

Intellectual Property that Helps Solve Social Issues

In the context of advancing development of the world economy due to globalization, social issues such as global environmental problems are becoming increasingly diverse and complex, and solving them will require advanced innovation. Konica Minolta is working to create new customer value through constant innovation. We seek to maintain and strengthen our competitive advantage by actively utilizing the technology and intellectual property, such as know-how, obtained in that process, and we also aim to help resolve social issues through focusing on five material issues.

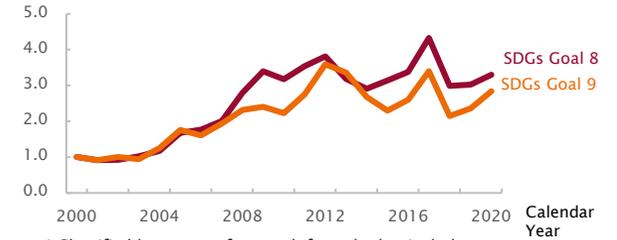
I Konica Minolta Capability to Resolve Social Issues from the Patent Perspective

Konica Minolta actively utilizes intangible assets, including customer engagement, technology, human resources, to resolve various social issues. Part of the intellectual property contained in technology is made public in patent applications. This means that some parts of efforts to resolve social issues can be visualized from patent information that has been disclosed. In light of the 169 target definition statements for the Sustainable Development Goals (SDGs), we have identified our Japanese registered patents associated to each goal of the SDGs. Since the year 2000, the number of such patents has been increasing. Notably, we have been accumulating technologies related to Goal 8 (fulfilling work and economic growth) and Goal 9 (build infrastructure for industry and technical innovation). Out of the Konica Minolta portfolios of patents registered in Japan which were active in 2020, 44% are portfolios of patents that link to SDG targets. Of those, 42% are classified under Goal 8 of the SDGs. The majority of them have to do with usability and automation, which support the resolution of one of the Konica Minolta material issues "improving fulfillment in work and corporate dynamism." These portfolios of patents contribute to maintaining and reinforcing the competitiveness of solutions

offered in the Digital Workplace Business and Professional Print Business. Incorporated into the value creation process, these patent assets become a driving force for business activities centered around Konica Minolta's five material issues and contribute to the resolution of future social issues.

I Measures toward Solutions for Environmental Problems

As part of Konica Minolta's measures to address SDGs in the intellectual property field, we have been acting as a corporate partner in WIPO GREEN since fiscal 2019. WIPO GREEN is a platform operated by the World Intellectual Property Organization (WIPO) of the United Nations to promote active utilization of environmental technology. In fiscal 2020, we registered over 20 additional environmental technology patents. These include a portfolio of patents relating to an all-solid-state alkali metal secondary battery, which is attracting attention as a next-generation technology for improved safety and longer life, and a portfolio of patents relating to a planar heating element with high heating efficiency that realizes a large energy-saving. With these patent portfolios openly available, we will support the creation of green innovation toward solving environmental problems that present urgent issues on a global scale.



* Classified by means of a search formula that includes international patent classifications (IPC) and keywords from the 169 SDG target definition statements.

Fig7. Number of Konica Minolta patents registered in Japan related to SDG Goals 8 and 9 (indexed with 2000 as 1)

Contribution to Solutions for Future Social Issues

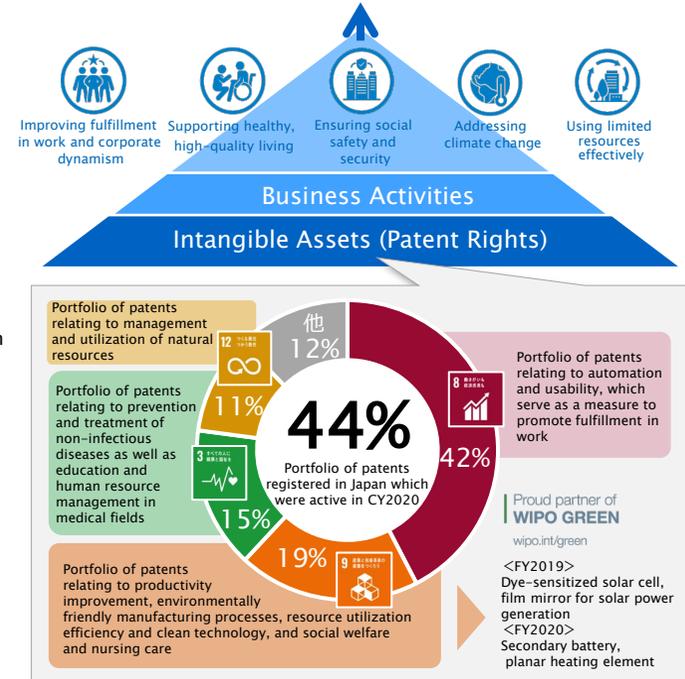


Fig8. SDG 17 goals composition

DX of Operations to Execute Intellectual Property Strategy

Konica Minolta is engaged in business reform through digital technology, leveraging intangible assets such as "imaging" technology. Through this digital transformation (DX), we are transforming our business mainly into high value-added services and working to balance growth as a corporation and solutions to social issues. We are also reforming intellectual property operations and processes with full use of data and digital technology in an effort to establish our competitive advantage in each business department and to ensure our sustained growth.

■ Vision for Promotion of DX

We have set two visions for the DX initiative for intellectual property operations and processes. One is to make our intellectual property strategy more sophisticated and effective.

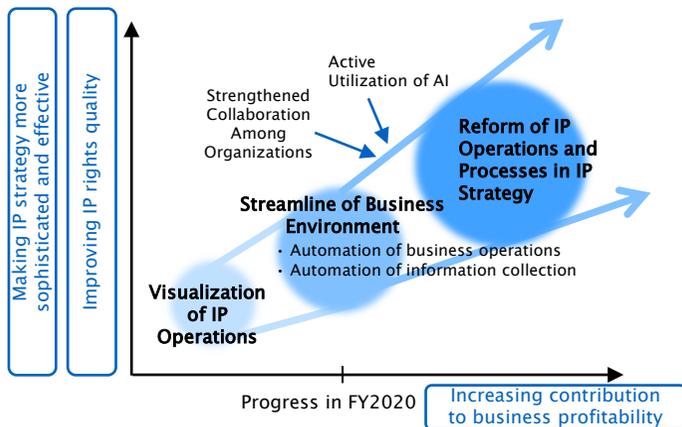


Fig9. DX promotion policy *IP: intellectual property

The other is to improve quality of intellectual property rights. In fiscal 2020, as initiatives to make our intellectual property strategy more sophisticated and effective, the Intellectual Property Division automated its operations, including information collection process, and streamlined business environment. Through these actions, the Intellectual Property Division is accelerating the shift toward high value-added operations (improvement of quality of intellectual property rights, acquisition of rights to important intellectual property, provision of intellectual property solutions) that will contribute to increased business profitability. Knowledge accumulated through measures to promote DX in the Intellectual Property Division is also being deployed and applied to intellectual property-related operations and processes in other divisions.

■ Examples of Initiatives

<Automation of Business Operations>

Robotic process automation (RPA) was introduced to a part of the patent application workflow. This realized a reduction in labor hours of 200 hours or more annually in the operations of the Intellectual Property Division.

<Automation of Information Collection>

In creating an intellectual property strategy that uses the intellectual property landscape to advantage, we need to study and research competing companies and related markets. For this purpose, it is also essential to check into general information, such as new product information and market trends, as well as intellectual property information. As to intellectual property information, we have developed a system for automatically collecting the necessary information with the help of IT tools. When it comes to general information, we have actively utilized RPA for the collection and selection of web information. The RPA has enabled to automatically and timely collect only what is useful from among the vast quantities of information. Having necessary information available in a simple and timely manner allowed us to allocate more resources to create intellectual property strategies which make the most of such information. This has increased the sophistication of intellectual property strategies.

<Heightened Accuracy in Intellectual Property Expense Management>

The matter of intellectual property expenses has for many years faced issues due to the difficulty in managing actual versus forecast results with a high degree of accuracy. Patents and trademarks incur expenses for applications, registrations and maintenances. The difficulties are that we have a large number of patents and trademarks, and they differ in the timing for payment of the expenses. Konica Minolta is therefore actively utilizing the results from statistical analysis of the data on the processes from the application to the expiration of rights. We have developed systems to calculate the intellectual property budget for the fiscal year, and to predict the timing for occurrence of expenses by the quarter. This has improved the accuracy of expense prediction. We have also created a system capable of compiling and confirming expense records in real time. Due to these systems, we have realized highly accurate management of actual versus forecast expenses by the quarter.