



KONICA MINOLTA

Intellectual Property Report 2020



Giving Shape to Ideas

In recent years, the environment surrounding the society has been undergoing rapid changes along with advancement of digital technology, as represented by IoT and artificial intelligence (AI), causing dramatic changes to our lives. To keep up with these changes in the social environment, Konica Minolta has been committed to transforming itself to a company that the society needs and supports, creating new value as “a digital company that provides solutions with insight into implicit challenges.”

Leveraging its technologies to “visualize the invisible” that it has cultivated since its foundation, Konica Minolta has endeavored to provide new value to as many people as possible. This include, in the office business field, visualizing inefficiencies and risks of business processes for small and medium-sized corporate customers; in the digital print field, visualizing environmental load and loss caused by fluctuations in industrial demand; and in the healthcare field, visualizing infectious and other diseases creeping up on people who may look healthy.

Intellectual property activities play an important role to ensure delivery of these values and are undergoing significant changes that are aligned to changes in the social environment and customer values viewed from diverse perspectives. I trust that this Intellectual Property Report 2020 will help you gain a deeper insight into our intellectual property activities.

Tetsuya Matsueda

Konica Minolta, Inc.

Executive Officer

General Manager, Legal Division and Responsible for General Affairs,
Intellectual Property, Compliance and Crisis Management

Direction of Intellectual Property Activities

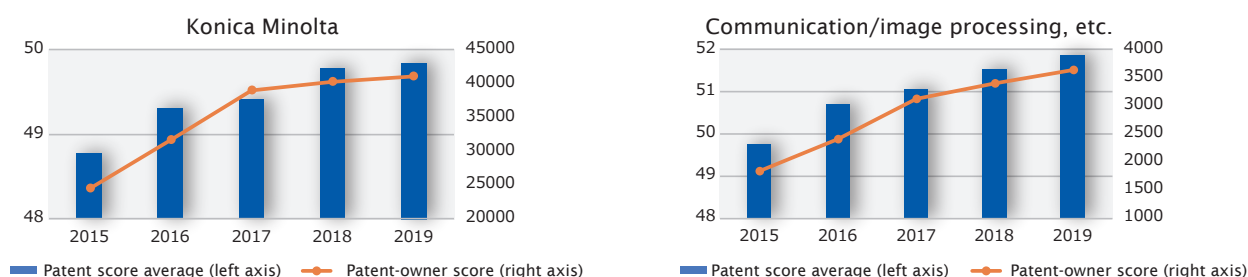
Konica Minolta views intellectual property as an important management resource, and its intellectual property strategy is an essential component of management strategy. The “Intellectual Property Strategy 2017-2022” was put together to set out its medium to long-term intellectual property strategy. This is updated every year according to changes in business and intellectual property environments. Two other plans were formulated, “Strategies and Policies to Improve Intellectual Property Quality” and “Strategies and Policies to Foster Intellectual Property Experts,” in line with which intellectual property activities are put into practice.

Intellectual Property Strategy	Key Points
Intellectual Property Strategy 2017-2022	Evolution of IP capabilities that support a “sustainable, highly profitable business structure” <ul style="list-style-type: none"> · Building a patent network to secure “domain patents” and locking in “differentiation technologies” · Incorporating and using knowhow and data in intellectual property strategy · Strengthening capability in patent information analysis · Improving and strengthening global IP structure · Improving brand value through designs and trademarks
Strategies and Policies to Improve Intellectual Property Quality	Enhancement of patent assets value <ul style="list-style-type: none"> · Quantification of patent asset quality using internal and external evaluations · Implementation of quality improvement policies and fixed point observation using quantification index
Strategies and Policies to Foster Intellectual Property Experts	Fostering IP experts possessing expertise, skills and business sense <ul style="list-style-type: none"> · Thorough learning of basic skills and knowledge · Study program in overseas law schools and overseas posting program · Training programs in technology management and business skills

Implementation of intellectual property strategy as described above has led to steady enhancement of the value of intellectual property that Konica Minolta holds. Activities based on intellectual property strategy have been pushed forward particularly with respect to digital technologies that are the key to medium to long-term growth. In communication and image processing technology, for instance, implementation of quality enhancement activities, aimed at creating intellectual property that leads to customer value, has resulted in consistent increase year after year in the scores indicating the quality of Konica Minolta’s patents, as shown in the chart below.

The value of intellectual property, as assessed by an external evaluation based on rankings published by Patent Result Co., Ltd., indicates that with respect to companies’ capability to prevent other companies from obtaining registered patents, Konica Minolta ranked 4th in the precision machinery sector in the 2019 ranking, having maintained a top 5 position since 2013.

Yearly Change in Patent-Owner Score



* Produced by Konica Minolta using Patent Results Co., Ltd.’s “BizCruncher.” Prepared with data for Japanese patents with application date of April 1, 2010 and later. Patent score average indicates average score of the attention level of individual patents and patent-owner score indicates rating of patent portfolio in their entirety. For both scores, the larger the number, the higher the assessment of the patent asset value.

Top 10 in 2019 Ranking of Companies’ Capability to Prevent Other Companies from Obtaining Registered Patents*¹ in the precision machinery sector

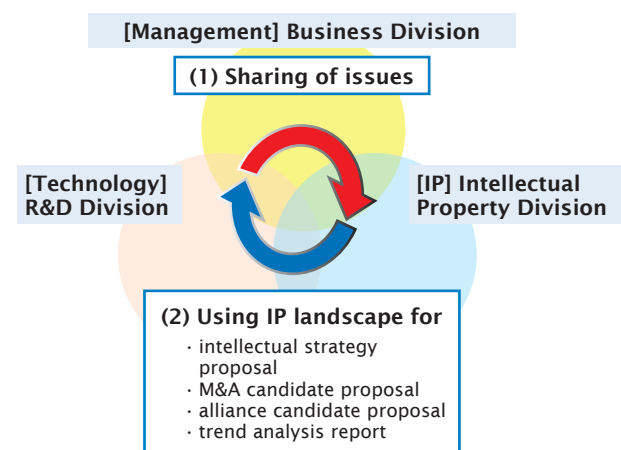
Ranking	Company Name	Number of Patents Cited	Ranking	Company Name	Number of Patents Cited
1	Canon	7,505	6	Olympus	2,541
2	Seiko Epson	4,528	7	Fuji Xerox	2,155
3	Ricoh	4,155	8	Nikon	1,789
4	Konica Minolta	3,595	9	Toppan Printing	1,464
5	Dainippon Printing	2,615	10	Tokyo Electron	851

*¹ For details of “2019 Ranking of Companies’ Capability to Prevent Other Companies from Obtaining Registered Patents,” visit Patent Result Co., Ltd. website: <https://www.patentresult.co.jp/news/2020/07/fcftpcc.html>

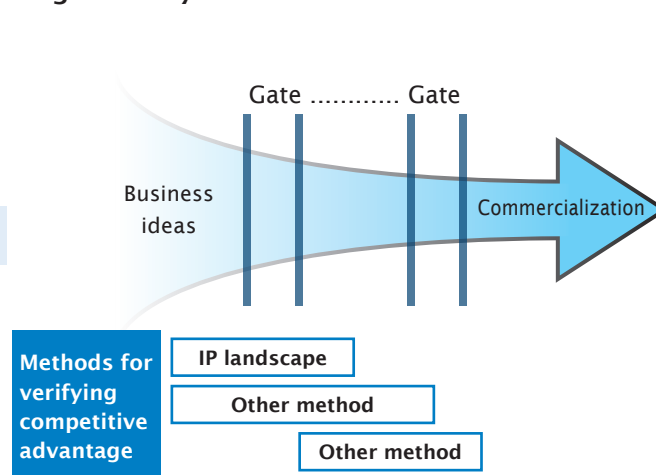
Efforts to Strengthen IP Capabilities

Konica Minolta has proactively introduced and applied “IP landscape” to integrate intellectual property information with market and other information, and analyze this intelligence for making strategic proposals to the management and businesses. Use of IP landscape contributes to the businesses in various ways, in such processes as development of intellectual property strategy and selection of alliance candidates. Going forward, we are aiming to further expand situations where IP landscape can be useful, such as selection of M&A candidates or provision of insight for the development of business scenario. As part of this effort, we have set out to strengthen support for business development by incorporating IP landscape into the Stage Gate System, which is a multistage assessment system in the commercialization process that is adopted as a management tool for new business development. IP landscape serves as one of the recommended methods for verifying competitive advantage (competitor search, barrier to market entry, alliance search, etc.).

Support for Activities of Business and R&D Divisions



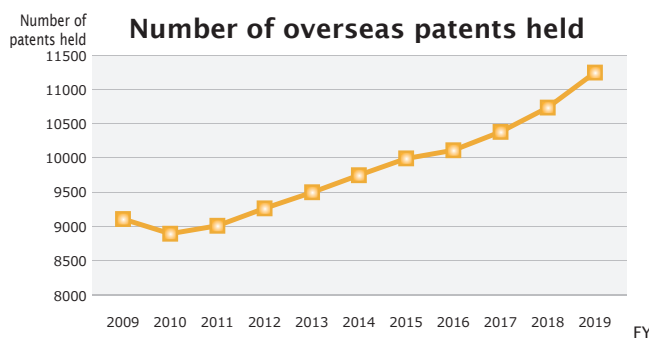
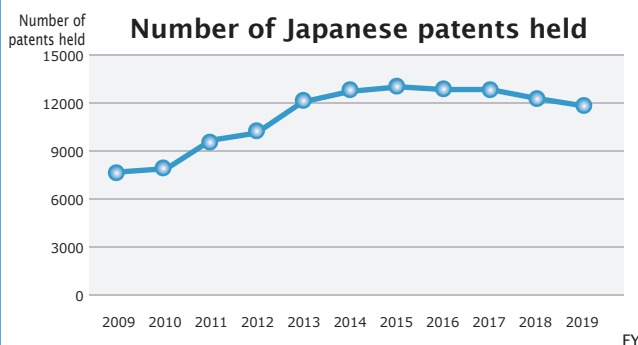
Stage Gate System



For Konica Minolta, whose overseas sales account for 80% of its revenues, acquisition of intellectual property rights in foreign countries is extremely important. With respect to Japanese patents, the number of patents held has been kept at a certain level due to selective patent application and patent portfolio. Meanwhile, the number of overseas patents held has been increasing yearly reflecting efforts to enhance patent portfolio through active filing of applications worldwide, notably in the United States and China, the two strategically important countries in intellectual property.

Numbers of patents held and patents acquired (2019)

	Japan	United States	China
Number of patents held	11,757	6,722	1,974
Number of patents acquired	1,226 <small>(ranked 19th among Japanese companies^{*2})</small>	649 <small>(ranked 24th among Japanese companies^{*3})</small>	323



*2 Ranking for the number of patents acquired is based on data from “Japan Patent Office Annual Report 2020” published by the Japan Patent Office.

*3 Ranking is estimated based on information from Intellectual Property Owners Association (Top 300 Patent Owners).

Examples of Intellectual Property Activities in Specific Businesses

[Professional Print] Konica Minolta launched the “AccurioPress C14000” series as its first heavy production printer (HPP) and the flagship model of color digital printing systems^{*4}.

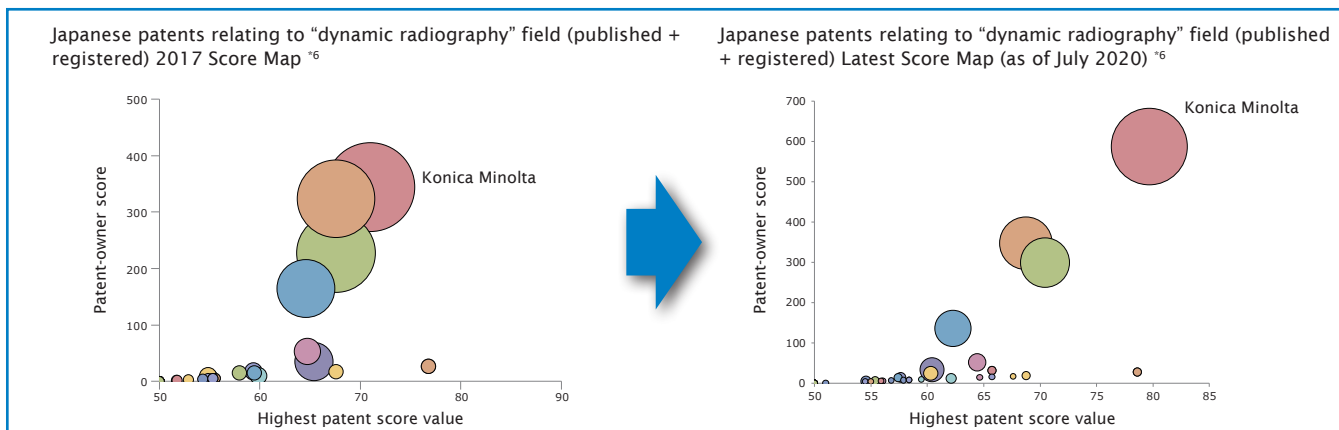
Featuring state-of-the-art technologies such as “inline media sensor system” that uses internal sensor and AI for paper setting to automatically detect paper thickness and type, and “inline trimmer system” (optional unit) that sends printed sheets directly for multiple cutting processes including four-edge trimming, business card and postcard cutting, “AccurioPress C14000” series supports automation of printing processes and offers customers in the printing business added value in the form of labor saving and skill-less operation. In order to protect Konica Minolta’s proprietary technologies applied to realize the value propositions such as those described above, the Development Division and Intellectual Property Division have been working together, from early stages of development, to formulate patent application policy and build patent portfolio strategically. Through these efforts, we have constructed a solid network of patent application around a number of our proprietary technologies including the automatic media recognition technology applied in inline media sensors that uses AI to detect paper profile such as thickness and type, and the trimming technology applied in inline trimmers for high speed and high-precision cutting.



AccurioPress C14000

Inline Media Sensor System

[Healthcare (Dynamic Digital Radiography)] Committed to contributing to the improvement of diagnosis accuracy using X-ray motion images, since late 2018 Konica Minolta has been promoting Dynamic Digital Radiography System^{*5}, which is a system that combines “KINOSIS,” an X-ray motion image analysis workstation, and “AeroDR fine,” a portable-type digital X-ray imaging equipment. With the Dynamic Digital Radiography System, a series of individual images can be continuously displayed and converted to motion images using continuous pulsed x-ray emission. For example, in dynamic chest radiography, actual “movement” can be visualized and quantified. At Konica Minolta, we are working on strengthening our patent portfolio by taking a customer-oriented approach in identifying value drivers and strategically implementing measures to establish patent rights. These include acting quickly to secure patent rights on key technologies. We have also not only increased the number of patents but, as shown in the chart below, also continuously enhanced the quality of patents in this field, which represents the value of the intellectual property, to steadily build up patent portfolio for protecting proprietary technologies that embody our value proposition.



*4 For information on AccurioPress C14000, visit our website:

https://www.konicaminolta.jp/business/products/graphic/ondemand_print/accurio_press/index.html

*5 Shimadzu Corporation’s RADspeed Pro, a diagnostic radiography system, is used for general x-ray imaging.

For information on DR products, visit our website:

<https://www.konicaminolta.jp/healthcare/products/dr/index.html>

*6 Produced by Konica Minolta using Patent Result Co., Ltd.’s “BizCruncher.” The size of the circles indicates the number of patents of each company. The horizontal axis indicates the score of patents with the highest evaluation; the vertical axis indicates the overall score of patent portfolio.

Maintaining and Enhancing Brand Value

Recognizing that the “KONICA MINOLTA” company name and symbols are important intangible assets for strengthening brand competitiveness, we have filed applications for and acquired rights to our trademarks in around 180 countries. We are also actively pushing forward to strategically acquire trademark rights for the names of our products and services in order to maintain and enhance our brand image. As of the end of fiscal 2019, we held approximately 2,700 trademark rights worldwide. Meanwhile, ongoing efforts are being made using trademark rights to clamp down on counterfeit goods to prevent deterioration of brand credibility and image, potential sales losses or other damages.

With respect to product designs, Konica Minolta is committed to creating attractive designs with a view to gaining dominance in market competition, efforts which were rewarded with the Good Design Award 2019 hosted by the Japan Institute of Design Promotion for the four products presented below. Of these four, the new generation MFP, “bizhub i-Series” also won the Red Dot Award: Product Design 2020, a very prestigious award globally, thus receiving praise for the sophisticated design befitting to the new-generation series that will lead the coming era. Design applications are actively filed to protect the designs of our products, and as of the end of fiscal 2019, we held approximately 400 design rights worldwide.

Products that earned the “Good Design Award”

A3 color MFP series
bizhub C360i/C300i/C250i



A4 color MFP series
bizhubC4050i/C3350i/
C3320i/C4000i/C3300i



Spectrophotometer
CM-26dG



Konica Minolta Planetaria Tokyo



* KONICA MINOLTA and KONICA MINOLTA logo are a trademark and a registered trademark of Konica Minolta, Inc.

* bizhub is a registered trademark of Konica Minolta, Inc.

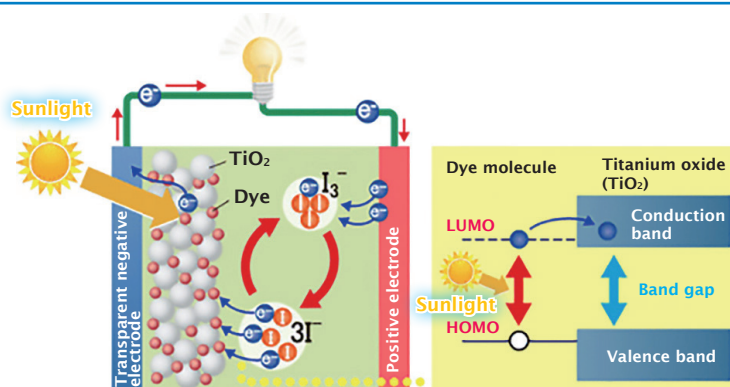
* Planetaria is a registered trademark of Konica Minolta Planetarium Co., Ltd.

Intellectual Property Activities that Contribute to the Society

As part of its SDGs (Sustainable Development Goals) initiatives in the area of intellectual property, Konica Minolta participates as a partner company in “WIPO GREEN”^{*7} (operated by the World Intellectual Property Organization (WIPO) of the United Nations), an international platform for technology exchange that aims to achieve a sustainable society. Konica Minolta has registered two patent portfolio with WIPO GREEN, one related to film mirrors for concentrating solar power generation and another related to dye-sensitized solar cells that can generate power even under low illumination. By releasing patent rights, which are generally considered to be exclusive rights, in specific areas, we seek to contribute to the achievement of SDGs with our internally developed environment-related technologies while exploring optimal use of our intellectual property in the new era.



Film mirrors for concentrating solar power generation



Features and structure of dye-sensitized solar cells

Konica Minolta joined the “OPEN COVID-19 DECLARATION”^{*8} as a founder, the aim of which is to stop the spread of COVID-19. In this declaration, the declarers commit, without seeking any compensation, not to assert for a certain period of time any patents, utility models, designs or copyrights that they own against activities whose purpose is to stop the spread of COVID-19, including diagnosis, prevention, containment and treatment of COVID-19, for a certain period of time. This comes as an addition to the various initiatives Konica Minolta is taking to stop the spread of the COVID-19 pandemic, through support and solutions provided by the various businesses in their respective areas^{*9}. By participating in the Declaration as a founder and promoting it to encourage more companies to join as declarers, Konica Minolta expects to also contribute to an early termination of the spread of COVID-19 in the field of intellectual property.



IP Open Access Declaration Against COVID-19

“Open COVID-19 Declaration” website

<https://www.gckyoto.com/covid19>

Declaration can be made from here.

*7 WIPO GREEN website: www.wipo.int/green

*8 “Open COVID-19 Declaration” website: <https://www.gckyoto.com/covid19>

*9 For information on Konica Minolta’s fight against COVID-19, visit our website: <https://www.konicaminolta.com/jp-ja/covid19/index.html>



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