regulatory compliance,

general administration of seconded employees, product shipping and quality control. Additionally, Toppan will allocate an appropriate number of staff with the qualifications to perform these services. The cost of the personnel performing the operational support services is allocated to VTS at fixed monthly rates based on the number of individuals and time dedicated to performing such services. VTS and Toppan also collaborate to use a shared administration system. The business assistance agreement has a three-year term and is in the process of being extended for an additional two years. It is terminable by VTS on 30 days' prior written notice, upon an insolvency event of either party, either party's uncured material breach of the agreement, if we cease to control a majority interest in VTS or if Toppan no longer holds any interest in VTS.

- *IP Transfer Agreement:* VTS entered into a Transferred IP Purchase Agreement with Toppan on March 29, 2018, Toppan transferred certain patent applications and issued patents relating to copper touch panel sensors and copper PET film to VTS for a purchase price of 568,675,000 Japanese Yen (exclusive of consumption tax), which was paid in installments ending on March 31, 2019. Pursuant to the terms of the IP Transfer Agreement, the completion of the application registration process with respect to transferred but unissued patents was assumed by VTS.
- *IP License Agreement:* Pursuant to the IP License Agreement effective March 29, 2018, Toppan granted VTS a non-exclusive, worldwide license for certain patents (including applications) and certain know-how developed by Toppan (such rights, the Licensed IP) for the purpose of manufacturing, selling, or importing/exporting VTS's products. In general, this agreement remains in force and effective until the expiration of the last licensed patent, unless terminated earlier by either party upon a payment default by VTS, an insolvency event of either party, either party's uncured material breach of the agreement, if we cease to control a majority interest in VTS. In connection with this agreement, VTS agreed to pay Toppan a low single-digit royalty on the total sale proceeds of the VTS products covered by the license, with such royalty fee payable monthly. Toppan provided VTS with certain customary representations and warranties regarding its intellectual property rights in the Licensed IP, including valid ownership and sufficiency of the Licensed IP.
- *R&D and Consignment Agreement:* Pursuant to this agreement dated March 29, 2018, as amended on November 7, 2019, December 6, 2019 and June 23, 2020, Toppan agreed to make available 7 Toppan employees to perform certain research and development services in accordance with a scheduled plan prepared by VTS. The R&D and Consignment Agreement has an initial term of three years. VTS pays a fixed monthly fee for the research and development services, which is calculated generally based on Toppan's staffing costs with applicable mark-up rates. The R&D and Consignment Agreement provides that any inventions and discoveries developed through the performance of the research and development services shall become the properties either of VTS or Toppan or jointly owned by both parties, depending on the underlying intellectual property which became the basis of such inventions and the nature/usage of the inventions. The R&D and Consignment Agreement may be terminated upon an insolvency event of either party, either party's uncured material breach of the agreement, if we cease to control a majority interest in VTS or if Toppan no longer holds any interest in VTS.
- *Distribution Agreement:* Pursuant to this agreement dated March 29, 2018, as amended on November 7, 2019, April 24, 2020 and June 23, 2020, VTS appointed Toppan to serve as a non-exclusive distributor of copper touch panel sensors used in touch panel modules and copper PET film used in touch panel sensors during the term of the agreement. Pursuant to the terms of the agreement, Toppan agrees to use commercially reasonable efforts to promote, sell and distribute the covered products and establish and maintain a sales organization for this purpose. The distribution agreement has an initial three year term and automatically renews for successive one-year terms unless terminated by either party on six months' notice. The distribution agreement may also be terminated upon an insolvency event of either party or either party's uncured material breach of the agreement.

Framework Collaboration Agreement with Wacker Chemie AG

We are party to a Framework Cooperation Agreement with Wacker, dated April 8, 2019, that replaced an earlier agreement between Wacker and us originally signed in 2013. Pursuant to the agreement, Wacker is the sole supplier to us of the base silicone material we use to prepare our *VIA bond plus* adhesive, a critical element in our optical bonding process. The silicone material has been improved and refined in accordance with our specifications over a number of years under the prior agreement.

With respect to the continued supply of silicone materials, the new Framework Cooperation Agreement provides as follows: (i) Wacker is required to exclusively provide us with the base silicone material used in our *VIA bond plus* adhesive per the specifications set forth in such agreement so long as we satisfy a minimum delivery amount per calendar year, (ii) we are required to purchase all of our requirements of our silicone materials from Wacker, if the silicone material is suitable for the project and approved by our customer and except to the extent that Wacker is unable to meet our requirements (which Wacker is required to confirm in writing within one week of our request for material) in which event we are permitted to obtain a suitable different material, (iii) the price of such material shall be mutually negotiated each year during the fourth quarter, with the contract being terminable if the parties are not able to agree on terms and (iv) Wacker's liability is limited as it solely warrants that the silicone material will meet the specifications provided in the agreement. The Framework Cooperation Agreement has an initial term ending December 31, 2021 and thereafter automatically renews for successive one year terms unless it is earlier terminated on six months' advance notice. While the contract may be renewed for additional periods, the exclusive relationship with Wacker will terminate no later December 31, 2021.

The Framework Cooperation Agreement also establishes Wacker and us as development partners for materials in the area of optical bonding, providing that Wacker will be identified to customers as the bearer of expertise in the manufacturing of products required for optical bonding and we will be identified to customers as the bearer of expertise with respect to the processing, assembly, development and optimization of applications and the development of assembly equipment. The agreement also provides that it is not intended to affect any pre-existing intellectual property rights of the parties or to effect any cross-licensing of intellectual property.

Collaboration with Corning

We also have entered into three commercial agreements with Corning Auto Glass Solutions, LLC or one of its affiliates (Corning) to collaborate on the development and manufacture of glass-on frame cold formed, or three dimensional formed surface, products for automotive interiors employing our optical bonding technology and Corning's cold forming technology which enables three-dimensional (3D) shaped cover glass designs, including automotive dashboard and instrument clusters made out of a single piece of formed glass. Automotive interiors includes cockpit and interior solutions of passenger vehicles, including automobiles, trucks, aircraft, seacraft and trains. The agreements include provisions relating to development, supply, manufacturing, cost-sharing and exclusivity, and delineate the respective intellectual property rights of the parties. Each agreement has an initial term of ten (10) years from the effective date of March 6, 2019, unless earlier terminated pursuant to its terms, and will thereafter automatically renew for one (1) or more additional three-year periods upon expiration of the initial term, as applicable, subject to certain notice requirements. We have no financial commitments under the agreements until work orders are entered into.

Agreements with IMI

Service and Support Agreement

Our subsidiary VIA optronics GmbH entered into a Service and Support Agreement effective January 7, 2019, with IMI, an affiliate of our shareholder, pursuant to which IMI agreed to provide development support services to VIA optronics GmbH by providing 14 dedicated employees for contract development support services. Additional dedicated employees can be added by mutual agreement of the parties. VIA optronics GmbH pays a fixed monthly fee for each dedicated employee which covers all costs for five (5) workdays a week. In addition, VIA optronics GmbH bears sole responsibility for any potential taxes, assessments, and other similar payments which accrue under this agreement. Each party disclaims any ownership rights to other party's background intellectual property and provides that any intellectual property that is developed by the parties in the course of performing the development support services under the agreement is solely owned by VIA optronics GmbH. The Service and Support Agreement has an unlimited term unless terminated by either party on at least 30 days' written notice.

Framework Development Agreement

VIA optronics GmbH also entered into a Framework Development Agreement with IMI that was effective November 1, 2018. Pursuant to this agreement, Via optronics GmbH agreed to provide IMI, development and research services for camera module projects. The scope of any relevant services to be provided by VIA optronics GmbH is to be set forth in separate statements of work which are negotiated in good faith by the

parties, which statements of work will contain any terms and conditions with regard to contract periods and payment conditions. IMI pays a fixed hourly rate for each employee of VIA optronics GmbH performing services under this agreement. In addition, IMI, bears sole responsibility for any potential taxes, assessments, and other similar payments which will accrue under this agreement. The agreement disclaims any ownership rights to other party's background intellectual property and provides that any intellectual property that is developed by the parties in the course of performing any statement of work is solely owned by VIA optronics GmbH. The Framework Development Agreement has an unlimited term unless terminated by either party on at least 30 days' written notice.

Intellectual Property Rights

Our success and ability to compete depend in part on our ability to maintain the proprietary aspects of our technologies and products. We rely on a combination of patents, trademarks, trade secrets, licensing and collaboration agreements, confidentiality agreements, and other statutory and contractual provisions to protect our intellectual property, but these measures may provide only limited protection.

Patents

In combination with VTS, as of December 31, 2020, we held 22 active patent families (i.e., groups of patents/patent applications for an invention filed in different countries that are based on the same priority (the first application)), including 124 granted patents covering certain display systems and customized equipment relating to our optical bonding technology and conductive film, electrodes and touch panels and display devices relating to our metal mesh touch sensor technology, and had an additional 33 pending patent applications worldwide.

These patent assets are complemented by our marketing, business development, applications, production and operations know-how and our ongoing research and development efforts.

Trade Secrets

As is true in our industry generally, the development of our products, processes and materials has involved a considerable amount of experience, manufacturing, operating and processing know-how and research and development techniques. We protect our proprietary processes and technologies with a blend of patent protection and trade secret protection. As part of our overall intellectual property strategy, we protect our non-patented proprietary knowledge as trade secrets through confidentiality controls such as nondisclosure and confidentiality agreements.

Licenses and Collaboration Agreements

We are a party to various licenses, collaborations and other arrangements that allow us to practice and improve our technology under a range of patents, patent applications and other intellectual property. These include the licensing and collaboration agreements with Toppan that are described in more detail under the heading "Item 4. Information on the Company – B. Business Overview – Strategic Alliance Agreements".

Trademarks

We have trademark protection for the word and figurative trademarks "Max VU", in each of the United States, Germany, China and the European Union. We have received trademark protection for "VIA optronics" in Germany.

Competition

Our optical bonded display solutions and metal mesh touch sensors are sold into end-markets for automotive, consumer electronics and industrial/specialized applications. These end-markets are characterized by rapidly changing technology and intense competition. Our principal competitors in automotive application markets are display makers with their own optical bonding capabilities such as AU Optronics, INX, Tianma, JDI and SHARP as well as Tier-1 suppliers, such as Continental and Alpine. Our principal competitors in the sale of optical bonded display solutions for consumer electronics applications are TPK, Henghao, Shenzhen Laibao Hi-Tech, GIS, Mutto and O-film. Our main competitors in the sale of optical bonded display solutions for industrial/specialized applications are primarily smaller regional companies such as Data Modul, Faytech and Data Image. In certain strategic cases, in order to expand our

optical bonding capacity in different markets, we partner with competitors by granting them a time limited license containing know-how about our process and delivery of our material for their manufacture of products for end users. For example, Continental is a licensee of our technology in addition to being a competitor and may from time to time also purchase components from us. Our principal competitor within metal mesh touch sensor technology is Fujifilm, which is also capable of producing F2 structures but uses silver (rather than copper) based metal mesh. We also compete with producers of existing ITO sensors and a limited set of smaller competitors who produce silver and copper-based metal mesh touch sensors but who focus more on the medium to larger-sized FF structure.

Government Regulation

We are subject to environmental, health and safety regulations in Germany, as well as in the countries where our products are used or sold or produced.

Germany

Legal Requirements for Manufacturing Sites, Facilities and Operations

Emissions Control Law

Our production processes generate emissions, in particular noise. As a result, we are subject to the rules and regulations of the Federal Emissions Control Act (*Bundesimmissionsschutzgesetz*, or *BImSchG*). The Federal Emissions Control Act contains provisions aiming at the prevention of harmful effects on the environment caused by air pollution, noise, vibration and similar environmental emissions. Companies causing such environmental emissions in Germany are subject to the supervision of the Federal Environment Agency and require a permit to perform their activities causing such emissions. We currently do not require any permits to be granted under the Federal Emissions Control Act as the emissions (such as noise) caused by our operations do not exceed certain threshold levels as determined by the Federal Emission Control Act.

As our products are mainly manufactured by machines, we are also required to comply with the 32nd Regulation on the Implementation of the Federal Emissions Control Act, or Ordinance on Equipment and Machine Noise Protection (*Geräte- und Maschinenlärmschutzverordnung—32. BImSchV*).

We are further subject to the 1st Regulation on the Implementation of the Federal Emission Control Act, or Ordinance on Small and Medium-sized Firing Installations (*Verordnung über kleine und mittlere Feuerungsanlagen—1. BImSchV*) as we use ovens for temperature testing of our products as part of our quality management. We are in compliance in all material aspects with these emission control laws.

Production, Possession and Handling of Waste and Dangerous Goods

Our business activities result in the generation, possession and handling of waste. We are subject to the German Act on Recycling (*Kreislaufwirtschaftsgesetz*, or *KrWG*) and the corresponding ordinances. In accordance therewith, the generation, possession and handling of waste is subject to several obligations, depending, among other things, on the characteristics of the waste concerned. As producer (*Erzeuger*) and possessor (*Besitzer*) of waste, we are generally responsible for the proper handling of such waste, and we are in compliance in all material aspects with the relevant rules and regulations.

Section 50 of the *KrWG* requires producers, possessors, collectors and transporters of waste and disposal firms to verify to the competent authority the proper disposal of hazardous waste (*gefährliche Abfälle*). Whether a certain substance qualifies as hazardous waste is determined according to the German Ordinance on the European Waste List (*Verordnung über das Europäische Abfallverzeichnis*). Save for ethanol-containing cleanser in low volumes we do not use or produce any hazardous waste in our production process.

We additionally comply in all material aspects with the requirements of the Battery Law (*Batteriegesetz*, or *BattG*) by disposing the batteries we use in an environmental-friendly way. We also comply with the provisions of the Packaging Law (*Verpackungsgesetz*, or *VerpackG*) which entered into force on 1 January 2019, replacing the Packaging Ordinance (*Verpackungsverordnung*). The Packaging Law applies to all distributors who put packaging into commercial circulation on the German market for the first time (referred to as “manufacturers”)—i.e., both for national producers

and for importers. The Packaging Law requires manufacturers to register and participate in a disposal and recycling system in relation to its product packaging.

Furthermore, we comply in all material aspects with the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). The European Union adopted the REACH Regulation to improve the protection of human health and the environment from the risks that can be posed by hazardous chemicals. In general, we do not use any hazardous chemicals other than ethanol-containing cleanser in our production process which, given the low volumes used by us, cannot be expected to have a negative impact on the environment.

Product Safety

Directive 2001/95/EC of the European Parliament and of the Council of December 3, 2001 on general product safety, which has been implemented in Germany by the German Product Safety Act (*Produktsicherheitsgesetz*, or ProdSG) as well as various governmental regulations (*Rechtsverordnungen*) on the safety of specific products and product groups, impose various obligations on manufactures. The German Product Safety Act applies whenever products are made available on the market, exhibited or first used in the context of a commercial activity, unless other legal provisions provide for corresponding or more far-reaching provisions on user protection.

Under the German Product Safety Act, a product may be made available on the market only if it complies with specific regulations applicable to such product, or, in the absence of such specific regulations, if its intended or foreseeable use does not put the health and safety of persons at risk. In addition to compliance with this general safety requirement, if products are made available to consumers, manufacturers must provide consumers with the necessary information allowing them to assess the risks inherent in such product where such risks are not obvious without adequate warnings and to take precautions against those risks. If manufacturers or distributors of consumer products become aware that a product is dangerous, they must notify the competent authorities and, where required, cooperate with them. Under certain circumstances, a product may have to be recalled. Our company has never been subject to a claim or order to recall any of its products under the German Product Safety Act.

Potential Fault-Based Liability and Strict Liability related to Products

In accordance with general principles of German civil law, we may be subject to fault-based liability for damages (*Schadensersatz*) caused by a breach of contract or unlawful infringement of legally protected rights of others by our own acts but also by any actions of individuals that work or undertake tasks for us or on our behalf in accordance with Sections 278 and 831 of the German Civil Code (*Bürgerliches Gesetzbuch* or BGB).

Under the German Product Liability Act (*Produkthaftungsgesetz*, or ProdHaftG) we may be strictly liable (i.e. liable regardless of our fault), as a “producer” for damages caused by a defective product. “Producer” means any participant in the production process, or importer, of a defective product, any person putting a name, trademark or other distinguishing feature on the product, and any person supplying a product whose actual producer cannot be identified. “Defectiveness” means the lack of compliance with safety requirements which the general public is entitled to expect when taking into account, among other things, the presentation of the product and the uses to which it can reasonably be put. We are not involved in any pending or threatened product liability cases or claims under the German Product Liability Act or other applicable regulations regarding product liability.

Liability for Environmental Damages

In the event of damage to persons or property caused by our facilities, we may additionally be strictly liable under the German Act on Liability for Environmental Damage (*Umwelthaftungsgesetz*, or UmwHG) or under the German Environmental Damage Act (*Umweltschadensgesetz*, or UmwSG), and the members of our management board, our supervisory board and our employees may even incur criminal liability under the German Criminal Code (*Strafgesetzbuch*, or StGB). We are not involved in any pending or threatened cases or claims under the German Act on Liability for Environmental Damage or the German Environmental Damage Act.

Occupational Health and Safety Requirement.

Occupational health and safety laws are applicable where a work environment may pose threats to employees. German law on occupational safety is heavily influenced by the requirements of the laws of the European Union. The key rules on occupational safety in Germany are contained in the German Act on Occupational Safety (*Arbeitsschutzgesetz*, or ArbSchG), which requires employers to provide for their employees' safety. This general obligation has been put into effect through several ordinances (*Rechtsverordnungen*) under the German Act on Occupational Safety, which are, in turn, more fully specified in technical guidelines. Among the relevant ordinances applicable to us is the Workplaces Ordinance (*Arbeitsstättenverordnung*), which contains various regulations on workplace conditions relating to, for example, ventilation, temperature and illumination. We are in compliance in all material aspects with the occupational and safety laws that are applicable to us.

In addition, we are monitored by the employers' liability insurance association (*Berufsgenossenschaft*). All companies in Germany are required to be member of the *Berufsgenossenschaft*, which is monitoring the companies regarding compliance with occupational health and safety requirements.

Data Protection and Data Privacy

Data protection in general

The collection, processing and other use of personal data is extensively regulated by European and national legislation. At the EU level, Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016, also known as the General Data Protection Regulation, or GDPR, entered into force on May 25, 2018. In Germany, the General Data Protection Regulation is supplemented and modified by the German Federal Data Protection Act (*Bundesdatenschutzgesetz*, or BDSG), which was recently amended with effect from May 25, 2018, as well as data protection statutes on state level. In general, the GDPR regulates when and how personal data may be collected, for what purposes it may be processed, for how long such data may be stored and to whom and how it may be transferred. The GDPR contains strict requirements for obtaining the consent of data subjects (*i.e.*, the persons to whom personal data relates) regarding the use and processing of their personal data. Such consent may be withdrawn at any time without cause, disallowing the continued use of the data concerned. In addition, transfer of personal data to recipients outside the EEA is subject to specific requirements. In connection with our business operations, we store personal data of customers in our CRM and ERP systems as part of our sales processes. The GDPR also requires businesses to take organizational measures such as the appointment of a data protection officer (*Datenschutzbeauftragter*), who, inter alia, monitors compliance with the requirements of the GDPR. We have retained an external data protection officer which monitors compliance with the GDPR. In addition, it may require a so-called privacy impact assessment in cases where an envisaged data processing operation is likely to result in high risk to the rights and freedoms of individuals concerned. In addition to the GDPR and the German Data Protection Act, various sector-specific statutes set forth specific rules which apply to certain industries or businesses and, within their respective scope, override the general provisions of the German Data Protection Act.

Individual rights of data subjects

Under the GDPR data subjects, inter alia, have the right to require information about what data has been recorded with respect to them, how their data is being processed, the right to data portability as well as the right to restrict certain processing of their data. Furthermore, the GDPR establishes a "right to be forgotten". As a result, a data subject may require that data relating to such data subject be deleted where, for example, the data subject has withdrawn his or her consent to use or storage of such data.

Consequences of non-compliance

Under the GDPR, any violation of applicable provisions may result in severe fines. Depending on the infringement, fines up to the higher of 4% of the annual worldwide turnover of the "undertaking" (which, in connection with a company that belongs to a corporate group, may relate to the entire group) for the last fiscal year or A20.0 million may be imposed. In addition, the GDPR grants individual data subjects the right to claim damages for violation of their rights under the GDPR.

China

Production, Possession and Handling of Waste and Dangerous Goods

Our business activities in China result in the generation and discharging of waste, including hazardous waste. Pursuant to the *PRC Environmental Protection Law* promulgated on December 26, 1989, amended on April 24, 2014, and effective as of January 1, 2015, as well as the *Measures for Pollutant Discharge Permitting Administration (for Trial Implementation)* promulgated on January 10, 2018 and effective as of the same date, a pollutant discharging entity shall hold a pollutant discharge permit as legally required, and the handling of hazardous waste is subject to special obligations such as registering with local authorities and helping authorities track the transfer of the hazardous waste to a qualified hazardous waste disposal entity. Our Chinese subsidiary has obtained the required permits.

Legal Requirements Related to Products

Product Safety

Pursuant to the *Product Quality Law of PRC* promulgated on February 22, 1993 and amended on July 8, 2000, August 27, 2009 and December 29, 2018, companies are prohibited from producing or selling products that do not meet applicable standards and requirements for safeguarding human health and ensuring human and property safety. Products must be free from unreasonable dangers threatening human and property safety. Where a defective product causes physical injury to a person or property damage, the aggrieved party may make a claim for compensation from the producer or the seller of the product. Producers and sellers of non-compliant products may be ordered to cease the production or sale of the products and could be subject to confiscation of the products and/or fines. Earnings from sales in contravention of such standards or requirements may also be confiscated, and in severe cases, an offender's business license may be revoked. *Work Safety* Under relevant work safety laws and regulations, including the *Work Safety Law of the PRC* which was promulgated on June 29, 2002, amended on August 27, 2009, August 31, 2014, and effective as of December 1, 2014, production and operating business entities must establish objectives and measures for work safety and improve the working environment and conditions for workers in a planned and systematic way. A work safety protection scheme must also be set up to implement a work safety responsibility system. In addition, production and operating business entities must arrange for work safety training and provide employees with protective equipment that meets the national standards or industrial standards. An entity or its relevant persons-in-charge who have failed to perform such safety measures will be required to rectify within a time limit or face administrative penalties. If the failure is not rectified within the prescribed time limit, the entity may be ordered to suspend business until such time as the failure is rectified, and serious violations may result in criminal liabilities. We are in compliance with the Work Safety Law.

Environmental Protection

Pursuant to the *Environmental Protection Law of the PRC* promulgated on December 26, 1989, amended on April 24, 2014 and effective on January 1, 2015, any entity which discharges or will discharge pollutants during the course of its operations or other activities must implement effective environmental protection safeguards and procedures to control and properly treat waste gas, waste water, waste residue, dust, noise vibrations, electromagnetic radiation and other hazards produced during such activities. Environmental protection authorities impose various administrative penalties on persons or enterprises in violation of the *Environmental Protection Law*. Such penalties include warnings, fines, orders to rectify within the prescribed period, orders to cease construction, orders to restrict or suspend production, orders to make recovery, orders to disclose relevant information or make an announcement, imposition of administrative action against relevant responsible persons, and orders to shut down enterprises. Any person or entity that pollutes the environment resulting in damage could also be held liable under the *Tort Law of the PRC*. In addition, environmental organizations may also bring lawsuits against any entity that discharges pollutants detrimental to the public welfare.

Potential Liability for Products and Environmental Losses

Our business activities in China are exposed to product liability and liability for environmental damage. Our Chinese subsidiary is engaged in the production and sales of the display screen and the TFT-LCD display panel and relevant products and processes. As a producer, our Chinese subsidiary may be held strictly liable (i.e., liable regardless of our fault) for damages caused by a defective product. Pursuant to the *PRC Product Quality Law*, producers may be protected from liability only if they can prove the case falls into one of the following three circumstances: (i) the

products have not been put into circulation; (ii) the defects were non-existent when the products were put into circulation; or (iii) the defects could not be found at the time of circulation due to scientific and technological reasons. Punitive compensation could be available if the producer or seller knowingly produces or sells a defective product that causes death or serious damages to the health of others. As for the environmental liabilities, according to the *PRC Tort Law*, polluters are strictly liable for any damages caused to the environment. Any entity which discharges pollutants shall assume the burden to prove that it should not be liable or its liability could be mitigated under certain circumstances as provided for by law or to prove that there is no causation between its conduct and the harm. Even if the entity complies with all the national or local pollutant discharge standards, it may still be held liable in accordance with a judicial interpretation issued by Supreme People's Court on the liability for environmental torts.

Japan

Legal Requirements for Manufacturing Sites, Facilities and Operations

Production, Possession and Handling of Waste and Dangerous Goods or Those Otherwise Harmful to the Environment Under the Waste Management and Public Cleansing Law of Japan (Act No. 137 of December 25, 1970; the "Waste Management Law"), a business operator must, among other things, appropriately dispose of its industrial waste pursuant to the cabinet ordinance promulgated under the Waste Management Law regarding the disposal and transportation of industrial wastes, or otherwise entrust transportation and disposal of industrial waste to a waste management firm with a permit issued by the applicable prefectural governor under the Waste Management Law. Under the Act on Rational Use and Proper Management of Fluorocarbons (Act No. 64 of June 22, 2001), users of specified products such as commercial refrigerators or air conditioners containing fluorocarbon refrigerants, must, among other things, conduct examinations, and are required to report fluorocarbon leakage over certain amounts to the competent minister. Further, maintenance operators of such specified products (retained by such users) must engage with professional collections firms registered with prefectural government, which handles collection of fluorocarbons and filings to the relevant governor.

Emission/Effluent/Noise Control

Under the Water Pollution Prevention Act of Japan (Act No. 138 of December 25, 1970), a plant operator or other business entity which discharges water from a "Specified Facility" must, among other things, register such Specified Facility in advance with the applicable prefectural governor. A "Specified Facility" is a facility discharging water that either (i) contains harmful substances, such as cadmium, as specified by the cabinet ordinance, or (ii) has a level of pollution likely to negatively affect living conditions as measured by the cabinet ordinance, including based on chemical oxygen demand. The operator of such Specified Facility must, among other requirements, comply with the effluent standards set forth by the ministerial ordinance of the Ministry of Environment, and periodically measure the pollution level of discharged water. Under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Act No. 86 of July 13, 1999; the "PRTR Act"), a business operator that handles designated chemical substances which pose a risk to human health or wildlife habitats (or materials easily transformed into such substances), must, among other things, measure and confirm the released amount and the transferred amount, and notify annually the competent minister such as the Minister of Economy, Trade and Industry (via prefectural governor) of such released amount and the transferred amount, pursuant to the applicable regulations set by such competent minister. Under the Air Pollution Control Act (Act No. 97 of June 10, 1968), a business operator must, among other things, take necessary measures to determine the status of the emission and dispersal into the atmosphere of "hazardous air pollutants" associated with their business activities, and to control such emission and dispersal. Copper and its compound are designated as materials which could be classified as hazardous air pollutants. Under the Noise Regulation Act (Act No. 98 of June 10, 1968), a business operator with certain noise-generating facilities located in a designated area must, among other things, comply with the maximum noise generation standards under the Act, which are respectively specified based on the time periods (mid-day, morning/evening and night) and the nature of areas (residential, industrial, etc.).

Legal Requirements Related to Products

Product Safety

Under the Industry Safety and Health Act (Act No. 57 of June 8, 1972; the "ISHA"), a business entity which delivers products containing certain material classified as harmful under the ISHA is required, among other things, to

notify certain matters set forth by the ministerial ordinance of the Ministry of Health, Labor and Welfare upon delivery of such products, in writing or by other method as prescribed by such ordinance. Further, under the Fire Services Act (Act No. 186 of July 24, 1948), a party who stores or handles designated combustibles such as synthetic resins, must notify the applicable regional fire station director in advance.

Occupational Health and Safety Requirements

Under the relevant work safety laws and regulations, including the ISHA, an employer such as our Japanese subsidiary must comply with the standards for preventing industrial accidents set forth in the ISHA, and ensure the safety and health of workers in workplaces by creating a comfortable work environment and improving working conditions. Further, an employer must, depending on the size and the nature of its plants as set forth by the ministerial regulations of the ISHA, appoint a general safety and health manager in charge of each workplace, to establish measures to, among other things, prevent physical risks or health hazards to workers, provide education on occupational health and safety, and prevent workplace accidents. Our manufacturing sites in Japan are in compliance with the relevant work safety laws and regulations in all material respects, including the ISHA.

Environmental Protection

The Basic Environment Law (Act No. 91 of November 19, 1993; the “Basic Environment Act”) sets forth the basic policy with respect to the environmental obligations of a business operator, and generally requires such business operator: (i) to take appropriate measures to prevent pollution and preserve the environment, (ii) to take appropriate measures for disposal of products which become waste, (iii) to make efforts to reduce the environmental burden in the use or disposal of products, including utilizing raw materials that minimize such environmental impact, and (iv) to cooperate with national and local governments with respect to environment preservation policy. The Basic Environment Act is intended to promote measures to mitigate global warming, and to further promote measures to reduce carbon emissions under the Act on Rationalizing Energy Use (Act No. 49 of June 22, 1979; the “Energy Use Act”), as amended. Also refer to *Legal Requirements for Manufacturing Sites, Facilities and Operations—Production, Possession and Handling of Waste and Dangerous Goods*, and—*Legal Requirements for Manufacturing Sites, Facilities and Operations Emission/Effluent Control*.

Potential Liability for Products and Environmental Losses

Manufacturing business operations in Japan are potentially exposed to product liability and liability for environmental damages, including the liabilities enumerated below. A manufacturer of products may be strictly liable for damages caused by a defective product. Pursuant to the Product Liability Act of Japan (Act No. 85 of July 1, 1994; the “PL Act”), manufacturers are liable for damages arising from the deprivation of life, health or property of others that is caused by the defect in the delivered product unless, (i) such defect could not have been discovered given the state of scientific or technical knowledge at the time when the manufacturer delivered the product or (ii) in case where the product is used as a component or raw material in another product, if the defect occurred primarily because of the compliance with the instructions concerning the design given by the manufacturer of such other product, and that the manufacturer is not negligent with respect to the occurrence of such defect. The scope of damage (indemnification) will be determined pursuant to general tort and contract principles under the Civil Code of Japan (Act No. 89 of April 27, 1896). With respect to environmental liabilities, under the Water Pollution Prevention Act, polluters are strictly liable for any damages caused on human life or health, resulting from the discharge of polluted water or waste water containing harmful substances, in connection with their business operations. If an accident occurs at a Specified Facility that results in the discharge of water containing harmful substances likely to harm human health or living conditions, the operator of such Specified Facility must immediately take measures to prevent subsequent discharge or permeation of water containing harmful substances and must notify the prefecture governor of such measures taken.

Worldwide

Our operations and the activities of our employees, contractors and agents around the world are subject to the laws and regulations of numerous countries, including the United States and Taiwan. These laws and regulations include data privacy requirements, labor relations laws, tax laws, anti-competition regulations, prohibitions on payments to governmental officials, import and trade restrictions and export requirements. Violations of these laws and regulations could result in fines, criminal sanctions against our officers, our employees, or us and may result in prohibitions on the conduct of our business. Any such violations could also result in prohibitions on our ability to offer our products and

services in one or more countries and could materially damage our reputation, our ability to attract and retain employees, our business and our operating results. Our operations (particularly in those countries with developing economies) are also subject to risks of violations of laws prohibiting improper payments and bribery, including the U.S. Foreign Corrupt Practices Act of 1977, the U.K. Bribery Act of 2010 and similar regulations in other jurisdictions. Although we intend to implement policies and procedures designed to ensure compliance with these laws, our employees, contractors and agents may take actions in violation of such policies. Any such violations, even if prohibited by our policies, could subject us to civil or criminal penalties or otherwise have an adverse effect on our business and reputation.

Legal Proceedings

From time to time, we may be subject to various claims or legal, arbitral or administrative proceedings that arise in the ordinary course of our business. We are currently not a party to, and we are not aware of any threat of, any legal, arbitral or administrative proceedings which, in the opinion of our management, is likely to have a material adverse effect on our business, financial condition or results of operations.

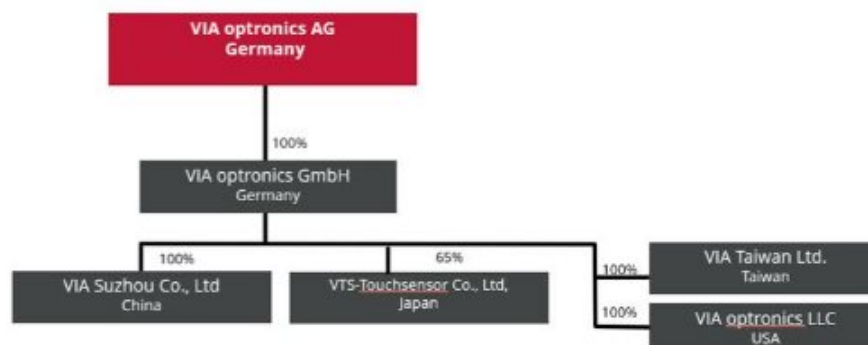
Insurance

We maintain comprehensive business liability insurance coverage (*Betriebshaftpflichtversicherung*) for our business operations in Germany, as well as in the United States and China where we have operations. In addition, we intend to obtain directors and officers liability insurance, which will cover expenses, capped at a certain amount, that our management and supervisory board members and our executive managers may incur in connection with their conduct as members of our management and supervisory boards or executive managers. We maintain insurance policies/a group insurance policy for our employees covering occupational accidents, car insurance policies, a legal expenses insurance policy and also insurance covering the risks of damaging our assets, business interruptions, transport risks and foreign travel health costs. We consider the insurance coverage we have to be adequate in light of the risks we face.

C. Organizational Structure

Organizational Chart

The following chart shows the organizational structure of VIA optronics AG and its direct and indirect subsidiaries as of the date hereof. See “Description of Company History and Share Capital— Incorporation of the Company.”



D. Property, plant and equipment

We have four production sites, which are located at our headquarters in Nuremberg, Germany, in Suzhou, China and in Satte and Shiga, Japan. All of our production sites include cleanrooms specific to our production necessities rated Class 1,000 and 10,000, which denotes the maximum number of particles of size 0.5 μm or larger permitted per cubic foot of air. A cleanroom with a lower number of such particles is cleaner and will be rated accordingly pursuant to applicable ISO and/or ITAF standards. The sites in Nuremberg and Suzhou are part of our display solution and optical bonding business, while the Japanese production sites relate to our metal mesh touch sensor technology production.

The production sites in Nuremberg and Suzhou employ manual, semi-automated and fully automated production lines and can handle different sizes of displays up to 100 inches in diagonal size. The production is based on process know-how, which is partially patented, as well as our proprietary *VIA bond plus* materials, which are exclusively produced for us on a contract basis. Most of the machinery used in our production process is designed and developed by us and manufactured by third party suppliers. Component materials such as display, housing, electronic parts or BLUs are purchased directly by us from third-party suppliers or are purchased from or provided by our customers. We seek to limit loss due to unused or obsolete inventory and components by generally purchasing raw materials only as required by customers' purchase orders. We ship directly to our customers globally or via custom-free hubs. We maintain internal supply chain and project management organizations that oversee our production processes and our component inventory requirements to facilitate cost and timing efficiencies in our manufacturing processes.

As of December 31, 2020, we had 32 employees dedicated to these functions. Both of our Japanese production sites are located inside factories of Toppan and are operated pursuant to lease and business assistance agreements. The production process is mainly operated by Toppan employees who are dedicated to VTS production on a secondment basis pursuant to secondment agreements. The primary raw materials used in production at these facilities are purchased by VTS with support from Toppan's purchasing team, leveraging pre-negotiated Toppan procurement conditions. See "Item 4. Information on the Company – B. Business Overview – Strategic Alliance Agreements" for a description of the lease and secondment agreements and other material agreements with Toppan. Because our products are often designed in close collaboration with our customers, our manufacturing and production teams, along with our sales and research and development personnel, are often actively involved in multiple stages of our customers' product design, development and production processes. As our business continues to grow, we intend to expand our operations within these groups over the next several years, including cold forming production and improvement in automation in our facilities in Germany and Japan. To support these upgrades and enhancements, we intend to increase our engineering, marketing and services staff in multiple geographies in order to support new development, marketing and service activities to meet the needs of both new and existing customers. We believe that the achievement of these expansion efforts may require substantial capital expenditures.

As of December 31, 2020, our manufacturing facilities operated at approximately 36.7% of capacity in Nuremberg, 29% of capacity in Suzhou (based on an average production size of 10 inches per unit), 75% of capacity in Satte and Shiga. In 2019 we began to install a 200m² new semi-auto line in our Nuremberg facility, which is expected to increase our manufacturing capacity in Nuremberg from 2k to 50k units per month. The installation was completed in September 2020 and we have invested approximately €600 thousand to complete the facility. We are also setting up a new production facility by installing a new automated production line in a new building near our headquarters in Nuremberg. This production facility will be used to build displays for automotive end customers based on the cold form technology. This new line occupies an area of about 1500m². The total cost of the facility equipment and production line is estimated to be approximately \$6.5 Million. Completion and ramp up are planned before end of Q2/2021. This new line will add a capacity of 8k units per month for high-end products with a cover glass in a special shape.

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The image below illustrates the location of our manufacturing, R&D and engineering and sales and support facilities.



Facilities

Information concerning our properties is set forth below as of December 31, 2020.

Location	Size (Sq. Meters)	ISO Certification*	Focus	Lease Termination Date
Nuremberg, Germany	4,865	ISO 9001:2015	Corporate Headquarters; Display Solutions Manufacturing and Sales Silicon Sales Camera Module Sales	October 31, 2025
Schwarzenbruck, Germany	28	N/A	Offices	N/A
Suzhou, China	10,397	ISO 9001:2015 ISO 14001:2015 IATF 16949:2016	Display Solutions Sales	March 31, 2021
Saito, Japan	1,676	ISO 9001:2008 JIS Q 9001:2008	Film for Metal Mesh Sensor Technology	March 31, 2023
Shiga, Japan	10,957.8	ISO 9001:2008 JIS Q 9001:2008	Sensors for Metal Mesh Sensor Technology	May 31, 2023
Taipei, Taiwan	VIA sales: 58.84 VTS sales: 13.85	N/A	Sales Offices	September 18, 2021** July 31, 2021
Orlando, Florida	199	ISO 9001:2015	Sales Office	February 28, 2022

* The ISO 9000 family of standards relates to quality management systems and is designed to help organizations ensure that they meet the needs of customers and other stakeholders.

Capital Expenditures

Our capital expenditures amounted to €3.8 million and €1.8 million, for the years ended December 31, 2020 and 2019, respectively. In 2020 the capital expenditures mainly focused on future projects in the industry and especially automotive sector to be able to perform new production technologies in-house. In 2019, our principal capital expenditures were, limited to necessary improvements of safety standards and general automation due to global economic factors. Our current capital expenditures are mainly on our new production lines, located in Germany and China for the automotive sector and are financed by proceeds from our IPO.

ITEM 4A. Unresolved Staff Comments

None.

ITEM 5. Operating and Financial Review and Prospects

The following discussion of our financial condition and results of operations is based upon and should be read in conjunction with our consolidated financial statements and their related notes included in this annual report. This report contains forward-looking statements. See “Item 5. Operating and Financial Review and Prospects—G. Safe Harbor on Forward-Looking Statements.” In evaluating our business, you should carefully consider the information provided under the caption “Item 3. Key Information—D. Risk Factors” in this annual report. We caution you that our businesses and financial performance are subject to substantial risks and uncertainties.

For a discussion of the year ended December 31, 2019 compared to December 31, 2018, refer to our Registration Statement on Form F-1/A dated September 23, 2020, Management’s Discussion and Analysis of Financial Condition and Results of Operations.

A. Operating Results

We are a leading provider of enhanced display solutions for multiple end-markets in which superior functionality or durability is a critical differentiating factor. Our customizable technology is well-suited for our target end-markets, in particular customers operating in high-end markets that have unique specifications, and in demanding environments that pose technical and optical challenges for displays, such as bright ambient light, vibration and shock, extreme temperatures and condensation. Our solutions combine our expertise in interactive display head assembly, comprising a display, cover lens and potentially touch sensors, and proprietary bonding technologies. We also develop, manufacture and sell customized and application-specific metal mesh touch sensors and electrode base film materials for use in touch modules or other touch products. Recently, we have introduced integrated, camera-enhanced and interactive displays, or interactive display solutions, that leverage our expertise in display solutions and touch sensor technology, as well as camera module design and related software capabilities. We believe that interactive display solutions will be critical to support the evolution of everyday life digital applications, such as touch- and camera-enabled consumer electronics, and the development of complex applications, such as advanced driver assistance systems. Our portfolio of offerings enables thin display assemblies and high optical clarity, which decreases power consumption and increases readability. We provide a wide range of customized display solutions, including curved display panels and solutions integrating multiple display touch assemblies under a single cover lens. In the future, we aspire to become one of the leading technology platforms for interactive display solutions in our target end-markets.

Key Business Metrics

We monitor certain key operating metrics to help us evaluate trends, establish budgets, measure the effectiveness and efficiency of our operations and gauge our cash generation, including:

- Revenue;
- Gross margin, which we define as gross profit stated as a percentage of revenues;
- EBITDA, which is a non-IFRS measure and which we define as net profit (loss) calculated in accordance with IFRS before financial result, taxes, depreciation and amortization; for purposes of our EBITDA calculation, we define “financial result” to include financial result as calculated in accordance with IFRS.

These metrics include both IFRS and non-IFRS measures. Our management and supervisory boards utilize both IFRS and non-IFRS measures in a number of ways, including to facilitate the determination of our allocation of resources, to measure our performance against budgeted and forecasted financial plans and to establish and measure a portion of management’s compensation. Our management and supervisory boards believe EBITDA is a helpful tool in understanding certain aspects of our financial performance and is an important supplemental measure of operating performance because it eliminates items that may have less bearing on our operating performance and highlight trends that may not otherwise be apparent when relying solely on IFRS financial measures. We also believe that EBITDA is useful to investors and other users of our financial statements in evaluating our performance because this measure is used by our management and supervisory boards for these purposes.

While we use EBITDA as a tool to enhance our understanding of certain aspects of our financial performance, we do not believe that this non-IFRS measure is a substitute for, or is superior to, the information provided by IFRS

results. As such, the presentation of EBITDA is not intended to be considered in isolation or as a substitute for any measure prepared in accordance with IFRS. The primary limitations associated with the use of non-IFRS measures as compared to IFRS results are that non-IFRS measures may not be comparable to similarly titled measures used by other companies in our industry and that non-IFRS measures may exclude financial information that some investors may consider important in evaluating our performance. Because of these and other limitations, you should consider our non-IFRS measure alongside the directly comparable IFRS-based financial performance measure, including our net profit/(loss), net profit margin and our other IFRS financial results. Management addresses the inherent limitations associated with using non-IFRS measures through disclosure of such limitations, presentation of our financial statements in accordance with IFRS and reconciliation of EBITDA and net profit/(loss). Further, management also reviews IFRS measures and measures such as our level of capital expenditures, research and development expenditures, and interest expense, among other items.

Set forth below are reconciliations of each non-IFRS measure to the most directly comparable financial measure prepared in accordance with IFRS, in order to enable investors to perform their own analysis of our operating results.

	Year Ended December 31,	
	2020	2019
€ in thousands		
Net (loss)/profit	(3,611)	(13,358)
Adjustments:		
Financial result	1,421	1,642
Foreign exchange gains (losses) on intercompany indebtedness	—	—
Income tax expense (benefit)	1,418	742
Depreciation and amortization	7,044	6,537
EBITDA	6,272	(4,437)
EBITDA margin	4.1 %	(3.2)%

Our key financial metrics by segment are as follows:

	Year Ended December 31,					
	2020		2019		2020	2019
€ in thousands	Display Solutions	Sensor Technologies	Display Solutions	Sensor Technologies	Consolidation Total	Consolidated Total
External revenues	127,119	25,471	113,359	23,873	152,590	137,231
Inter-segment revenues	—	3,360	—	2,138	—	—
Total revenues	127,119	28,831	113,359	26,010	152,590	137,231
Gross profit (loss)	18,426	4,933	11,976	(1,954)	23,359	10,022
Operating income (loss)	(1,252)	479	(4,641)	(6,332)	(772)	(10,974)
Depreciation and amortization	2,524	4,520	2,055	4,482	7,044	6,537
EBITDA	1,272	4,999	(2,586)	(1,851)	6,271	(4,437)

In our display solutions segment, we focus on the development, production and sale of interactive display solutions using our optical bonding technology. We provide optical bonding on either a consignment basis (meaning our customer directly sources all of the necessary product components and we apply our patented *Max VU* bonding process to assemble such components) or a full service basis (meaning we source the necessary product components and perform the related optical bonding). In limited cases, we also offer licenses for our *Max VU* optical bonding processes and sell related bonding equipment to selected customers. Additionally, starting 2019, we began providing certain customers with automotive camera module technology and research and development engineering services. For the years ended December 31, 2020 and 2019, we generated €127.1 million and €113.4 million, respectively, in revenue, and €(1.3) million and €(4.6) million, respectively, in operating loss, from our display solutions segment. As a result of the COVID-19 global pandemic, business interruptions caused a decrease in customer orders during the six months ended June 30, 2020, in particular during the first quarter. Additionally, during this period, the Chinese government imposed production-limiting measures, which led to reduced output of our production facilities located in China. In contrast to that the second half of 2020 demonstrated a strong recovery of the overall market with increased demand especially in our industry sector which lead to a strong increase of revenue compared to the first half of 2020.

In our sensor technologies segment, we focus on the development, production and sale of metal mesh touch sensors, both for use in our own enhanced display solutions and as component parts to third-party customers, and the development of other sensor components and technologies that can be incorporated into our interactive display solutions.

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For the years ended December 31, 2020 and 2019, we generated €28.8 million and €26.0 million, respectively, in revenue and € 0.5 million and €(6.3) million, respectively, in operating income (loss), from our sensor technologies segment. Business interruptions and reductions in end-customer demand due to the COVID-19 global pandemic caused a decrease in customer orders. In Japan, our production was temporarily halted for two weeks in March 2020 but recovered to a strong demand in the second half of 2020 which compensated for the temporary shut down in the first quarter.

Our customers operate in the automotive, consumer electronics and industrial/specialized applications markets. Our offerings are foundational to our customers' products and our customers rely upon us to meet their demanding production and quality specifications, as well as their inventory and quantity requirements. Our sales process is principally geared towards interactive display solutions using our optical bonding technology, customized metal mesh touch sensors and camera modules. Following our acquisition of a majority interest in VTS, we have further integrated the utilization of metal mesh touch sensors in the production of our touch-enabled enhanced display solutions to the extent that these sensors are compatible with our customers' specifications. We also offer metal mesh touch sensors as a stand-alone product to third parties for integration in their products. We are increasingly focused on producing interactive display solutions, integrating our display and metal mesh touch sensor technology and expertise with advanced camera modules.

Our customers and design partners include many of the world's largest display and system manufacturers in the automotive, consumer electronics and industrial/specialized applications markets. We generally sell our products to OEMs and Tier-1 suppliers. Our technological expertise in combination with our deep customer and commercial partner collaborations, including our collaboration with Corning with respect to cold form glass technology, enables us to meet challenges and act as a sole source supplier for certain customers, including, for example, select customers in ruggedized applications and the automotive industry. We market and sell our products and solutions primarily through our internal direct sales force, supported by outside sales representatives and distributors, including Toppan.

We often have significant engagement with and act as a design partner to the OEMs, who may be our direct customers or our indirect customers through their Tier-1 suppliers. We believe that engaging with OEM customers in their design activities provides us with an advantage over competitors who are not engaged in OEM design activities and provides us with early visibility into our customers' technology and product roadmaps. This early access allows us to develop solutions that meet their long-term needs and best position ourselves for engagement on future business opportunities. We believe our track record of technological and product performance, high quality, cost effectiveness, and on-time deliveries have resulted in our position as a leading provider of optical bonding solutions and metal mesh touch sensors. We believe our strong relationship with our OEM and Tier-1 supplier customers, many of which are currently developing new products and applications that can incorporate our solutions, will also continue to position us as a source of supply for their future product offerings.

Our customers' product life cycles vary significantly depending on their end-market, with consumer electronics being approximately 1-1.5 years, automotive being approximately 3-7 years and industrial/specialized applications being approximately 3-10+ years. The length of our product development and sales cycle in both of our segments, generally varies from nine months to three years during which time we often incur research and development, production and other costs, much of which may not be reimbursed. Accordingly, significant revenues may only be recognized much later than when a product is initially introduced for sale and we may not see a positive margin impact from a new customer contract for several years, if at all. Therefore, revenue from our current products, projects or customer portfolio is not necessarily an indicator of our future sales or profitability, because our future sales are likely to be comprised of a different mix of products which have different margin profiles.

We report our results in euros, which we consider our functional currency.

In anticipation of our initial public offering, on June 25, 2019 we completed a corporate reorganization, pursuant to which VIA optronics AG became the holding company for VIA optronics GmbH and its subsidiaries, see "Description of Company History and Share Capital" incorporated by reference into this [annual report from our Registration Statement on Form F-1 for more information](#).

Key Factors Impacting our Results of Operations

Our business and historical financial condition and results of operations have been affected by a number of important factors that we believe will continue to affect our financial condition and results of operations in the future. Our results are primarily affected by the following factors:

Success of Design Wins with Potential and Existing Customers. We believe our enhanced display solutions offer high-quality and advanced functionality, which combined with our ability to meet our customers' production volume requirements makes us an attractive choice to existing and potential customers. In order to get our solutions designed into OEMs' products, we work with our current and potential OEMs and/or their Tier-1 or other suppliers to understand their product roadmaps and strategies. We incur costs, including research and development costs relating to design engineering and prototype manufacturing, such as with our current automotive project pipeline, as well as tooling costs in connection with our pursuit of new design wins, that may not be accompanied by or lead to revenues. Our customers may not purchase our solutions even after we have obtained a design win due to factors unrelated to the quality or availability of our solutions. These costs can be significant and may not be reimbursed. With respect to our automotive customers, we are increasingly collaborating in the early stages of the OEM design and development process on interactive display systems for car interiors, which have become, and we believe will continue to be, differentiating factors for the driver experience. We consider design wins to be critical to our future success. We define a design win as the successful completion of the evaluation stage, where an OEM has tested our product, verified that our product meets its requirements, qualified our interactive display solutions for their products and delivered a letter to us indicating that we have been awarded the project. The revenue that we generate, if any, from each design win, and the cost incurred to achieve each design win and prepare for production of the products, can be material and can vary significantly. The product development process for our OEM, Tier-1 supplier and other customers can be lengthy, and in some instances may last for longer than two years. We may not earn revenue from our solutions unless and until products featuring our technologies are shipped to our customers, and prior to such time we may incur unreimbursed costs, which at times may be significant, for product development. Our sales expectations are based on forecasts from our existing customers, internal estimates of existing and potential customer demands and internal estimates of overall market trends. We anticipate that our costs in connection with new design wins will increase as we pursue additional opportunities with new and existing customers, including in furtherance of our strategy of becoming an interactive display system provider.

Investment in Growth. We have invested, and intend to continue making investments and increase our headcount to expand our operations and develop our products and differentiated technologies to support our growth and expand our infrastructure. For the years ended December 31, 2020 and 2019, we incurred capital expenditures of €3.8 million and €1.8 million, respectively, in connection with continued investments in technical equipment, machines and other equipment in furtherance of our goal of becoming an interactive display system and camera solutions provider. We expect our total operating expenses to increase, potentially significantly, in the foreseeable future to meet our growth objectives. We plan to continue to invest in our sales and support operations to further broaden our support and coverage of our existing customer base, in addition to developing new customer relationships and generating design wins. We also intend to continue to invest additional resources in research and development to support the development of our products and differentiated technologies. For the years ended December 31, 2020 and 2019, our research and development expenses were €3.2 million and €2.5 million, respectively, and are principally related to increased research and development costs associated with camera module technology. This includes current year expenses for projects in research and development which were initiated in prior periods. We expect that our research and development expenses, including prototype development costs related to future automotive projects, will increase, potentially significantly, in the future as we pursue additional opportunities and in furtherance of our strategies. Any investments we make in our sales and marketing operations or research and development will occur in advance of experiencing any benefits from such investments, and the return on these investments may be lower than we expect or be nonexistent.

Pricing and Product Cost. Our gross margin has been and will continue to be affected by a variety of factors, including the timing of changes in pricing, changes in our product mix, shipment volumes, market prices for our customers' products, changes in the purchase price of our raw materials and changes in the purchase price of third-party components integrated into our enhanced display solutions and direct labor costs. In general, newly introduced products and products with higher performance and functionality, as well as more complex displays used in more challenging and demanding environments (such as industrial/specialized applications), tend to be priced higher than more mature products or products with fewer features (such as in the consumer market). In addition, as we shift production of certain of our products out of China and expand production capacity in other geographies, we expect that our labor costs may increase and we may not be able to pass the increased costs on to our customers. We expect that in certain cases the

average selling prices during the life cycle of our project related products can decline as they mature. When selling prices decline, we seek to offset this effect by reducing our costs of raw materials and components as part of our overall manufacturing expenses. If we are unable to maintain overall average selling prices or offset any declines in average selling prices with realized savings on product costs, our gross margin will decline.

The Ability of our Customers to Produce and Sell Their Products. Our customers generally use our products and solutions as a component or a portion of their offerings to their own customers, who in turn sell these offerings to end users. Accordingly, our success depends in large part on the ability of our customers to market and sell their offerings that incorporate our products and solutions. Our customers' product offerings are usually complex and may involve many different systems and components, and their ability to sell their products depends on many factors, including the availability of component parts, raw materials and other necessary services; the proper functioning of each of these components and the timeliness and effectiveness of their own processes. Supply or production delays, raw material shortages or the failure or under-performance of components unrelated to our products and solutions may impact our business even when we are able to deliver our products and services timely and defect-free. These factors may cause delays in our customers' production cycles, may cause our customers to cut back or delay their purchases of our products and solutions or may lead them to cease purchases from us entirely for periods of time while they address their production issues. Because our customer agreements typically do not specify minimum order requirements by our customers, our customers usually have no obligation to purchase our solutions if they experience supply issues unrelated to our solutions, or to make any prepayments to us. This dynamic materially affected our revenues in 2019, during which a global shortage of Intel microprocessor chips led our largest customer to delay orders from us. In addition, the COVID-19 pandemic has affected the demand for certain of our customers' products. However, the impact of the pandemic on our revenue was noticeable during the first quarter of the year 2020, but compensated by demand increase in consumer and industry sector in the following three quarters for the year ended December 31, 2020. Still, the pandemic can adversely affect our supply chains, logistics, and the availability of our workforce, and there can be no assurance that our cost saving initiatives will be successful or that COVID-19 won't have an adverse impact on our revenue in future.

Our Customer Mix. We operate in two segments and deliver products to customers in three different end-markets: automotive, consumer electronics and industrial/specialized applications. We sell different types of products into our various customer end-markets such as displays for board computers (automotive), touch displays for consumer appliances (consumer electronics) and highly readable displays for different industrial or medical machines (industrial/specialized applications). We expect customers in industrial/specialized applications end-market to be the largest source of sales and customers in automotive applications and consumer applications to represent slightly lower shares of our sales. Since 2018, our sales mix has moved toward a more balanced portfolio with the largest concentration in industrial applications followed by consumer and automotive applications. This change in sales mix by end-market is expected to improve our gross margin, as sales to customers in the consumer end-market usually contribute lower gross margin in comparison to those to customers in the industrial/specialized applications and automotive end-markets, as our gross margins generally are higher with more specialized product development. We expect to achieve our targeted share of the industrial/specialized end-market in the coming years. However, an increase in projects with greater margin contributions yielded a higher gross margin for the year 2020 compared to 2019. In our sensor technology segment, most of our product sales are used in consumer-related products; however, we are seeing increased use by customers with products in the industrial/specialized applications and automotive end-market. We expect that this increase will accelerate in the future, but that, at least for the next two years, customers in the consumer end-market will continue to contribute the largest proportion of sales in our sensor technologies segment.

Based on historical experience, revenue in the first quarter is typically the lowest in the year. This dynamic also continued for the year 2020, however, there can be no assurance that those historical trends will continue in future periods.

Product Development Efforts and Product Lifecycles of our Existing and Potential Customers. Our customers' product life cycles, or the time they wish to purchase and use a particular design, vary significantly depending on their end-market, typically lasting multiple years. Based on our experience, we typically expect life cycles to be approximately 1 to 3 years for consumer electronics, 3 to 7 years in automotive and 3 to 10+ years in industrial/specialized applications. We estimate our customers' product life cycles on a case-by-case basis, given the close contacts we have with our customers. For consumer electronics products, it typically takes us approximately three months to respond to conceptual requests for information, or RFIs, approximately three months to receive requests for quotes, or RFQs, or business awards, approximately six months to complete development and sampling before we

commence commercial shipments, and one to one and a half years to ramp up mass production, and we provide ongoing service for an additional two to three years. For automotive applications, it typically takes us approximately six months to three years to respond to conceptual RFIs, approximately one year to receive RFQs or business awards, two to three years to complete development and sampling before we commence commercial shipments, and three to seven years to ramp up mass production, and we provide ongoing service for an additional eight to ten years. For industrial/specialized applications, it typically takes us approximately one to two years to respond to conceptual RFIs, three to six months to receive RFQs or business awards, one to one and a half years to complete development and sampling before we commence commercial shipments, and three to at least ten years to ramp up mass production, and we provide ongoing service for an additional one to ten years. Consumer electronics products generally have shorter development timelines and automotive and industrialized/specialized products have longer development timelines. As noted above, costs we incur to develop and produce new products can be significant and may not be reimbursed. Commercial shipments of our products can continue for a period exceeding ten years, depending on the end-market or application.

Volatility of Revenues and Operating Cost Levels Due to Currency Exchange Fluctuations. With our multinational presence and our need to source materials from multiple locations to produce our enhanced display solutions and sensor technology, we incur revenues and operating costs in currencies other than the euro. Any currency fluctuation can lead to a corresponding effect on those revenues and operating costs, which in turn can have a material impact on our net income (loss) and EBIDTA in certain periods. Additional information on transaction and currency translation risks and our efforts to manage them are contained in "—Quantitative and Qualitative Disclosure About Market Risk."

Key Components of our Results of Operations

We consider a variety of performance and financial metrics to assess the performance of our business. The following discussion describes the components of our statement of operations and other comprehensive income (loss) and certain key factors affecting our results of operations.

Revenue

Most of our revenue is derived from the sale of our enhanced display solutions and metal mesh touch sensors. We also derive revenue from the provision of optical bonding services and from licensing of our optical bonding process and related sale of equipment. Additionally, beginning in 2019, our display solutions segment began generating revenues from providing automotive camera module research and development engineering services to certain customers. As a company with a global reach, our revenues are generated from sales to customers located in markets in Asia, Europe and the Americas (North and South America). In the segment footnote to the financial statements, included in Item 18, we also present revenues based on the geographical location of our subsidiary that bills the customer in footnote 24.

Cost of Sales

Our total cost of sales consists of the costs associated with the manufacturing (including raw materials costs) and distribution of our products, and other costs (e.g., depreciation and amortization, production-related personnel expenses, freight expenses, inventory write downs, repair of production machinery, rework, warehousing and product warranty). Beginning in 2019, we also incurred personnel, seconded personnel and equipment costs related to delivering automotive camera module research and development engineering services. Certain of our traditionally fixed costs, such as production related personnel expenses, are capable of transitioning to variable costs by more efficiently applying the automated aspects of our production lines to reduce labor and associated overhead costs.

Gross Profit

Our gross profit is the difference between our revenue and our cost of sales.

Selling Expenses

Our selling expenses mainly consist of personnel expenses (including wages, salaries and bonuses, and social security costs) for our sales and marketing staff, marketing and advertising expenses, internal cost allocations, travel and other expenses. Other expenses include rental fees, car fleet expenses, depreciation and amortization, and sales

representative and distributor commissions. Our marketing and advertising expenses are comprised of fees for our attendance at industry fairs, advertisements, press services, web-based marketing as well as other marketing expenses, including product samples used to market our solutions. As a result of our international expansion and increasing complexity of our enhanced display solutions, as well as anticipated increases in revenues, we believe that our total selling expenses are likely to increase both in absolute terms and as a percentage of revenues over the next few years.

General Administrative Expenses

Our general administrative expenses mainly consist of personnel expenses (including wages, salaries and bonuses, and social security costs) for our administrative staff, rent, building and maintenance expenses as well as other expenses. The other expenses include items such as legal, consulting and audit fees, general maintenance expenses, fees for third party services, depreciation and amortization, travel expenses as well as insurance premiums.

Research and Development Expenses

We incur research and development expenses in connection with the design and development of our solutions, including to improve the technical capabilities of our product offerings generally and in connection with project-based client-driven specifications and requirements. Our research and development expenses consist of personnel expenses, fees for third-party research and development services, supplies and other expenses. We expect that our research and development expenses could increase as a percentage of revenue to the extent that our development and design costs, specifically within automotive applications, increase and as we focus increasingly on developing products and services directly for automotive customers as well as research and development relating to interactive display solutions and other camera-enhanced displays, three dimensional displays, new sensor technologies, software enhancements and embedded computing.

We incur research and development costs in relation to internal research and development projects. Product development costs under IFRS are generally required to be capitalized if the product being developed is technically and commercially viable, the costs of the development can be measured reliably, there are probable future economic benefits from the development and we have sufficient intent and resources to complete the development and use or sell the resulting asset. Other development expenditures that do not meet these criteria are recognized as incurred. We expense research costs as incurred. Since inception, we have not capitalized any development costs.

Other Operating Income and Expenses

Our other operating income and expense consists of income from foreign currency transaction gains or losses, losses on disposal of fixed assets, non-income taxes, bad debt provisions, damages/insurance proceeds, indemnities due to inadequate quality of third-party materials received by us, and miscellaneous income or expense. Foreign currency transaction gains or losses arise from transactions denominated in a foreign currency when the transaction date and settlement date differ.

Financial Result

Financial result is financial income less financial expenses. Financial income consists of interest income on our cash and cash equivalents. Interest income is recognized as it accrues, using the effective interest method. Financial expenses include interest expenses related to our financing facilities, negative interest rates on our cash and the impact of currency exchange fluctuations on the principal balance of our outstanding financing facilities that are denominated in currencies other than euros.

Income Tax Expenses

The income tax expense for the period comprises current and deferred income tax. Income taxes are recognized in the income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity.

Exchange Differences on Translation of Foreign Operations

Exchange differences on translation of foreign operations are primarily driven by fluctuations between the euro and functional currencies of our subsidiaries which include the Japanese yen, Chinese renminbi and US dollar and are recognized in other comprehensive income.

Other Categories of Expenses Affecting Results

Depreciation and Amortization Expenses

Depreciation and amortization expenses are included in our cost of sales, general administrative and selling expenses. Following our adoption of IFRS 16, effective January 1, 2019, our depreciation expenses are primarily related to our rental and lease costs and the equipment we use in the development and production of our products. Our amortization expenses are primarily related to the amortization of other intangible assets such as patents and software licenses, amortization of intangible assets, primarily, customer relationships. The table below sets forth the allocation of our depreciation and amortization expenses among our cost of sales, general administrative and selling expenses:

	Year ended December 31,	
	2020	2019
€ in thousands		
Cost of sales	5,317	5,146
General administrative expenses	1,190	853
Selling expenses	534	536
Research and development	3	2
Total depreciation and amortization expenses	7,044	6,537

Deferred Offering Costs

The deferred transaction costs totaling €10.1 million were reclassified as a cost to equity as the IPO was concluded in 2020. As of December 31, 2019, we had capitalized deferred offering costs of €6.5 million and costs of €3.6 million incurred during the year ended December 31, 2020.

COVID-19 Pandemic

In December 2019, a novel strain of coronavirus, since named SARS-CoV-2, causing the disease known as COVID-19, was reported in China. Since then, COVID-19 has spread globally, including throughout the United Kingdom and Europe, as well as the United States. In March 2020, the World Health Organization declared the outbreak of COVID-19 as a “pandemic” or worldwide spread of a new disease. In response, many countries around the world, including the European Union and the United States, have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of the virus, and have closed non-essential businesses.

We could be materially and adversely affected by the risks, or the public perception of the risks, related to an epidemic, pandemic, outbreak, or other public health crisis, such as the recent outbreak of COVID-19. During one week of the COVID-19 pandemic, the Chinese government imposed production-limiting measures, and then travel restrictions within China for several weeks thereafter, which led to reduced output of our production facilities located in China and increased net costs of component parts due to increased labor costs. In Japan, VTS temporarily halted production for two weeks in March 2020 due to decreased order volume but has since resumed normal production capacity. We have taken numerous steps to mitigate the impact of the pandemic on our results of operations, including implementing a work-from-home policy for non-manufacturing employees and alternative production shifts for our manufacturing operations. Furthermore, we engaged in cost reduction activities such as ceasing the recruitment of personnel. However, the impact of the pandemic on our revenue was noticeable during the first quarter of the year 2020, resulting in decreased sales for the three months ended March 31, 2020 of 22.1% as compared to the three months ended March 31, 2019.

This was compensated by demand increase in consumer and industry sector in the following three quarters for the year ended December 31, 2020. Still, the pandemic can adversely affect our supply chains, logistics, and the

availability of our workforce, and there can be no assurance that our cost saving initiatives will be successful or that COVID-19 won't have an adverse impact on our revenue in future.

The ultimate extent of the impact of any epidemic, pandemic, outbreak, or other public health crisis on our business, financial condition and results of operations will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of such epidemic, pandemic, outbreak, or other public health crisis and actions taken to contain or prevent the further spread, among others. Accordingly, we cannot predict the extent to which our business, financial condition and results of operations will be affected.

Year Ended December 31, 2020 Compared to December 31, 2019

Results of Operations

The following table sets forth our statement of operations and other comprehensive income (loss) data both on an actual basis and as a percentage of revenues for the periods indicated:

	Year Ended December 31,		Period Over Period Change
	2020	2019	(2020 v. 2019)
	Amount	Amount	Amount
	€ in thousand	€ in thousand	€ in thousand
Revenue	152,590	137,231	15,359
Cost of sales	(129,231)	(127,210)	(2,022)
Gross profit	23,359	10,022	13,337
Selling expenses	(3,381)	(4,252)	871
General administrative expenses	(15,373)	(13,197)	(2,176)
Research and development expenses	(3,187)	(2,490)	(697)
Other operating income (expenses), net(1)	(2,190)	(1,056)	(1,134)
Operating (loss) income	(772)	(10,974)	10,202
Financial result	(1,421)	(1,642)	221
(Loss) profit before tax	(2,193)	(12,616)	10,423
Income tax expense	(1,418)	(742)	(677)
Net (loss)/profit	(3,611)	(13,358)	9,746
<i>Other comprehensive income</i>			
Exchange differences on translation of foreign operations	(349)	117	(466)
Comprehensive (loss)/income	(3,961)	(13,241)	9,280

- (1) Amount is shown on a net basis solely for convenience of the reader. Please refer to our consolidated financial statements and related notes included in Item 18 for a presentation of Other operating income and Other operating expense on a gross basis.

Revenue

Our revenue increased €15.4 million or 11.2% to €152.6 million in 2020 as compared to €137.2 million in 2019. Revenue from our display solutions segment increased €13.8 million, or 12.1%, in 2020. Revenues from our sensor technologies segment increased by €1.6 million or 6.7%. This increase in revenues was mainly due to higher than anticipated sales to certain consumer and industrial end-market customers, namely Dell and Pegatron. Their revenue share increased by €21.6 million as a result of higher demand of laptops in general due to homeschooling and ruggedized laptops for the year 2020. In 2020 we experienced a recovery of the industry sector and a constant revenue in the automobile sector.

In 2019 Dell's production cycle was negatively influenced by a shortage in Intel microprocessor chips, which are central to Dell's product offerings. As a result of these production delays, Dell reduced its purchases from us during this period. The decline in revenue from AU Optronics during 2019 compared to 2018 resulted from lower sales by AU Optronics to one of their customers that experienced production declines during this period, which led AU Optronics to correspondingly reduce their purchases from us during the relevant period.

Cost of Sales and Gross Profit

Costs of sales increased €2.0 million, or 1.6%, to €129.2 million in 2020 as compared to €127.2 million in 2019, while revenue increased by 11.2% percent. This was caused by a higher margin product mix and several measures to reduce raw material and consumables expenses during 2020. Total gross profit increased €13.3 million or 133.1%, to €23.4 million in 2020 from €10.0 million in 2019. Gross profit/(loss) from our display solutions and sensor technologies segments in 2020 was €18.4 million and €4.9 million respectively. Our gross profit for our display solutions segment increased €6.5 million or 53.9% in 2020 as compared to 2019, primarily driven by the recovered demand of the industry sector as well as new projects in the automotive sector and the industry sector, which deliver higher margins than the consumer sector. Our total gross margin was 15.3% for 2020 compared to our total gross margin of 7.3% for 2019. Gross margin for our display solutions segment increased to 14.5% for 2020, comparing to 10.6% for 2019, while gross margin for our sensor technologies segment recovered sharply to 19.4% in 2020, compared to a gross margin of (8.2)% in 2019. The gross profit and gross margin in our sensor technologies segment increased primarily due to fixed personnel costs remaining relatively unchanged and expenses for raw material and consumables decreased, due to cost reduction programs and less production of cost intensive sensors, while revenues have increased. In 2019, gross profit and gross margin in our sensor technologies segment was negatively impacted by inventory stock costs relating to our purchase of third party metal mesh films to satisfy heightened demand for our product at a time which we experienced production capacity limitations.

Selling Expenses

Our selling expenses decreased by €0.9 million, or 20.5%, to €3.4 million for 2020 as compared to €4.3 million for 2019 as a result of a reduction in benefits and reduced travel expenses, which are linked to the impact of the pandemic. Our selling expenses decreased as a percentage of revenue in 2020 to 2.2% from 3.1%.

General Administrative Expenses

Our general administrative expenses increased by €2.2 million or 16.5%, to €15.4 million for 2020 as compared to €13.2 million for 2019 as we continued to support the administrative needs of our operations. This increase was mainly caused by the needed headcount increase for keeping up with the revenue growth and future strategy, and insurance expenses related to our listing. Our general administrative expenses increased as a percentage of revenue in 2020 to 10.1% from 9.6% in 2019.

Research and Development Expenses

Our research and development expenses increased €0.7 million or 28.0%, to €3.2 million for 2020 as compared to €2.5 million for 2019. Therefore, our research and development expenses increased as a percentage of revenue in 2020 to 2.1% from 1.8% in 2019, mainly to develop new and enhance our existing solutions for our sensor and camera solution technology as well as our solution portfolio for the industry and automotive sectors in general. Therefore, we increased our efforts in the Innovation and Development process by enlarging our research and development departments with a new innovation focused team.

Other Operating Income and Other Operating Expenses

On a net basis, other operating income (expense), increase of €1.1 million for 2020 to €(2.2) million as compared to €(1.1) million in 2019. This was mainly caused by higher currency exchange rate losses due to a higher position in US Dollar after our IPO.

Financial Result

Our financial result decreased by €0.2 million or 13.5%, to €(1.4) million for 2020 as compared to €(1.6) million for 2019. This decrease almost entirely relates to decreased interest expenses on our borrowings under our bank loans.

B. Liquidity and capital resources

To date, we have historically been able to meet our working capital requirements through sales of our products and services, including licensing, as well as borrowings under our working capital and equipment financing facilities and proceeds from our public offering. As of December 31, 2020, we had cash and cash equivalents of €81.0 million and we had access to seven credit and equipment financing facilities, one of which was with one bank located in Germany, five of which were with banks located in China and one of which was with a bank located in Japan. We have an aggregate availability of €2.4 million under the German facilities, USD 21.1 million under the Chinese facilities and JPY 341.1 million under the Japanese facilities to support our short term working capital and capital expenditure requirements. In total €20.6 million, were outstanding as of December 31, 2020 as compared to an aggregate of €28.6 million outstanding as of December 31, 2019. At December 31, 2020, the blended interest rate of these facilities was 2.6% for the German facilities, 2.5% for the Chinese facilities and approximately 1.0% for the Japanese facilities. These facilities generally require repayment within six months except for the long-term Japanese facility which matures on November 30, 2023.

We are not bound by any restrictive covenants with respect to these working capital facilities, however the subsidiaries that are borrowers under certain of these bank loans have pledged a portion of their receivables to the applicable lender up to the drawn balance of the respective loans to support the obligations under such loans. Historically we have been able to obtain replacement working capital financing upon the maturity of our bank loans. The loan from our majority shareholder totaling € 2.0 million was repaid in December 2020. We generally receive payment from our customers within 60-90 days of the date of delivery of our products and services to our customers and maintain 30-60 day payment terms with our suppliers.

We have historically used cash generated from our operations and short-term borrowings under our existing working capital financing facilities to fund our working capital requirements. Subsequent to our public offering in September 2020, we have also used proceeds to fund our working capital requirements and have used a portion to fund a new automated production line in a new building near our headquarters in Nuremberg.

We have experienced a negative cash flow from operating activities in 2020 as we have increased our inventory to build up stock for future orders and experienced increased accounts receivables following a higher demand in the last quarter of 2020. However, we believe that our existing cash and cash equivalents, together with cash generated from operations, will be sufficient to meet our anticipated cash needs for at least the next 12 months.

Cash flows

	Year Ended December 31		
	2020	2019	2018
(€ in thousands)			
Net cash provided by (used in) operating activities	(747)	5,256	(8,903)
Net cash used in investing activities	(2,870)	(3,091)	(3,822)
Net cash provided by (used in) financing activities	75,493	(2,795)	15,994
Net increase (decrease) in cash and cash equivalents	71,875	(630)	3,269

Net cash provided by (used in) operating activities

In 2020 our net cash provided by operating activities decreased € (6.0) million to € (0.7) million. This decrease of the net cash provided by operating activities corresponds primarily to increased inventories and trade receivables.

In 2019, our net cash used in operating activities increased €14.2 million to € 5.3 million as compared to € (8.9) million for 2018. This increase was primarily due to increased collections of trade accounts receivable, decreased payment of other liabilities and decreased inventories at fiscal year-end, partially offset by the loss before income taxes.

Net cash used in investing activities

In 2020, our net cash used in investing activities decreased slightly by € 0.2 million to € (2.9) million as compared to € (3.1) million for December 31, 2019. The decrease was due to lower purchases of property and equipment. This effect was partly offset by an increase of purchases of intangible assets.

In 2019, our net cash used in investing activities was € 3.1 million, representing a decrease of € 0.7 million as compared to 2018. This decrease primarily related to the absence in 2019 of our 2018 payment of € 1.3 million to purchase for our 65% interest in VTS, net of cash acquired in the acquisitions, and of costs in 2018 for related acquired property, equipment and intangible assets.

Net cash provided by (used in) financing activities

In 2020, the net cash provided by financing activities increased by €78.3 million to €75.5 million. This effect is mainly related to our gross IPO receipt of €90.8 million. The IPO costs totaling €3.6 million have to be deducted. The result of the receipt of € 53.6 million in proceeds from loans and borrowings were overcompensated by €60.5 million repayment of loans. Additionally, the payment of lease liabilities increased by €1.7 million compared to last year.

In 2019, our net cash used in financing activities was €2.8 million, partially as a result of our receipt of €59.4 million in proceeds from borrowings under our working capital loans, primarily offset by € 58.9 million in loan repayments and €1.6 million in interest paid on our outstanding working capital loans. Additionally, €1.7 million in cash outflows for lease payments was included in financing activities as required under IFRS 16 *Leases* which we adopted effective January 1, 2019. Prior to this date, such payments were presented as a component of operating activities.

C. Research and development, patents and licenses, etc.

Full details of our research and development activities and expenditures are given in Item 4 and under the description of the “Operating Results” in this Item 5 within this annual report.

D. Trend information

See the description of “Operating Results” in this Item 5 within this Annual Report.

E. Off-Balance Sheet Arrangements

We not have any off-balance sheet arrangements.

F. Tabular Disclosure of Contractual Obligations

Our principal contractual obligations primarily consist of equipment financing facilities and lease liabilities.

	December 31, 2020			
	(€ in thousands)			
	Total	Less Than 1 Year	1 - 5 Years	More Than 5 Years
Bank overdrafts, lines of credit and long-term debt ⁽¹⁾	€ 22.286	€ 20.647	€ 1.640	€ —
Lease liabilities	9.484	1.734	6.275	1.475
Total	31.770	22.381	7.915	1.475

(1) Excludes interest. See “Item 5. B. Liquidity and Capital Resources”.

G. Safe Harbor

See “Special Note Regarding Forward Looking Statements” on page 1 of this annual report.

ITEM 6. Directors, Senior Management and Employees

A. Directors and Senior Management

The following table sets forth the names and functions of the current members of our supervisory board, their ages, their terms (which expire on the date of the relevant year's general shareholders' meeting) and their principal occupations outside of the company as of December 31, 2020:

Name	Age	Term Expires	Principal Occupation
Diosdado P. Banatao	74	2021	Chairman of Blaize Inc. ("Blaize")
Anthony John Best	60	2025	Strategic Financial Director and Advisor of Surface Technology International Inc.
Anil Kumar Doradla	51	2025	Chief Financial Officer of Grid Dynamics International, Inc. ("Grid Dynamics")
Dr. Heiko Frank (Chairman)	56	2025	Managing Director of Kloepfel Corporate Finance GmbH
Jerome S. Tan (Vice Chairman)	58	2025	Chief Financial Officer of IMI

The business address of the members of our supervisory board is the same as our business address: VIA optronics AG, Sieboldstrasse 18, 90411 Nuremberg, Germany. The following is a brief summary of the business experience of the members of our supervisory board:

Diosdado Banatao, an American citizen, became a member of our supervisory board in July 2019. Mr. Banatao founded and currently serves as Chairman of Blaize and as Emeritus Chairman of INPHI Inc. ("INPHI"). Blaize and INPHI are both portfolio companies of Tallwood Venture Capital. He previously served as Chairman and as a member of the compensation committee of Thinci Inc. and as executive Chairman of Wave Computing Inc. Wave Computing Inc. Blaize, INPHI and Thinci Inc. are all portfolio companies of Tallwood Venture Capital. In 2000, Mr. Banatao founded Tallwood Venture Capital, a venture capital investment firm with approximately €300 million of assets under management, where he previously served as a Managing Director. Mr. Banatao holds a bachelor of science in electric engineering from the Mapua Institute of Technology in the Philippines, a master of science in electrical engineering and computer science from Stanford University, and a doctor of technology (honoris causa) from the Mindanao State University. Mr. Banatao was awarded the Master Entrepreneur of the Year Award in 1997 by Ernst & Young, Inc. Magazine and Merrill Lynch Business Financial Services. We believe that Mr. Banatao's diverse and long-term experience as founder and leader of various technology firms provides him with valuable insights into our operations and industry, enabling him to contribute diverse experience and expertise to our supervisory board.

Anthony John Best, a British citizen, became a member of our supervisory board in July 2019. Mr. Best has served as an alternate director of Surface Technology International Inc. since May 2017. Previously, Mr. Best has served as a director of Surface Technology International Inc. between 2010 and 2017, and as a trustee director in manufacturing and consultancy of HSSMI Ltd. between 2015 and 2019. Additionally, Mr. Best served as a fund director of Renshaw Bay LLP from 2012 until 2016 and was a Chairman of SME capital Ltd. between June 2015 and January 2020. Mr. Best received a bachelor degree in politics, philosophy and economics from Oxford University. We believe that Mr. Best's long term experience in business and finance provides him with valuable insights into our business, particularly in the area of finance.

Anil Kumar Doradla, an American citizen, became a member of our supervisory board in July 2019. He has served as chief financial officer of Grid Dynamics since November 2019. Before this position at Grid Dynamics, Mr. Doradla served as chief financial officer of Airgain Inc. between 2018 and 2020 and as an equity research analyst at William Blair between 2008 and 2018. Mr. Doradla received a Bachelor's degree in technology from the Sri Venkateswara University in Tirupati in India. He also holds a master of science from the Virginia Tech University, and completed his master in business administration in business, finance and management at the University of Texas at Austin. We believe that Mr. Doradla's experience in the area of business and finance, including his role as Chief Financial Officer at Grid Dynamics, provide him with valuable insights into our business, particularly in the area of finance.

Dr. Heiko Frank, a German citizen, became a member of our supervisory board in January 2019 and currently serves as the Chairman of our supervisory board. Dr. Frank served as member of the advisory board (*Beirat*) of our subsidiary VIA optronics GmbH prior to our corporate reorganization. Between February 2013 and March 2016, Dr. Frank served as a management board member of IMAP M&A Consultants AG. Since April 2016, Dr. Frank has been a shareholder in and has served as Managing Director of Kloeppel Corporate Finance GmbH, a financial advisory firm. Dr. Frank served as a member of the advisory board of Alphastystems GmbH from April 2009 until December 2014, and as deputy Chairman of the supervisory board of SchwabenMobil Nahverkehrsgesellschaft GmbH from June 2007 until October 2018. Since July 2007, he has served as Chairman of the supervisory board of the German stocklisted CPU Softwarehouse AG, and since November 2017, as a member of the advisory board of Interconnect GmbH. Since March 2000, he has been active as a commercial judge at the regional court (*Landgericht*) in Augsburg, Germany, and since 2016, he has served as a member of the curatorship at the FOM University of Applied Sciences for Economics and Management. Dr. Frank received a diploma in business administration from the University of Augsburg, and a doctorate (Dr. rer. pol.) in business administration from the University of Augsburg and constructed his thesis on local electronic media. We believe that Dr. Frank's diverse and long-term experience in M&A, corporate finance advisory positions, and his roles as an advisory and supervisory board member at the above-mentioned companies, provide him with valuable insights into our business, particularly in the areas of financing and acquisition opportunities. Additionally, his focus on IT and technology companies gives him insight into our operations and industry, enabling him to provide our supervisory board with a broad range of knowledge. We also believe that Dr. Frank's service as a member of the advisory board (*Beirat*) of our subsidiary VIA optronics GmbH and his previous role as Statutory Auditor at our joint venture, VTS-Touchsensor Co., Ltd., prior to our initial public offering and our corporate reorganization ensures continuity in the oversight of our company's business.

Jerome S. Tan, a Singaporean citizen, became a member of our supervisory board in January 2019 and currently serves as the Vice Chairman of our supervisory board. Mr. Tan served as a member of the advisory board (*Beirat*) of our subsidiary VIA optronics GmbH prior to our initial public offering and our corporate reorganization. Mr. Tan has served as Senior Managing Director and the Global Chief Financial Officer of IMI, an affiliate of our largest shareholder, since January 1, 2011 where he is responsible for providing leadership, direction and management of the Finance functions including Treasury, Financial Planning & Analysis and Controllershship. He brings more than 30 years of broad experience and various achievements in finance, strategic planning, business development and acquisition/integration. He has assumed regional leadership roles in multi-national Banking and Finance companies, and Food and Beverage industry located in different countries in the Asia Pacific Region. Prior to joining IMI, he was with the General Electric Company holding various regional and operating roles in Finance and Business Development including CFO for CNBC / NBC Universal Asia Pacific, CFO of GE Money Singapore and GE Money Bank in the Philippines. Before taking on operating CFO positions, he was the Regional FP&A Leader for GE Money Asia; and a Business Development Director for GE Capital responsible for mergers and acquisition. Prior to joining GE, he was also a key member of the management team of San Miguel Brewing International Ltd., managing Treasury and Financial Planning, and Corporate Planning and Business Development. He started his career in banking as an Associate in Robert Fleming, Inc. based in New York and was also an Assistant Director in First Pacific Bank Asia, Ltd. in Hong Kong. Mr. Tan has also served as a member of the advisory board (*Beirat*) of MT Technologies GmbH, Germany since September 2018. Mr. Tan received a bachelor of arts in Economics from De La Salle University in the Philippines and a master in business administration in General Management from the University of Virginia, Darden School of Business. We believe Mr. Tan's long-term experience and role as Chief Financial Officer of several international companies provides our supervisory board with expertise in financial matters and his service as a member of the advisory board (*Beirat*) of our subsidiary VIA optronics GmbH prior to our initial public offering and our corporate reorganization ensures continuity in the oversight of our company's business.

Members of the Management Board

The following table sets forth the names and functions of the current members of our management board, their ages and their terms as of December 31, 2020:

Name	Age	Term Ends	Position
Jürgen Eichner	60	2022	Chief Executive Officer
Daniel Jürgens	51	2022	Chief Financial Officer

The business address of the members of our management board is the same as our business address: VIA optronics AG, Sieboldstrasse 18, 90411 Nuremberg, Germany.

The following is a brief summary of the business experience of the members of our management board:

Jürgen Eichner became a member of our management board in January 2019. After founding VIA optronics GmbH in 2005, Mr. Eichner has served as a Managing Director and Chief Executive Officer of our subsidiary VIA optronics GmbH since 2006. From 2000 to 2004, Mr. Eichner served as Head of Sales EMEA for White Electronics Design Corporation, and from 1998 to 2000, he served as business development manager and as a director of the service group “Professional Services” of Origin Germany B.V. Between 1985 and 1998, he served as a development engineer, project manager, group leader and as the head of the Electronic Service Center of Diehl Stiftung & Co. KG. Mr. Eichner graduated with a Master of Science in electronics engineering from the University of Applied Sciences of Nuremberg.

Daniel Jürgens became a member of our management board in January 2019. Mr. Jürgens has served as a Managing Director of our subsidiary VIA optronics GmbH, since 2015 and has been VIA optronics GmbH’s Chief Financial Officer since June 2015. From 2014 to 2015, Mr. Jürgens was employed by IMAP M&A Consultants AG in Mannheim, Germany, serving as a partner and providing M&A consulting services. Mr. Jürgens served as Chief Financial Officer of Elephant Seven AG in 2005 and 2006. Since 2002, Mr. Jürgens has been a shareholder and Managing Director of iBRAIN Consulting Group GmbH, an M&A consulting services company. Mr. Jürgens received a diploma in business administration from Ludwig-Maximilian-Universität, Munich.

B. Compensation

Compensation of Management Board and Supervisory Board Members

Compensation of Management Board Members

We entered into service agreements with the current members of our management board, which are described below in more detail. These agreements provide for an annual fixed base salary and an annual performance award (annual bonus) with a target equaling a certain percentage of the annual fixed base salary. Adjustments to the fixed base salary of our management board members are to be considered annually based on inflation, competitive environment and individual performance. In addition to the fixed and variable remuneration components, the members of our management board are entitled to additional benefits under the terms of their service agreements, including company car arrangements, mobile phone, as well as to reimbursement of necessary and reasonable expenses, including travelling, overnight accommodation and entertainment expenses. Our company has obtained directors’ & officers’ indemnity insurance policies for the benefit of the members of our management board covering the statutory liability arising from their activities in this capacity.

We believe that the service agreements between us and the members of our management board provide for payments and benefits that are in line with customary market practice for similar companies who are operating in our industry. In 2020, the two members of our management board are entitled to receive a total compensation package of up to € 731,000 annually, which includes base salary, bonus payments and other compensation as a result of additional benefits described above.

Service Agreements

Service Agreement with Jürgen Eichner

In September 2020 we entered into a service agreement with Jürgen Eichner to serve as our Chief Executive Officer and a member of our management board. The service agreement includes an initial fixed term until December 31, 2022. The fixed base salary will be adjusted annually at the time of the annual collective wage increases for employees of the Bavarian metal industry at a percentage rate equal to the percentage rate at which the salaries of employees at the highest level of the pay scale for employees of the Bavarian metal industry are increased. The annual bonus target amounts to up to 100% of the annual fixed base salary. The performance targets of the annual bonus are tied to financial indicators, such as annual profits. In the event the company terminates the service agreement for any reason other than for material breach of his duties, Mr. Eichner shall be entitled to a lump sum severance payment equal to one month’s base salary per year of service since June 1, 2006. The service agreement with Mr. Eichner provides for a two-year non-compete covenant after termination of his service agreement. Mr. Eichner is entitled to salary continuation (non-compete compensation) during the term of the non-compete covenant equal to 50% of the average remuneration (fixed base salary plus variable remuneration) received by Mr. Eichner in the 36 months’ period prior to the termination

of the service agreement. The amount of the non-compete compensation shall be payable pro rata in equal monthly installments during the term of such covenant.

Service Agreement with Daniel Jürgens

In September 2020 we entered into a service agreement with Daniel Jürgens to serve as Chief Financial Officer and a member of our management board. The service agreement includes an initial fixed term until December 31, 2022, during which it can be terminated by Mr. Jürgens upon six months' prior written notice to the end of a calendar month. The annual bonus target amounts to up to 33.33% of the annual fixed base salary; the Company's variable bonus policy applies accordingly with respect to the targets to be achieved.

The service agreement provides for a two-year non-compete covenant after termination of his service agreement. Mr. Jürgens is entitled to salary continuation (non-compete compensation) during the term of the non-compete covenant equal to 50% of the average remuneration (fixed base salary plus variable remuneration) received by him in the 36 months' period prior to the termination of the service agreement. The amount of the non-compete compensation shall be payable pro rata in equal monthly installments during the term of such covenant.

Compensation of Supervisory Board Members

On August 25, 2020, the annual general shareholders' meeting adopted the following remuneration system for the members of our supervisory board to our shareholders at our first annual general shareholders' meeting:

- Ordinary members of the supervisory board will receive a fixed remuneration in the amount of € 20,000 per annum. The Chairman and Vice Chairman of the supervisory board will receive a fixed remuneration in the amount of €40,000 per annum and €30,000 per annum, respectively. The Chairman of the Audit Committee will receive a fixed remuneration in the amount of €30,000 per annum.
- If more than four supervisory board meetings are held during a calendar year, the members of the supervisory board will receive €5,000 for each additional physical meeting. Beyond this, we will generally not compensate the supervisory board members for their attendance of supervisory board meetings.
- The members of the supervisory board will be entitled to reimbursement of their reasonable, documented expenses (including, but not limited to, travel, board and lodging and telecommunication expenses).
- Value added tax payable on their remuneration and expenses shall be added, where applicable. This remuneration system will therefore remain in force until amended or terminated by our general shareholders' meeting.

Remuneration and Benefits in the Financial Year 2020

The members of the current management board of VIA optronics AG (established on January 4, 2019) also serve as Managing Directors of our subsidiary and former group holding company VIA optronics GmbH.

The compensation system of VIA optronics GmbH for its Managing Directors consists of an annual fixed salary and a variable compensation component, the payment of which is dependent on the achievement by the company of pre-agreed financial targets. With the contribution of VIA optronics GmbH into our company, the Managing Director service contracts of Mr. Jürgens and Mr. Eichner have been fully replaced by new management board member service contracts at the level of VIA optronics AG.

Under the new management board member service contracts, neither Mr. Jürgens nor Mr. Eichner will receive separate remuneration for the services rendered in their capacity as Managing Directors of VIA optronics GmbH. Instead, the services rendered in their capacity as Managing Directors of VIA optronics GmbH will be covered by the compensation granted under the management board member service contracts with our company (see "Compensation of Management Board Members" above).

As Managing Directors of VIA optronics GmbH, Mr. Eichner and Mr. Jürgens received total combined remuneration (base and variable) € 700,000 in respect of the financial year 2020. In addition, Mr. Eichner and Mr. Jürgens received customary fringe benefits such as a company car, mobile phone, employer contributions to their health insurance up to the contribution maximum in an amount up to € 31,000 in aggregate, and an accident insurance coverage.

Two of our current supervisory board members, Dr. Frank and Mr. Tan, formerly served as members of the advisory board (Beirat) of our subsidiary and former group holding company, VIA optronics GmbH, until the dissolution of the advisory board in 2020. Prior to the dissolution of the advisory board, Dr. Frank received remuneration for his service on the advisory board of VIA optronics GmbH in an amount of €5,000 per year during the financial years 2020 and 2019. Mr. Tan did not receive any remuneration in 2020 or 2019.

C. Board Practices

Supervisory Board Practices

Decisions are generally made by our supervisory board as a whole; however, decisions on certain matters may be delegated to committees of our supervisory board to the extent permitted by law. The Chairman, or if he or she is unable to do so, the Vice Chairman, chairs the meetings of the supervisory board and determines the order in which the agenda items are discussed, the method and order of the voting, any adjournment of the discussion and passing of resolutions on individual agenda items after a due assessment of the circumstances. In addition, under German law, each member of the supervisory board is obliged to carry out his or her duties and responsibilities in person, and such duties and responsibilities cannot be generally and permanently delegated to third parties. However, the supervisory board and its committees have the right to retain third-party experts for the review and analysis of specific matters within the scope of the supervisory board's control and supervisory function under German law. We would bear the cost of any such experts that are retained by the supervisory board or any of its committees within the scope of their responsibilities. Pursuant to Section 107 para. 3 of the German Stock Corporation Act, the supervisory board may form committees from among its members and charge them with the performance of specific tasks. The committees' tasks, responsibilities and processes are determined by the supervisory board. The supervisory board may delegate to one or more committees all tasks and responsibilities not reserved for the supervisory board as a whole as a matter of mandatory law. Pursuant to its internal rules of procedure, the supervisory board has established a Compensation and Nomination Committee and an Audit Committee.

Compensation and Nomination Committee

Pursuant to our articles of association and the rules of procedure of our supervisory board, the Compensation and Nomination Committee prepares hiring and personnel decisions of the supervisory board and performs the following functions:

- preparation of the supervisory board's resolutions regarding the conclusion, amendment and termination of service agreements of members of the management board, taking into account the compensation system adopted by the supervisory board;
- preparation of the supervisory board's resolutions regarding the compensation of the members of the management board pursuant to Section 87 of the German Stock Corporation Act;
- preparation of the supervisory board's resolutions regarding the compensation system for the management board, including the key contractual provisions, and providing the supervisory board with the information necessary to perform a review of the compensation system on a regular basis;
- representation of the company *vis-a-vis* former members of the management board pursuant to Section 112 of the German Stock Corporation Act;
- approving outside employment of and outside positions by management board members pursuant to Section 88 of the German Stock Corporation Act;

- approval of agreements with supervisory board members pursuant to Section 114 of the German Stock Corporation Act; and
- identifying suitable candidates who may be proposed for election as supervisory board members to the shareholders' meeting. The Compensation and Nomination Committee monitors the management board's compliance with the rules of procedure of the management board. The Compensation and Nomination Committee consists of three members, Mr. Jerome Tan, Mr. Best and Mr. Doradla. Our supervisory board has determined that a majority of the members of the Compensation and Nomination Committee satisfy the independence requirements under German law and the New York Stock Exchange listing standards. Mr. Tan has been elected Chairman of the Compensation and Nomination Committee.

Audit Committee

Our Audit Committee assists the supervisory board in overseeing the accuracy and integrity of our accounting and financial reporting processes, along with the audits of our financial statements. The Audit Committee also oversees the effectiveness of our internal control system, our compliance with legal and regulatory requirements, evaluates the independence and qualifications of the independent auditors, and oversees the performance of such auditors.

The Audit Committee's duties and responsibilities include, among others:

- the review of our accounting processes;
- the review of the effectiveness of our internal control systems, risk management and compliance;
- the review and the handling of matters and processes related to auditor independence;
- the recommendation of external auditors for approval by the shareholders' meeting, the commissioning of the auditors to conduct the audit, agreeing on additional services to be provided by the auditors within the scope of the auditor's assignment, the determination of the scope and the key areas of review of the audit, agreeing upon the auditors' compensation and oversight of the auditors' work (including resolution of disagreements with the auditors);
- the preparation of the supervisory board's resolution on our financial statements;
- reviewing our interim financial statements that are made public or otherwise filed with any securities regulatory authority;
- monitoring our bookkeeping and records; and
- the establishment of procedures for (i) the receipt, retention and treatment of complaints we receive regarding accounting, internal accounting controls or auditing matters and (ii) the submission by our employees of concerns regarding questionable accounting or auditing matters.

The Audit Committee consists of three members: Diosdado Banatao, Anthony John Best and Anil Kumar Doradla. According to the New York Stock Exchange listing standards, the Exchange Act and our rules of procedure for the Supervisory Board, all members of our Audit Committee must be independent. Our supervisory board has determined that each member of the Audit Committee qualifies as independent within the meaning of the New York Stock Exchange listing standards, the Exchange Act and the German Corporate Governance Code, and meets the financial literacy requirement of the New York Stock Exchange listing standards.

Mr. Doradla is the Chairman of our Audit Committee. Pursuant to the German Corporate Governance Code, the Chairman of the Audit Committee shall not be the Chairman of our supervisory board. In addition, the Chairman of the Audit Committee shall be independent from the company, the management board and from the controlling shareholder and have specific expertise in accounting and internal control procedures. Our supervisory board has determined that the Chairman of the Audit Committee, Mr. Doradla, in view of his in deep knowledge and experience in the application of accounting principles and internal control procedures, has the required expertise within the meaning of the German

Corporate Governance Code. The relevant SEC rules list a number of ways that an audit committee financial expert may gain the required experience, including as a principal financial officer of a company, as is the case with Mr. Doradla. Based on Mr. Doradla's aforementioned financial expertise and professional experience as Chief Financial Officer of Grid Dynamics, he also qualifies as an "audit committee financial expert" under the relevant SEC rules.

Management Board

Overview

Under our articles of association, the management board must consist of one or more persons. The supervisory board determines the exact number of members on the management board and appoints the Chairman and the deputy Chairman of the management board, if any. Currently, the management board consists of two members, Jürgen Eichner, appointed as Chief Executive Officer, and Daniel Jürgens, appointed as Chief Financial Officer.

The members of our management board conduct the day-to-day business of our company in accordance with applicable laws, our articles of association and the rules of procedure for the management board. The management board generally responsible for the management of our company and for handling our day-to-day business relations with third parties, the internal organization of our business and communications with our shareholders. In addition, the management board is responsible for:

- the preparation of our annual financial statements;
- making a proposal to be submitted to our shareholders' meeting on how our profits (if any) should be allocated (such proposal to be submitted simultaneously to the supervisory board); and
- regular reporting to the supervisory board on our current operating and financial performance, our budgeting and planning processes, and our performance in relation thereto and on future business planning (including strategic, financial, investment and personnel planning). The supervisory board can appoint the members of the management board for a maximum term of five years. According to the recommendations by the German Corporate Governance Code, the first-time appointment of management board members shall be for a period not more than three (3) years. Reappointment or extension, including a repeated reappointment or extension, of the term for up to five years is permissible. The supervisory board may only revoke the appointment of a management board member prior to the expiration of his or her term for good cause, such as for gross breach of fiduciary duties or if the shareholders' meeting passes a vote of no-confidence with respect to such member, unless the supervisory board deems the no-confidence vote to be clearly unreasonable. The supervisory board is also responsible for entering into, amending and terminating service agreements with the management board members and, in general, for representing us in disputes involving the management board irrespective of whether in or out of the court.

Our supervisory board may delegate any of these tasks to one of its committees, subject to certain exceptions in which resolutions have to be taken by the supervisory board as a whole. Pursuant to our current rules of procedure for the supervisory board, our supervisory board has delegated certain tasks to the Audit Committee and certain other tasks to the Compensation and Nomination Committee. For more details see sections "—Compensation and Nomination Committee" and "—Audit Committee."

According to our articles of association, as long as there are two or more management board members, either (i) two management board members or (ii) one management board member acting jointly with an authorized representative (*Prokurist*) have the authority to act on our behalf. The supervisory board may grant any management board member the right to represent us alone and may release any member of the management board from the restrictions on multiple representation (*Mehrfachvertretung*) under Section 181, 2nd alternative of the German Civil Code (*Bürgerliches "Gesetzbuch*).

Based on a resolution of the supervisory board, all members of the management board were released from the restrictions on multiple representation. Such release does not affect the fiduciary duties of the management board members towards our company.

The rules of procedure for our management board provide that certain matters require a resolution adopted by the management board, in addition to matters for which a resolution adopted by the management board is required by law or our articles of association. Such matters include the following:

- the management board's reports to inform the supervisory board;
- the management board's quarterly and semi-annual reports as required by applicable securities laws;
- fundamental organizational measures, such as the execution of, or amendment to, domination and profit and loss transfer agreements (Section 291 *et seqq.* of the German Stock Corporation Act), transformation measures within the meaning of the German Transformation Act (*Umwandlungsgesetz*), sale or acquisition of material company assets as well as issues of strategy and business planning as set out in Section 90 para. 1 no. 1 of the German Stock Corporation Act;
- measures related to the implementation and control of a monitoring system as set forth in Section 91 para. 2 of the German Stock Corporation Act;
- the issuance of the compliance statement pursuant to Section 161 para. 1 of the German Stock Corporation Act;
- the preparation of the consolidated and unconsolidated financial statements (including the management report) as well as comparable reports issued by the company voluntarily or based upon securities laws;
- convening of the general shareholders' meeting and preparation of the agenda, including the management board's proposals for matters to be discussed and, where applicable, voted on at the meeting; or
- matters with respect to which the chairman or any two members of the management board (in case the management board was enlarged) have requested a resolution by the management board.

The management board has the authority to determine our business areas and operating segments. It must also decide upon the internal allocation of responsibility for certain business areas and operating segments among the various members of the management board, by setting up a business responsibilities plan (*Geschäftsverteilungsplan*). While all members of the management board continue to bear joint responsibility for the management of the company, we have adopted a business responsibilities plan assigning the following primary responsibilities to our members of the management board:

The Chief Executive Officer, currently Jürgen Eichner, has the following primary responsibilities:

- overseeing our marketing and sourcing, sales and operations, research and development, technology, production, human resources, information technology and quality management functions.

The Chief Financial Officer, currently Daniel Jürgens, has the following primary responsibilities: overseeing our controlling, accounting, and legal functions.

The rules of procedure of our supervisory board provide that a management board member may not continue to serve on our management board past his or her 65th birthday.

D. Employees

As of December 31, 2020, we engaged with, including through secondment and service agreements with Toppan as well as through agreements with external dispatch firms as described below, a total of 693 persons, including 570 in operations (such as Production, Strategic Purchasing, Global Quality and Processes, Engineering, Supply Chain Management), 51 in finance and administration (such as human resources, information technology, legal and general administration); 38 in sales and marketing (including licensing); and 34 in research and development.

Of these staff, 100 were located in Germany, 589, in the aggregate, in China, Japan and Taiwan, and 4 in the United States. In addition to our direct employees, as of December 31, 2020, we utilized the services of 407 individuals,

in the aggregate, in China and Japan, on a contract basis to support our flexible production capacity which aids in balancing production volume variations, figures of which are included into the abovementioned aggregate staff counts.

At VTS, we are serviced by a total of 123 employees as of December 31, 2020, with 5 direct employees, 55 secondees from Toppan and 13 Toppan employees providing services to us under the Business Assistance Agreement, including 10 in research and development, and further 50 are dispatched to VTS from professional dispatch firms. Of the aggregate staff working at VTS sites, 83 were located in Shiga, Japan, 34 were located in Saito, Japan, and 6 were located in Hino City (Tokyo, Japan).

The secondment arrangement with Toppan had an expiration date in March 2021, and we are currently in negotiations regarding extension. The secondment arrangement is continuing pursuant to the previous terms during until negotiations are finalized.

E. Share Ownership

1. Ordinary Shares Beneficially Owned

The following table sets forth information, as of April 1, 2021, regarding the beneficial ownership of our ordinary shares.

Holders in excess of 5%:	Number of Shares Beneficially Owned	% of Beneficially Owned
Coöperatief IMI Europe U.A.	2,280,000 (1)	50.32%
Corning Research & Development Corporation	280,701 (2)	6.20%
Supervisory Board and Management Board Members		
Diosdado P. Banatao	-	-
Anthony John Best	-	-
Anil Kumar Doradla	-	-
Dr. Heiko Frank	-	-
Jerome S. Tan	-	-
Jürgen Eichner	720,000 (3)	15.89%
Daniel Jürgens	-	-
All members of our supervisory board and management board as a group (7 persons)	720,000	15.89% (4)

(1) Based on the Schedule 13G filed by Coöperatief IMI Europe U.A. on February 11, 2021. The address of Coöperatief IMI Europe U.A. is Herikerberweg 238 Luna ArenA, 1101 CM, Amsterdam, Noord-Holland, Netherlands. No natural person has sole voting or dispositive control over the shares owned by Coöperatief IMI Europe U.A.; however, Fernando Zobel de Ayala and Jaime Augusto Zobel de Ayala each control, indirectly, 30.25% of the interests owned by Coöperatief IMI Europe U.A. Fernando Zobel de Ayala and Jaime Augusto Zobel de Ayala each have an address of c/o Mermac, Inc., 3rd Floor Makati Stock Exchange Building, Ayala Avenue, Makati City, Philippines.

(2) Based on the Schedule 13G filed by Corning Research and Development Corporation on October 7, 2020. Consists entirely of ADSs and is reflected on an as-converted basis to the underlying ordinary shares. The address of Corning Research & Development Corporation is One Riverfront Plaza, Corning, NY 14831, USA. Corning Research & Development Corporation is a subsidiary of Corning, Inc., a publicly-listed company in the United States.

(3) 619,560 of Mr. Eichner's shares are held through the entity Jürgen Eichner Vermögensverwaltungs GmbH & Co. KG, which is controlled by Mr. Eichner. The business address of Mr. Eichner is c/o VIA optronics AG, Sieboldstrasse 18, 90411 Nuremberg, Germany. The remaining 100,440 shares are legally owned by close family members, but held in fiduciary custody, with all voting rights reserved, by Mr. Eichner.

(4) The percentage of ownership by all members of our Supervisory and Management Boards as a group is based on 4,530,701 ordinary shares outstanding as of April 28, 2021.

Percentages of ownership are based on 4,530,701 ordinary shares outstanding as of April 28, 2021. Except as otherwise indicated, the persons named in this table have sole voting and investment power with respect to all ordinary shares shown as beneficially owned by them, subject to community property laws where applicable and to the information contained in the footnotes to this table.

As of April 28, 2021, there were five holders of record entered in our German share register. BNYM, the depositary, is the holder of record of the ordinary shares that underlie our ADSs. The number of holders of record is based exclusively upon our share register and does not address whether a share or shares may be held by the holder of record on behalf of more than one person or institution who may be deemed to be the beneficial owner of a share or shares in our Company.

ITEM 7. Major Shareholders and Related Party Transactions

A. Major shareholders.

See “Item 6. Directors, Senior Management and Employees—E. Share Ownership.”

B. Related Party Transactions

Since January 1, 2017, there has not been, nor is there currently proposed, any material transaction or series of similar material transactions to which we were or are a party in which any of the members of our Supervisory Board and Management Board, executive officers, holders of more than 10% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than the compensation and shareholding arrangements we describe where required in “Item 6. Directors, Senior Management and Employees,” and the transactions we describe below.

Strategic Alliance Agreements

See “Item 4. Information on the Company – B. Business Overview – Strategic Alliance Agreements” for a description of material agreements with Toppan, the minority owner of VTS-Touchsensor Co., Ltd.

Property Lease Agreement

Our subsidiary VIA optronics GmbH has leased 28.42 square meters of office space located at Lettenfeldstrasse 15, Schwarzenbruck, Germany from our CEO, Jürgen Eichner pursuant to a lease agreement dated June 1, 2006, as amended from time to time. The initial net rent amounted to € 730.00 per month, with prepayment for operating costs in an amount of € 220.00 net per month (plus 19% VAT). Since 2011, the rent and prepayment for operating costs have been reduced to an aggregate net amount of € 360.00 (plus 19% VAT) due to a reduction of the space leased. The lease agreement has an unlimited term and can be terminated by either party with three months’ notice to the end of a calendar month.

Service Agreements

We have entered into service agreements with the members of our management board. See “Item 6. Directors, Senior Management and Employees.”

Loan Agreement with Coöperatief IMI Europe U.A.

In December 2019, VIA optronics AG received a € 2,000,000 loan from Coöperatief IMI Europe U.A., our majority shareholder. The loan is due in February 2021 with no penalty on full or partial early repayment and accrues interest at a rate equivalent to that due by VIA optronics GmbH on its working capital loan facility of from Bayern LB (Bayerische Landesbank). This loan was repayed in full in December 2020. See Note 25 of the consolidated financial statements under “Item 18 – Financial Statements” for additional information.

Service and Support Agreement and Framework Development Agreement with IMI

See “Item 4. Information on the Company – B. Business Overview – Strategic Alliance Agreements—Agreements with IMI” for a description of commercial agreements with IMI, an affiliate of our majority shareholder, and Note 25 of the consolidated financial statements under “Item 18 – Financial Statements” for additional information.

Relationship with Kloepfel Corporate Finance GmbH

Dr. Heiko Frank, a member of our supervisory board, holds 49.99% of the shares and serves as managing director of Kloepfel Corporate Finance GmbH, or Kloepfel. Kloepfel has served as an advisor to our business since March 2016 based on a continuing, untermiated buy-side project contract, including in connection with the investment by our current shareholder Cooperatief IMI Europe U.A. in VIA optronics GmbH and the acquisition by VIA optronics GmbH of the 65% ownership interest in VTS-Touchsensor Co., Ltd. Under the project contract, Kloepfel is, entitled to (i) a monthly retainer, (ii) a lump-sum success fee equaling EUR 250,000 net per successful acquisition, (iii) a lump-sum milestone fee of EUR 5,000 net per issued letter of intent, and (iv) reimbursement of out-of-pocket expenses.

Pursuant to a further project contract dated as of July 1, 2018, and amended on July 25, 2019, Kloepfel provided general advisory, management and coordination services in connection with our initial public offering. Under the IPO project contract, Kloepfel was entitled to (i) a monthly retainer, (ii) a success fee equal to 0.95% of the gross proceeds of our initial public offering, and (iii) reimbursement of out-of-pocket expenses, subject to certain caps. The aggregate fee Kloepfel received during the 3 years’ duration of under the IPO project contract amounts to 870.280,19 EUR. Following completion of the initial public offering, the IPO project contract had been terminated; no fees owed to Kloepfel are outstanding under this terminated IPO project contract.

Role of Dr. Heiko Frank and Jerome Tan as “Statutory Auditor” at VTS-Touchsensor Co., Ltd.

Dr. Heiko Frank, a member of our supervisory board, was appointed as “statutory auditor” of our Japanese subsidiary, VTS-Touchsensor Co., Ltd. in 2018. Pursuant to Japanese law, a “statutory auditor” is appointed for a term of four years. The major responsibilities of the statutory auditor include the general supervision and monitoring authority of the relevant company and its directors. This includes the duty to monitor the status of the company’s business operations and its assets and liabilities, the review of the company’s financial statements, business reports prepared for submission to each shareholders’ meeting and preparation of an audit (business monitoring) report for each business year. The statutory auditor’s responsibilities also include monitoring and supervising the compliance of the company’s directors with applicable laws and the company’s articles of incorporation. In connection with Dr. Frank’s role as “statutory auditor”, €7,500 was paid in 2019 to Kloepfel Corporate Finance GmbH, where Dr. Frank is managing director. He resigned from his position as “statutory auditor” on March 18, 2020. He did not receive any fees for his role in 2020. His successor as statutory auditor of VTS has been Mr. Jerome Tan, who succeeded Mr. Frank immediately. Jerome Tan is also the CFO of IMI, which is the major shareholder of VIA AG. Mr. Tan has not received any fees in connection with his service as statutory auditor of VTS in 2020.

Indemnity and Cost Sharing Agreement

We entered into an indemnity and cost sharing agreement with the selling shareholders in connection with our initial public offering. Under this agreement, the selling shareholders agreed (i) to indemnify us from certain liability risks and (ii) to assume parts of the transaction costs, in each case arising out of or in connection with our initial public offering.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. Financial Information

A. Consolidated Statements and Other Financial Information

See “Item 18. Financial Statements”.

Legal Proceedings

See “Item 4. Information on the Company—B. Business Overview—Legal Proceedings.”

Dividend Policy

We have no present intention of declaring or paying any dividends in the foreseeable future. Any recommendation by our management board and supervisory board to pay dividends will depend on many factors, including our financial condition, results of operations, legal requirements, capital requirements, business prospects and other factors.

All of our shares represented by the ADSs generally have the same dividend rights as all of our other outstanding shares. Any distribution of dividends proposed by our management board and supervisory board requires the approval of our shareholders in a shareholders’ meeting. See “Item 10. Additional Information—B. Memorandum and Articles of Association,” which incorporates by reference certain sections of our registration statement on [Form F-1 \(Registration No. 333---248599\)](#) that explain in more detail the procedures we must follow and the German law provisions that determine whether we are entitled to declare a dividend.

For information regarding the German withholding tax applicable to dividends and related United States refund procedures, see “Item 10. Additional Information—E. Taxation—German Taxation of ADSs.”

B. Significant Changes

Except as set forth elsewhere in this annual report, no significant changes have occurred since December 31, 2020.

ITEM 9. The Offer and Listing

A. Offer and Listing Details

Every five ADSs represent one ordinary shares. Our ADSs are listed for trading on the New York Stock Exchange under the symbol “VIAO.”

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs have been listed on the New York Stock Exchange since September 25, 2020.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

See the descriptions included in our registration statement on [Form F-1 \(Registration No. 333-248599\)](#) under the headings "Description of Company History and Share Capital" and "Description of American Depositary Shares," which are incorporated herein by reference.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company—Business Overview," "Item 7. Major Shareholders and Related Party Transactions—Related Party Transactions," or elsewhere in this annual report.

D. Exchange Controls

There are currently no legal restrictions in Germany on international capital movements and foreign-exchange transactions, except in limited embargo circumstances (*Teilembargo*) relating to certain areas, entities or persons as a result of applicable resolutions adopted by the United Nations and the EU. Restrictions currently exist with respect to, among others, Belarus, Burundi, Central African Republic, Congo, Guinea, Guinea-Bissau, Iran, Iraq, Jemen, Lebanon, Libya, Mali, Myanmar, Nicaragua, North Korea, Russia, Somalia, South Sudan, Sudan, Syria, Tunisia, Turkey, Ukraine, Venezuela and Zimbabwe.

There are limited notification requirements regarding transactions involving cross-border monetary transfers. With some exceptions, every corporation or individual residing in Germany must report to the German Central Bank (*Deutsche Bundesbank*) (i) any payment received from, or made to, a non-resident corporation or individual that exceeds € 12,500 (or the equivalent in a foreign currency), however, payments in relation to import, export or transfer of goods are not comprised, and (ii) any claim against, or liability payable to, a non-resident or corporation in excess of € 5 million (or the equivalent in a foreign currency) at the end of any calendar month. Payments include cash payments made by means of direct debit, checks and bills, remittances denominated in Euros and other currencies made through financial institutions, as well as netting and clearing arrangements. Furthermore, the contribution of property and rights into companies, branches and operating facilities shall be deemed to be a payment for purposes of the notification requirements. A willful or negligent breach of the notification obligations may be subject to a fine.

E. Taxation

The following discussion describes the material U.S. federal income tax and German tax consequences of acquiring, owning and disposing of the ADSs. It does not purport to be a comprehensive description of all tax considerations that may be relevant to a decision to purchase ADSs by any particular investor, including tax considerations that arise from rules of general application to all taxpayers or to certain classes of taxpayers that are generally assumed to be known by investors. In particular, this discussion does not address tax considerations applicable to a U.S. holder (as defined in "—U.S. Taxation" below) or other holder that may be subject to special tax rules, including, without limitation, brokers or dealers in securities or currencies, traders in securities electing mark to market, notional principal contracts or currencies, Medicare contribution tax, financial institutions, insurance companies, U.S. expatriates and inverted companies, certain stapled companies, tax-exempt organizations, tax-deferred or other retirement accounts, regulated investment companies, real estate investment trusts, a person that holds ADSs as part of a hedge, straddle, conversion or other integrated transaction for tax purposes, a person that purchases or sells ADSs as part of a wash sale for tax purposes, a person whose functional currency for tax purposes is not the U.S. dollar, a person subject to the U.S. alternative minimum tax, a person who does not hold the ADSs as capital assets for tax purposes, or a person that owns or is deemed to own 10% or more of the company's stock (by vote or value). In addition, the discussion does not address tax consequences to an entity treated as a partnership (or other pass-through entity) for U.S. federal income tax purposes that holds ADSs. Prospective purchasers that are partners in a partnership holding ADSs should consult their own tax advisors.

German Taxation

The following discussion describes the material German tax consequences of acquiring, owning and disposing of ADSs. With the exception of the subsection “Income Taxation of German Tax Resident Holders” below, which provides an overview of dividend taxation of holders that are tax resident in Germany, this discussion applies only to U.S. treaty beneficiaries (defined below) that acquire ADSs in the offering. This discussion is based on German tax laws, including, but not limited to, circulars issued by German tax authorities, which are not binding on the German courts, and the Treaty (as defined below). It is based upon tax laws in effect as of the date of this annual report. These laws are subject to change, possibly on a retroactive basis. There is no assurance that German tax authorities will not challenge one or more of the tax consequences described in this discussion. This discussion does not address the treatment of ADSs that are (i) held in connection with a permanent establishment or fixed base through which a U.S. treaty beneficiary carries on business or performs personal services in Germany or (ii) part of business assets for which a permanent representative in Germany has been appointed. In addition, this discussion is based upon the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms. It does not purport to be a comprehensive or exhaustive description of all German tax considerations that may be of relevance in the context of acquiring, owning and disposing of ADSs. Prospective holders of ADSs should consult their own tax advisors regarding the German tax consequences of the purchase, ownership and disposition of ADSs in light of their particular circumstances, including the effect of any state, local, or other foreign or domestic laws or changes in tax law or interpretation.

General German Tax Treatment of ADSs

As of the date hereof, no published German tax court decisions exist as to all aspects of the German tax treatment of ADRs or ADSs. However, based on the circular issued by the German Federal Ministry of Finance (*Bundesfinanzministerium*) dated May 24, 2013, reference number IV C 1-S2204/12/10003, as amended by the circular dated December 18, 2018, reference number IV C 1-S2204/12, jointly the “ADR Tax Circular,” for German tax purposes, the ADSs should represent a beneficial ownership interest in the underlying shares of the company and qualify as ADRs for the purpose of the ADR Tax Circular. If the ADSs qualify as ADRs under the ADR Tax Circular, dividends will accordingly be attributable to holders of ADSs for tax purposes, and not to the legal owner of the ordinary shares (i.e., the financial institution on behalf of which the ordinary shares are stored at a domestic depository for the ADS holders). Furthermore, holders of ADSs will be treated as beneficial owners of the capital of the company with respect to capital gains (see below in section “—German Taxation of Capital Gains of the U.S. Treaty Beneficiaries of the ADSs”). However, investors should note that circulars published by the German tax authorities (including the ADR Tax Circular) are not binding on German courts, including German tax courts, and it is uncertain whether a German court would follow the ADR Tax Circular in determining the German tax treatment of the ADSs. Nevertheless, for the purpose of this German tax section it is assumed that the ADSs qualify as ADRs within the meaning of the ADR Tax Circular.

Taxation of Non-German Resident U.S. Holders

The following discussion describes material German tax consequences for a holder that is a U.S. treaty beneficiary of acquiring, owning and disposing of ADSs. For purposes of this discussion, a “U.S. treaty beneficiary” is a resident of the United States for purposes of the Convention between the Federal Republic of Germany and United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital and certain other Taxes in the version published as of June 4, 2008 / August 7, 2008 (*Abkommen zwischen der Bundesrepublik Deutschland und den Vereinigten Staaten von Amerika zur Vermeidung der Doppelbesteuerung und zur Verhinderung der Steuerverkürzung auf dem Gebiet der Steuern vom Einkommen und vom Vermögen und einiger anderer Steuern in der Fassung der Bekanntmachung vom 4. Juni 2008 / 7. August 2008*) as published in the German Federal Law Gazette 2008 vol. II pp. 611/851 (hereinafter referred to as the “Treaty”) who is fully eligible for benefits under the Treaty.

A holder will be a U.S. treaty beneficiary entitled to full Treaty benefits in respect of the ADSs if it is, *inter alia*:

- the beneficial owner of the ADSs (and the dividends paid with respect thereto);
- a U.S. holder (as defined below);

- not also a resident of Germany for German tax purposes; and
- not subject to the limitation on benefits restrictions (*i.e.*, anti-treaty shopping article of the Treaty or German domestic rules) that applies in limited circumstances.

Special rules apply to pension funds and certain other tax-exempt investors.

General Rules for the Taxation of Non-German Tax Resident Holders of ADSs.

Non-German resident holders of ADSs are subject to German taxation with respect to certain German source income (*beschränkte Steuerpflicht*). According to the ADR Tax Circular, income from the shares should be attributed to the holders of ADSs for German tax purposes. As a consequence, income from the ADSs should be treated as German source income (dividend distributions of a corporate with a statutory seat and/or its place of central management in Germany). However, the repayment of capital contributions (*Einlagenrueckgewähr*) for tax purposes is considered as reduction of the acquisition costs of the respective shares rather than as dividend payment (subject to proper tax declaration by the company in accordance with German tax law).

The full amount of a dividend distributed by the company to a non-German resident holder is subject as a matter of principal to (final) German withholding tax at an aggregate rate of 26.375% (25% income tax plus 5.5% solidarity surcharge thereon). The relevant dividend is deemed to be received for German tax purposes at the payout date as determined by the company's general shareholders' meeting, or if such date is not specified, the day after such general shareholders' meeting.

The amount of the relevant taxable income is based on the gross amount in Euro; any expenses and costs related to such taxable income in principle should not reduce the taxable income. German withholding tax on capital income (*Kapitalertragsteuer*) is withheld and remitted to the competent German tax authorities by (i) the German dividend disbursing agent (*i.e.*, a German credit institution, financial services institution (each including the German branch of a foreign enterprise), German securities trading enterprise or German securities trading bank (each as defined in the German Banking Act (*Kreditwesengesetz*)) that holds or administers the underlying shares in custody and (a) disburses or credits the dividend income from the underlying shares, (b) disburses or credits the dividend income from the underlying shares on delivery of the dividend coupons or (c) disburses such dividend income to a foreign agent, or (ii) the central securities depository (*Wertpapiersammelbank*) in terms of the German Depository Act (*Depotgesetz*) holding the underlying shares in a collective deposit, if such central securities depository disburses the dividend income from the underlying shares to a foreign agent, regardless of whether a holder must report the dividend for tax purposes and regardless of whether or not a holder is a resident of Germany. Pursuant to the provisions of the Treaty, the German withholding tax may not exceed 15% of the gross dividends collected by U.S. treaty beneficiaries. The excess of the total withholding tax, including the solidarity surcharge, over the maximum rate of withholding tax permitted by the Treaty is refunded to U.S. treaty beneficiaries upon application (subject to presenting a German withholding tax certificate which can only be issued if the company has confirmed in writing to the German depository the number of ADSs issued and that all of the ADSs issued at the issuance date were covered by an equivalent number of German shares deposited with the German depository (circular by the German Federal Ministry of Finance, dated December 18, 2018, reference number IV C 1-S 2204/12/10003)). For example, for a declared dividend in the amount of EUR100, a U.S. treaty beneficiary initially receives EUR73.625 (EUR100 minus the 26.375% withholding tax including solidarity surcharge). The U.S. treaty beneficiary is entitled to a partial withholding tax refund from the German tax authorities in the amount of EUR11.375 of the gross dividend (EUR100). As a result, the U.S. treaty beneficiary ultimately receives a total amount of EUR85 (85% of the declared dividend) following the refund of the excess withholding. However, such a refund is subject to the German anti-avoidance treaty shopping rule (as described below in section “—Withholding Tax Refund for U.S. Treaty Beneficiaries”). A reduced permitted German withholding tax rate of 5% would apply according to the Treaty provisions, if the U.S. treaty beneficiary is a corporation and holds directly at least 10% of the voting shares of the dividend paying company.

German Taxation of Capital Gains of U.S. Treaty Beneficiaries of the ADSs. Capital gains from the disposition of ADSs realized by a non-German tax resident holder who does not maintain a permanent establishment or other taxable presence in Germany will be treated as German source income and be subject to German (corporate) income tax if such holder at any time during the five years preceding the disposition, directly or indirectly, owned 1% or more of the company's share capital (or other equity related instruments, as specified by law), irrespective of whether through the ADSs or shares of the company. If such holder had acquired the ADSs without consideration, the previous

owner's holding period and quota would be taken into account when calculating the above holding period and the participation threshold. However, U.S. treaty beneficiaries are eligible for treaty benefits under the Treaty (as described above in the section "—Taxation of Non-German Resident U.S. Holders"). Pursuant to the Treaty, U.S. treaty beneficiaries are not subject to German tax with any capital gain derived from the sale of the ADSs, even under the circumstances described in the preceding paragraph and therefore will not be taxed on capital gains from the disposition of the ADSs. German statutory law obliges a German disbursing agent to levy withholding tax on capital gains from the sale of ADSs or other securities held in a custodial account in Germany. With regard to the German taxation of capital gains, German disbursing agent means a German credit institution or the financial services institution, including a German branch of a foreign enterprise, or a German securities trading enterprise or a German securities trading bank (each as defined in the German Banking Act (*Kreditwesengesetz*)) that holds the ADSs in custody or administers the ADSs for the investor or conducts sales or other dispositions and disburses or credits the income from the ADSs to the holder of the ADSs. It should be noted that the German statutory law does not explicitly condition the obligation to withhold taxes on capital gains being subject to taxation in Germany under German statutory law or on an applicable income tax treaty permitting Germany to tax such capital gains. However, a circular issued by the German Federal Ministry of Finance, dated January 18, 2016, reference number IV C 1-S2252/08/10004:017 (published in the German Federal Tax Gazette 2016 vol. I pp. 85), as amended from time to time, provides that German taxes on capital gains need not be withheld when the holder of the custody account is not a resident of Germany for tax purposes and the income is not subject to German taxation. The circular further states that there is no obligation to withhold such tax even if the non-German resident holder owns 1% or more of the share capital of a German corporation. Although circulars issued by the German Federal Ministry of Finance are in principle only binding on the German tax authorities, a German disbursing agent is expected not to withhold tax on capital gains derived by a U.S. treaty beneficiary from the disposition of ADSs held in a custodial account in Germany, unless that the holder of the ADSs does not provide evidence on its tax status as non-German tax resident.

Withholding Tax Refund for U.S. Treaty Beneficiaries. U.S. treaty beneficiaries are generally eligible for treaty benefits under the Treaty (as described above in Section "—Taxation of Non-German Resident U.S. Holders"). Accordingly, U.S. treaty beneficiaries are entitled to claim a refund of the portion of the otherwise applicable 26.375% German withholding tax on dividends that exceeds the applicable Treaty rate (subject to presenting a German withholding tax certificate). However, in respect of dividends, the refund described in the preceding paragraph is only possible if, due to special rules on the restriction of withholding tax credit, the following three cumulative requirements are met: (i) the holder must qualify as beneficial owner of the ADSs for an uninterrupted minimum holding period of 45 days within a period starting 45 days prior to and ending 45 days after the due date of the dividends, (ii) the holder has to bear at least 70% of the change in value risk related to the ADSs during the minimum holding period as described under (i) of this paragraph and has not entered into (acting by itself or through a related party) hedging transactions which lower the change in value risk by more than 30%, and (iii) the holder must not be obliged to fully or largely compensate directly or indirectly the dividends to third parties. If these requirements are not met, then for a holder not being tax-resident in Germany who applied for a full or partial refund of the withholding tax pursuant to a double taxation treaty, no refund is available. This restriction generally does only apply if (a) the tax on the dividends underlying the refund application is below 15% of the gross amount of the dividends pursuant to a double taxation treaty and (b) the holder does not directly own 10% or more of the shares in the company and is subject to income taxes in its state of residence, without being tax-exempt.

The restriction of the withholding tax credit does not apply if the holder has beneficially owned the ADSs for at least one uninterrupted year until receipt (*Zufluss*) of the dividends.

However, as previously discussed, investors should note that it is unclear how the German tax administration will apply the refund process to dividends on the ADSs. Further, such refund is subject to the German anti-avoidance treaty shopping rule according to section 50d para. 3 of the German Income Tax Act (*Einkommensteuergesetz*), which is currently subject to envisaged amendments (draft law of the *Abzugsteuerentlastungsmodernisierungsgesetz* passed by the German Federal Government on January 20, 2021, still subject, however, to the parliamentary procedure in the German Parliament). Generally, this rule (as currently still applicable) requires that the U.S. treaty beneficiary (in case it is a non-German resident company) maintains its own administrative substance and conducts its own business activities. In particular, a foreign company shall not have the right to a full or partial refund to the extent persons holding ownership interests in the company would not be entitled to the refund if they would have derived the income directly and the gross income realized by the foreign company is not caused by the business activities of the foreign company, and there are either no economic or other considerable reasons for the interposition of the foreign company, or the foreign company does not participate in general commerce by means of a business organization with resources

appropriate to its business purpose. However, this shall not apply if the foreign company's principal class of stock is regularly traded in substantial volume on a recognized stock exchange, or if the foreign company is subject to the provisions of the German Investment Tax Act (*Investmentsteuergesetz*). Furthermore, the European Court of Justice recently decided that the German anti-avoidance treaty shopping rule, as described before, is not in line with the requirements of the European Directive 2011/96EC (the European Parent Subsidiary Directive), as amended from time to time. Though this decision does not directly affect non-European resident holders of shares, it had an impact on the envisaged amendments of the anti-avoidance treaty shopping rule by the *Abzugsteuerentlastungsmodernisierungsgesetz* still subject to parliamentary proceeding in the German parliament. The draft law, however, is usually subject to further changes in the parliamentary procedure. Therefore, whether or not and to which extent the current anti-avoidance treaty shopping rule applies, has to be analyzed on a case by case basis taking into account all relevant tests. In addition, the interpretation of these tests is disputed and until the time of filing of this annual report no published decisions of the German Federal Finance Court (*Bundesfinanzhof*) dealing with the interpretation of these tests exist. Due to the legal structure of the ADSs, only limited guidance of the German tax authorities exists on the practical application of this procedure with respect to the ADSs.

Income Taxation of German Tax Resident Holders

This subsection provides an overview of general taxation principles applicable to the holders of ADSs who are tax resident in Germany. A holder is a German tax resident if, in case of an individual, he or she maintains a residence (*Wohnsitz*) or his or her habitual abode (*gewöhnlicher Aufenthalt*) in Germany or if, in case of a corporation, it has its place of central management (*Geschäftsleitung*) or a statutory seat (*Sitz*) in Germany.

The German dividend and capital gains taxation rules applicable to German tax residents require a distinction between ADSs held as private assets (*Privatvermögen*) and ADSs held as business assets (*Betriebsvermögen*).

ADSs held as Private Assets (*Privatvermögen*). If ADSs are held as private assets by a German tax resident individual, dividends and capital gains are taxed as capital income (*Einkünfte aus Kapitalvermögen*) and are principally subject to 25% German flat rate income tax on capital income (*Abgeltungsteuer*) (plus a 5.5% solidarity surcharge (*Solidaritätszuschlag*) thereon, resulting in an aggregate rate of 26.375% and plus church tax (*Kirchensteuer*), if applicable), which is generally levied in the form of withholding tax on capital income (*Kapitalertragsteuer*). The holder is taxed on gross capital income (including dividends or gains with respect to ADSs), less the annual saver's tax-free allowance (*Sparer-Pauschbetrag*) of currently EUR801 for an individual or EUR1,602 for married couples and registered civil unions (*eingetragene Lebenspartnerschaften*) filing jointly. The deduction of actual expenses relating to the capital income (including dividends or gains with respect to ADSs) is not permitted.

The withholding tax on capital income generally settles the income tax liability of the holder with respect to the capital income. However, private investors may request the application of their personal progressive income tax rate on the whole income from capital investments in a given year if this results in a lower tax liability. If this is the case, any tax withheld in excess will be refunded during the personal income tax assessment procedure.

Losses resulting from the disposal of ADSs can only be offset with capital gains from the disposition of shares of corporations (*Aktien*) and other ADSs treated similar to shares. If, however, a holder directly or indirectly held at least 1% of the share capital of the company at any time during the five years preceding the disposition, the German flat rate income tax on capital income does not apply with regard to such capital gain, but 60% of the capital gain resulting from the disposition are taxable at the holder's personal progressive income tax rate (plus 5.5% solidarity surcharge and church tax, if applicable, thereon). Correspondingly, only 60% of any capital losses and disposal costs are tax deductible.

ADSs held as Business Assets (*Betriebsvermögen*). In case the ADSs are held as business assets, the actual taxation depends on the legal form of the holder (i.e., whether the holder is a corporation or an individual). Irrespective of the legal form of the holder, dividends are generally subject to the aggregate withholding tax rate of 26.375%, unless the holder of the ADSs is an investment fund (*Investmentfonds*) subject to German investment taxation. The tax actually withheld is credited against the respective holder's final (corporate or personal) income tax liability. Due to special rules on the restriction of withholding tax credits in respect of dividends, a full withholding tax credit requires that the following three cumulative requirements are met: (i) the holder must qualify as beneficial owner of the ADSs for an uninterrupted minimum holding period of 45 days within a period starting 45 days prior to and ending 45 days after the due date of the dividends, (ii) the holder has to bear at least 70% of the change in value risk related to the ADSs during the minimum holding period as described under (i) of this paragraph and has not entered into (acting by itself or through

a related party) hedging transactions which lower the change in value risk by more than 30%, and (iii) the holder must not be obliged to fully or largely compensate directly or indirectly the dividends to third parties. If these requirements are not met, three-fifths of the withholding tax imposed on the dividends must not be credited against the holder's corporate income tax or income tax liability, but may, upon application, be deducted from the holder's tax base for the relevant tax assessment period. A holder that is generally subject to German income tax or corporate income tax and that has received gross dividends without any deduction of withholding tax due to a tax exemption without qualifying for a full tax credit under the aforementioned requirements has to notify the competent local tax office accordingly and has to make a payment in the amount of the omitted withholding tax deduction. The special rules on the restriction of withholding tax credit do not apply to a holder whose overall dividend earnings within an assessment period do not exceed A20,000 or that has been the beneficial owner of the ADSs for at least one uninterrupted year until receipt (Zufluss) of the dividends. To the extent the amount withheld exceeds the (corporate or personal) income tax liability, the withholding tax will be refunded, provided that certain requirements are met. With regard to holders in the legal form of a corporation, capital gains from ADSs are in general effectively 95% tax exempt from corporate income tax (including solidarity surcharge) and trade tax. In contrast, dividends from ADSs are only 95% exempt from corporate income tax, if the corporation holds at least 10% of the share capital in the company at the beginning of the respective calendar year. To the extent ADSs and/or shares of 10% or more of the company have been acquired during a calendar year, the acquisition will be deemed to be made at the beginning of the calendar year. Furthermore, dividends are subject to trade tax (*Gewerbesteuer*), unless the holder holds at least 15% of the share capital in the company at the beginning of the tax assessment period. In the latter case, effectively 95% of the dividends are exempt from trade tax.

Business expenses and capital losses actually incurred in connection with ADSs might not be tax deductible for corporate income and trade tax purposes except if certain requirements are met. This concerns in particular expenses which are related to the disposition of ADSs. With regard to individuals holding ADSs as business assets, 60% of dividends and capital gains are taxed at the personal progressive income tax rate of the holder of ADSs (plus 5.5% solidarity surcharge and church tax, if applicable, thereon). Correspondingly, only 60% of business expenses related to the respective income are principally deductible for income tax purposes. Furthermore, trade tax may apply, provided the ADSs are held as assets of a German trade or business (*Gewerbebetrieb*) of the holder, but the resulting trade tax might be credited against the income tax liability of the holder pursuant to a lump sum procedure. Special taxation rules apply to German tax resident credit institutions (*Kreditinstitute*), financial services institutions (*Finanzdienstleistungsinstitute*), financial enterprises (*Finanzunternehmen*), life insurance and health insurance companies (*Lebens- und Krankenversicherungsunternehmen*), pension funds (*Pensionsfonds*) and investment funds (*Investmentfonds*).

German Inheritance and Gift Tax (*Erbschaft- und Schenkungsteuer*)

Generally, a transfer of ADSs by a holder at death or by way of gift will be subject to German gift or inheritance tax, respectively, if (i) the decedent or donor, or the heir, donee or other transferee is resident in Germany at the time of the transfer, or with respect to German citizens who are not resident in Germany, if the decedent or donor, or the heir, donee or other transferee has not been continuously outside of Germany for a period of more than five years; (ii) the ADSs or ordinary shares are part of the business property of a permanent establishment or a fixed base in Germany; or (iii) the ADSs or ordinary shares subject to such transfer form part of a portfolio that represents 10% or more of the registered share capital of the company and has been held, directly or indirectly, by the decedent.

However, the right of Germany to impose gift or inheritance tax on a non-resident shareholder may be limited by an applicable estate tax treaty. In the case of a U.S. resident holder, a transfer of ADSs by a U.S. resident holder at death or by way of gift generally will not be subject to German gift or inheritance tax pursuant to the estate tax treaty between the U.S. and Germany (Convention between the Federal Republic of Germany and the United States of America for the Avoidance of Double Taxation with respect to Estate, Gift and Inheritance Taxes, German Federal Law Gazette 1982 vol. II page 846, as amended by the Protocol of December 14, 1998 and as published on December 21, 2000, German Federal Law Gazette 2001 vol. II, page 65; the "Estate Tax Treaty") provided the decedent or donor, or the heir, donee or other transferee was not domiciled in Germany for purposes of the Estate Tax Treaty at the time the gift was made, or at the time of the decedent's death, and the ADSs were not held in connection with a permanent establishment or a fixed base in Germany. In general, the Estate Tax Treaty provides a credit against the U.S. federal gift or estate tax liability for the amount of gift or inheritance tax paid in Germany, subject to certain limitations, in a case where the ADSs or ordinary shares are subject to German gift or inheritance tax and U.S. federal gift or estate tax.

Other German Taxes

There are currently no German net worth, transfer, stamp or other similar taxes that would apply to a U.S. holder on the acquisition, ownership, sale or other disposition of the ADSs. Certain member states of the European Union are considering introducing a financial transaction tax (*Finanztransaktionssteuer*) which, if and when introduced, may also be applicable on sales and/or transfer of ADS.

Information and Reporting Requirements

The Organization for Economic Co-Operation and Development released the Common Reporting Standard (“CRS”) designed to create a global standard for the automatic exchange of financial account information, similar to the information to be reported under FATCA.

Under the CRS and legislation enacted in Germany to implement the CRS, generally certain information needs to be disclosed about investors in the shares, the ultimate beneficial owners and/or controllers, and their investment in and returns from the shares. All prospective investors should consult with their own tax advisors regarding the tax consequences of their investment in the ADSs.

U.S. Taxation

The following discussion describes the material U.S. federal income tax consequences that are relevant with respect to the acquisition, ownership and disposition of the ADSs by U.S. holders. The information provided below is based on the Internal Revenue Code of 1986, as amended, or the Code, Internal Revenue Service, or IRS, rulings and pronouncements, and judicial decisions all as now in effect and all of which are subject to change or differing interpretations, possibly with retroactive effect. It does not provide a complete analysis of all potential tax considerations. For example, the opinion does not describe the effect of the U.S. federal estate and gift tax laws, the Foreign Account Tax Compliance Act (including the U.S. Treasury regulations promulgated thereunder and intergovernmental agreements entered into in connection therewith) or the effects of any foreign, state or local laws that may be applicable to a U.S. holder.

For purposes of this opinion, a “U.S. holder” is a beneficial owner of ADSs that for U.S. federal income tax purposes, is (1) an individual who is a citizen or resident of the United States, (2) a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state of the United States, including the District of Columbia, (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source, or (4) a trust, if it (i) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons or (ii) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership (including an entity or arrangement, domestic or foreign, treated as a partnership for U.S. federal income tax purposes) holds ADSs, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. A holder of ADSs that is a partnership, and partners in such partnership, should consult their own tax advisors about the U.S. federal income and estate tax consequences of purchasing, owning and disposing of the ADSs. In general, a U.S. holder of ADSs should be treated as the owner of our ordinary shares for U.S. federal income tax purposes. U.S. holders should consult their own tax advisers concerning the tax consequences of converting ADSs to ordinary shares.

Each prospective holder of ADSs should consult its own tax advisors regarding the U.S. federal, state and local or other tax consequences of acquiring, owning and disposing of the company’s ADSs in light of their particular circumstances. U.S. holders should also review the discussion under “—German Taxation of ADSs” for the German tax consequences to a U.S. holder of the ownership of the ADSs.

Distributions

Under the United States federal income tax laws, and subject to the PFIC rules (as discussed below under “—Additional United States Federal Income Tax Consequences—PFIC Rules”), the gross amount of any distribution of cash or property that is actually or constructively received ordinary dividend income to the extent the amount of such distribution is paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax

purposes. We do not, however, expect to determine earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend. To the extent the amount of such distribution exceeds our current and accumulated earnings and profits for the taxable year of the distribution, it will be treated first as a non-taxable return of capital to the extent of such U.S. holder's adjusted tax basis in its ADSs, and to the extent the amount of such distribution exceeds such adjusted tax basis, will be treated as gain from the sale or exchange of the ADSs. If you are a non-corporate U.S. holder, dividends paid to you that constitute qualified dividend income should be taxable to you at a preferential rate (rather than the higher rates of tax generally applicable to items of ordinary income) provided that you hold the ADSs for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and meet other holding period requirements. If we are a PFIC (as discussed below under “—Additional United States Federal Income Tax Consequences—PFIC Rules”), distributions paid by us with respect ADSs will not be eligible for the preferential income tax rate. Prospective investors should consult their own tax advisors regarding the taxation of distributions under these rules.

You must include the gross amount of any dividend payment with respect to the ADSs without reduction for German taxes withheld from the dividend payment even though you do not in fact receive the amount associated with the withheld German tax. The gross amount of the dividend is taxable to you when you receive the dividend, actually or constructively. We expect that dividends paid on the ADSs will not be eligible for the dividends-received deduction generally available to corporate U.S. holders.

Subject to applicable limitations, some of which vary depending upon a U.S. holder's particular circumstances, German taxes withheld from dividends (net of any potential refunds described under “—German Taxation—Taxation of Non-German Resident U.S. Holders—Withholding Tax Refund for U.S. Treaty Beneficiaries”) on the ADSs can be claimed as a credit against the U.S. holder's U.S. federal income tax liability. For purposes of the U.S. foreign tax credit rules, dividends with respect to our ADS should constitute income from sources outside of the United States and should generally be passive income. In lieu of claiming a foreign tax credit, U.S. holders may, at their election, deduct foreign taxes, including any German income tax, in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year. The rules governing foreign tax credits are complex and prospective investors should consult their own tax advisors regarding the implications of the foreign tax credit provisions for them, in light of their particular situation. The gross amount of any dividend paid in foreign currency will be included in the gross income of a U.S. holder in an amount equal to the U.S. dollar value of the foreign currency calculated by reference to the exchange rate in effect on the date the dividend distribution is received by the depository, regardless of whether the payment is in fact converted into U.S. dollars. If the foreign currency is converted into U.S. dollars on the date of receipt by the depository, a U.S. holder generally should not be required to recognize foreign currency gain or loss in respect of the dividend. If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any gain or loss on a subsequent conversion or other disposition of the foreign currency will be treated as ordinary income or loss, and will generally be income or loss from sources within the United States for foreign tax credit limitation purposes. The amount of any distribution of property other than cash will be the fair market value of the property on the date of the distribution, less the sum of any encumbrance assumed by the U.S. holder.

U.S. Taxation of Sale or Other Disposition

Subject to the discussion below under “—Additional United States Federal Income Tax Consequences—PFIC Rules,” a U.S. holder will generally recognize a gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of ADSs in an amount equal to the difference between the U.S. dollar value of the amount realized from such sale, exchange or other disposition and the U.S. holder's tax basis in such ADSs. Such gain or loss generally will be capital gain or loss. Capital gain of a non-corporate U.S. holder recognized on the sale or other disposition of ADSs held for more than one year is generally eligible for a reduced rate of taxation. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes. Consequently, if a German withholding tax is imposed on the sale or disposition of the shares, a U.S. holder that does not receive significant foreign source income from other sources may not be able to derive effective United States foreign tax credit benefits in respect of such German taxes. The deductibility of capital losses is subject to limitations.

A U.S. holder that receives foreign currency on the sale or other disposition of ADSs will realize an amount equal to the U.S. dollar value of the foreign currency calculated by reference to the exchange rate in effect on the date of sale or other disposition (or, in the case of cash basis and electing accrual basis taxpayers, the U.S. dollar value of the

foreign currency on the settlement date) provided that the ADSs are treated as being “traded on an established securities market.” An accrual basis U.S. holder that does not elect to determine the amount realized using the exchange rate in effect on the settlement date will recognize foreign currency gain or loss equal to the difference between the U.S. dollar value of the amount received based on the exchange rate in effect on the date of the sale or other disposition and the settlement date. A U.S. holder will have a tax basis in the currency received equal to the U.S. dollar value of the foreign currency calculated by reference to the exchange rate in effect on the settlement date. If a U.S. holder receives foreign currency upon a sale or exchange of ADSs, gain or loss, if any, recognized on the settlement date or subsequent sale, conversion or disposition of such foreign currency will be ordinary income or loss, and will generally be income or loss from sources within the United States for foreign tax credit limitation purposes and will not be eligible for the reduced tax rate applicable to long-term capital gains. However, if such foreign currency is converted into U.S. dollars on the date received by the U.S. holder, a cash basis or electing accrual U.S. holder should not recognize any gain or loss on such conversion. If an accrual basis U.S. holder makes the election described in the first sentence of this paragraph, it must be applied consistently from year to year and cannot be revoked without the consent of the IRS.

Redemption

A redemption of ADSs by us will be treated as a sale of the redeemed ADSs by the U.S. holder or as a distribution to the U.S. holder (which is taxable as described above under “—Distributions”). U.S. holders are urged to consult their tax advisors regarding the treatment of a redemption of ADSs.

Additional United States Federal Income Tax Consequences

PFIC Rules. Special adverse U.S. federal income tax rules apply to U.S. holders owning shares of stock in a PFIC. In general, if you are a U.S. holder, we will be a PFIC with respect to you if, taking into account our proportionate share of the income and assets of our subsidiaries under applicable “look-through” rules, for any taxable year in which you held the ADSs: (i) at least 75% of our gross income for the taxable year is passive income or (ii) at least 50% of the value, determined on the basis of a quarterly average, of our assets is attributable to assets that produce or are held for the production of passive income. Based on an analysis of our gross income and gross assets for the taxable year ending December 31, 2020, we believe that we were not a PFIC for the taxable year ending December 31, 2020 and we do not expect to be treated as a PFIC in any future taxable year. However, because PFIC status is based on our income, assets and activities for the entire taxable year, which we expect may vary substantially over time, it is not possible to determine whether we will be characterized as a PFIC for any taxable year until after the close of the taxable year. Moreover, we must determine our PFIC status annually based on tests that are factual in nature, and our status in future years will depend on our income, assets and activities in each of those years. There can be no assurance that we will not be considered a PFIC for any taxable year.

Passive income generally includes dividends, interest, royalties, rents (other than certain rents and royalties derived in the active conduct of a trade or business), annuities and gains from the disposition of assets that produce passive income. Any cash we hold generally will be treated as held for the production of passive income for the purpose of the PFIC test, and any income generated from cash or other liquid assets generally will be treated as passive income for such purpose. If a foreign corporation owns at least 25% by value of the stock of another corporation, the foreign corporation is treated for purposes of the PFIC tests as owning its proportionate share of the assets of the other corporation, and as receiving directly its proportionate share of the other corporation’s income.

If we were to be treated as a PFIC, except as otherwise provided by election regimes described below, a U.S. holder would be subject to special adverse tax rules with respect to (i) “excess distributions” received on the ADSs and (ii) any gain recognized upon a sale or other disposition (including a pledge) of the ADSs. A U.S. holder would be treated as if it had realized such gain and “excess distributions” ratably over its holding period for the ADSs and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. Special rules apply for calculating the amount of the foreign tax credit with respect to “excess distributions” by a PFIC.

With certain exceptions, a U.S. holder’s ADSs will be treated as stock in a PFIC if we were a PFIC at any time during the U.S. holder’s holding period in for its ADSs, even if we are not currently a PFIC.

Dividends that a U.S. holder receives from us will not be eligible for the special tax rates applicable to qualified dividend income if we are treated as a PFIC, either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income.

In general, if a U.S. holder owns stock in a PFIC that is treated as “marketable stock,” the U.S. holder may make a mark-to-market election. Stock will be marketable if they are “regularly traded” on a “qualified exchange” or other market within the meaning of applicable U.S. Treasury regulations, including the New York Stock Exchange. If a U.S. holder makes this election, the U.S. holder will not be subject to all of the PFIC rules described above. Instead, in general, the U.S. holder will include as ordinary income the excess, if any, of the fair market value of its ADSs at the end of the taxable year over the U.S. holder’s adjusted basis in its ADSs. Similarly, any gain realized on the sale, exchange or other disposition of the ADSs will be treated as ordinary income, and will not be eligible for the favorable tax rates applicable to qualified dividend income or long-term capital gains. The U.S. holder will also be allowed to take an ordinary loss in respect of the excess, if any, of the adjusted basis of its ADSs over the fair market value at the end of the taxable year (but only to the extent of the net amount of previously included income as a result of the mark-to-market election). A U.S. holder’s basis in the ADSs will be adjusted to reflect any such income or loss amounts recognized under these rules. Once made, the election cannot be revoked without the consent of the IRS unless the ADSs cease to be marketable.

A U.S. holder may in certain circumstances also mitigate adverse tax consequences of the PFIC rules by filing an election to treat the PFIC as a QEF if the PFIC complies with certain reporting requirements. However, in the event that we are or become a PFIC, we do not intend to comply with such reporting requirements necessary to permit U.S. holders to elect to treat us as a QEF. U.S. holders should consult their own tax advisors regarding the application of the PFIC rules to their investment in the ADSs and the elections discussed above.

Information with Respect to Interests in PFICs. If we were to be treated as a PFIC, owners of the ADSs (including, potentially, indirect owners) would be required to file an information report, currently on IRS Form 8621, with respect to such interest on their tax returns, subject to certain exceptions. U.S. holders are urged to consult their tax advisors regarding the application of these rules to their ownership of the ADSs.

Information with Respect to Foreign Financial Assets. Owners of “specified foreign financial assets” with an aggregate value in excess of \$50,000 (and in some circumstances, a higher threshold) may be required to file IRS Form 8938 (Statement of Specified Foreign Financial Assets) with respect to such assets on their tax returns. “Specified foreign financial assets” may include financial accounts maintained by foreign financial institutions, as well as any of the following, if they are held for investment and not held in accounts maintained by financial institutions: (i) stocks and securities issued by non-U.S. persons, (ii) financial instruments and contracts held for investment that have non-U.S. issuers or counterparties, and (iii) interests in foreign entities. U.S. holders are urged to consult their tax advisors regarding the application of these rules to their ownership of the ADSs. The understatement of income attributable to “specified foreign financial assets” in excess of U.S. \$5,000 extends the statute of limitations with respect to the tax return to six years after the return was filed. U.S. holders who fail to report the required information could be subject to substantial penalties.

Backup Withholding and Information Reporting. Backup withholding and information reporting requirements will generally apply to certain payments to U.S. holders of dividends on ADSs and proceeds from the sale or other disposition of the ADSs. We, our agent, a broker or any paying agent, may be required to withhold tax from any payment that is subject to backup withholding unless the U.S. holder (1) is an exempt payee, or (2) provides the U.S. holder’s correct taxpayer identification number and complies with applicable certification requirements. Backup withholding is not an additional tax. Any amounts withheld from a payment to a U.S. holder of ADSs under the backup withholding rules can be credited against any U.S. federal income tax liability of the U.S. holder, provided the required information is timely furnished to the IRS. A U.S. holder generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed the U.S. holder’s income tax liability by filing a refund claim with the IRS. Prospective investors should consult their own tax advisors as to their qualification and procedure for exemption from backup withholding.

F. Dividend and paying agents

Not applicable.

G. Statement by experts

Not applicable.

H. Documents on Display

We previously filed with the SEC our registration statement on Form F-1 (Registration No. 333-248599), as amended, including the prospectus contained therein, to register our ordinary shares.

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year, which is December 31. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

I. Subsidiary Information

Not applicable.

ITEM 11. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk from fluctuations in interest rates and foreign currency exchange rates which may adversely affect our results of operations and financial condition. The market risk is the risk that the fair value or the future cash flow of a financial instrument fluctuates due to changes in the market prices. The primary market risks to which we are exposed are interest rate risk and foreign exchange risk.

Interest Rate Risk

Interest rate risk includes the influence of positive and negative changes to interest rates on our profit, equity, or cash flow in the current or any future reporting period. Interest rate risks from financial instruments arise mainly in connection with financial liabilities, including borrowings under our existing working capital and equipment financing facilities. With the amount of cash and cash equivalents and financial instruments that we maintained on December 31, 2020, a hypothetical increase or decrease of one percentage point, or 100 basis points, in interest rates, would not have had a material effect on our financial statements.

Foreign Exchange Risk

We are exposed to currency risk to the extent that there is a mismatch between the currencies in which sales, purchases/expenses and borrowings are denominated and the respective functional currencies of our group companies. Our functional currency is the euro. The currencies in which transactions are primarily denominated are euros, U.S. dollars, Japanese yen and Chinese renminbi. The foreign exchange risks we face result from translation risk and transaction risk. Translation risk describes the risk from changes to the statement of financial position and statement of comprehensive income items of a subsidiary due to changes to the exchange rates when converting local individual financial statements into presentation currency. The changes caused by currency fluctuations when translating statement of financial position items are recognized in equity. We are currently exposed to translation risk with respect to three subsidiaries, specifically with respect to translation of U.S. dollars, Chinese renminbi and Japanese yen to euros, our currency for financial reporting purposes. We estimate that a 10% change in the value of the Euro versus the value of the U.S. dollar and Japanese Yen would change our reported financial liabilities in 2020 by € 4.7 million and € 3,600, respectively. There is no hedging of this risk. Transaction risk is the risk that the value of future foreign payments may change due to exchange rate fluctuations. We operate internationally and are exposed to foreign exchange risk arising from various currency exposures, primarily with respect to euros. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations.

Credit Risk

Credit risk, also known as risk of default, is the risk that a customer or counterparty to a financial instrument fails to meet its contractual obligations. Our credit risk arises principally from our receivables from customers and varies from customer to customer. We conduct extensive credit assessments of our customers during the customer acquisition phase. Thereafter, outstanding receivables from customers are monitored regularly and put through a formal collection process in order to convert such receivables to cash. Any remaining credit risk is reviewed and provided for individually.

ITEM 12. Description of Securities Other than Equity Securities.

A. Debt Securities.

Not applicable.

B. Warrants and Rights.

Not applicable.

C. Other Securities.

Not applicable

D. American Depositary Shares

Fees and Expenses

The Bank of New York Mellon, as depositary, will register and deliver American Depositary Shares, also referred to as ADSs. Every 5 ADSs represent 1 ordinary share (or a right to receive a share) deposited with The Bank of New York Mellon SA/NV, as custodian for the depositary in Germany. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs will be administered and its principal executive office are located at 240 Greenwich Street, New York, New York 10286.

<i>Persons depositing or withdrawing shares or ADS holders must pay:</i>	<i>For:</i>
US\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
\$.05 (or less) per ADS	Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
\$.05 (or less) per ADS per calendar year	Depositary services
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
Expenses of the depositary	Cable and facsimile transmissions (when expressly provided in the deposit agreement) Converting foreign currency to U.S. dollars

Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	As necessary
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Any charges incurred by the depositary or its agents for servicing the deposited securities	As necessary
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The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

Payment by Depositary

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. We had not received any payment from the Bank of New York Mellon as of December 31, 2020.

PART II.

ITEM 13. Defaults, Dividend Arrearages and Delinquencies.

None.

ITEM 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

ITEM 15. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures, which is defined in Rules 13a-15(e) of the Exchange Act as of the end of the period covered by this annual report. Based upon that evaluation, our management, with the participation of our chief executive officer and chief financial officer, has concluded that our disclosure controls and procedures were ineffective as of December 31, 2020, because of the material weaknesses in our internal control over financial reporting described below. Our disclosure controls and procedures were not effective to satisfy the objectives for which they are intended.

Notwithstanding management's assessment that our disclosure controls and procedures were ineffective as of December 31, 2020 due to the material weaknesses primarily related to the lack of sufficient accounting and supervisory personnel who have the appropriate level of technical accounting experience and training and a lack of consistent application of accounting processes and procedures by our accounting personnel, we believe that the consolidated financial statements included in this annual report on Form 20-F fairly present our financial position, results of operations and cash flows for the fiscal years covered thereby in all material respects

Management's Annual Report on Internal Control over Financial Reporting

This annual report does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by rules of the SEC for newly public companies.

Attestation Report of the Registered Public Accounting Firm

This annual report does not include an attestation report of the company's registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly public companies and because Via Optronics AG is an emerging growth company under the JOBS Act.

Changes in Internal Control over Financial Reporting

This annual report does not include disclosure of changes in control over financial reporting due to a transition period established by rules of the SEC for newly public companies.

ITEM 16. Reserved**ITEM 16A. Audit Committee Financial Expert**

Our board of directors has determined that Mr. Doradla, an independent director and chairman of our audit committee, is our audit committee financial expert.

ITEM 16B. Code of Ethics

Our board of directors has adopted our code of business conduct and ethics, or code of conduct, a code that applies to all of our supervisory board members, management board members, including the chief executive officer, the chief financial officer and chief operations officer, and employees. This code is available publicly on our website at www.via-optronics.com. Any amendments to, or waivers from, the provisions of the code of conduct applicable to members of our supervisory board and management board will be disclosed on our website promptly following the date of such amendment or waiver.

ITEM 16C. Principal Accountant Fees and Services.

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, or EY, has served as our independent registered public accounting firm for the years ended December 31, 2020, 2019 and 2018 for which audited financial statements appear in this annual report.

The following table sets out the aggregate fees for professional audit services and other services rendered by our independent auditors for the fiscal years ended December 31, 2019 and 2020:

	December 31,	
	2020	2019
	(€ in thousands)	
Audit fees	992	890
Audit-related fees	738	295
Tax fees	-	-
All other fees	206	-
Total	<u>1,936</u>	<u>1,185</u>

Audit fees relate to the audit of the financial statements and services related to our statutory and regulatory filings for our subsidiaries.

Audit-related fees relate to certain procedures on our quarterly results and to the issuance of a comfort letter in connection with our IPO in September 2020.

Other fees are any additional amounts for products and services provided by the principal accountants.

The Audit Committee evaluates the qualifications, independence and performance of the independent auditor as well as pre-approves and reviews the audit and non-audit services to be performed by the independent auditor. The external audit plan and fees for professional audit services and other services rendered by EY for the year ended December 31, 2020 were approved by the Audit Committee. The external audit plan and fees for professional audit services and other services rendered by EY for the year ended December 31, 2019 were approved by the Supervisory Board. The Audit Committee monitors compliance with the German and U.S. rules on non-audit services provided by an independent registered public accounting firm.

ITEM 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

ITEM 16E Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

ITEM 16F

Not applicable.

ITEM 16G Corporate Governance

In general, under Section 303A.11 of the New York Stock Exchange Listed Company Manual, foreign private issuers such as us are permitted to follow home country corporate governance practices instead of certain provisions of the New York Stock Exchange Listed Company Manual without having to seek individual exemptions from the New York Stock Exchange. A foreign private issuer making its initial U.S. listing on the New York Stock Exchange and following home country corporate governance practices in lieu of the corresponding corporate governance provisions of the New York Stock Exchange Listed Company Manual must disclose in its registration statement or on its website any significant ways in which its corporate governance practices differ from those followed by U.S. companies under the New York Stock Exchange Listed Company Manual. In addition, we also may qualify for certain exemptions under the New York Stock Exchange Listed Company Manual as a foreign private issuer that may affect our corporate governance practices.

The significant differences between the corporate governance practices that we follow and those set forth in the New York Stock Exchange Listed Company Manual are described below:

- Section 303A.01 of the New York Stock Exchange Listed Company Manual requires listed companies to have a majority of independent directors. There is no requirement under German law that the majority of the members of a supervisory board be independent. However, the German Corporate Governance Code and the rules of procedure of our supervisory board provide that the supervisory board should be composed of an “appropriate” number of independent members. We consider three of the current members of the supervisory board as independent within the meaning of the New York Stock Exchange Listed Company Manual and the German Corporate Governance Code.
- Section 303A.04(b) of the New York Stock Exchange Listed Company Manual requires all companies listed on the New York Stock Exchange to have a written nomination committee charter. German law does not require a separate charter for a nomination committee. Instead, the responsibilities of our Compensation and Nomination Committee are set forth in the rules of procedure of our supervisory board and in the applicable German laws.
- Section 303A.05(b) of the New York Stock Exchange Listed Company Manual requires all companies listed on the New York Stock Exchange to have a written compensation committee charter. German law does not require a separate charter for a compensation committee. Instead, the responsibilities of our Compensation and Nomination Committee are set forth in the rules of procedure of our supervisory board and in the applicable German laws.
- Section 303A.07(a) of the New York Stock Exchange Listed Company Manual requires each member of the audit committee of a listed company to be financially literate and also requires that at least one audit committee member have accounting or related financial management expertise. The German Corporate Governance Code contains a recommendation that the chairman of the audit committee of a listed company have expertise in the areas of accounting and internal control procedures. Accordingly, the rules of procedure of our supervisory board stipulate that the Chairman of our Audit Committee shall have special expertise and experience regarding accounting principles and internal control procedures. The Chairman of the Audit Committee, Anil Kumar Doradla, fulfills these requirements. Although we believe that all members of our Audit Committee are financially literate, neither German law, nor the rules of procedure of our supervisory board, require all members of our Audit Committee to be financially literate.
- Section 303A.07(b) of the New York Stock Exchange Listed Company Manual requires all companies listed on the New York Stock Exchange to have a written audit committee charter. German law does not require a separate charter for an audit committee. Instead, the responsibilities of our Audit Committee are set forth in the rules of procedure of our supervisory board and in the applicable German laws.
- Section 303A.09 of the New York Stock Exchange Listed Company Manual requires all listed companies to adopt and disclose corporate governance guidelines. German law does not require a company to adopt separate

corporate governance guidelines. Instead, we follow the German Corporate Governance Code as described above. In addition, certain of the subjects to be addressed in the corporate governance guidelines pursuant to Section 303A.09 are contained in the rules of procedure of our supervisory board.

We may, however, deviate from certain recommendations and suggestions of the Corporate Governance Code in various respects. Any such deviations from the German Corporate Governance Code recommendations will be published in our annual compliance statements.

ITEM 16H Mine Safety Disclosure

Not applicable.

PART III.

ITEM 17. Financial Statements

Not applicable.

ITEM 18. Financial Statements

Reference is made to pages F-1 to F-47 included herein by reference.

ITEM 19. Exhibits

- 1.1 [Articles of Association of VIA optronics AG \(incorporated by reference to Exhibit 3.1 to the Company's Form F-1 \(No. 333-248599\), filed with the Securities and Exchange Commission \(the "Commission"\) on September 21, 2020\).](#)
- 1.2 [Rules of Procedure of the Supervisory Board of VIA optronics AG \(incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 21, 2020\).](#)
- 1.3 [Rules of Procedure of the Management Board of VIA optronics AG \(incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 21, 2020\).](#)
- 2.1 [Form of specimen of ordinary registered share certificate and English translation \(incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 21, 2020\).](#)
- 2.2 [Form of Deposit Agreement \(incorporated by reference to Exhibit 99-a to the Company's Registration Statement on Form F-6 \(No. 333-248714\), filed with the Commission on September 10, 2020\).](#)
- 2.3 [Form of American Depositary Receipt \(included in Exhibit 2.2\).](#)
- 2.4* [Description of Securities registered under Section 12 of the Exchange Act.](#)
- 4.1 [Shareholders Agreement, dated January 25, 2019, by and among VIA optronics AG, Coöperatief IMI Europe U.A. and Jürgen Eichner \(incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 21, 2020\).](#)
- 4.2 † [Framework Cooperation Agreement, dated April 8, 2019, by and between VIA optronics GmbH and Wacker Chemie AG \(incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.3 [Investment Agreement, dated as of March 7, 2019, by and among VIA optronics AG, VIA optronics GmbH and Corning Research & Development Corporation, as amended September 30, 2019 and March 24, 2020 \(incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.4** [Framework Agreement, dated November 30, 2017, by and between VIA optronics GmbH and Toppan Printing Co., Ltd. \(incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 21, 2020\).](#)
- 4.5 [Shareholders' Agreement, dated March 23, 2018, by and between VIA optronics GmbH and Toppan Printing Co., Ltd. \(incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.6 [Employee Secondment Agreement \(Toppan\), dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd. \(incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.7 [Employee Secondment Agreement \(TEP\), dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Electronics Products Co., Ltd. \(incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.8 [Shiga Facility Lease Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd. \(incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form F-1 \(No. 333-248599\), filed with the Commission on September 4, 2020\).](#)
- 4.9** [Satte Facility Lease Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd., as amended June 23, 2020 \(incorporated by reference to Exhibit 10.9 to the](#)

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	<u>Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.10**	<u>Business Assistance Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd., as amended April 1, 2019 and April 1, 2020 (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 21, 2020).</u>
4.11†	<u>Transferred IP Purchase Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Touch Panel Products, Co., Ltd. (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.12†	<u>IP License Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd. (incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.13**	<u>R&D and Consignment Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd., as amended November 7, 2019, December 6, 2019 and June 23, 2020 (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.14	<u>Distribution Agreement, dated March 29, 2018, by and between VTS-Touchsensor Co., Ltd. and Toppan Printing Co., Ltd., as amended June 23, 2020 (incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.15†*	<u>Project Contract, dated as of March 16 / April 22, 2016, by and between VIA optronics GmbH and Kloeppel Corporate Finance GmbH.</u>
4.16†	<u>Project Contract, dated as of July 1, 2018, by and between VIA optronics GmbH and Kloeppel Corporate Finance GmbH as amended July 25, 2019 (incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.17**	<u>Service and Support Agreement, dated January 7, 2019, by and between Integrated Micro-Electronics, Inc. and VIA optronics GmbH (incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.18**	<u>Framework Development Agreement, effective as of November 1, 2018, by and between Integrated Micro-Electronics, Inc. and VIA optronics GmbH (incorporated by reference to Exhibit 10.17 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 4, 2020).</u>
4.19	<u>Shareholders Agreement, dated July 11, 2019, by and among VIA optronics AG, Cöoperatief IMI Europe U.A. and Jürgen Eichner (incorporated by reference to Exhibit 10.18 to the Company's Registration Statement on Form F-1 (No. 333-248599), filed with the Commission on September 21, 2020).</u>
8.1*	<u>List of Subsidiaries</u>
12.1*	<u>Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
12.2*	<u>Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
13.1*	<u>Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
13.2*	<u>Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** An attachment or portion of this exhibit has been omitted (i) pursuant to Item 601(a)(5) of Regulation S-K because the information contained therein is not material and is not otherwise publicly disclosed or (ii) pursuant to Item 601(a)(6) because it includes information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy. The Company has furnished supplementally a copy of the attachment to the Securities and Exchange Commission.

† Portions of this exhibit (indicated by asterisks) have been redacted in compliance with Regulation S-K Item 601(b)(10)(iv).

Signatures

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

VIA optronics AG

By: /s/ Jürgen Eichner / Daniel Jürgens

Name: Jürgen Eichner/ Daniel Jürgens

Title: *Chief Executive Officer/Chief Financial Officer*
April 29, 2021

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Management Board of VIA optronics AG

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of VIA optronics AG (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations and other comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with International Financial Reporting Standards as issued by International Accounting Standards Board (IFRS).

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

We have served as the Company’s auditor since 2015.

Munich, Germany
April 29, 2021

VIA optronics AG
Consolidated Statements of Financial Position
December 31, 2020 and 2019

EUR	Note	12/31/2020	12/31/2019
Assets			
Non-current assets		21,467,453	24,935,283
Intangible assets	6	4,078,249	6,033,571
Property and equipment	7	16,835,608	18,576,268
Other financial assets		155,105	156,757
Deferred tax assets	22	398,491	168,687
Current assets		128,384,683	56,724,662
Inventories	8	17,256,055	14,485,822
Trade accounts receivables	9	26,377,820	25,224,456
Current tax assets	22	135,743	75,923
Other assets	10	3,593,785	7,603,338
Cash and cash equivalents		81,021,280	9,335,123
Total assets		149,852,136	81,659,945
Equity and liabilities			
Equity attributable to equity holders of the parent		77,628,320	800,620
Share capital	11	4,530,701	3,000,000
Capital reserve	11	83,422,824	4,169,843
(Accumulated Deficit)		(9,948,029)	(6,331,002)
Currency translation reserve		(377,176)	(38,221)
Non-controlling interests		276,904	281,658
Total Equity		77,905,224	1,082,278
Non-current liabilities		9,396,050	12,452,059
Loans	12	1,639,813	2,797,277
Provisions	13	135,784	134,476
Lease liabilities	16	7,620,453	8,816,494
Deferred tax liabilities	22	-	703,812
Current liabilities		62,550,863	68,125,608
Loans	12	20,646,533	28,648,651
Trade accounts payable		30,610,890	24,147,955
Current tax liabilities	22	1,274,111	255,221
Provisions	13	575,940	1,993,833
Lease liabilities	16	1,593,975	3,155,469
Other financial liabilities	14	3,949,072	5,837,124
Other liabilities	15	3,900,342	4,087,355
Total equity and liabilities		149,852,136	81,659,945

**Consolidated Statements of Operations and
Other Comprehensive Income (Loss)
for the years ended December 31, 2020, 2019 and 2018**

EUR, except share amounts	Note	2020	2019	2018
Revenue	18	152,590,315	137,231,335	171,678,894
Cost of sales	19	(129,231,305)	(127,209,624)	(149,873,374)
Gross profit		23,359,010	10,021,711	21,805,520
Selling expenses	19	(3,380,809)	(4,252,062)	(4,295,235)
General administrative expenses	19	(15,373,077)	(13,197,135)	(13,266,631)
Research and development expenses	19	(3,186,980)	(2,490,259)	(1,336,840)
Other operating income	20	4,969,034	2,358,997	5,022,477
Other operating expenses	20	(7,159,521)	(3,415,143)	(3,031,280)
Operating (loss)/income		(772,342)	(10,973,891)	4,898,011
Financial result	21	(1,420,968)	(1,642,182)	(1,141,591)
(Loss)/Profit before tax		(2,193,310)	(12,616,073)	3,756,420
Income tax expense	22	(1,418,134)	(741,564)	(378,110)
Net (loss)/profit		(3,611,444)	(13,357,637)	3,378,310
Which is attributable to:				
Owners of the company		(3,617,028)	(11,759,184)	3,959,134
Non-controlling interests		5,584	(1,598,453)	(580,824)
<i>Other comprehensive income / (loss):</i>				
Exchange differences on translation of foreign operations		(349,294)	116,717	23,309
Comprehensive (loss)/income		(3,960,738)	(13,240,920)	3,401,619
Which is attributable to:				
Owners of the company		(3,955,984)	(11,727,788)	3,910,914
Non-controlling interests		(4,754)	(1,513,132)	(509,295)
Weighted average of shares outstanding		3,398,330	2,991,600	2,900,000
(Loss)/earnings per share in EUR		(1.06)	(3.93)	1.37

Consolidated Statements of Cash Flows

for the years ended December 31, 2020, 2019 and 2018

EUR	2020	2019	2018
Cash flows from operating activities			
Net (loss) / profit	(3,611,444)	(13,357,637)	3,378,310
Adjustments for:			
—Depreciation of property and equipment	5,132,605	4,907,832	2,116,496
—Amortization of intangible assets	1,910,985	1,629,195	1,095,954
—Impairment loss on trade receivables	323,200	284,758	169,012
—Financial result	1,420,968	1,642,182	1,141,591
—Gain from a bargain purchase	—	—	(2,992,660)
—Foreign currency effect	(2,047,671)	527,879	178,003
—Income tax expense	1,418,134	741,565	378,110
Changes in:			
—Inventories	(2,770,234)	5,993,324	1,344,330
—Trade accounts receivables and other assets	(3,994,649)	(1,287,603)	(15,701,254)
—Prepayments	(143,969)	295,698	(673,275)
—Trade accounts payable and other liabilities	4,364,133	4,887,316	(633,895)
—Provisions	(1,416,586)	(168,975)	475,700
—Current and deferred income taxes	21,817	406,924	3,624,634
Income taxes paid	(1,354,676)	(1,246,492)	(2,804,510)
Net cash used in operating activities	(747,387)	5,255,966	(8,903,454)
Cash flow from investing activities			
Proceeds from sale of property and equipment	35,505	—	—
Acquisition of a subsidiary, net of cash acquired	—	—	(1,286,356)
Acquisition of property and equipment	(2,819,124)	(1,536,200)	(2,374,230)
Acquisition of intangible assets	(86,850)	(1,554,787)	(161,236)
Net cash used in investing activities	(2,870,468)	(3,090,987)	(3,821,822)
Cash flow from financing activities			
Issuance of share capital	90,844,618	100,000	—
Payment of transaction costs	(3,591,465)	—	—
Interest paid	(1,434,069)	(1,584,082)	(697,245)
Proceeds from loans	53,577,777	59,368,855	57,975,438
Repayment loans	(60,473,984)	(58,931,938)	(41,284,325)
Payment of lease liabilities	(3,430,031)	(1,748,088)	—
Net cash provided by (used in) financing activities	75,492,846	(2,795,253)	15,993,868
Net (decrease) / increase in cash and cash equivalents	71,874,992	(630,274)	3,268,592
Cash and cash equivalents at January 1	9,335,123	9,943,184	6,623,477
Foreign currency effect	(188,835)	22,213	51,115
Cash and cash equivalents at December 31	81,021,280	9,335,123	9,943,184

**Consolidated Statements of Changes in Equity
for the years ended December 31, 2020, 2019 and 2018**

	Equity Attributable to Owners of the Company						Non-Controlling Interests	
	(Accumulated							
	Share Capital	Subscribed Capital	Capital Reserve	Deficit) / Retained Earnings	Currency Translation Reserve	Total	Total	Total
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	
January 1, 2018	—	73,327	6,996,516	1,469,048	(21,395)	8,517,496	—	8,517,496
Net profit	—	—	—	3,959,134	—	3,959,134	(580,824)	3,378,310
Foreign currency translation effect	—	—	—	—	(48,220)	(48,220)	71,529	23,309
Total comprehensive income	—	—	—	3,959,134	(48,220)	3,910,914	(509,295)	3,401,619
Non-controlling interests arising on a business combination	—	—	—	—	—	—	2,304,085	2,304,085
December 31, 2018	—	73,327	6,996,516	5,428,182	(69,615)	12,428,410	1,794,790	14,223,200
Net profit / loss	—	—	—	(11,759,184)	—	(11,759,184)	(1,598,453)	(13,357,637)
Foreign currency translation effect	—	—	—	—	31,396	31,396	85,321	116,717
Total comprehensive income	—	—	—	(11,759,184)	31,396	(11,727,788)	(1,513,132)	(13,240,920)
Issue of share capital upon formation (note 5)	100,000	—	—	—	—	100,000	—	100,000
Effect of contribution in kind (note 5)	2,900,000	(73,327)	(2,826,673)	—	—	—	—	—
December 31, 2019	3,000,000	—	4,169,843	(6,331,002)	(38,221)	800,620	281,658	1,082,278
Net loss	—	—	—	(3,617,028)	—	(3,617,028)	5,584	(3,611,444)
Foreign currency translation effect	—	—	—	—	(338,955)	(338,955)	(10,339)	(349,294)
Total comprehensive income	—	—	—	(3,617,028)	(338,955)	(3,955,984)	(4,754)	(3,960,738)
Issuance of share capital	1,530,701	—	89,313,917	—	—	90,844,618	—	90,844,618
Transaction costs	—	—	(10,060,936)	—	—	(10,060,936)	—	(10,060,936)
December 31, 2020	4,530,701	—	83,422,824	(9,948,029)	(377,176)	77,628,319	276,904	77,905,224

VIA optronics AG

Notes to the Consolidated Financial Statements

December 31, 2020, 2019 and 2018

1. Corporate information

VIA optronics AG (the “Company” or “VIA”) together with its subsidiaries (the “Group” or “VIA Group”) is a leading provider of enhanced display solutions for multiple end markets in which superior functionality or durability is a critical differentiating factor.

The Company’s technology is particularly well-suited for demanding environments that pose technical and optical challenges for displays, such as bright ambient light, vibration and shock, extreme temperatures and condensation. VIA’s solutions combine VIA’s expertise in integrated display head assembly and proprietary bonding technologies. VIA’s portfolio of offerings enables thin display designs and high optical clarity, which decreases power consumption and increases readability. The Company provides a broad range of customized display solutions across a broad range of display sizes, including curved display panels and solutions integrating multiple displays under one cover lens. Furthermore, since beginning of 2018, VIA engages in the production of metal mesh touch sensor technology and electrode base film.

The Company is registered in the commercial register of the local court (Amtsgericht) of Nuremberg under HRB 36200 and has its registered seat in Nuremberg, Germany.

As of September 29, 2020, VIA became listed on The New York Stock Exchange under the symbol “VIAO” (NYSE: VIAO). For more information related to the IPO, please see Note 11.

VIA maintains production facilities in Germany, China and Japan. Through its subsidiaries, VIA maintains and operates sales offices in Taiwan and the United States. As of December 31, 2020, subsidiaries included in the consolidated financial statements are as follows:

- VIA optronics GmbH, Schwarzenbruck, Germany
- VIA optronics LLC, Orlando, Florida, USA (hereafter referred to as “VIA LLC”)
- VIA optronics (Suzhou) Co., Ltd., Suzhou, China (hereafter referred to as “VIA Suzhou”)
- VTS-Touchsensor Co., Ltd., Higashi Omi, Japan (hereafter referred to as “VTS”) (see Note 2.3, Business Combination and Goodwill)
- VIA optronics (Taiwan) Ltd., Taipei, Taiwan (hereafter referred to as “VIA Taiwan”)

The financial year of all Group entities corresponds to the calendar year.

VIA is a subsidiary of Integrated Micro-Electronics, Inc. (“IMI”) a Philippines-based Company. IMI is part of Ayala Group which is a publicly listed entity in the Philippines. The ultimate parent company is Mermac Inc., a Philippines-based company. VIA is owned 50.32% by IMI, 15.89% by Jürgen Eichner (CEO and founder) and 33.79% are held by the Bank of New York Mellon in fiduciary custody without any voting agreement. The consolidated financial statements of the Company comprise the Company and its subsidiaries (together referred to as the “Group” and individually as “Group entities”).

2. Significant accounting policies

2.1 Basis of preparation

The consolidated financial statements of the VIA Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

All amounts in the consolidated financial statements are reported in Euro ("EUR"), except where otherwise stated.

The Group presents assets and liabilities in the consolidated statements of financial position based on current or non-current classification. An asset is current when it is expected to be realized within twelve months after the reporting period; or cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current. A liability is current when it is due to be settled within twelve months after the reporting period. The Group classifies all other liabilities as non-current.

The consolidated statements of operations and other comprehensive income (loss) have been prepared using the cost of sales method under IFRS. The financial statements have been prepared on a historical cost basis.

The outbreak of the COVID-19 pandemic and the measures adopted by governments in countries worldwide to mitigate the pandemic's spread have not significantly impacted the Group. Nevertheless, the Group considered the impact of Covid-19 in preparing the financial statements and the application of accounting judgements, estimates and assumptions.

The consolidated financial statements were authorized by the members of the Management Board on April 29, 2021.

2.2 Basis of consolidation

The consolidated financial statements incorporate the assets and liabilities and the results of operations and cash flows of the Group. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The financial statements of the subsidiaries are prepared using consistent accounting policies. Intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated.

2.3 Business Combination and Goodwill

The Group accounts for business combinations using the acquisition method when control is transferred to the Group. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in general administrative expenses.

When the Group acquires a business, it assesses the identifiable financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date.

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed). If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then a bargain purchase gain is recognized in the statement of operations.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

2.4 Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below.

2.4.1 Fair value measurement

Fair value is a market-based measurement. For some assets and liabilities, observable market transactions or market information is available. For other assets and liabilities, observable market transactions or market information might not be available. When a price for an identical asset or liability is not observable, another valuation technique is used. To increase consistency and comparability in fair value measurements there are three levels of the fair value hierarchy:

- Level 1—Inputs use quoted prices in active markets for identical assets or liabilities
- Level 2—Inputs are inputs, other than quoted prices included within Level 1, which are observable either directly or indirectly
- Level 3—Inputs are unobservable and have values estimated by management based on market participant assumptions which are reasonably available

2.4.2 Revenue from contracts with customers

The Group generates revenue from the production and sale of enhanced display solutions using optical bonding technology and of metal mesh touch sensors. VIA provides optical bonding on either a consignment basis (meaning its customer directly sources all of the necessary product components and the Group applies its patented MaxVU bonding process to assemble such components) or a full service basis (meaning the Group will source the necessary product components and perform the related optical bonding) and R&D engineering services. In the sensor technologies segment, the Group focuses on the development, production and sale of metal mesh touch sensors and the development of other sensor components and technologies that can be incorporated into the Group's integrated display solutions. A small portion of the Group's revenues is derived from licenses for its MaxVU optical bonding processes and sales of related bonding equipment to select customers; together these licences comprised less than 2.3% of the Group's revenues for 2020, 2019 and 2018.

Although there are several components which are used in the bonding process, these components are highly integrated in a way that the customer cannot benefit from either the bonding service or the components used in the bonding process independent from each other. As a result, the fully bonded display is a separate performance obligation both under the consignment model as well as the full service model.

The Group considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated (e.g., warranty). Based on a detailed evaluation (e.g. whether warranties provided are service-type warranties), the Group evaluated that these promises are not separate performance obligations. Therefore, no portion of the transaction price needs to be allocated to those promises.

Under certain contracts performed on a full service basis, Group entities source components such as displays from either the customer or suppliers of the customer. The Group evaluated whether payments for such components are considered payables to customers and concluded that those payments are in exchange for a distinct good. Therefore, such payments are classified to cost of sales in the consolidated statements of operations and other comprehensive income (loss).

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those

goods or services. The Group has concluded that it is the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer.

For optical bonding services performed under the consignment model, revenue is recognized at a point in time based on the fact that the assets created have alternative use to the Group entities. This is when the enhancement process is finalized, the customer removes the enhanced products from the consignment stock and is invoiced, according to contract.

For the sale of products under the full service model, revenue is recognized at a point in time when control of the products are transferred to the customers, generally on delivery of the products.

For R&D engineering services, revenue is recognized over-time as the customer simultaneously receives and consumes the benefits provided by the Group's performance completed to date.

Contract balances

Contract assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

Contract fulfilment cost assets

A contract fulfilment cost asset is recognized if the Group incurred costs to fulfil a contract with a customer and this costs relate directly to an existing or specific anticipated contract, generate or enhance resources of the Group that will be used to satisfy the performance obligations in the future and are expected to be recovered.

Contract fulfilment cost assets are amortised on a straight-line basis, consistent with the expected lifetime of the project to which the asset relates.

Contract assets and contract fulfilment cost assets are subject to impairment assessment. Refer to Note 2.4.11.

Trade accounts receivable

A receivable is recognized when an amount of consideration that is unconditional is due from the customer (i.e., only the passage of time is required before payment of the consideration is due). See Note 2.4.8 for accounting policies of financial assets.

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract. See note 4.1.

2.4.3 Taxes

Income tax expense comprises current and deferred tax and is recognized in profit or loss except to the extent that it arises from a business combination, or items recognized directly in equity or other comprehensive income (OCI).

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted in the countries in which the Group operates at the

reporting date. Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Future taxable profits are determined based on business plans for individual subsidiaries in the Group. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that they are recoverable.

The measurement of deferred tax reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities and applying the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

2.4.4 Foreign currencies

Functional and presentation currency

The Group's consolidated financial statements are presented in Euros, which is also the parent company's functional currency. The Group determines the functional currency for each entity and the respective financial statements are measured using that functional currency.

Transactions and balances

Transactions in foreign currencies are translated into the respective functional currencies of Group companies using the exchange rates at the dates the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Differences arising on settlement or translation of monetary items are recognized in the consolidated statements of operations.

Foreign currency translation

Upon consolidation, the assets and liabilities of foreign operations are translated into Euros at the rate of exchange prevailing at the reporting date and the consolidated statements of operations and other comprehensive income (loss) are translated at the average rates. The exchange differences arising on translation for consolidation are recognized in OCI. Upon disposal of a foreign operation, the component of OCI relating to that particular foreign operation is reclassified to the statement of operations.

A summary of exchange rates to the Euro for currencies in which the Group operates is as follows:

(€1 Equals)	Average Rates for the Year Ending Dec. 31 2020	Spot Rates at Dec. 31 2020
USD	1.1419	1.2271
CNY	7.8690	8.0225
JPY	121.8024	126.4900
TWD	33.6168	34.5067

	Average Rates for the Year Ending Dec. 31 2019	Spot Rates at Dec. 31 2019
(€1 Equals)		
USD	1.1175	1.1234
CNY	7.7487	7.8205
JPY	121.5518	121.9400
TWD	34.5837	33.6811

	Average Rates for the Year Ending Dec. 31 2018	Spot Rates at Dec. 31 2018
(€1 Equals)		
USD	1.1816	1.1450
CNY	7.8074	7.8751
JPY	130.4618	125.8500

2.4.5 Property and equipment

Property and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses. Evaluation of impairment of non-financial assets is described in 2.4.10.

Cost includes expenditures that are directly attributable to the acquisition of the asset or self-constructed assets in addition to any costs incurred in order to bring the assets into operating condition. The cost of an item of property and equipment includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located to the extent there is an obligation to do so. An asset retirement obligation for such costs is recorded upon acquisition. The costs for dismantling and removing are recognized and measured in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

The Group has recognized asset retirement obligations to return certain of the Group's premises to their original condition.

Property and equipment are depreciated to their estimated residual values using the straight-line method over their estimated useful lives. The depreciation is recognized in the statements of operations.

Estimated useful lives are as follows:

	Years
Technical equipment and machinery	3 - 13
Factory, office and other equipment	3 - 13

Gains or losses on disposal of property and equipment are recognized in the statements of operations.

Repairs and maintenance are expensed as incurred.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

2.4.6 Leases

Policy applicable after IFRS 16 adoption

The Group assesses at inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

This policy is applied to contracts entered into, on or after January 1, 2019, as well as those existing as of this date and which were previously identified as leases. See 3.1 for additional information on the effect of IFRS 16 adoption.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets

The Group recognizes a right-of-use asset at the lease commencement date. Right-of-use assets are initially measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Rights-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

	Years
Buildings	3 - 10
Factory, office and other equipment	3

In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability. Refer to 2.4.10 Impairment of non-financial assets.

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The Group presents right-of-use assets in 'property and equipment' in the statement of financial position.

Lease liability

The lease liability is initially measured at the present value of the outstanding lease payments at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. The Group uses its incremental borrowing rate as the discount rate.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

Lease payments included in the measurement of the lease liability comprise the following:

- Fixed payments, including in-substance fixed payments;
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- Amounts expected to be payable under a residual value guarantee; and
- The exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of

whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount for the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases for IT equipment with an initial lease term of 12 months or less. It also applies the low-value assets recognition exemption to leases of equipment considered to be low value. For these leases, expense is recognized on a straight-line basis over the lease term.

Extension options

Some property leases contain extension options exercisable by the Group up to one year before the end of the non-cancellable contract period. Where practicable, the Group seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by the Group and not by the lessors. The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options. The Group re-assesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

Policy applicable before IFRS 16 adoption

At the inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The classification of leases is based on the extent to which risks and rewards incidental to ownership of a leased asset lie with the lessor or the lessee.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership and otherwise is an operating lease.

The leased assets are measured initially at an amount equal to the lower of the fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the assets are accounted for in accordance with the accounting policy applicable to that asset or depreciated over the shorter of the lease term and its useful life.

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability and are allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

2.4.7 Intangible Assets

Intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortization and any accumulated impairment losses.

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates.

Intangible assets are amortized using the straight-line method over their estimated useful lives. The amortization is recognized in profit or loss.

The Group had no development expenditures that met the requirements for capitalization and thus none have been capitalized. The Group does not have any intangible assets with indefinite useful lives.

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Estimated useful lives are as follows:

	Years
Customer relationships	5
Software and Patents	5
Licenses	2

Amortization methods, useful lives and residual values are reviewed at each financial year-end and adjusted, if appropriate.

2.4.8 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

Under IFRS 9 financial assets are classified, at initial recognition at amortized cost, fair value through other comprehensive income (OCI), or fair value through profit or loss. All of the Group's financial assets are measured at amortized cost as the financial assets' contractual cash flows give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding and as the business model of the Group is to collect contractual cash flows. Generally, the Group initially measures a financial asset at its fair value plus transaction costs. Trade receivables do not contain significant a significant financing component and are measured at the transaction price in accordance with 4.1 Revenue from contracts with customers.

Subsequent measurement

For subsequent measurement, financial assets are measured at amortized cost, measured using the effective interest method and are subject to impairment. The Group's financial assets at amortized cost include trade accounts receivable and other financial assets (current and non-current), as well as cash and cash equivalents. Gains and losses are recognized in the statements of operations when the asset is derecognized, modified or impaired.

Derecognition

A financial asset is derecognized when the rights to receive cash flows from the asset have expired or the Group has transferred its rights to receive cash flows from the asset.

Financial liabilities

The Group's financial liabilities include trade and other payables as well as loans and borrowings, including bank overdrafts.

Initial recognition and measurement

Financial liabilities are classified at initial recognition as financial liabilities at fair value through profit or loss or as financial liabilities at amortized cost. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Subsequent measurement

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in the statements of operations when the liabilities are derecognized as well as through the amortization process. Payables are recognized at the amount expected to settle or discharge the liability.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

2.4.9 Inventories

Inventories are measured at the lower of cost or net realizable value. The cost of inventories is based on the first-in first-out principle, and includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overhead based on normal operating capacity.

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and estimated costs to make the sale.

2.4.10 Impairment of non-financial assets

At each reporting date, the Group reviews the carrying amounts of its non-financial assets (property and equipment, inventories and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For impairment testing, assets within the scope of IAS 36 are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs ("cash-generating units").

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in the statements of operations. They are allocated to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

2.4.11 Impairment of financial assets

The Group recognizes loss allowances for expected credit losses (ECLs) for financial assets measured at amortized cost under the general approach of IFRS 9. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For trade receivables (and contract assets) the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For bank deposits and other financial receivables not classified as fair value through profit or loss the general approach of IFRS 9 is used.

The Group considers a financial asset in default when contractual payments are 120 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any

credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

2.4.12 Cash and cash equivalents

Cash and cash equivalents represent cash at banks, cash on hand and short-term deposits with original maturities of three months or less from the date of acquisition.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

2.4.13 Provisions

A provision is recognized if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

A provision for warranties is recognized when the underlying products or services are sold, based on historical warranty experience and a weighting of possible outcomes against their associated probabilities.

For several leased buildings, the Group has installed leasehold improvements primarily related to cleanrooms and a provision related to the asset retirement obligation has been recognized (see Note 2.4.5).

2.4.14 Pensions and other post-employment benefits

Pensions and similar obligations relate to the Group's statutory pension obligations for defined contribution plans. Obligations for contributions to defined contribution plans are recognized as an expense in the statements of operations. The Group has no defined benefit plans.

2.4.15 Segments

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operating Decision Maker (CODM). The CODM is comprised of the CEO and the CFO of VIA. Since the acquisition of VTS in 2018 the Group reports two operating segments, "Display Solutions" and "Sensor Technologies". No operating segments have been aggregated to form the reportable segments.

Although Display Solutions includes a number of different applications for optical bonding services, the process, customers and economic characteristics are similar. The Display Solutions facilities have the capability of serving both the consignment and full service models.

The acquisition of VTS (see Note 5) provided a horizontal extension of the value chain, but its operations are not significantly interrelated to other group entities. Therefore, the Group has an operating segment which is separately reviewed by the CODM. The segment Sensor Technologies engages in the production of metal mesh touch sensor technology and electrode base film.

The CODM monitors the operating results of its segments separately for the purpose of making decisions regarding resource allocation and performance assessment. Segment performance is evaluated based on revenue, gross profit, EBITDA and net profit (loss). Segment performance is not evaluated based on the measures of Operating income (loss) and Depreciation and amortization, which are presented in the tables below in Note 24 to reconcile gross profit to EBITDA.

During the reporting period inter-segment supply of goods occurred and inter-segment services were provided which included a handling/management fee from the segment "Display Solutions" to the segment "Sensor Technologies".

The Group defines segment assets, segment liabilities and capital expenditure, as the total assets, total liabilities, and total capital expenditure relating to the specific operating segment of the Group.

2.4.16 Related parties

Related parties are members of the Group's supervisory board, executive officers, key management personnel or holders of more than 20% of its shares. The key management personnel according to IAS 24 are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including director of the Group. Furthermore, close family members of related parties are in the scope of IAS 24.

3. Accounting Standards

3.1 Initial application of financial reporting standards issued by the IASB

The Group adopted IFRS 16 as of January 1, 2019. The nature and effect of the changes as a result of adoption of this new accounting standard are described below.

IFRS 16—Leases

IFRS 16 supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC 15 Operating Leases Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognize most leases on the balance sheet.

As of January 1, 2019, VIA Group initially applied IFRS 16 using the modified retrospective approach. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application. The Group elected to use the transition practical expedient to not reassess whether a contract is or contains a lease at January 1, 2019. Instead, the Group applied the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. No adjustment to the opening balance of retained earnings at January 1, 2019 was required with no restatement of comparative information.

VIA Group as a lessee

VIA Group primarily leases offices, factory facilities and vehicles.

As a lessee, VIA Group previously classified leases as either operating or finance leases. Refer to Note 2.4.6 for the accounting policy prior to IFRS 16 adoption. Upon adoption, VIA Group recognized right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for short-term and leases of low value assets.

Transition

Previously, VIA Group classified all of its leases as operating leases under IAS 17. Some leases include an option to renew the lease for an additional time period after the end of the non-cancellable period.

At transition, lease liabilities were measured at the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application. Right-of-use assets are measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments.

The Group applied the following available practical expedients:

- Applied the exemption not to recognize right-of-use assets and liabilities for leases with less than 12 months of lease term.
- Excluded initial direct costs from measuring the right-of-use asset at the date of initial application.

- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

Impacts on transition as of January 1, 2019

Upon transition to IFRS 16, the Group recognized additional lease liabilities and additional right-of-use assets at an amount equal to the lease liability. No differences were recognized in retained earnings at transition. The impact on transition is summarized below.

EUR	01/01/2019
Right-of-use assets presented in property and equipment	11,825,810
Lease liabilities	11,825,810

Due to the recognition of corresponding lease liabilities and right-of-use assets, taxable and deductible temporary differences arise, accordingly, deferred tax assets and liabilities have been recognized on those differences.

When measuring lease liabilities for leases that were classified as operating leases, the Group discounted lease payments using its incremental borrowing rate as of January 1, 2019. The weighted average rate applied is 2.1%. The lease liabilities as at January 1, 2019 are reconciled to the operating lease commitments as of December 31, 2018 as follows:

EUR	01/01/2019
Operating lease commitment as at December 31, 2018	6,885,912
Less: Discounting of operating lease commitments	(358,049)
Discounted operating lease commitments using the incremental borrowing rate as at January 1, 2019	6,527,863
Less:	
Commitments relating to short-term leases	(4,734)
Commitments relating to leases of low-value assets	(15,537)
Add:	
Discounted payments in optional extension periods not as at December 31, 2018	5,318,218
Lease liabilities as at January 1, 2019	11,825,810

Impacts for the period

As a result of applying IFRS 16, in relation to those leases, VIA Group has recognized depreciation and interest expense, instead of operating lease expense. During the financial year 2019, VIA Group recognized TEUR 1,869 of depreciation charges and TEUR 227 of interest expense from these leases.

New and amended standards and interpretations

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2020. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Standard/Interpretation	Subject of Standard/ Interpretation or Amendment	Expected Impact on the VIA Group
<i>Amendments to IFRS 3: Definition of a business</i>	The amendment to IFRS 3 Business Combinations clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that, together, significantly contribute to the ability to create output. Furthermore, it clarifies that a business can exist without including all of the inputs and processes needed to create outputs.	This amendment had no impact on the consolidated financial statements of the Group, but may impact future periods should the Group enter into any business combinations.

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Standard/Interpretation	Subject of Standard/ Interpretation or Amendment	Expected Impact on the VIA Group
<i>Amendments to IFRS 7, IFRS 9 and IAS 39 Interest Rate Benchmark Reform</i>	The amendments to IFRS 9 and IAS 39 Financial Instruments: Recognition and Measurement provide a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainty about the timing and/or amount of benchmark-based cash flows of the hedged item or the hedging instrument.	These amendments have no impact on the consolidated financial statements of the Group as it does not have any interest rate hedge relationships.
<i>Amendments to IAS 1 and IAS 8 Definition of Material</i>	The amendments provide a new definition of material that states, “information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.” The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users.	These amendments had no impact on the consolidated financial statements of, nor is there expected to be any future impact to the Group.
<i>Conceptual Framework for Financial Reporting issued on 29 March 2018</i>	The Conceptual Framework is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the Conceptual Framework is to assist the IASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards. This will affect those entities which developed their accounting policies based on the Conceptual Framework. The revised Conceptual Framework includes some new concepts, updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts.	This amendment had no impact on the consolidated financial statements of the Group.
<i>Amendments to IFRS 16 Covid-19 Related Rent Concessions</i>	On 28 May 2020, the IASB issued Covid-19-Related Rent Concessions - amendment to IFRS 16 Leases. The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under IFRS 16, if the change were not a lease modification. The amendment applies to annual reporting periods beginning on or after 1 June 2020. Earlier application is permitted.	This amendment had no impact on the consolidated financial statements of the Group.

3.2 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Standard/Interpretation	Effective Date	Subject of Standard/ Interpretation or Amendment	Expected Impact on the VIA Group
<i>Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37</i>	01.01.2022	The amendments apply a “directly related cost approach”. The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.	This clarification is not expected to have a material impact on the consolidated financial statements.
<i>Property, Plant and Equipment (Amendments to IAS 16)</i>	01.01.2022	Proceeds before Intended Use, which prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss.	This clarification is not expected to have a material impact on the consolidated financial statements.
<i>Amendments to IAS 1: Presentation of Financial Statements: Classification of Liabilities as Current or Non-current</i>	01.01.2023	Clarifies whether debt and other liabilities with an uncertain settlement date should be classified as current (due or potentially due to be settled within one year) or non-current in the statement of financial position.	This clarification is not expected to have a material impact on the consolidated financial statements.

4. Significant accounting judgements, estimates and assumptions

In preparing these consolidated financial statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognized prospectively.

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognized in the consolidated financial statements as well as the key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date which have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined as follows.

4.1 Revenue from contracts with customers

Principal versus agent considerations

The Group enters into contracts with certain of its customers to acquire, on their behalf, displays produced by third-party suppliers. Under these contracts, the Group provides procurement services. The Group determined that it does control the goods before they are transferred to customers, and it does have the ability to direct the use of the

displays or obtain benefits from the displays. The following factors indicate that the Group does control the goods before they are being transferred to customers. Therefore, the Group determined that it is principal in these contracts.

- The Group is primarily responsible for fulfilling the promise to provide the specified displays
- The Group has inventory risk before or after the specified displays have been transferred to the customer as it purchases displays and takes them into inventory before the displays are bonded and shipped to the customers
- The Group has discretion in establishing the price for the specified displays

4.2 Provision for expected credit losses of trade receivables and contract assets

The Group uses a provision matrix to calculate ECLs for trade receivables. The provision rates are based on days past due for customers that have similar loss patterns.

The provision matrix is initially based on the Group's historical observed default rates. The Group then calibrates the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions are expected to deteriorate over the next year, which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted upward. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future.

4.3 Provisions

A provision is recognized if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. A provision for warranties is recognized when the underlying products or services are sold, based on historical warranty experience and a weighting of possible outcomes against their associated probabilities.

Management's estimations are based on the best information available related to historical experience and expected future costs and are subject to change over time.

4.4 Contingent liabilities

From time to time, the Group may be involved in various claims and legal proceedings relating to claims arising out of its operations, as discussed further in Note 17—Commitments and contingencies. Periodically, and at each financial period end, the Group reviews the status of all significant outstanding matters to assess the potential financial exposure.

When (i) it is probable that an asset has been impaired or a liability has been incurred and (ii) the amount of the loss can be reasonably estimated, the Group records the estimated loss in its consolidated statements of operations and other comprehensive income (loss). The Group provides disclosure in the notes to the consolidated financial statements for loss contingencies that do not meet both of these conditions if there is a reasonable possibility that a loss may have been incurred that would be material to the financial statements. Significant judgment is required to determine the probability that a liability has been incurred and whether such liability is reasonably estimable. The Group bases accruals made on the best information available at the time, which can be highly subjective. The final outcome of these matters could vary significantly from the amounts included in the accompanying consolidated financial statements.

4.5 Income taxes

The Group records income taxes under the liability method. Deferred tax assets and liabilities reflect the Group's estimation of the future tax consequences of temporary differences between the carrying amounts of assets and liabilities for book and tax purposes. The Group determines deferred income taxes based on the differences in accounting methods and timing between financial statement and income tax reporting. Accordingly, the Group determines the deferred tax asset or liability for each temporary difference based on the enacted tax rates expected to be in effect when the Group realizes the underlying items of income and expense. The Group considers many factors when assessing the likelihood of future realization of its deferred tax assets, including its recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available to the Group for tax reporting purposes, as well as other relevant factors. Therefore, actual income taxes could materially vary from these estimates.

4.6 Purchase price allocation

The Group assigns the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition.

When determining the fair values of assets acquired and liabilities assumed, the Group makes significant estimates and assumptions. The Group generally bases the measurement of fair value on the present value of future discounted cash flows. The discounted cash flows model indicates the fair value of the reporting unit based on the present value of the cash flows that the Group expects the reporting unit to generate in the future. The Group's significant estimates in the discounted cash flows model includes forecasted revenues, weighted average costs of capital as well as the term of use of the tangible assets.

The Group's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

4.7 Lease renewal options

The Group has several lease contracts that include extension and termination options. The Group applies judgement in evaluating whether it is reasonably certain whether or not to exercise the option to renew or terminate the lease. Group considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew or to terminate (e.g., construction of significant leasehold improvements or significant customization to the leased asset).

5. Changes in the Group

The following are the consolidated subsidiaries of VIA optronics AG:

Name	Place of Business	Ownership Interest %			Net Profit (Loss)			Equity in EUR	
		12/31/2020	12/31/2019	12/31/2018	in EUR			12/31/2020	12/31/2019
					2020	2019	2018		
VIA optronics GmbH	Schwarzenbruck, Germany	100	100	*	(1,726,540)	(7,485,107)	*	(5,856,981)	(4,130,440)
VIA optronics LLC	Orlando, Florida, USA	100	100	100	(190,393)	(518,604)	326,012	(1,914,714)	(1,897,939)
VIA optronics (Suzhou) Co., Ltd.	Suzhou, China	100	100	100	4,975,824	547,204	5,309,218	20,090,782	15,603,019
VIA optronics (Taiwan) Ltd.	Taipei, Taiwan	100	100	100	85,037	(17,695)		210,009	130,282
VTS-Touchsensor Co., Ltd.	Higashi Omi, Japan	65	65	65	15,956	(4,567,009)	(1,659,499)	791,155	804,738

* See Reorganization of the Group's structure section below

Reorganization of the Groups' structure

On January 4, 2019, the shareholders of VIA optronics GmbH formed VIA optronics AG, a stock corporation under German law with nominal share capital of TEUR 100. Upon formation, VIA optronics AG's equity consisted of 100,000 ordinary shares with no par value and a stated value of one Euro (EUR 1) and each shareholder owned the same proportionate interest as in VIA optronics GmbH. On April 18, 2019, the shareholders of VIA optronics GmbH contributed the shares that they held in VIA optronics GmbH to VIA optronics AG by way of a contribution in kind against issuance of new shares. As a result of this contribution, the share capital was increased from TEUR 100 by TEUR 2,900 to TEUR 3,000 in the form of a capital increase by way of a contribution in kind through issuance of 2,900,000 ordinary shares, each with a nominal value of EUR 1 per share, to the former shareholders of VIA optronics GmbH (who are also the founding shareholders of VIA optronics AG) as consideration for their contributions. On June 25, 2019, the contribution of the VIA optronics GmbH shares to VIA optronics AG became legally effective with the registration of the capital increase with the commercial register. With the effectiveness of the contribution and the capital increase by way of a contribution in kind, VIA optronics AG became the sole shareholder of VIA optronics GmbH and the founding shareholders of VIA optronics AG (and former shareholders of VIA optronics GmbH) received the new shares in VIA optronics AG issued in the capital increase proportionate to the shareholdings in VIA optronics GmbH shares that they contributed.

The contribution in kind and resulting reorganization was recognized as a business combination under common control (transaction under common control) using the book value method. As a result, the difference between the nominal value of new shares issued by VIA optronics AG for the acquisition of the shares of VIA optronics AG (TEUR 2,900) and VIA optronics GmbH's own share capital (TEUR 73) has been accounted for through capital reserve and subscribed capital in the consolidated statement of financial position.

Due to the common control nature of the transaction, the prior-year comparative disclosures required by IFRS have been presented as if the legal structure of VIA optronics AG had already existed, including earnings per share (see Note 26). Hence the financial statements of VIA optronics AG are effectively the successor to VIA optronics GmbH.

Foundation of Taiwan Subsidiary

On January 2, 2019, VIA optronics (Taiwan) Ltd was founded as a new subsidiary with the purpose of conducting the sales activities for the Group. VIA optronics AG indirectly holds all shares of VIA optronics (Taiwan) Ltd.

Acquisition of VTS

On March 29, 2018, VIA acquired 65% of the shares and voting rights in VTS-Touchsensor Co., Ltd., Higashi Omi, Japan, a developer and manufacturer of metal mesh touch sensor technologies and electrode base film, from Toppan Touch Panels Products Co., Ltd., ("Toppan"). VIA has power over VTS because the relevant activities are directed through voting rights and potential voting rights (deadlock call right). VIA's rights are substantive when all available facts and circumstances are considered and they provide VIA with the current ability to direct the relevant activities of VTS. Simultaneous with the acquisition, VTS and Toppan entered into a sale and transfer agreement regarding special technology relevant for the production of touch sensors.

With the acquisition, VIA significantly advanced its vertical integration as VTS produces significant components for VIA's existing product portfolio in the display technology business. Moreover, VIA could further improve its business relations in the Japanese market and gain additional production know-how.

At the acquisition date, the Group elected to measure the non-controlling interests in the acquiree at the proportionate share (35%) of the acquiree's identifiable net assets.

As of December 31, 2018, the Group reassessed whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviewed the procedures used to measure the amounts to be recognized at the acquisition date. This reassessment confirmed the fair value of the net assets acquired. As Toppan had not operated VTS as a separate entity prior to the sale of the controlling interest to the Group, the bargain purchase gain resulted primarily from the step-up in the fair value of certain machinery and equipment that Toppan had fully depreciated and fair value related to intangible assets for customer relationships that were not recognized as internally developed intangible assets.

by Toppan. The Group therefore recognized the gain from bargain purchase from the acquisition amounting to TEUR 2,993, which was recognized as other operating income in the statement of operations.

Transaction costs for due diligence, legal and notary fees in 2018 of TEUR 775 (2017: TEUR 512) were expensed and are included in general administrative expenses. The purchase consideration of the acquisition was paid in cash.

No changes in Group took place during the year ended December 31, 2020.

6. Intangible assets

In EUR	Software, Licenses and Patents	Customer Relationships	In Process	Total
<i>Cost</i>				
Balance at January 1, 2019	5,316,273	2,203,278	10,636	7,530,187
Additions	1,262,694	—	84,490	1,347,185
Transfer	95,126	—	(95,126)	—
Foreign currency effect	128,169	60,845	—	189,014
Balance at December 31, 2019	6,802,262	2,264,124	—	9,066,386
Additions	86,850	—	—	86,850
Transfer	—	—	—	—
Foreign currency effect	(99,763)	(31,423)	—	(131,186)
Balance at December 31, 2020	6,789,349	2,232,701	—	9,022,049

In EUR	Software	Customer Relationships	In Process	Total
<i>Accumulated amortization</i>				
Balance at January 1, 2019	(1,047,289)	(356,331)	—	(1,403,620)
Amortization	(1,119,260)	(509,935)	—	(1,629,195)
Balance at December 31, 2019	(2,166,549)	(866,266)	—	(3,032,815)
Amortization	(1,402,098)	(508,886)	—	(1,910,985)
Balance at December 31, 2020	(3,568,647)	(1,375,152)	—	(4,943,799)
<i>Carrying amounts</i>				
At January 1, 2019	4,268,984	1,846,947	10,636	6,126,567
At December 31, 2019	4,635,713	1,397,857	—	6,033,571
At December 31, 2020	3,220,701	857,549	—	4,078,249

There were no impairment losses and subsequent reversals concerning intangible assets in 2020, 2019 or 2018.

7. Property and equipment

In EUR	Buildings	Technical Equipment and Machines	Factory, Office, Other Equipment and Leasehold Improvements	Assets Under Construction	Total
<i>Cost</i>					
Recognition of right-of-use asset on initial application of IFRS 16	11,725,800	—	100,010	—	11,825,810
Balance at January 1, 2019	11,725,800	12,034,514	3,280,141	762,530	27,802,985
Additions	—	283,044	590,687	534,600	1,408,331
Transfers	—	609,322	202,476	(811,798)	—
Disposals	—	(99,898)	(71,580)	(84,490)	(255,968)
Foreign currency effect	204,865	190,545	7,280	12,298	414,989
Balance at December 31, 2019	11,930,665	13,017,527	4,009,004	413,140	29,370,337
Balance at January 1, 2020	11,930,665	13,017,527	4,009,004	413,140	29,370,337
Additions	824,613	553,733	646,934	1,722,258	3,747,538
Transfers	—	11,966	—	(11,966)	—
Disposals	—	(53,019)	(0)	—	(53,019)
Foreign currency effect	(202,521)	(90,064)	(25,766)	(1,735)	(320,086)
Balance at December 31, 2020	12,552,757	13,440,143	4,630,172	2,121,698	32,744,770
<i>Accumulated depreciation</i>					
Balance at January 1, 2019	—	(3,655,260)	(2,295,034)	—	(5,950,294)
Depreciation charge for the year	(1,805,706)	(2,794,104)	(308,023)	—	(4,907,832)
Disposals	—	35,482	28,575	—	64,057
Balance at December 31, 2019	(1,805,706)	(6,413,882)	(2,574,482)	—	(10,794,069)
Depreciation charge for the year	(1,817,745)	(2,872,934)	(427,183)	(14,744)	(5,132,605)
Disposals	—	17,513	—	—	17,513
Balance at December 31, 2020	(3,623,451)	(9,269,302)	(3,001,665)	(14,744)	(15,909,161)
<i>Carrying amounts</i>					
At January 1, 2019	11,725,800	8,379,254	985,107	762,530	21,852,691
At December 31, 2019	10,124,960	6,603,646	1,434,522	413,140	18,576,268
At December 31, 2020	8,929,306	4,170,841	1,628,508	2,106,954	16,835,608

There have been no impairment losses or reversals of impairment in 2020, 2019 or 2018.

Refer to Note 16 for the amount of Right-of-use assets included in property and equipment.

8. Inventories

In EUR	12/31/2020	12/31/2019
Raw materials and supplies	10,674,829	7,377,176
Work in progress	693,357	879,729
Finished goods and merchandise	5,887,869	6,228,917
Inventories	17,256,055	14,485,822

During 2020, an amount of TEUR 105,030 (2019: TEUR 100,987; 2018: TEUR 134,453) for inventories was recognized as cost of sales.

There was an inventory write-down in 2020 of TEUR 96 (2019: TEUR 0; 2018: TEUR 700).

9. Trade accounts receivable

All trade accounts receivable are from third parties and have maturities within one year. At the balance sheet date, all trade accounts receivable are non-interest bearing.

The following table provides information about the expected credit loss rates (ECLs) and recognized loss impairments for trade accounts receivables as at December 31, 2020 and December 31, 2019.

December 31, 2020 in EUR	Trade Receivables Days Past Due						Total
	Current	<30 Days	31 - 60 Days	61 - 90 Days	91 - 120 Days	>120 Days	
Expected credit loss rate	0.36%	1.14%	6.15%	2.29%	4.47%	1.86%	0.72%
Estimated total gross carrying amount at default	20,440,906	3,193,352	243,574	704,697	303,789	2,200,380	27,086,699
Expected credit loss	(72,865)	(36,393)	(14,984)	(16,166)	(13,574)	(40,830)	(194,813)
Impairment loss				—	—	(514,066)	(514,066)
Trade accounts receivables	20,368,041	3,156,959	228,590	688,531	290,215	1,645,484	26,377,820

December 31, 2019 in EUR	Days Past Due						Total
	Current	<30 Days	31 - 60 Days	61 - 90 Days	91 - 120 Days	>120 Days	
Expected credit loss rate	1.05 %	1.64 %	1.81 %	5.86 %	2.74 %	5.50 %	2.00 %
Estimated total gross carrying amount at default	17,488,498	2,842,760	1,072,661	815,992	247,442	4,126,903	26,594,255
Expected credit loss	(182,809)	(46,649)	(19,402)	(47,854)	(6,788)	(227,166)	(530,668)
Impairment loss						(839,131)	(839,131)
Trade accounts receivables	17,305,689	2,796,111	1,053,259	768,138	240,654	3,060,606	25,224,456

The allowances of the trade accounts receivable developed as follows:

	EUR
Balance at January 1, 2019	971,381
Impairment loss	200,812
Provision for expected credit losses	189,668
Currency translation effect	7,939
Balance at December 31, 2019	1,369,800
Reversal of impairment loss	(291,756)
Reversal of provision for expected credit losses	(335,855)
Currency translation effect	(33,309)
Balance at December 31, 2020	708,880

10. Other current assets

In EUR	12/31/2020	12/31/2019
Deferred offering costs	—	6,469,471
Contract assets	—	715,962
Value added tax refund	883,027	228,987
Contract fulfilment cost assets	237,347	—
Miscellaneous	217,302	77,976
Prepaid expenses	2,219,057	83,377
Receivables from employees < 1 year	37,051	27,565
Total	3,593,785	7,603,338

Deferred offering costs were reclassified as a cost to equity as the IPO was concluded in 2020, please refer to Note 11 for details. Contract assets which resulted from revenue recognition from products without an alternative use and where the Group has an enforceable right to payment, were transferred to customer and thus derecognized as of December 31, 2020. As of December 31, 2020, the contract fulfilment cost assets result from incurred costs to fulfil contracts with customers. The prepaid expenses as of December 31, 2020, mainly consist of D&O insurance.

11. Equity

As of December 31, 2020, VIA's subscribed capital is divided into 4,530,701 (December 31, 2019: 3,000,000) ordinary shares, all fully paid and each representing a share of the capital stock of EUR 1.00. In total, the capital stock thus amounts to EUR 4,530,701. Each share guarantees the right to the dividend resolved by the shareholders' meeting if any.

VIA's subscribed capital has been increased in the financial year ended December 31, 2020 through the Company's Initial Public Offering and the concurrent private placement by 1,530,701 ordinary shares.

The total net proceeds received from the Initial Public Offering (IPO) and the concurrent private placement amounted to EUR 80,783,682 of which the amount of EUR 79,252,981 exceeding the share of the capital stock of EUR 1.00 per share has been accounted for through capital reserve.

Transaction costs including underwriting discounts and commissions and offering expenses payable by the Company amounting to EUR 10,060,936 have been deducted from the gross IPO and private placement proceeds.

Transaction costs have been paid in the financial year ended December 31, 2020 as well as previous years. Transaction costs that have been paid in the financial year ended December 31, 2020 amounted to EUR 3,591,465 and are presented as cash flow from financing activities in the consolidated statement of cash flows. Transaction costs that have been paid in previous years amounted to EUR 6,469,471 and have not been reclassified based on the execution of the IPO. They are presented as cash flow from operating activities in the respective years incurred.

12. Loans

	Interest Rates %	Maturity	Contract Currency	In Contract Currencies 12/31/2020	EUR 12/31/2020
Current loans					
Bank overdrafts			—		264
Deutsche Bank	2.55 - 2.60%	02/22 - 03/09/21	EUR	2,400,000	2,400,000
CZBANK	3.5%	04/13 - 05/10/21	USD	1,950,940	1,586,748
CITIC BANK	2.16 - 2.24%	02/05 - 06/02/21	USD	6,001,493	4,881,165
ICBC Bank	2.25 - 2.32%	01/26 - 06/25/21	USD	4,922,324	4,003,449
SPD Bank	3.07 - 3.15%	02/28 - 03/30/21	USD	6,260,000	5,091,415
CCB Bank	1.16%	02/03/21	USD	2,000,000	1,626,650
Shiga Bank	0.98%	11/30/2023	JPY	100,080,000	791,209
Shiga Bank	1.28%	06/01/2022	JPY	33,600,000	265,634
Total current loans					20,646,533
Non-current loans					
Shiga Bank	0.98%	11/30/2023	JPY	191,420,000	1,513,321
Shiga Bank	1.28%	06/01/2022	JPY	16,000,000	126,492
Total non-current loans					1,639,813

	Interest Rates %	Maturity	Contract Currency	In Contract Currencies 12/31/2019	EUR 12/31/2019
Current loans					
Bank overdrafts			EUR	26,420	26,420
Shareholder*			EUR	2,000,000	2,000,000
Bayern LB	1.86 - 4.00 %	01/31 - 06/26/20	EUR	7,100,000	7,100,000
Deutsche Bank	1.95 %	01/17 - 03/04/20	EUR	2,500,000	2,500,000
CZBANK	4.80 - 5.00 %	01/14 - 05/25/20	USD	3,035,712	2,707,977
CITIC BANK	3.78 - 3.99 %	01/10 - 06/12/20	USD	9,406,690	8,390,859
ICBC Bank	3.92 - 4.15 %	01/21 - 05/21/20	USD	4,631,324	4,131,327
CCB Bank	2.87 %	02/19/2020	USD	780,000	695,791
Shiga Bank	1.67 %	11/30/2023	JPY	133,680,000	1,096,277
Total current loans					28,648,651
Non-current loans					
Shiga Bank	1.67 %	11/30/2023	JPY	341,100,000	2,797,277
Total non-current loans					2,797,277

- * As of December 31, 2019, VIA had received funds of TEUR 2,000 as a loan from IMI, a shareholder and related-party of VIA; see Note 25 for additional information.
As collateral, the Group has pledged a portion of its trade accounts receivable up to amounts drawn under the respective loans, in support of these obligations (2020: TEUR 2,037; 2019: TEUR 15,926).

All loans were concluded under normal market conditions.

	Loans EUR	Financial Liabilities Due to Third Parties* EUR	Lease Liabilities EUR	Share Capital EUR	Capital Reserve EUR	Total EUR
Recognition of lease liabilities on initial application of IFRS 16	—	—	11,825,810	—	—	11,825,810
Balance at January 1, 2019	30,505,046	921,954	11,825,810	—	—	43,252,810
Cash flows from financing activities						
Proceeds from issue of share capital	—	—	—	100,000	—	100,000
Proceeds from loans and borrowings	59,368,855	—	—	—	—	59,368,855
Repayment of loans and borrowings	(58,861,016)	(70,922)	—	—	—	(58,931,938)
Payment of lease liabilities	—	—	(1,748,088)	—	—	(1,748,088)
Interest paid	(1,357,141)	—	(226,941)	—	—	(1,584,082)
Net cash provided by (used in) financing activities	(849,303)	(70,922)	(1,975,029)	100,000	—	(2,795,253)
Foreign currency effect	433,043	—	204,370	—	—	637,413
New leases	—	—	76,953	—	—	76,953
Interest expense	1,357,141	—	226,941	—	—	1,584,082
Balance at December 31, 2019	31,445,928	851,032	10,359,045	100,000	—	42,756,005
Balance at January 1, 2020	31,445,928	851,032	10,359,045	100,000	—	42,756,005
Cash flows from financing activities						
Gross IPO proceeds	—	—	—	1,530,701	89,313,917	90,844,618
IPO costs	—	—	—	—	(3,591,465)	(3,591,465)
Proceeds from loans and borrowings	53,577,777	—	—	—	—	53,577,777
Repayment of loans and borrowings	(60,398,873)	(75,110)	—	—	—	(60,473,984)
Payment of lease liabilities	—	—	(1,817,114)	—	—	(1,817,114)
Interest paid	(1,236,102)	—	(197,967)	—	—	(1,434,069)
Net cash provided by (used in) financing activities	(8,057,198)	(75,110)	(2,015,081)	1,530,701	85,722,452	77,105,764
Foreign currency effect	(2,338,486)	—	(205,918)	—	—	(2,544,404)
New leases	—	—	878,414	—	—	878,414
Interest expense—paid	1,236,102	—	197,967	—	—	1,434,069
Balance at December 31, 2020	22,286,346	775,922	9,214,427	1,630,701	85,722,452	119,629,848

* disclosed in the other current financial liabilities (see Note 14)

13. Provisions

In EUR	Warranties	Asset Retirement Obligation	Litigation	Other	Total
Balance at January 1, 2019	1,422,331	132,333	427,175	315,445	2,297,284
Additions	74,648	—	—	1,481,970	1,556,618
Reversals	(996,144)	—	—	—	(996,144)
Usage	—	—	(427,175)	(315,445)	(742,620)
Unwinding of discount	—	1,964	—	—	1,964
Currency translation effect	15,746	179	—	(4,717)	11,208
Balance at December 31, 2019	516,581	134,476	—	1,477,253	2,128,310
Non-current	—	134,476	—	—	134,476
Current	516,581	—	—	1,477,253	1,993,833
Total	516,581	134,476	—	1,477,253	2,128,310
Balance at January 1, 2020	516,581	134,476	—	1,477,253	2,128,310
Additions	124,881	—	—	—	124,881
Reversals	(65,264)	—	—	—	(65,264)
Usage	—	—	—	(1,478,922)	(1,478,922)
Unwinding of discount	—	1,993	—	—	1,993
Currency translation effect	(258)	(685)	—	1,669	726
Balance at December 31, 2020	575,940	135,784	—	—	711,724
Non-current	—	135,784	—	—	135,784
Current	575,940	—	—	—	575,940
Total	575,940	135,784	—	—	711,724

During the year ended December 31, 2020, patent licencing fees which comprised other provisions as of December 31, 2019 were settled.

The provision for warranties relates mainly to products sold during the respective year. The provision has been estimated based on historical warranty data associated with similar products and services. The Group expects to settle these obligations over the next year. The reversal of TEUR 65 in 2020 (2019: TEUR 996) resulted from the legal obligation for a specific warranty provision lapsing in the year.

Furthermore, the Group has asset retirement obligations to return certain of the Group's premises to their original condition. The asset retirement obligation is not expected to be fulfilled in less than five years.

In the ordinary course of business, the Group is party to lawsuits. In 2018, the Group recognized a provision for litigation related to a legal dispute with a former employee. As part of the sale agreement between the Group's former and current shareholder, an escrow account was established for the benefit of the Company to the extent such matter is resolved. Accordingly, the Group had recorded for this case an amount as other non-financial asset equal to this liability. The legal dispute concerning this matter was resolved during 2019 in the amount accrued at December 31, 2018 of TEUR 427.

14. Other current financial liabilities

In EUR	12/31/2020	12/31/2019
Financial liabilities due to third parties	775,922	851,032
Invoices not yet received	2,681,136	4,972,937
Customers with credit balances	174,870	—
Miscellaneous other financial liabilities	317,144	13,155
Total	3,949,072	5,837,124

The financial liabilities due to third parties consist mainly of a commercial agreement with Intel.

15. Other current liabilities

In EUR	12/31/2020	12/31/2019
Liabilities due to personnel bonus	1,996,597	2,263,758
Social security liabilities	144,420	162,544
Tax liabilities other than income taxes	613,125	424,443
Liabilities for remaining leave	338,219	302,597
Contract liabilities	190,154	334,123
Accrued expenses	57,519	39,014
Miscellaneous other non-financial liabilities	560,309	560,876
Total	3,900,342	4,087,355

Miscellaneous other current non-financial liabilities mainly consist of freight, professional services and office supplies accruals (2020: TEUR 291; 2019: TEUR 525).

16. Leases

Leases as a lessee

The Group has lease contracts for various items of office, plant and vehicles used in its operations. Leases of office and plant have lease terms between 3 and 18 years, while motor vehicles generally have lease terms of 3 years. The Group's obligations under its leases are secured by the lessor's title to the leased assets. For certain leases, the Group is restricted from entering into any sub-lease agreements. There are several lease contracts that include extension and termination options, which are further discussed below.

The extension options representing the undiscounted potential future rental payments for the lease contracts which are not included in the lease liabilities for the VIA Group as on December 31, 2020 amount to TEUR 5,778 (2019: TEUR 5,421).

The Group also has certain leases of machinery with lease terms of 12 months or less and leases of office equipment with low value. The Group applies the 'short-term lease' and 'lease of low-value assets' recognition exemptions for these leases.

The carrying amounts of right-of-use assets recognized and the movements during the period were as follows:

Right-of-use assets

In EUR	Buildings	Factory, Office and Other Equipment	Total
Balance at January 1, 2020	10,124,959	113,373	10,238,332
Depreciation charge for the year	(1,817,745)	(85,478)	(1,903,223)
Additions to right-of-use assets	824,613	103,802	928,414
Foreign currency effect	(202,521)	—	(202,521)
Balance at December 31, 2020	8,929,305	131,696	9,061,002

In EUR	Buildings	Factory, Office and Other Equipment	Total
Balance at January 1, 2019	11,725,800	100,010	11,825,810
Depreciation charge for the year	(1,805,706)	(63,590)	(1,869,296)
Additions to right-of-use assets		76,953	76,953
Foreign currency effect	204,865	0	204,865
Balance at December 31, 2019	10,124,959	113,373	10,238,332

The carrying amounts of lease liabilities (included under current and non-current financial liabilities) and the movements during the period as well as the amounts recognized in profit or loss were as follows:

Lease Liability

In EUR	Lease Liability
Balance at January 1, 2020	(11,971,963)
Additions	(878,414)
Accretion of interest	(197,967)
Payments	3,627,998
Foreign currency effect	205,918
Balance at December 31, 2020	(9,214,428)
Current	(1,593,975)
Non-current	(7,620,453)
In EUR	Lease Liability
Balance at January 1, 2019	(11,825,810)
Additions	(1,689,870)
Accretion of interest	(226,942)
Payments	1,975,029
Foreign currency effect	(204,370)
Balance at December 31, 2019	(11,971,963)
Current	(3,155,469)
Non-current	(8,816,494)

Amounts recognized in profit or loss

In EUR	2020
2020—Leases under IFRS 16	
Depreciation expense of right-of-use assets	1,903,223
Interest on lease liabilities	(197,967)
Expenses relating to short-term leases	34,860
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	40,800
	1,780,916
In EUR	2019
2019—Leases under IFRS 16	
Depreciation expense of right-of-use assets	1,869,296
Interest on lease liabilities	(226,941)
Expenses relating to short-term leases	4,018
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	46,506
	1,692,879

The Group had total cash outflows for all leases of TEUR 3,704 in 2020 (2019: TEUR 2,026).

17. Commitments and contingencies

From time to time, the Group may be involved in various claims and legal proceedings relating to claims arising out of its operations. As of December 31, 2020, there are five legal out-of-court and court disputes related to production issues. The dispute processes are still ongoing, and the estimated claims are assessed to have potential loss of TEUR 195. Based on present facts, the outcome is uncertain; however, management believes a loss is not probable.

18. Revenue

In EUR	2020	2019	2018
Display Solutions	127,119,437	113,358,812	150,315,353
<i>Full Service Model</i>	108,255,662	104,534,027	148,118,965
<i>Consignment Model</i>	16,827,626	6,500,740	2,196,388
R&D Engineering Services	2,036,149	2,324,045	—
Sensor Technologies	25,470,878	23,872,523	21,363,541
Total	152,590,315	137,231,335	171,678,894

The Group has no remaining performance obligations which have an original expected term of more than one year.

Contract Balances

In EUR	2020	2019	January 1, 2019
Trade accounts receivables (see Note 9)	26,377,820	25,224,456	28,348,708
Contract liabilities	190,154	334,123	38,427
Contract assets	—	715,962	—
Contract fulfilment cost assets	237,347	—	—

Contract liabilities include advances on orders received from customers. The development of contract liabilities and revenue recognized therefrom is as follows:

In EUR	Contract Liabilities
Balance at January 1, 2019	38,427
Deferred during the year	334,123
Recognized as revenue during the year	(38,427)
Balance at December 31, 2019	334,123
Deferred during the year	190,154
Recognized as revenue during the year	(334,123)
Balance at December 31, 2020	190,154

19. Expenses by nature

Expenses by nature were as follows:

In EUR	2020	2019	2018
Raw materials and consumables	105,030,465	101,070,401	134,453,049
Salaries, wages and employee benefits	22,877,775	24,676,137	18,073,070
Consultancy and professional fees	4,064,764	3,574,695	2,144,300
Advertising, vehicle and travel expenses	1,341,142	2,552,183	3,691,559
Warranty	124,881	(921,496)	252,125
Lease expenses	190,673	217,855	1,417,331
Purchased services	2,443,355	1,798,175	3,186,693
Taxes, insurance costs, and other dues	1,993,462	2,073,989	914,185
Depreciation and amortisation	7,043,590	6,537,028	3,212,450
Maintenance	1,704,322	1,611,234	237,948
Other	4,357,742	3,958,879	1,189,369
Total	151,172,171	147,149,080	168,772,079

Salary, wages and employee benefits included salaries and wages which amounted to TEUR 21,426 in 2020 (2019: TEUR 22,724; 2018: TEUR 16,239) and social security contributions which amounted to TEUR 1,452 in 2020

(2019: TEUR 2,188; 2018: TEUR 1,848). In 2020, Warranty includes a benefit from the reversal of a TEUR 65 (2019: TEUR 996) warranty provision in the year; refer to Note 13 for additional information.

In 2020 the category “Other” contains other R&D expenses in the amount of TEUR 1,927 (2019: TEUR 1,162; 2018: TEUR 0), utilities expenses of TEUR 1,439 (2019: TEUR 1,593; 2018: TEUR 147), miscellaneous small amounts, primarily comprised of approximately TEUR 189 (2019: TEUR 174; 2018: TEUR 234) for cafeteria expenses, TEUR 162 (2019: TEUR 131; 2018: TEUR 94) for quality and testing expenses and TEUR 0 (2019: TEUR 0; 2018: TEUR 148) for relocation expenses.

20. Other income and other expenses

20.1 Other operating income

Other operating income consists of exchange gains, damages/insurance proceeds and miscellaneous.

In EUR	2020	2019	2018
Exchange gains	3,326,593	911,779	1,297,223
Damages/insurance proceeds	12,282	21,224	15,099
Bargain purchase gain	—	—	2,992,660
Miscellaneous other operating income	1,630,159	1,425,994	717,495
Total	4,969,034	2,358,997	5,022,477

In 2020, miscellaneous other operating income mainly consists of tooling income in the amount of TEUR 492 (2019: TEUR 771), ECL reduction of TEUR 326 and income from release of other liabilities TEUR 274.

In 2018, miscellaneous other operating income mainly consisted of the tooling charges which were charged to the customer TEUR 345, other accrual release (TEUR 77), indemnities due to inadequate quality of received material (TEUR 70) and other small amounts of miscellaneous income.

20.2 Other operating expenses

Other operating expenses include exchange losses, losses on disposal of fixed assets, other taxes, increase in bad debt provisions and miscellaneous.

In EUR	2020	2019	2018
Exchange losses	5,462,494	937,045	1,355,207
Losses on disposals of assets	76,561	16,565	—
Other taxes	—	1,190	8,039
Increase in bad debt provisions	323,200	572,928	255,886
Miscellaneous other operating expenses	1,297,265	1,887,415	1,412,148
Total	7,159,521	3,415,143	3,031,280

In 2020, miscellaneous other operating expense mainly consists of tooling expense in the amount of TEUR 836 (2019: TEUR 766; 2018: TEUR 560) and warranty expenses (TEUR 282). In 2019 and 2018 they also included accrued licensing fees (2019: TEUR 520; 2018: TEUR 0), off-site expenses (2018: TEUR 285), custom duties (2018: TEUR 181) and other miscellaneous expenses.

21. Financial result

In EUR	2020	2019	2018
Interest income on:			
—Loans, bank deposits and receivables	4,182	3,771	
Total interest income arising from financial assets not measured at fair value through profit or loss	4,182	3,771	
Finance income	4,182	3,771	—
Interest expense	(1,423,157)	(1,643,990)	(1,140,047)
Unwind of discount on asset retirement obligation	(1,993)	(1,964)	(1,544)
Finance costs	(1,425,150)	(1,645,953)	(1,141,591)
Net finance costs recognized in profit or loss	(1,420,968)	(1,642,182)	(1,141,591)

22. Taxes on income

22.1 Income tax expense

Income tax expense include current and deferred income taxes as follows:

In EUR	2020	2019	2018
Current tax expense	2,275,672	201,953	1,883,669
Adjustments in respect of current income tax of previous year	86,252	156,800	275,895
Deferred income tax charge / (benefit)	(943,789)	382,812	(1,781,454)
Income tax expense	1,418,134	741,565	378,110

Both VIA AG and VIA optronics GmbH are subject to corporate income tax and trade tax in Germany. The statutory corporate income tax rate of VIA AG in 2020 and 2019 is 15.0% plus solidarity surcharge of 5.5% thereon (15.82% in total). The municipal trade tax in 2020 is approximately 16.35%.

For the year ending December 31, 2020, the statutory German corporate income tax rate applicable to VIA optronics GmbH is 32.17% (2019: 31.9 %, 2018: 31.8%). It consists of the corporate income tax rate of 15.0% plus solidarity surcharge of 5.5% and the variable municipal trade tax of 16.35% (in 2019 – 16.1 %, in 2018—16.0%,). The change in the municipal trade tax is due to the complete relocation of the permanent establishment from Altdorf to Nuremberg, with Nuremberg having a higher trade tax rate.

For the Group's subsidiaries, VIA LLC (USA) a tax rate of 23.75% (2019: 26.5%; 2018: 27.0%), for VIA Suzhou (China) a tax rate of 25.0% in 2020, 2019 and 2018 and for VTS (Japan) a tax rate of 34.1% (2019: 34.1 %, 2018: 33.9%) is applicable. For VIA Taiwan the tax rate applicable in 2020 is 20.0% (2019: 20.0 %).

22.2 Effective tax rate

The company's applicable tax rate is 32.17% (2019: 32.17%), being the applicable income tax rate of VIA AG. The reconciliation of the Group's statutory tax rate to its effective tax rate is as follows:

In EUR	2020	2019	2018
(Loss)/Profit before tax	(2,193,310)	(12,616,073)	3,756,420
Tax under domestic (German) tax rate	705,588	4,058,591	(1,195,744)
Effect of tax rate in foreign jurisdictions	423,177	119,823	545,310
Tax effect of:			
Changes in domestic tax rate		(11,938)	70,954
Non-deductible expenses	(128,603)	(47,925)	(71,349)
Current-year losses for which no deferred tax asset is recognized	(2,360,472)	(2,582,253)	—
Write off (reversal) of deferred tax assets for tax losses carried forward or deductible temporary differences	(13,965)	(2,089,536)	113,383
Non-deductible withholding taxes	(126,455)	(195,123)	(275,868)
Permanent difference from business combination	—	—	719,359
Income tax for prior years	72,671	(892)	(275,895)
Others	9,925	7,688	(8,260)
Income tax expense	(1,418,134)	(741,565)	(378,110)
Effective tax rate	64.66 %	5.88 %	10.07 %

22.3 Deferred Taxes

The components of deferred tax balances are as follows:

In EUR	2020		2019		2018	
	Deferred Tax Assets	Deferred Tax Liabilities	Deferred Tax Assets	Deferred Tax Liabilities	Deferred Tax Assets	Deferred Tax Liabilities
Non-current assets						
Intangible assets	158,134	(292,338)	115,923	(476,530)	—	(576,234)
Property and equipment	—	(3,073,184)	—	(4,155,783)	—	(1,589,665)
Other financial assets	—	—	—	—	45,633	—
Current assets						
Inventories	58,186	—	312,529	—	317,440	—
Trade accounts receivables	163,841	—	50,849	(13,913)	305,873	(19,992)
Other current assets	—	(85,795)	—	(2,319,362)	—	(732,527)
Cash and cash equivalents	8,100	—	13,596	—	48,119	—
Non-current liabilities						
Loans	—	—	—	—	—	—
Provisions	41,791	(12,737)	34,740	—	40,339	—
Other financial liabilities	—	—	—	—	—	(11,221)
Lease liabilities	2,076,118	—	2,803,625	—	—	—
Current liabilities						
Loans	—	—	—	—	29,772	—
Trade accounts payable	691,939	(60,747)	880,190	(86,100)	138,878	—
Provisions	—	—	—	—	237,526	(232,600)
Lease liabilities	484,147	—	484,298	—	—	—
Other financial liabilities	208,879	—	39,935	—	15,983	—
Other non-financial liabilities	2,359	(10,445)	15,778	(4,011)	10,324	—
Losses carried forward	40,242	—	1,769,111	—	1,886,325	—
Deferred Taxes before netting	3,933,737	(3,535,246)	6,520,574	(7,055,699)	3,076,212	(3,162,239)
Netting	(3,535,246)	3,535,246	(6,351,887)	6,351,887	(1,138,361)	1,138,361
Deferred Taxes netted	398,491	(0)	168,687	(703,812)	1,937,851	(2,023,878)

Deferred tax assets are recognized on unused tax losses to the extent that it is probable that taxable profits will be available in the future against which the unused tax losses can be utilized. In this regard, management exercises judgment as to the expected timing and the amount of the taxable profits and measures deferred tax assets on unused tax losses accordingly.

Due to continuing losses, in 2020 the Company determined that the recoverability of the deferred tax assets for VIA optronics AG, VIA optronics GmbH and VIA LLC, in excess of recoverable deferred tax liabilities, was not deemed probable. Therefore, deferred taxes of TEUR 2,360 for current tax losses were not recognized.

In Germany, the Group has accumulated corporate income tax losses carried forward of TEUR 27,726 (2019: TEUR 17,658) and trade tax losses carried forward of TEUR 27,132 (2019: TEUR 17,246), no deferred tax asset was recognized for TEUR 27,601 (corporate income tax) resp. TEUR 27,005 (trade tax). German corporate income tax and trade tax losses carried forward do not expire in the future.

In other countries, the Group has accumulated tax losses carried forward of TEUR 3,701 (2019: TEUR 5,043). For TEUR 796 (2019: TEUR 4,126), no deferred tax asset was recognized. The non-recognized tax losses of VTS (Japan) (TEUR 850) were fully used in 2020. Carry forward of tax losses from VIA LLC until 2017 of TEUR 2,635 are limited to a carryforward-period of 20 years.

For deductible temporary differences of TEUR 3,184 from VIA optronics AG, VIA optronics GmbH and VIA LLC a deferred tax asset was not recognized. Further, no deferred tax asset was recognized for deductible temporary differences of TEUR 1,026 of VTS (Japan), since the future deduction for tax purposes is uncertain at the balance sheet date.

Deferred taxes charged to equity in 2020 were TEUR 9 (2019: TEUR 67). In previous periods, deferred taxes charged to equity resulted from the foreign currency reserve adjustment. In 2018, a deferred tax liability of TEUR 2,857 was initially recognized as a result of the acquisition of the shares in VTS.

Deferred tax liabilities relating to outside based differences in the amount of TEUR 242 (2019: TEUR 156) are not recognized. The outside basis differences, which are indefinitely reinvested, amount to TEUR 755 (2019: TEUR 490).

23. Market Risk Management and Financial Instruments

The Group's activities expose it to a variety of financial risks: market risk (including currency risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management approach focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the financial performance of the Group.

Management regularly reviews the Group's risk management objectives to ensure that risks are identified and managed appropriately. The Supervisory Board is made aware of and reviews management's risk assessments prior to entering into significant transactions.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade accounts receivable and contract assets) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

Trade accounts receivable and contract assets

Customer credit risk is managed by each business unit subject to the Group's established policy, procedures and control relating to customer credit risk management. The Group evaluates this risk through detailed ageing analysis and also detailed analysis of the credit worthiness of the consumers. The Group follows risk control procedures to assess the credit quality of the customers taking into account their financial position, past experience and other factors. The

compliance with credit limits by corporate customers is regularly monitored by management. As of December 31, 2020, the carrying amount of primary financial instruments is comprised of trade accounts receivables and the amount of TEUR 26,337 represents the maximum exposure to credit risk for those financial instruments. In 2019 the maximum exposure to credit risk for those financial instruments was TEUR 25,940 and comprised of trade accounts receivables and contract assets. As of December 31, 2020, 16% (2019: 20%) of trade accounts receivables were due from one customer, as well as two customers which account for 15% each (2019: 12% and 17%). In 2019, 100% of contract assets related to an individual customer. Trade accounts receivable are unsecured.

The Group allocates each exposure to a credit risk grade based on data that is determined to be predictive of the risk of loss (including but not limited to management accounts and cash flow projections and available press information about customers) and applying experienced credit judgement. Credit risk grades are defined using qualitative and quantitative factors that are indicative of the risk of default.

The table in Note 9 provides information about the exposure to credit risk and ECLs for trade receivables for corporate customers at December 31, 2020 and December 31, 2019. The Group uses an allowance matrix to measure the ECLs of trade accounts receivable from individual customers, which comprise a very large number of small balances.

Cash deposits

The Group's maximum exposure to credit risk for the components of the statement of financial position at December 31, 2020 and December 31, 2019 is the carrying amount of cash and cash equivalents in the statements of financial position. The Group believes the risk of loss of carrying amount is remote and mitigated in part by spreading cash deposits across different subsidiaries and banks.

Interest rate risk

Interest rate risk includes the influence of positive and negative changes to interest rates on the Group's profit, equity, or cash flow in the current or any future reporting period. Interest rate risks from financial instruments arise mainly in connection with financial liabilities, including borrowings under the Group's existing working capital and equipment financing facilities. With the amount of cash and cash equivalents and financial instruments that the Group maintained at December 31, 2020 and December 31, 2019, a hypothetical increase or decrease of one percentage point, or 100 basis points, in interest rates, would not have had a material effect on the Group's financial statements.

Liquidity risk

The primary objective of the Group's liquidity and capital management is to monitor the availability of cash and capital in order to support its business expansion and growth. The Group manages its liquidity and capital structure with reference to economic conditions, performance of its local operations and local regulations. The table below presents the contractual undiscounted cash flows relating to the Group's financial liabilities at the balance sheet date.

The cash flows are grouped based on the remaining period to the contractual maturity date. The Group has sufficient funds to meet these commitments as they become due.

In EUR	Up to 1 Year	Between 1 and 3 Years	More Than 3 Years
Balance at December 31, 2020			
Non-current loans		1,653,327	—
Current loans	20,778,308	—	—
Trade accounts payable	30,610,890	—	—
Lease liabilities	1,734,382	3,207,209	4,542,080
Other current financial liabilities	3,949,072	—	—
Total	57,072,653	4,860,536	4,542,080
Balance at December 31, 2019			
Non-current loans	—	2,832,316	—
Current loans	28,850,173	—	—
Trade accounts payable	24,147,955	—	—
Lease liabilities	3,348,791	4,777,899	4,544,369
Other current financial liabilities	5,837,124	—	—
Total	62,184,043	7,610,215	4,544,369

The Group assessed the concentration of risk with respect to refinancing its debt and concluded it to be low. Based on the cash flow forecast for 2021, the Group has sufficient liquidity as at December 31, 2020 for the next twelve months.

Foreign exchange risk

The Group operates globally and is exposed to foreign exchange risk arising from exposure to various currencies in the ordinary course of business. The Group's exposures primarily consist of the U.S. dollar and Japanese Yen. Foreign exchange risk arises from commercial transactions and recognized financial assets and liabilities denominated in a currency other than the functional currency of the entity.

The following tables demonstrate the sensitivity to a reasonably possible change in the exchange rates of Euros for U.S. Dollar and Japanese Yen:

Balances at December 31, 2020

In EUR	Cash and Cash Equivalents	Trade Accounts Receivables	Current Interest-Bearing Loans and Borrowings	Trade Accounts Payable	Currency Risk Exposure	Change of Risk (bps)	Impact on Profit (+) or Loss (-) in Euro
Balance at December 31, 2020							
Amounts in USD	83,933,959	15,409,594	(21,134,757)	(25,416,839)	52,791,957	+/- 1.000	+/- 4,302,172
Amounts in JPY		4,084,144			4,084,144	+/- 1.000	+/- 3,229

Balances at December 31, 2019

In EUR	Trade Accounts Receivables	Current Interest-Bearing Loans and Borrowings	Trade Accounts Payable	Currency Risk Exposure	Change of Risk (bps)	Impact on Profit (+) or Loss (-) in Euro
Balance at December 31, 2019						
Amounts in USD	4,053,992	(17,853,725)	(3,487,841)	25,395,559	+/- 1.000	+/- 2,260,598
Amounts in JPY	—	—	(4,323,071)	4,323,071	+/- 1.000	+/- 3,545

Capital management

The Group's policy is to maintain a strong capital base so as to maintain investor and creditor confidence and to sustain future development of the business. Management monitors capital through regular review of cash and cash

equivalent balances at each subsidiary, trade account receivables collection and trade accounts payables to manage credit demand. Management also regularly monitors sufficiency of credit lines and interest-bearing loans, diversification of banks and lenders and updated cash flow forecasts.

Financial assets and liabilities at carrying amount

The following table presents the carrying amount and the fair values of financial assets and liabilities to the definitions and categories of IFRS 9 as at December 31, 2020 and as at December 31, 2019. The respective fair value of financial instruments as of the reporting dates is also presented:

In EUR	Category According to IFRS 9	December 31, 2020	
		Carrying Amount	Fair Value*
Assets			
Other Non-current financial assets	AC	155,105	155,105
Trade accounts receivables	AC	26,337,073	26,337,073
Other current financial assets			
Current tax assets	AC	2,219,057	2,219,057
Cash and cash equivalents	AC	81,021,280	81,021,280
Liabilities			
Non-current interest bearing loans and borrowings	AC	1,639,813	1,590,461
Current liabilities			
Current interest bearing loans and borrowings			
Bank loans	AC	20,646,533	20,646,533
Trade accounts payable	AC	27,384,396	27,384,396
Other current financial liabilities			
Financial liabilities due to third parties	AC	775,922	775,922
Invoices not yet received	AC	2,681,136	2,681,136
Miscellaneous other financial liabilities	AC	317,144	317,144

The term AC stands for Measurement at Amortized Cost

		December 31, 2019	
In EUR	Category According to IFRS 9	Carrying Amount	Fair Value*
Assets			
Other Non-current financial assets	AC	156,757	156,757
Trade accounts receivables	AC	25,224,456	25,224,456
Other current financial assets			
Cash and cash equivalents	AC	9,335,123	9,335,123
Liabilities			
Non-current interest bearing loans and borrowings	AC	2,797,277	2,702,122
Current liabilities			
Current interest bearing loans and borrowings			
Bank loans	AC	28,648,651	28,648,651
Trade accounts payable	AC	24,147,955	24,147,955
Other current financial liabilities			
Financial liabilities due to third parties	AC	851,032	851,032
Invoices not yet received	AC	4,972,937	4,972,937
Miscellaneous other financial liabilities	AC	13,155	13,155

* Carrying amount approximates fair values

24. Segments

The Group's key financial metrics by segment are as follows:

12/31/2020 In EUR	Display Solutions	Sensor Technologies	Total Segments	Consolidation Adjustments	Consolidated Total
External revenues	127,119,437	25,470,878	152,590,315	—	152,590,315
Inter-segment revenues	—	3,360,282	3,360,282	(3,360,282)	—
Total revenues	127,119,437	28,831,160	155,950,597	(3,360,282)	152,590,315
Gross profit (loss)	18,426,003	4,933,008	23,359,010	—	23,359,010
Operating income (loss)	(1,252,144)	479,397	(772,747)	405	(772,342)
Depreciation and amortization	2,523,655	4,519,935	7,043,590	—	7,043,590
EBITDA	1,271,511	4,999,332	6,270,843	405	6,271,248
Net income (loss)	(3,627,399)	15,956	(3,611,444)	—	(3,611,444)
Segment assets	137,944,207	20,306,646	158,250,853	(8,398,717)	149,852,136
Capital expenditure	3,272,517	561,870	3,834,387	—	3,834,387
Segment liabilities	59,543,782	19,515,491	79,059,273	(7,112,360)	71,946,912

12/31/2019 In EUR	Display Solutions	Sensor Technologies	Total Segments	Consolidation Adjustments	Consolidated Total
External revenues	113,358,812	23,872,523	137,231,335	—	137,231,335
Inter-segment revenues	—	2,137,760	2,137,760	(2,137,760)	—
Total revenues	113,358,812	26,010,283	139,369,095	(2,137,760)	137,231,335
Gross profit	11,975,923	(1,954,212)	10,021,711	—	10,021,711
Operating income (loss)	(4,641,040)	(6,332,421)	(10,973,461)	(430)	(10,973,891)
Depreciation and amortization	2,055,365	4,481,663	6,537,028	—	6,537,028
EBITDA	(2,585,675)	(1,850,758)	(4,436,433)	(430)	(4,436,863)
Net income (loss)	(8,790,628)	(4,567,009)	(13,358,331)	(694)	(13,357,637)
Segment assets	66,327,315	22,185,549	88,512,864	(6,852,919)	81,659,945
Capital expenditure	1,595,428	223,812	1,819,240	—	1,819,240
Segment liabilities	64,763,418	21,380,811	86,144,229	(5,566,563)	80,577,666

12/31/2018 In EUR	Display Solutions	Sensor Technologies	Total Segments	Consolidation Adjustments	Consolidated Total
External revenues	150,315,353	21,363,541	171,678,894	—	171,678,894
Inter-segment revenues	277,536	—	277,536	(277,536)	—
Total revenues	150,592,889	21,363,541	171,956,430	(277,536)	171,678,894
Gross profit	20,457,591	1,123,471	21,581,062	224,458	21,805,520
Operating income (loss)	4,230,694	(2,413,161)	1,817,533	3,080,478	4,898,011
Depreciation and amortization	757,394	2,455,056	3,212,450	—	3,212,450
EBITDA	4,988,088	41,895	5,029,983	3,080,478	8,110,461
Net income (loss)	1,957,857	(1,659,499)	298,358	3,079,952	3,378,310
Segment assets	61,958,634	23,610,114	85,568,748	(4,997,488)	80,571,260
Capital expenditure	1,580,313	793,917	2,374,230	—	2,374,230
Segment liabilities	51,727,139	18,419,346	70,146,485	(3,798,425)	66,348,060

Geographic information

The Group's geographical distribution of revenues, property and equipment and intangible assets is within the three regions Asia, Europe as well as North America. The distribution of revenue (based on the Group location which bills the customer), property and equipment and intangible assets is as follows:

Revenue by Region	12/31/2020 in EUR	12/31/2019 in EUR	12/31/2018 in EUR
Asia	82,734,687	81,362,926	109,026,165
<i>thereof China</i>	57,263,809	57,490,403	87,662,624
<i>thereof Japan</i>	25,470,878	23,872,523	21,363,541
Europe (<i>Germany</i>)	62,157,908	48,218,014	54,852,549
North America (<i>United States</i>)	7,697,720	7,650,395	7,800,180
Total revenues	152,590,315	137,231,335	171,678,894

Property and Equipment/ Intangible Assets by Region	12/31/2020 in EUR	12/31/2019 in EUR
Asia	13,339,863	18,260,599
<i>thereof China</i>	4,281,031	4,910,153
<i>thereof Japan</i>	9,058,832	13,350,447
Europe (<i>Germany</i>)	7,535,398	6,274,455
North America (<i>United States</i>)	38,597	74,783
Total	20,913,857	24,609,838

In the year ended December 31, 2020, the Display Solutions segment had two customers who each individually comprised 39% and 16% (2019: two customers comprised 30% and 14%; 2018: three customers comprised: 29%, 21% and 13%) of the Group's revenues and the Sensor Technologies segment had one customer in 2020, which comprised 16% (2019: 17%; 2018: 12%) of the Group's revenue.

25. Related party disclosures

At VIA Group the key management personnel according to IAS 24 are Jürgen Eichner, CEO, and Daniel Jürgens, CFO. Joselene Eichner, the wife of the group CEO and shareholder Jürgen Eichner, is employed by VIA optronics GmbH as administrative assistant. Major responsibilities include assisting and supporting the human resources department. As of December 31, 2020 the only shareholder who owns more than 20% is IMI and holds 50.32%. But, as of December 2019 and 2018 the shareholders were IMI and Jürgen Eichner who owned 76% and 24% of VIA, respectively. Furthermore, Dr. Heiko Frank, Chairman of the Supervisory Board, is Managing Director and a 49.99% owner of Kloepfel Corporate Finance GmbH (Kloepfel). Therefore, Kloepfel is a related party in accordance with IAS 24. The ultimate parent company is Mermac Inc., a Philippines-based Company.

The following tables show an overview of the transactions with the related parties.

Transactions with related parties

In EUR		Interest Expense	Sales to related parties	Purchases from related parties	Remuneration
Integrated Micro-Electronics, Inc. (IMI)	2020	35,519	41,756	1,651,438	—
	2019	—	1,158,000	1,064,000	—
Kloepfel Corporate Finance GmbH (Kloepfel)	2020	—	—	1,238,452	—
	2019	—	—	144,221	—
Executive management (Jürgen Eichner, CEO)	2020	—	—	5,640	—
	2019	—	—	5,000	—
Joselene Eichner, wife of VIA Group CEO	2020	—	—	—	32,160
	2019	—	—	—	40,673

Kloepfel provides the Group general advisory, management and coordination services for the Group's public equity offering as well as other strategic opportunities. Under the project contract, Kloepfel was entitled to (i) a monthly retainer, (ii) a success fee equal to 0.95% of the gross proceeds of an offering, which fee is payable upon consummation of such an offering and (iii) reimbursement of out-of-pocket expenses, subject to certain caps.

Outstanding balances with related parties

In EUR		Loans from related parties	Amounts owed by related parties	Amounts owed to related parties
Entity with significant influence over the Group:				
Integrated Micro-Electronics, Inc. (IMI)	2020	—	1,199,756	2,304,558
	2019	2,000,000	1,158,000	1,064,000
Others:				
Kloepfel Corporate Finance GmbH (Kloepfel)	2020			2,448
	2019			54,522

On December 27, 2019, the Group received funds in an amount of TEUR 2,000 from IMI as a loan and agreed to negotiate, in good faith, the loan terms. The corresponding loan agreement, executed in June 2020 set an interest rate equivalent to the rate due by VIA optronics GmbH on its working capital loan facility from Bayern LB (see Note 11), which was fixed at 1.93% as of December 31, 2019. The interest rate is applicable as of the date the funds were disbursed and is adjustable as of the 1st of each month to the rate in effect on the Bayern LB loan facility. The loan was repaid in December 2020.

In EUR	2020	2019
Executive management (Jürgen Eichner, CEO and Daniel Jürgens, CFO)	700,000	874,000
Supervisory board	150,000	55,000

The amounts of compensation for key management personnel (short-term employment benefits only) as well as the supervisory board represent the amounts earned by each group of related party. In 2019, only TEUR 5 of supervisory board compensation had already been paid.

26. Earnings (Loss) per share

Basic earnings per share are calculated in accordance with IAS 33 based on the earnings (or loss) attributable to VIA optronics AG shareholders and the weighted averages number of shares outstanding during the period.

The number of shares outstanding as of December 31, 2020 was 4,530,701 (2019: 3,000,000). The weighted average of shares outstanding for twelve months ended December 31, 2020 was 3,398,330 (2019: 2,991,600). In 2019, until legal formation of VIA optronics AG, 2,900,000 shares were used as the basis for the calculation of earnings per share based on the number of shares issued for the contribution in kind of VIA optronics GmbH.

There are currently no factors resulting in a dilution of earnings per share.

	2020	2019	2018
(Loss)/Income after taxes from continuing operations (attributable to VIA optronics AG shareholders) in EUR	(3,617,028)	(11,759,184)	3,959,134
Weighted average of shares outstanding	3,398,330	2,991,600	2,900,000
(Loss)/Earnings per share in EUR	<u>(1.06)</u>	<u>(3.93)</u>	<u>1.37</u>

27. Other Information

27.1 Employees

The Group had an average of 620 employees (2019: 681; 2018: 663) in the reporting period. The employees are divided in industrial employees and commercial employees. In 2020, the industrial employees amounted to 424 (2019: 487; 2018: 465) and the commercial employees amounted to 197 (2019: 194; 2018: 198).

28. Events after the reporting period

The Group has entered into a lease contract for a new production facility in Nuremberg, Germany, beginning on January 1, 2021. The contract has a lease term of six years with total lease payments of TEUR 2,243.

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

The following description sets forth certain material terms and provisions of the securities of VIA optronics AG ("VIA," or the "Company," "we," "us," and "our") that are registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). This description also summarizes relevant provisions of German corporate law, including the German Stock Corporation Act (Aktiengesetz, or AktG). The following summary does not purport to be complete and is subject to, and is qualified in its entirety by reference to, the applicable provisions of German corporate law, our rules of procedure of the supervisory board, our rules of procedure of the management board, our articles of association and Deposit Agreement, as amended from time to time, which are incorporated by reference as exhibits to the Annual Report on 20-F of which this Exhibit is a part. We encourage you to read these exhibits for additional information.

General

Our securities include (a) our ordinary shares, at no par value and €1.00 nominal value per share, and (b) our American Depositary Shares (the "ADSs"), every five ADSs representing one ordinary share. Our ordinary shares are registered under the Exchange Act not for trading purposes, but only in connection with the registration of ADSs pursuant to the requirements of the Securities and Exchange Commission (the "Commission").

Our ADSs are listed on The New York Stock Exchange under the trading symbol "VIAO."

The following is a description of the rights of (i) the holders of ordinary shares and (ii) ADS holders. Ordinary shares underlying the outstanding ADSs are held by The Bank of New York Mellon, as depositary.

Ordinary Shares

The following is a summary of the rights of our holders of our ordinary shares as specified in our articles of association.

Type and Class of Securities

Each ordinary share has no par value and a nominal value of €1.00 per share.

Authorized Ordinary Shares

The articles of association authorize the management board, subject to the consent of the supervisory board, to increase the Company's registered share capital in one or more tranches by up to €1,500,000 by issuing up to 1,500,000 new no par value ordinary shares against contribution in cash or in kind until June 30, 2024.

With the consent of the supervisory board, the management board is authorized to exclude the shareholders' subscription rights in the following circumstances:

- to exclude fractional amounts resulting from the subscription ratio from the statutory subscription right of the shareholders;
- in the case of increases of the share capital against contributions in kind, in particular, in order to acquire companies, divisions of companies or interests in companies; or
- if the increase of the share capital is against contribution in cash, and if the issue price of the new shares is not substantially lower (as defined in the German Stock Corporation Act) than the exchange price for our shares of the same class and having the same terms already listed at the time of the final determination of the issue price. For this purpose, the market price may also be considered the market price of an ADS listed on the New York Stock Exchange divided by the number of our shares or multiplied by the fraction of our

shares represented by an ADS, as the case may be. In addition, the amount of the share capital represented by the shares issued pursuant to this authorization under the exclusion of the statutory subscription rights may not exceed 10% of the share capital at the time this authorization comes into effect or is exercised. The 10% threshold includes new or treasury shares of our company issued or transferred during the term of this authorized capital on another legal basis under the exclusion of statutory subscription rights pursuant to Section 71 para 1 number 8 sentence 5 and Section 186 para 3 sentence 4 of the German Stock Corporation Act.

Subscription Rights

According to the German Stock Corporation Act, every shareholder is generally entitled to subscription rights (commonly known as preemptive rights) if new shares convertible bonds, bonds with warrants, profit-participation rights or profit-sharing bonds are issued in proportion to the number of shares he or she holds in the corporation's existing share capital. Under German law, these rights do not apply to shares issued out of conditional capital. A minimum subscription period of two weeks must be provided for the exercise of such subscription rights.

Under German law, the shareholders' meeting may pass a resolution excluding subscription rights if a majority of at least three-quarters of the share capital represented in the relevant shareholder vote adopts the resolution. To exclude subscription rights, the management board must also make available a report to the shareholders justifying the exclusion and demonstrating that the company's interest in excluding the subscription rights outweighs the shareholders' interest in maintaining their rights. The justification may be subject to judicial review. Under German law, the exclusion of subscription rights in connection with the issuance of new shares is permitted, in particular, if we increase the share capital against cash contributions, if the amount of the capital increase does not exceed 10% of the existing share capital and the issue price of the new shares is not significantly lower than the market price of our shares. For this purpose, the market price may also be considered the market price of an ADS listed on the New York Stock Exchange divided by the number of our shares or the fraction of one of our shares represented by an ADS, as the case may be.

Shareholders' Meetings, Resolutions and Voting Rights

Pursuant to our articles of association, shareholders' meetings may be held at our registered offices, at the registered seat of a German stock exchange or in a German city with more than 100,000 inhabitants. In general, shareholders' meetings are convened by our management board. Separately, the supervisory board is required to convene a shareholders' meeting in cases where this is required as a matter of statutory law (i.e., if calling a meeting is required in the best interest of our company). In addition, shareholders who, individually or as a group, own shares in our company that represent at least 5% of our share capital may request that our management board convene a shareholders' meeting. If our management board does not convene a shareholders' meeting upon such a request, the shareholders may petition in German court for authorization to convene a shareholders' meeting.

Pursuant to our articles of association, the convening notice for a shareholders' meeting must be made public at least 36 days prior to the meeting. Shareholders who, individually or as a group, own shares in our company that represent at least 5% or €500,000 of our share capital may require that modified or additional items be added to the agenda of the shareholders' meeting and that these items be published prior to the shareholders' meeting.

Under German law, our annual general shareholders' meeting must take place within the first eight months of each financial year. Among other things, the general shareholders' meeting is authorized and required to adopt resolutions on the following issues:

- use of our annual net profit determined in accordance with German generally accepted accounting principles;
 - discharge of the actions taken by the members of our management board and our supervisory board;
 - the approval of our statutory auditors;
 - increases or decreases in our share capital;
-

- the election of supervisory board members; and
- to the extent legally required, the approval of our financial statements.

Each share carries one vote at our shareholders' meeting.

Our articles of association provide in Article 20 that the resolutions of the shareholders' meeting are adopted by a simple majority of the votes cast, unless otherwise required by law or the articles of association.

Neither German law nor our articles of association provide for a minimum participation as a quorum for our shareholders' meetings.

Under German law, certain resolutions of fundamental importance require a majority of at least three-quarters of the share capital represented in the relevant shareholder vote. Resolutions of fundamental importance include, in particular, capital increases with exclusion of subscription rights, capital decreases, the creation of authorized or conditional capital, the dissolution of a company, a merger into or with another company, split-offs and split-ups, the conclusion of inter-company agreements (*Unternehmensverträge*) as defined in the German Stock Corporation Act (in particular control agreements (*Beherrschungsverträge*) and profit and loss transfer agreements (*Ergebnisabführungsverträge*)), and a change of the legal form of a company.

Dividend Rights

Under German law, distributions of dividends on shares for a given financial year are generally determined by a process in which the management board and supervisory board submit a proposal to our annual general shareholders' meeting held in the subsequent financial year and such annual general shareholders' meeting adopts a resolution.

German law provides that a resolution concerning dividends and distribution thereof may be adopted only if the company's unconsolidated financial statements prepared in accordance with German GAAP show a net profit. In determining the profit available for distribution, the result for the relevant year must be adjusted for profits and losses brought forward from the previous year and for withdrawals from or transfers to reserves. Certain reserves are required by law and must be deducted when calculating the profit available for distribution.

Shareholders participate in profit distributions in proportion to the number of shares they hold. Dividends on shares resolved by the general shareholders' meeting are paid annually, shortly after the general shareholders' meeting, in accordance with the German Stock Corporation Act and the rules of the respective clearing system. Dividend payment claims are subject to a three-year statute of limitation.

We have never declared or paid any dividends to our shareholders and, as of the date of this report, have no intention to declare or pay any dividends in the foreseeable future.

Liquidation Rights

Apart from liquidation e.g., as a result of insolvency proceedings, we may be liquidated with a vote of a majority of at least three-quarters of the share capital represented in the relevant shareholder vote. If we are liquidated, any assets remaining after all of our liabilities have been paid off will be distributed among our shareholders in proportion to their holdings in accordance with German statutory law. The German Stock Corporation Act provides certain protections for creditors which must be observed in the event of liquidation.

Authorization to Acquire Treasury Shares

We may not acquire our own shares unless authorized by the shareholders' meeting or in other very limited circumstances as set out in the German Stock Corporation Act. Shareholders may not grant a share repurchase authorization lasting for more than five years. The German Stock Corporation Act generally limits repurchases to 10% of our share capital and resales must generally be made either on a stock exchange, in a manner that treats all shareholders equally, or in accordance with the rules that apply to subscription rights relating to a capital increase. The shareholders' meeting adopted a resolution on July 4, 2019 authorizing the management board, for a period until

June 30, 2024, subject to the consent of the supervisory board and provided it complies with the legal requirement of equal treatment, to purchase our shares in an amount up to 10% of our total share capital. The shares may be purchased by means of a purchase on a stock exchange or an offer to all shareholders in one or more tranches and may be used for any purpose permitted by law. The management board is authorized to redeem the purchased shares without further resolution by the shareholders' meeting. The management board is also authorized to sell the purchased shares in other ways than a sale on a stock exchange or an offer to all shareholders under full or partial exclusion of the statutory subscription rights of the shareholders with the supervisory board's consent as follows: (i) to exclude shareholders' subscription rights for fractional amounts, (ii) by selling the purchased shares against contributions in kind, and (iii) by selling the purchased shares against cash consideration, if the consideration is not significantly lower than the market price at the time of the sale.

Squeeze-Out of Minority Shareholders

Under German law, the shareholders' meeting of a stock corporation may resolve upon request of a shareholder that holds shares that represent at least 95% of the share capital, that the shares held by any remaining minority shareholders be transferred to such shareholder against payment of "adequate cash compensation" (*Ausschluss von Minderheitsaktionären*). This amount must take into account the full value of the company at the time of the resolution, which is generally determined using the future earnings value method (*Ertragswertmethode*).

A squeeze-out in context of a merger (*umwandlungsrechtlicher Squeeze-Out*) only requires a majority shareholder to hold at least 90% of the share capital.

American Depositary Shares

Depositary

We have appointed The Bank of New York Mellon ("BNY" or the "depositary") as the depositary for the ADSs pursuant to a deposit agreement (the "Deposit Agreement"). BNY's depositary offices are located at 240 Greenwich Street, New York, New York 10286.

Provisions

Every five ADSs represents the right to receive, and to exercise the beneficial ownership interest in, one ordinary share on deposit with the custodian. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities.

An ADS holder holds ADSs either (A) directly (i) by having an American Depositary Receipt, also referred to as an ADR, which is a certificate evidencing a specific number of ADSs, registered in its name, or (ii) by having uncertificated ADSs registered in its name, or (B) indirectly by holding a security entitlement in ADSs through its broker or other financial institution that is a direct or indirect participant in The Depositary Trust Company, also called DTC. If a holder holds ADSs directly, it is a registered ADS holder, also referred to as an ADS holder. This description assumes the holder is an ADS holder. If the holder holds the ADSs indirectly, it must rely on the procedures of its broker or other financial institution to assert the rights of ADS holders described in this section. Such holders should consult with its broker or financial institution to find out what those procedures are.

We will not treat ADS holders as one of our shareholders and they will not have shareholder rights. German law governs shareholder rights. The depositary will be the holder of the shares underlying its ADSs. As a registered holder of ADSs, it will have ADS holder rights. A deposit agreement among us, the depositary, ADS holders and all other persons indirectly or beneficially holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs.

Dividends and Distributions

The depositary has agreed to pay or distribute to ADS holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, upon payment or deduction of its fees and expenses. ADS holders will receive these distributions in proportion to the number of shares their ADSs represent.

Cash. The depositary will convert any cash dividend or other cash distribution we pay on the shares into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If that is not possible or if any government approval is needed and cannot be obtained, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid. It will not invest the foreign currency and it will not be liable for any interest.

Before making a distribution, any withholding taxes, or other governmental charges that must be paid will be deducted. The depositary will distribute only whole U.S. dollars and cents and will round fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, ADS holders may lose some of the value of the distribution.*

Shares. The depositary may distribute additional ADSs representing any shares we distribute as a dividend or free distribution. The depositary will only distribute whole ADSs. It will sell shares which would require it to deliver a fraction of an ADS (or ADSs representing those shares) and distribute the net proceeds in the same way as it does with cash. If the depositary does not distribute additional ADSs, the outstanding ADSs will also represent the new shares. The depositary may sell a portion of the distributed shares (or ADSs representing those shares) sufficient to pay its fees and expenses in connection with that distribution.

Rights to purchase additional shares. If we offer holders of our securities any rights to subscribe for additional shares or any other rights, the depositary may (i) exercise those rights on behalf of ADS holders, (ii) distribute those rights to ADS holders or (iii) sell those rights and distribute the net proceeds to ADS holders, in each case after deduction or upon payment of its fees and expenses. To the extent the depositary does not do any of those things, it will allow the rights to lapse. *In that case, ADS holders will receive no value for them.* The depositary will exercise or distribute rights only if we ask it to and provide satisfactory assurances to the depositary that it is legal to do so. If the depositary will exercise rights, it will purchase the securities to which the rights relate and distribute those securities or, in the case of shares, new ADSs representing the new shares, to subscribing ADS holders, but only if ADS holders have paid the exercise price to the depositary. U.S. securities laws may restrict the ability of the depositary to distribute rights or ADSs or other securities issued on exercise of rights to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer.

Other Distributions. The depositary will send to ADS holders anything else we distribute on deposited securities by any means it thinks is legal, fair and practical. If it cannot make the distribution in that way, the depositary has a choice. It may decide to sell what we distributed and distribute the net proceeds, in the same way as it does with cash. Or, it may decide to hold what we distributed, in which case ADSs will also represent the newly distributed property. However, the depositary is not required to distribute any securities (other than ADSs) to ADS holders unless it receives satisfactory evidence from us that it is legal to make that distribution. The depositary may sell a portion of the distributed securities or property sufficient to pay its fees and expenses in connection with that distribution. U.S. securities laws may restrict the ability of the depositary to distribute securities to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADS holders. *This means that ADS holders may not receive the distributions we make on our shares or any value for them if it is illegal or impractical for us to make them available to such holders.*

Deposit, Withdrawal and Cancellation

The depositary will deliver ADSs if ADS holders or their broker deposits shares or evidence of rights to receive shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names the ADS holder requests and will deliver the ADSs to or upon the order of the person or persons that made the deposit.

ADS holders may surrender their ADSs to the depositary for the purpose of withdrawal. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will deliver the shares and any other deposited securities underlying the ADSs to the ADS holder or a person the ADS holder designates at the office of the custodian. Or, at such holder's request, risk and expense, the depositary will deliver the deposited securities at its office, if feasible. However, the depositary is not required to accept surrender of ADSs to the extent it would require delivery of a fraction of a deposited share or other security. The depositary may charge ADS holders a fee and its expenses for instructing the custodian regarding delivery of deposited securities.

ADS holders may surrender their ADR to the depositary for the purpose of exchanging their ADR for uncertificated ADSs. The depositary will cancel that ADR and will send to the ADS holder a statement confirming that the ADS holder is the registered holder of uncertificated ADSs. Upon receipt by the depositary of a proper instruction from a registered holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depositary will execute and deliver to the ADS holder an ADR evidencing those ADSs.

Voting Rights

ADS holders may instruct the depositary how to vote the number of deposited shares their ADSs represent. If we request the depositary to solicit ADS holders' voting instructions (and we are not required to do so), the depositary will notify ADS holders of a shareholders' meeting and send or make voting materials available to such holders. Those materials will describe the matters to be voted on and explain how ADS holders may instruct the depositary how to vote. For instructions to be valid, they must reach the depositary by a date set by the depositary. The depositary will try, as far as practical, subject to the laws of Germany and the provisions of our articles of association or similar documents, to vote or to have its agents vote the shares or other deposited securities as instructed by ADS holders. If we do not request the depositary to solicit ADS holders' voting instructions, ADS holders can still send voting instructions, and, in that case, the depositary may try to vote as such holders instruct, but it is not required to do so.

Except by instructing the depositary as described above, ADS holders won't be able to exercise voting rights unless they surrender their ADSs and withdraw the shares. However, holders may not know about the meeting enough in advance to withdraw the shares. In any event, the depositary will not exercise any discretion in voting deposited securities and it will only vote or attempt to vote as instructed.

We cannot assure ADS holders that they will receive the voting materials in time to ensure that ADS holders can instruct the depositary to vote their shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. *This means that ADS holders may not be able to exercise voting rights and there may be nothing ADS holders can do if their shares are not voted as requested.*

In order to give ADS holders a reasonable opportunity to instruct the depositary as to the exercise of voting rights relating to Deposited Securities, if we request the Depositary to act, we agree to give the depositary notice of any such meeting and details concerning the matters to be voted upon at least 40 days in advance of the meeting date.

Fees and Expenses

Persons Depositing or Withdrawing Shares or ADS Holders Must Pay:	For:
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property
	Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
\$.05 (or less) per ADS	Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to ADS holders had been shares and the shares had been deposited for issuance of ADSs	Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
\$.05 (or less) per ADS per calendar year	Depository services
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the depositary or its agent when ADS holders deposit or withdraw shares
Expenses of the depositary	Cable and facsimile transmissions (when expressly provided in the deposit agreement)
	Converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	As necessary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency

conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

Payment of Taxes

ADS holders will be responsible for any taxes or other governmental charges payable on their ADSs or on the deposited securities represented by any of their ADSs. The depositary may refuse to register any transfer of their ADSs or allow them to withdraw the deposited securities represented by their ADSs until those taxes or other charges are paid. It may apply payments owed to ADS holders or sell deposited securities represented by their American Depositary Shares to pay any taxes owed and they will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

Tender and Exchange Offers; Redemption, Replacement or Cancellation of Deposited Securities

The depositary will not tender deposited securities in any voluntary tender or exchange offer unless instructed to do by an ADS holder surrendering ADSs and subject to any conditions or procedures the depositary may establish.

If deposited securities are redeemed for cash in a transaction that is mandatory for the depositary as a holder of deposited securities, the depositary will call for surrender of a corresponding number of ADSs and distribute the net redemption money to the holders of called ADSs upon surrender of those ADSs.

If there is any change in the deposited securities such as a sub-division, combination or other reclassification, or any merger, consolidation, recapitalization or reorganization affecting the issuer of deposited securities in which the depositary receives new securities in exchange for or in lieu of the old deposited securities, the depositary will hold those replacement securities as deposited securities under the deposit agreement. However, if the depositary decides it would not be lawful and practical to hold the replacement securities because those securities could not be distributed to ADS holders or for any other reason, the depositary may instead sell the replacement securities and distribute the net proceeds upon surrender of the ADSs.

If there is a replacement of the deposited securities and the depositary will continue to hold the replacement securities, the depositary may distribute new ADSs representing the new deposited securities or ask ADS holders to surrender their outstanding ADRs in exchange for new ADRs identifying the new deposited securities.

If there are no deposited securities underlying ADSs, including if the deposited securities are cancelled, or if the deposited securities underlying ADSs have become apparently worthless, the depositary may call for surrender of those ADSs or cancel those ADSs upon notice to the ADS holders.

Amendment and Termination

We may agree with the depositary to amend the deposit agreement and the ADRs without ADS holder consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depositary for registration fees, facsimile costs, delivery charges or similar items, or prejudices a substantial right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depositary notifies ADS holders of the amendment. *At the time an amendment becomes effective, ADS holders are considered, by continuing to hold their ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended.*

The depositary will initiate termination of the deposit agreement if we instruct it to do so. The depositary may initiate termination of the deposit agreement if

- 60 days have passed since the depositary told us it wants to resign but a successor depositary has not been appointed and accepted its appointment;
- we delist the ADSs from an exchange on which they were listed and do not list the ADSs on another exchange;
- we appear to be insolvent or enter insolvency proceedings
- all or substantially all the value of the deposited securities has been distributed either in cash or in the form of securities;
- there are no deposited securities underlying the ADSs or the underlying deposited securities have become apparently worthless; or
- there has been a replacement of deposited securities.

If the deposit agreement will terminate, the depositary will notify ADS holders at least 90 days before the termination date. At any time after the termination date, the depositary may sell the deposited securities. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement, unsegregated and without liability for interest, for the *pro rata* benefit of the ADS holders that have not surrendered their ADSs. Normally, the depositary will sell as soon as practicable after the termination date.

After the termination date and before the depositary sells, ADS holders can still surrender their ADSs and receive delivery of deposited securities, except that the depositary may refuse to accept a surrender for the purpose of withdrawing deposited securities or reverse previously accepted surrenders of that kind if it would interfere with the selling process. The depositary may refuse to accept a surrender for the purpose of withdrawing sale proceeds until all the deposited securities have been sold. The depositary will continue to collect distributions on deposited securities, but, after the termination date, the depositary is not required to register any transfer of ADSs or distribute any dividends or other distributions on deposited securities to the ADSs holder (until they surrender their ADSs) or give any notices or perform any other duties under the deposit agreement except as described in this paragraph.

Limitations on Obligations and Liability

Limits on our Obligations and the Obligations of the Depositary; Limits on Liability to Holders of ADSs

The deposit agreement expressly limits our obligations and the obligations of the depositary. It also limits our liability and the liability of the depositary. We and the depositary:

- are only obligated to take the actions specifically set forth in the deposit agreement without negligence or bad faith, and the depositary will not be a fiduciary or have any fiduciary duty to holders of ADSs;
- are not liable if we are or it is prevented or delayed by law or by events or circumstances beyond our or its control from performing our or its obligations under the deposit agreement;
- are not liable if we or it exercises discretion permitted under the deposit agreement;
- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement, or for any special, consequential or punitive damages for any breach of the terms of the deposit agreement;
- have no obligation to become involved in a lawsuit or other proceeding related to the ADSs or the deposit agreement on ADS holders' behalf or on behalf of any other person;
- may rely upon any documents we believe or it believes in good faith to be genuine and to have been signed or presented by the proper person;
- are not liable for the acts or omissions of any securities depositary, clearing agency or settlement system; and
- the depositary has no duty to make any determination or provide any information as to our tax status, or any liability for any tax consequences that may be incurred by ADS holders as a result of owning or holding ADSs or be liable for the inability or failure of an ADS holder to obtain the benefit of a foreign tax credit, reduced rate of withholding or refund of amounts withheld in respect of tax or any other tax benefit.

In the deposit agreement, we and the depositary agree to indemnify each other under certain circumstances.

Requirements for Depositary Actions

Before the depositary will deliver or register a transfer of ADSs, make a distribution on ADSs, or permit withdrawal of shares, the depositary may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities;
- satisfactory proof of the identity and genuineness of any signature or other information it deems necessary; and
- compliance with regulations it may establish, from time to time, consistent with the deposit agreement, including presentation of transfer documents.

The depositary may refuse to deliver ADSs or register transfers of ADSs when the transfer books of the depositary or our transfer books are closed or at any time if the depositary or we think it advisable to do so.

Right to Receive the Shares Underlying ADSs

ADS holders have the right to cancel their ADSs and withdraw the underlying shares at any time except:

- when temporary delays arise because: (i) the depositary has closed its transfer books or we have closed our transfer books; (ii) the transfer of shares is blocked to permit voting at a shareholders' meeting; or (iii) we are paying a dividend on our shares;
- when ADS holders owe money to pay fees, taxes and similar charges; or
- when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of shares or other deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Direct Registration System

In the deposit agreement, all parties to the deposit agreement acknowledge that the Direct Registration System, also referred to as DRS, and Profile Modification System, also referred to as Profile, apply to the ADSs. DRS is a system administered by DTC that facilitates interchange between registered holding of uncertificated ADSs and holding of security entitlements in ADSs through DTC and a DTC participant. Profile is a feature of DRS that allows a DTC participant, claiming to act on behalf of a registered holder of uncertificated ADSs, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register that transfer.

In connection with and in accordance with the arrangements and procedures relating to DRS/Profile, the parties to the deposit agreement understand that the depositary will not determine whether the DTC participant that is claiming to be acting on behalf of an ADS holder in requesting registration of transfer and delivery as described in the paragraph above has the actual authority to act on behalf of the ADS holder (notwithstanding any requirements under the Uniform Commercial Code). In the deposit agreement, the parties agree that the depositary's reliance on and compliance with instructions received by the depositary through the DRS/Profile system and in accordance with the deposit agreement will not constitute negligence or bad faith on the part of the depositary.

Shareholder communications; inspection of register of holders of ADSs

The depositary will make available for inspection at its office all communications that it receives from us as a holder of deposited securities that we make generally available to holders of deposited securities. The depositary will send ADS holders copies of those communications or otherwise make those communications available to ADS holders if we ask it to. ADS holders have a right to inspect the register of holders of ADSs, but not for the purpose of contacting those holders about a matter unrelated to our business or the ADSs.

Jury Trial Waiver

The deposit agreement provides that, to the extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to the ADSs or the deposit agreement. We believe the deposit agreement's jury trial waiver is enforceable; however, if an ADS holder were to seek a jury trial of any claim they may have against us or the depositary arising out of or relating to the ADSs or the deposit agreement and we or the depositary opposed such a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable case law. However, ADS holders will not, by agreeing to the terms of the deposit agreement, be deemed to have waived our or the depositary's compliance with U.S. federal securities laws and the rules and regulations promulgated thereunder.

Projektvertrag

zwischen

Kloepfel Corporate Finance GmbH

Ludwigpalais, Ludwigstr. 8
DE-80539 München

und

Via optronics GmbH

Lettenfeldstraße 15
DE-90592 Schwarzenbruck

im Folgenden der „**Auftraggeber**“ genannt.

1. Ausgangslage

Die Via optronics GmbH, eingetragen unter der HRB Nr. 22650, wurde 2005 von Herrn Jürgen Eichner gegründet und hat sich über die Jahre hin zu einem global agierendem Spezialisten im Bereich der Display- Veredelung entwickelt. Die Produktionsstätten in Deutschland und China sind mit Ihrer Reinraum-Technologie auf Mittel- und Großserienproduktion ausgelegt. Via optronics GmbH besitzt zwei Tochtergesellschaften zu 100% (Via optronics LLC (USA) und Via optronics (Suzhou) Co. Ltd. (CHN)) sowie ein Rep. Office in Taiwan (zusammen „Via optronics Group“). Geschäftsführer von Via optronics GmbH sind Herr Jürgen Eichner sowie Herr Daniel Jürgens.

Die Anteile der Via optronics GmbH werden von den folgenden Gesellschaftern gehalten:

- Jürgen Eichner: rund 45,00%
- WHEB: rund 55,00%

Neben dem Dual Track (siehe separater Vertrag von Kloepfel Corporate Finance GmbH) sind die Auftraggeber auch daran interessiert, über strategische Add-On Akquisitionen weiter zu wachsen und die Wertschöpfungstiefe zu erweitern. Dieses wird im Folgenden näher beschrieben („Projekt“).

2. Auftrag

2.1. Der Auftraggeber beauftragt Kloepfel Corporate Finance GmbH exklusiv mit:

- der Suche und Identifikation von geeigneten Zielunternehmen entsprechend der Kriterien, die aus der Unternehmensstrategie abgeleitet werden;
- der Ansprache der geeigneten Personen aus Gesellschafterkreis und/oder Management der Zielgesellschaften und Herstellung der Gesprächsbereitschaft;
- der verantwortlichen Leitung des gesamten Prozesses bis zum Abschluss einer Transaktion gem. dem nachstehend aufgeführten Leistungsumfang und -inhalt.

2.2. Die Vertragsparteien sind sich darüber einig, dass der Erfolg des Projektes entscheidend vom aktiven Zusammenwirken zwischen dem Auftraggeber und Kloepfel Corporate Finance GmbH abhängt und eine intensive Zusammenarbeit voraussetzt. Der Auftraggeber wird daher jedwede Aktivitäten, die auf den Abschluss einer Transaktion gerichtet sind, ausschließlich mit Kloepfel Corporate Finance GmbH zusammen durchführen und Kloepfel Corporate Finance GmbH über alle evtl. Interessenten oder sonstige Aktivitäten unterrichten, die für den Prozess relevant sind (Exklusivität).

3. Leistungsinhalt und –umfang

Zur Durchführung des Projektes übernimmt Kloepfel Corporate Finance folgende Aufgaben:

Phase 1:

- 3.1. Projektierung / Analyse und Vorbereitung der Ansprache
- 3.2. Identifikation und Selektion von Zielunternehmen

Phase 2:

- 3.3. Ansprache der Targets
- 3.4. Grundlagenklärung und Meetings/Workshops
- 3.5. Konzeptentwicklung und Angebot/LOI
- 3.6. Begleitung der Verhandlungen
- 3.7. Begleitung in der Due Diligence & Koordination der verschiedenen (Berater-) Teams
- 3.8. Begleitung der Schlussverhandlungen und Vertragsabschluss

Je nach Situation und Verlauf des Prozesses können sich Veränderungen im Prozessumfang oder -ablauf ergeben, die mit dem Auftraggeber abgestimmt werden. Einzelne Bestandteile der beschriebenen Prozesse können somit erweitert oder obsolet werden.

4. Projektlaufzeit

Dieses Vertragsverhältnis ist auf unbestimmte Zeit abgeschlossen, wobei die Parteien für die Abwicklung des Auftrages mit einer Laufzeit von 6 Monaten rechnen. Der Projektvertrag kann von jeder Vertragspartei mit einer Frist von mind. zwei Wochen zum Ende des laufenden Monats gekündigt werden. Projektbeginn ist der 15. März 2016.

5. Honorare und Auslagenersatz

- 5.1. Kloepfel Corporate Finance GmbH erhält einen monatlichen Retainer i.H.v. € 12.500 für die Aufbereitung und Unterstützung in der Buchhaltung des Auftraggebers sowie zur Erstellung seiner Firmendokumentationen (siehe auch "reverse merger" etc.). Dieser wird dem Auftraggeber monatlich in Rechnung gestellt. Der monatliche Retainer hat eine Laufzeit von 9 Monaten. Eine frühere Beendigung erfolgt dann, wenn der Erfolgsfall – also der Kauf eines Unternehmens – bereits vor Laufzeitende erfolgt.

Der Retainer wird zu einer Summe von € 37.500 auf das Erfolgshonorar angerechnet (50% von 6 Monaten Retainer-Honorar).

Sollte während der Laufzeit die Via optronics GmbH einen neuen Investor erhalten, so wird die Retainerhöhe ab einem Betrag von € 0 aufwärts erneut verhandelt.

- 5.2. Im Erfolgsfall steht Kloepfel Corporate Finance GmbH ein Erfolgshonorar pro Transaktion zu. Erfolgsfall ist der Abschluss von Verträgen (Closing) zur ganzen oder teilweisen Übernahme eines Zielunternehmens oder ähnlichen Verträgen:

Das Erfolgshonorar im Rahmen einer Add-on-Transaktion beträgt dabei pro Zielunternehmen jeweils € 250.000 („Pauschalerfolgshonorar“). Pro abgegebenem LOI an ein Zielunternehmen ist ein Meilenstein-Betrag von € 5.000 als Honorar zu zahlen.

Bei der Add-On Akquisition werden die Retainer oder bereits zuvor geleisteten Honorarzahungen an mögliche damalige M&A Berater nicht angerechnet. Unabhängig von einer festgestellten Unternehmensbewertung, wird das oben dargestellte Pauschalerfolgshonorar fällig.

Das Erfolgshonorar entsteht auch, wenn der Erfolgsfall innerhalb von 18 Monaten nach Beendigung des Projektvertrages durch Kündigung der Auftraggeber eintritt. Sofern der separate Vertrag für den Dual Track erfolgreich mit einer Transaktion mit Ayala abgeschlossen wird (Closing), gilt dieser Vertrag automatisch als gekündigt. Kloepfel Corporate Finance GmbH wird dabei weiterhin für die strategischen Wachstumsschritte als präferierter M&A Berater behandelt. Die Nachlauffrist nur der bis dahin in Verhandlung stehenden Add-on Akquisitionen bleibt unberührt. Bei allen anderen Unternehmen wird die Nachlauffrist aufgehoben.

- 5.3. Die in Ausführung des Auftrages anfallenden Drittauslagen und Reisekosten trägt der Auftraggeber. Diese werden monatlich nachgewiesen und abgerechnet. Evtl. Auslandsreisen und Drittauslagen sind vor Durchführung mit dem Auftraggeber abzustimmen. Basis hierfür sind € 0,70 je Fahrzeugkilometer sowie die Erstattung von Flug- und Bahnreisen (innerhalb der EU "Economy Class"; außerhalb der EU "Business Class"; Erste Klasse bei Bahnfahrten).
- 5.4. Wenn als Ergebnis der durch Kloepfel Corporate Finance GmbH angebahnten Gespräche zwischen den Firmen eine anderweitige strategische kommerzielle Vereinbarung zustande kommt, konkret eine Lizenz-, Vertriebs- oder Produktionsvereinbarung, ein Joint Venture, das/die vorher nicht bestand oder in Anbahnung befindlich war, so wird eine Erfolgsgebühr in Höhe des Pauschalhonorars fällig. Als kommerzielle Vereinbarungen in diesem Sinne gelten nur Verträge, deren Vertragslaufzeit 12 Monate übersteigt.
- 5.5. Alle Honorare verstehen sich zuzüglich MwSt. in gesetzlicher Höhe.

6. Geheimhaltung

- 6.1. Kloepfel Corporate Finance GmbH wird sämtliche im Zusammenhang mit dem Projekt erhaltenen Unterlagen und Informationen streng vertraulich behandeln, insbesondere gilt:
 - Kloepfel Corporate Finance GmbH wird vertrauliche Informationen und Unterlagen nur an solche Mitarbeiter ihres Unternehmens weitergeben, die sich ihrerseits zur Geheimhaltung verpflichtet haben und mit dem Projekt befasst sind;
 - Kloepfel Corporate Finance GmbH wird vertrauliche Unterlagen und Informationen an Dritte nur weitergeben, wenn diese sich ihrerseits vorab zur Geheimhaltung verpflichtet haben und von Via optronics freigegeben wurden.
- 6.2. Die Verpflichtung zur Geheimhaltung der erhaltenen Informationen und Unterlagen entfällt, soweit diese
 - Kloepfel Corporate Finance GmbH vor dem Empfangsdatum nachweislich bekannt waren oder danach ohne Mitwirkung oder Verschulden von Kloepfel Corporate Finance GmbH bekannt werden;
 - allgemein bekannt sind oder nach dem Empfangsdatum ohne Mitwirkung oder Verschulden von Kloepfel Corporate Finance GmbH allgemein bekannt werden.
- 6.3. Die Geheimhaltungsverpflichtungen der Ziffern 6.1 und 6.2 gelten auch für den Auftraggeber hinsichtlich der Informationen, die er von Kloepfel Corporate Finance GmbH über potenzielle Zielunternehmen erhält.

- 6.4. Kloepfel Corporate Finance GmbH ist berechtigt, in Absprache mit dem Auftraggeber auf die Tatsache der Mandatierung und den wesentlichen Gegenstand des Mandats in Veröffentlichungen hinzuweisen sowie den Abschluss der Transaktion in üblicher Weise (Tombstone) zu veröffentlichen.

7. Salvatorische Klausel

Sollten sich einzelne Bestimmungen dieses Projektvertrages als unwirksam erweisen, so wird die Wirksamkeit der übrigen Bestimmungen hiervon nicht berührt. An die Stelle der unwirksamen Bestimmung tritt eine Regelung, die dem gewollten Zweck am nächsten kommt.

Mündliche Nebenabreden bestehen nicht. Änderungen oder Ergänzungen dieser Vereinbarung bedürfen der Schriftform.

Für das Vertragsverhältnis und die sich hieraus ergebenden Ansprüche gilt ausschließlich deutsches Recht. Erfüllungsort und Gerichtsstand sind am Sitz von Kloepfel Corporate Finance GmbH.

München, den 16.03.2016

Kloepfel Corporate Finance GmbH

Via optronics GmbH

Subsidiaries

[illegible]

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Jürgen Eichner, certify that:

1. I have reviewed this Annual Report on Form 20-F of VIA optronics AG;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2021

/s/ Jürgen Eichner
Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Daniel Jürgens, certify that:

1. I have reviewed this Annual Report on Form 20-F of VIA optronics AG;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2021

/s/ Daniel Jürgens
Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 20-F of VIA optronics AG (the “Company”) for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, Jürgen Eichner, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jürgen Eichner

Jürgen Eichner

Chief Executive Officer

(Principal Executive Officer)

Dated: April 29, 2021

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 20-F of VIA optronics AG (the “Company”) for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, Daniel Jürgens, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Daniel Jürgens

Daniel Jürgens

Chief Financial Officer

(Principal Financial Officer)

Dated: April 29, 2021
