Efforts to Strengthen Intellectual Property Capabilities

I Portfolio Transformation (i) Transformation to Digital Workplace Business

We have been promoting the transformation from the Office Printing Business centering on multi-functional peripherals to the Digital Workplace Business including digital solutions combined with the peripherals. In the Digital Workplace Business, the profitability is being increased not only by improving infrastructure-based services, such as cloud support and security services, but also by bringing customer success through monitoring changes of customer needs and interests. In terms of intellectual property, in addition to the conventional strategy of protecting technologies and designs in hardware by securing intellectual property rights, we are executing multifaceted strategies for data, a key to business growth. Specifically, in line with the strategies, the extensive use of data is being promoted pursuant to contracts with customers. For example, we are offering failure prediction for our multi-functional peripherals installed at our customers' sites, based on data obtained from the machines, which is related to usage and quality change of printings. For that purpose, we have been acquiring patent rights for the system or software that support customers' business and utilizing such data under the terms of contracts with the customers while protecting their important information. With these activities, we have been supporting the provision of customer value which realizes downtime reduction on the customer side and speedy maintenance services*.

* For related information: Digital Workplace Business: Information collection and analysis system for remote maintenance/shttps://research.konicaminolta.com/en/technology/tech_details/pdm/

■ Portfolio Transformation (ii) Business Growth in "Measurement, Inspection, and Diagnosis" Fields

In addition, Konica Minolta has been establishing a reliable source of profit, instead of the Office Business, by expanding to the "measurement, inspection, and diagnosis" fields. As intellectual property activities which accelerate this business expansion, for technologies and products which are the core of our Growth Strategy, we have been building patent barriers with intensive patent applications and then establishing a sustainable genre-top position. In particular, such technologies are, for the Industrial Business, visual inspection technology and behavior detection technology for use with FORXAI; for the Healthcare Business, X-ray dynamic analysis technology; and for the Professional Printing Business, automation technology which is mounted on an automatic quality optimization unit IQ-501*. Due to the development and execution of the intellectual property strategy according to the business portfolio transformation, the ratio of the number of patents for the "measurement, inspection, and diagnosis" fields in our patent portfolio in fiscal 2021 has increased by 1.4 times as compared with that in fiscal 2017 (Fig.

Also, in the "measurement, inspection, and diagnosis" fields as well, we have been pursuing our intellectual property strategy to promote data utilization. In the Healthcare Business, as an example, with a focus on the importance of medical data, we are proactively utilizing such data and adding new value to health care services, and ultimately strengthening continuous business competitiveness. In utilizing the medical data, it is required to comply with various laws and regulations as well as contracts with the third-parties involved in handling the data. In fiscal 2021, in the Healthcare Business, we explored the framework for data

utilization in accordance with the Japanese Next Generation Medical Infrastructure Act and addressed the amended Japanese Act on the Protection of Personal Information. Further, with the contractual strategy for promoting co-creation with partners, we helped the Healthcare Business accelerate such data utilization.

* For related information : Industry Business : Technology https://research.konicaminolta.com/en/technology/industry/

Healthcare Business: Dynamic digital radiography and image analysis technologies https://research.konicaminolta.com/en/technology/tech_details/dynamic_analysis/

Professional Print Business: Real-time printed image analysis technology https://research.konicaminolta.com/en/technology/tech_details/professional_print/

Patents portfolio transformations* *Indexed with FY2017 as 1



Fig. 2 Percentage of patents in the "measurement, inspection, and diagnosis" fields

^{*}Based on publications in Japan