<u>Q & A at the presentation of</u> <u>Medium-Term Management Plan MG20R</u> (Presented on May 31, 2019)

[1. Overall]

Q. Please let us know about the latest progress with Vehicle Energy Japan and Ube Maxell Kyoto. For Vehicle Energy Japan, six months have passed since the announcement and what is the current situation, including the timing of consolidation? For Ube Maxell Kyoto, it became consolidated subsidiary. Please let us know about the size of sales and the customers.

A. Vehicle Energy was restarted in April as Vehicle Energy Japan. Currently, we are proceeding in line with the plan announced in December. We are in the process of building mass production system based on received orders. We will build a new factory within our existing factory and rapidly working on expansion of our production lines. We have dispatched about 30 to 40 engineers.

Regarding Ube Maxell Kyoto, demand is growing and we are operating two companies each focused on respective areas of strength. But we are managing these two companies under the integral management with Ube Industries, Ltd. in order to enhance strong area of each company.

Regarding sales, in P17 of presentation, we mentioned that under "coated separators and others" it was just under 3 billion yen in FY2018. Please understand that most of them are from Ube Maxell Kyoto.

Q. Please let us know about the funding of Vehicle Energy?

A. Under the business plan, investments for production capacity increase and working capital will be funded by the Company and INCJ. We are receiving strong orders, and we are currently considering how we will fund in the future.

Q. Regarding MBP, please let us know about lessons you learned and how you will proceed in the future?

A. There are the five companies in FY2018, and another company, Maxell System Tech, established in 2017. We thought that the time horizon for realizing synergies is quite different by company. We are working under the concept of MBP, but there were difficulties like pricing as well.

Q. We believe that the issue of the different timeline had been anticipated as you were bringing companies with different cultures. And we understand that you had emphasis on autonomy, rather than actively merging cultures.

A. There are areas we could realize bigger synergies after MBP, including changes in the market environment. For example, we integrated all our design/development and manufacturing departments of home appliances into Maxell Izumi which was proceeded more than we planned.

Q. How are you managing the overall business portfolio? Is there any guideline, such as share, profitability and ROIC to decide whether to do business.

A. ROIC is different by business. Regarding business we should grow or shrink, there is no specific business decided to be abandoned yet. We have about 60 businesses now and would like to decrease them to around 40 strong businesses in two years or more.

We are currently considering ways to define what we should grow, what we should shrink, and what should be abandoned, although we haven't reached anything conclusive yet that can be disclosed. In terms of profitability, we would like to foster product groups that generate margin of about 10%.

Q. Please confirm if the new target for FY2020 is not final goal, but still targeting to achieve the original target of MG20?

A. Yes. Although we have revised the MG20 as MG20R, but we still recognize the MG20 targets as figures that we must accomplish.

[2. Energy Division]

Q. Regarding lithium ion batteries for consumer market, do you basically plan not to do business for gaming in the future?

A. We can not say whether we will do it or not. But we have decided not to invest in new capacity expansion. We would like to judge considering its profitability.

Q. The business relating to gaming equipment is rather difficult business.

A. It depends on its profitability. We will judge double-digit profit margin as a guideline.

Q. Regarding CLB, will you focus on hearing aids for the time being? It is lithium-ion battery, but small and button-shaped, or coin-shaped. Will the production take place in Ono or somewhere else considering expansion strategy?

A. We have plans beyond hearing aids. As for production, liquid injection and sealing are the key points. Therefore, the production should be in Ono. Regarding the design, as it is based on lithium-ion technology, experts in lithium-ion batteries are now working on the design of CLB. We will increase our production capacity based on the concept of sequential investment.

Q. Let us ask you about the current situation of Vehicle Energy again. About the sales target of 60 billion yen, how is the certainty of the figure?

A. Currently, there is no decline in the number of orders received, and the Company is steadily building its capabilities. We are planning to bring existing assets to full production, and we will further strengthen the areas that have become bottlenecks. And the construction of new factory within our Kyoto Factory will be started soon.

Q. Regarding battery for TPMS, it looks that the actual results did not grow to that level despite market growth.

A. Overall demand in the automobile market went downwards on a global basis. Also, there is an issue relating to inventories. There are rather big effects from Chinese market, but as we are dealing with the customers not in China as well, we suffer from effect of change of worldwide demand.

Q. Regarding Vehicle Energy Japan, if you send some personnel into Vehicle Energy Japan, your expense for labor cost will be decreased?

A. Yes.

[3. Sliontec Division]

Q. Regarding the electromagnetic wave absorber, we think that the growth potential is high, and you currently hold 10% of the market and aims for 40%. What is the current use? On which part of the car it will be applied? What is the average size? Also let us know about market expansion in the future and about your differentiating factors from competitors such as patent.

A. To the first question, some of the customers use electromagnetic wave absorber on the radar itself, and some of them use it a little away from the radar. There are some variations. Our electromagnetic wave absorber element is a magnetic material that converts millimeter waves into heat and absorbs them. In the design of electromagnetic wave absorber, the magnetic permeability and dielectric constant are designed. However, we only can use the magnetic permeability in the design at this point in time, in terms of patent. The sizes are different for each customer, from a very small millimeter order to a centimeter order. It is difficult to make accurate estimation of the market size.

Q. Are there different use for millimeter-wave radar, or around the body of the car? Do you deliver the sheets for the car body to car manufacturers?

A. Yes. Regarding the supply, it is possible that we deliver car manufacturers directly, but supply chain in automobile industry is very complicated and not confirmed yet.

Q. Is there any room for expansion in the area of usage per one car?

A. The level of autonomous driving in Japan is currently at Levels 2 or 3. In Europe where it is in Levels 3 to 4, the area of automobiles and the number of radars per vehicle will increase, and the number of absorption sheets will increase. However, automotive manufacturers will head in the direction of small and thinner sheets. We believe that if they proceed in the direction of thinner sheets, we can take advantage of the design of magnetic permeability.

Q. Regarding building materials, you mentioned development in Asia last year. Did you originally propose using tape alone, without elastomeric materials under it?

A. We already have results in Vietnam and chosen distributors. We were originally proposing to replace all existing materials such as paint and cement by butyl tapes. In Southeast Asian markets, there were any such materials. However, currently proposing combination of them.

Q. Where do you see bigger possibility, in Asia or in North America?

A. It is North America in terms of scale.

[4. Optronics Division]

Q. Regarding in-car camera lens units, as ADAS expands, how do you analyze the background of your inability to get simultaneous growth in sensing? What is the background that you say you will be able to grow the business?

A. In FY2018, business for sensing was not a big part. And there is a fact that Tier 1s we are dealing are rather strong in viewing. As a result, viewing was the major part of our business. We are now developing new customers for sensing.

Q. Since it is basically a car business, we think your future forecast is accurate. A. Yes, accuracy is high.

Q. Regarding in-car camera lens units, you aim for No. 1 by hybrid strategy. What is the point to achieve this. And we think there is a slight decline in profitability now. Please explain the timing of the recovery.

A. The reason why such plastics are used is certainly costs. It is our strength to have both low cost and high reliability.

As for the current profitability, now we are shifting to sensing. We have made considerable progress in automation from what we had previously done by hand.

In this respect, we are seeing a considerable increase in such investments at the moment, and this is the reason why profitability will decline. However, as we have developed a flexible automated machine that can accommodate a variety of models. We are aiming for profitability of 10% in FY2020.

Q. Regarding LED headlamp lens, the story is to expand the supply chain from lenses to modules. Is it possible to secure profitability?

A. We will expand the light guides and inner lenses in overseas. With their very thick and special shape, we think we need local production and local consumption. We think it is possible to achieve added value, by doing assemble of them with lenses.

Q. Is this a requirement from existing customer or from new customer?

A. Including existing customers. There is a growing need for new lenses and optics for ADB, roadside irradiation, and so on. We will develop products that have high added value. It does not mean simply assembling.

[5. Life Solution Division]

Q. What was the background of the reorganization? Let us know about the purpose and expected effect.

A. Life Solution Division is engaged in a wide range of businesses in Maxell. Historically, we have absorbed nearly six or seven business entities. We divided the division to brand business including BtoB, and component and solution business. In each business, manufacturing and sales are integrated. And we are considering allocation of resources carefully.

Q. If you separate Consumer & Solution Business into your own brand and OEM business, which is the growing part?

A. We can not tell quantitatively, but the OEM business is expected to grow. "Ilexam" is a flagship, and we intend to spend a long time promoting the llexam brand through a route that does not destroy prices.

Q. Regarding EF2 (Mask for OLED panels), we think it is an exclusive business with one customer. Is there possibility to sell to other customers?

A. We are reaffirming the contract that allows us to sell this product to other parties in the event of an unforeseen situation.

Q. In terms of the synergy with Maxell Izumi, how will you proceed the internalization of batteries in the hydraulic tools and the enhancement of IoT functions?

A. Higher voltage is the target for the time being. We will cooperate with Specialty Business Unit of Energy Division. For enhancement of IoT, we will cooperate with I-O Data Device, Inc. We have presented at the exhibition, Electrical Construction Equipment and Materials Fair, hydraulic tools using Energy Division's batteries. We are increasing number of models in the future.

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