



KONICA MINOLTA

Intellectual Property Report 2019



Giving Shape to Ideas

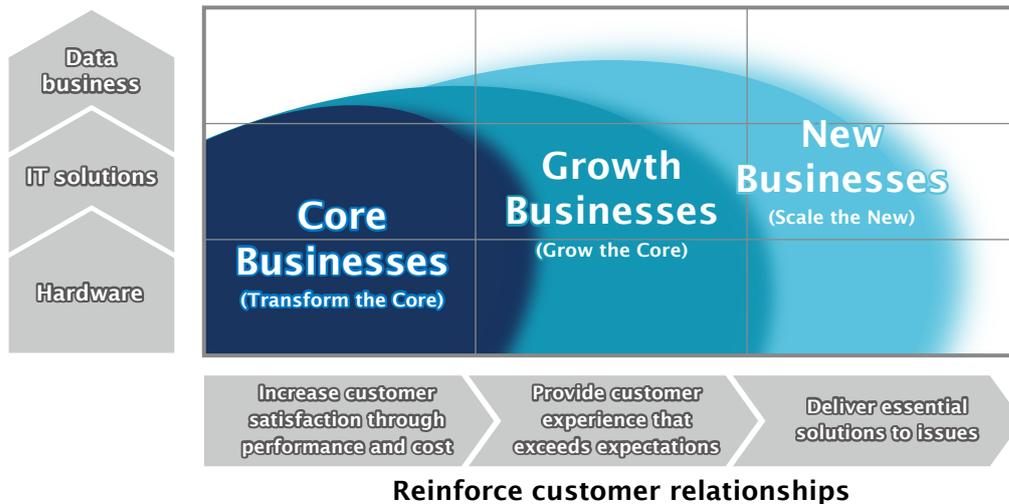
Business Strategy and Technology

Under the Konica Minolta philosophy “The Creation of New Value,” Konica Minolta, Inc. (“Konica Minolta”) is committed to offering new values to customers through its products, services and solutions by evolving the core technologies it has developed that are rooted in its photographic film and camera technologies.

In the Medium Term Business Plan “SHINKA 2019”^{*1}, we are pushing forward with evolution to a platform business powered by data, where existing core technologies are combined with technologies and knowhow that we have actively acquired and strengthened through M&As.

We aim to be a highly profitable company with insight to social issues 10 years in the future and with a high value-added business model creating unique value for sustained growth.

Added value increased by digital



Core Businesses

Business Areas

Office / Production print / Digital medical diagnosis equipment / Color measuring instruments / Materials and components

- Focus on value added products
- Reform of global cost structure
- ROIC management at the business unit level



Office color MFPs



Digital printing systems



Digital radiography equipment



Imaging colorimeter

Growth Businesses

Business Areas

Industrial print / Marketing services / Medical IT services / Visual inspection / Raw materials and new films

- Maximization of the achievements of M&As
- Cultivation of digital customer value and profit expansion



Digital label printer



Medical image information systems



Diagnostic ultrasound systems

New Businesses

Business Areas

Workplace Hub / Status monitoring / Bio-healthcare / BIC's theme for new business development

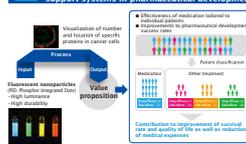
- Establishment of highly profitable business model in the IoT era
- Establishment of a management base

"Workplace Hub" that supports work-style reform



Workplace Hub

NEW Full-scale entry into personalized medicine and support systems in pharmaceutical development



Personalized medicine and support systems in pharmaceutical development



Care support system

*1 For information on the Medium Term Business Plan “SHINKA 2019,” visit our website: https://www.konicaminolta.jp/about/investors/management/midterm_plan_presentations/index.html

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,” which was put together to promote “SHINKA 2019,” is an evolution of the “Productivity Enhancement” initiatives relating to the formation of patent assets and supports the platform business through a comprehensive strategy that incorporates intellectual property other than patents for knowhow, data etc. The Intellectual Property Strategy is established for each of Core, Growth and New Businesses areas according to their respective business environments, and is promoted in coordination with each business.

In addition to “Intellectual Property Strategy 2017-2022”, Konica Minolta has formulated two plans in fiscal 2018, “Strategies and Policies to Improve Intellectual Property Quality” and “Strategies and Policies to Foster Intellectual Property Experts”, as part of its efforts to improve the quality of its intellectual property, foster human resources in charge of intellectual property operation, and strengthen the organization.

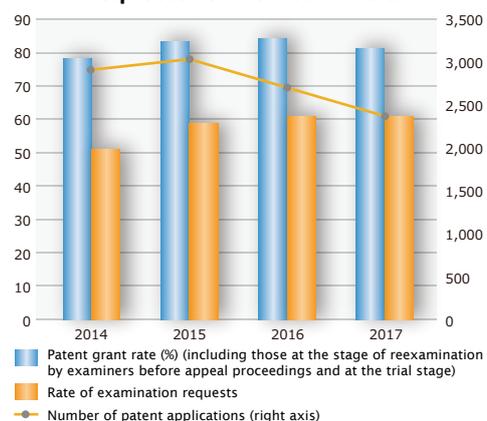
 Intellectual Property Strategy	Key Points
Intellectual Property Strategy 2017-2022	Evolution to IP capabilities that support a “sustainable, highly profitable business structure”. <ul style="list-style-type: none"> · Building a patent network to secure “dominant patents” and locking in “differentiating 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 assets 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 · Studying program in overseas law schools and overseas posting program · Training programs in technology management and business skills

Efforts to Strengthen IP capabilities

Konica Minolta has been working on constructing a high quality patent portfolio with high investment efficiency by being selective in patent applications with focus on outstanding inventions created through technological development, while paying attention to raising and maintaining the rates of examination requests and patent grants^{*2}.

As a result of these ongoing efforts and implementation of “Strategies and Policies to Improve Intellectual Property Quality,” indicators showing the value of Konica Minolta’s patent applications are rising. In the “2018 Ranking of Companies’ Capability to Prevent Other Companies from Obtaining Registered Patents”^{*3} published by Patent Result Co., Ltd., Konica Minolta ranked 4th in the precision machinery sector, having maintained a top-5 position since 2013.

Number of Japanese patent applications, patent grant rate, and rate of examination requests for Konica Minolta



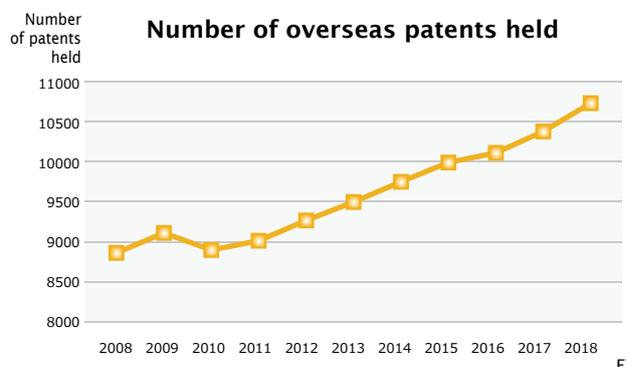
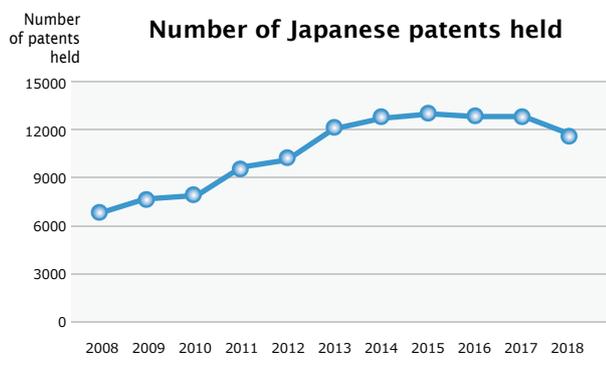
Top-10 in 2018 Ranking of Companies’ Capability to Prevent Other Companies from Obtaining Registered Patents in the precision machinery sector

Ranking	Company Name	Number of patents cited	Ranking	Company Name	Number of patents cited
1	Canon	7,673	6	Dainippon Printing	2,530
2	Seiko Epson	4,813	7	Fuji Xerox	2,243
3	Ricoh	4,281	8	Nikon	1,805
4	Konica Minolta	3,733	9	Toppan Printing	1,477
5	Olympus	2,560	10	Kyocera Document Solutions	791

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 more or less constant level by being selective in patent application and patent portfolio. Meanwhile, the number of overseas patents held has been increasing yearly due to active filing of applications worldwide, notably in the United States and China, to enhance our patent portfolio.

Numbers of patents held and patents acquired (2018)

	Japan	United States	China
Number of patents held	11,678	6,757	1,800
Number of patents acquired	1,183 (ranked 22th among Japanese companies ^{*4})	598 (ranked 21th among Japanese companies ^{*5})	272

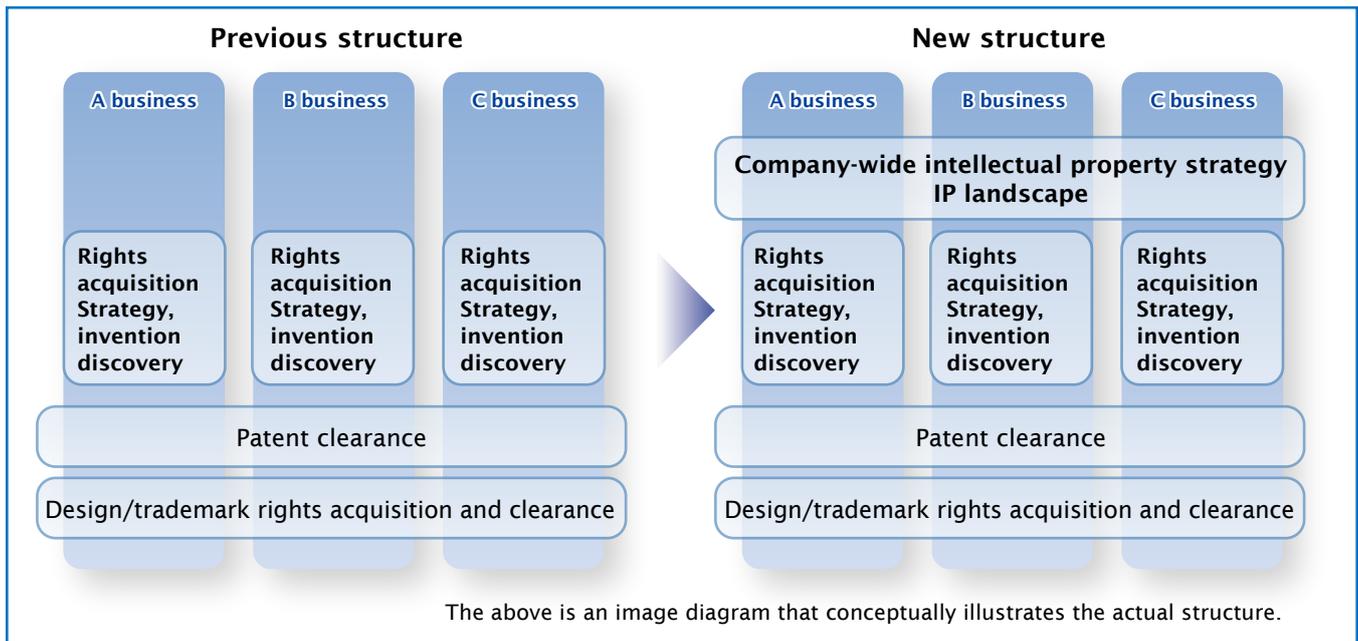


*2 “Patent grant rate” is the number of patent grants at the examination stage, the number of patents granted from reexamination by examiners before appeal proceedings, and the number of patents obtained after filing a request for appeal against an examiner’s decision of refusal (number of appeal requests granted), as a percentage of dispositions made at examination and trial stages for each year.
 *3 For details of “2018 Ranking of Companies’ Capability to Prevent Other Companies from Obtaining Registered Patents,” visit Patent Result Co., Ltd. website: <https://www.patentresult.co.jp/news/2019/06/fcitprec.html>
 *4 Ranking for the number of patents acquired is based on data from “Japan Patent Office Annual Report 2019” published by the Japan Patent Office.
 *5 Ranking is estimated based on information from Intellectual Property Owners Association (Top 300 Patent Owners).

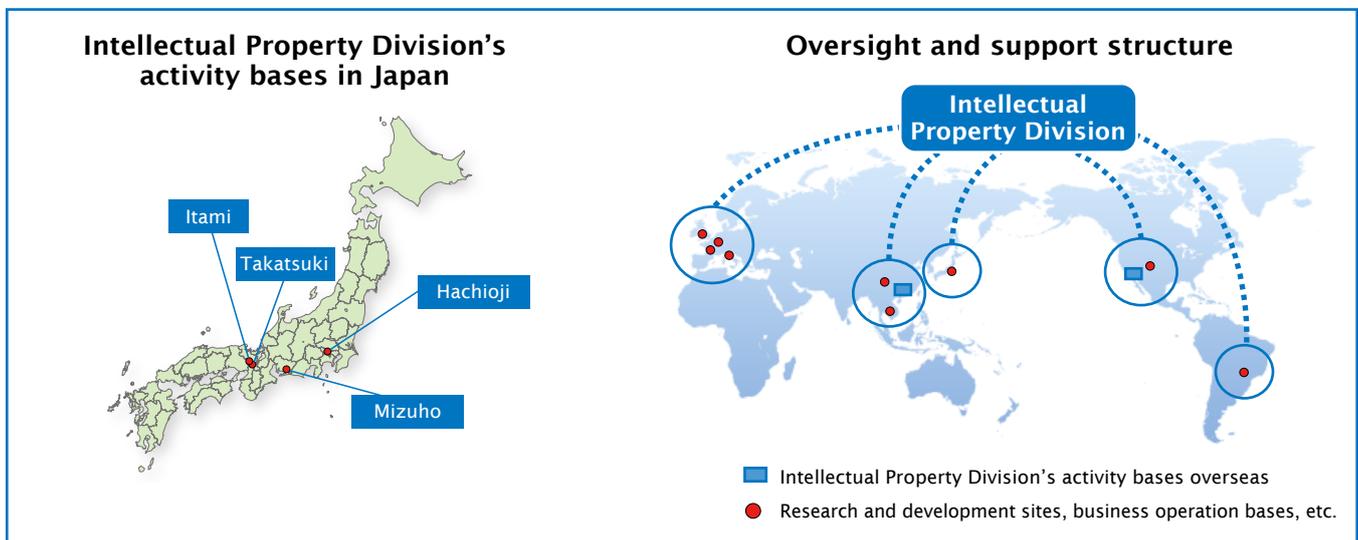
System to Support Intellectual Property Activities

The responsibility for supervision and promotion of intellectual property activities, including invention, discovery, filing of applications, rights acquisition and work related to third-party patents, lies with the Intellectual Property Division, which is a cross-business organization.

We analyze the business environment based on intellectual property and other information, and were one of the first to focus on the importance of the "IP landscape" in proposing strategies for management and business. This has led us to analyze other companies' patent trends and explore their development themes using patent analysis tools. For implementing the policies to strengthen our capabilities in analyzing intellectual property information as set out in "Intellectual Property Strategy 2017-2022," in April 2019 we established an organization dedicated to intellectual property strategy within the Intellectual Property Division. The organization is strengthening strategies that contribute to better business management.



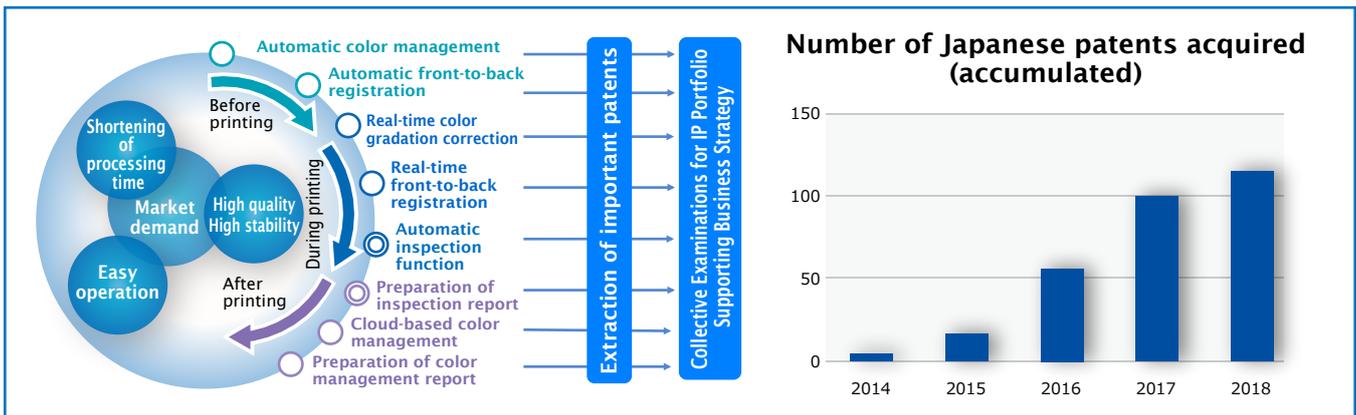
From its bases of operation in Hachioji, Tokyo and several other locations, the Intellectual Property Division is promoting intellectual property activities at the research and development sites through close communication with research and development staffs. The Intellectual Property Division's oversight and support for activities related to intellectual property is provided not only in Japan but also covers research and development sites and bases of business activities overseas. In recent years, as a result of active M&A transactions notably in the New Businesses, the number of overseas subsidiaries has been increasing. In order to augment the promotion of intellectual property operations in these overseas subsidiaries and research and development sites, we are pressing ahead with further enhancement and evolution of our global IP structure.



Examples of intellectual property activities in specific businesses

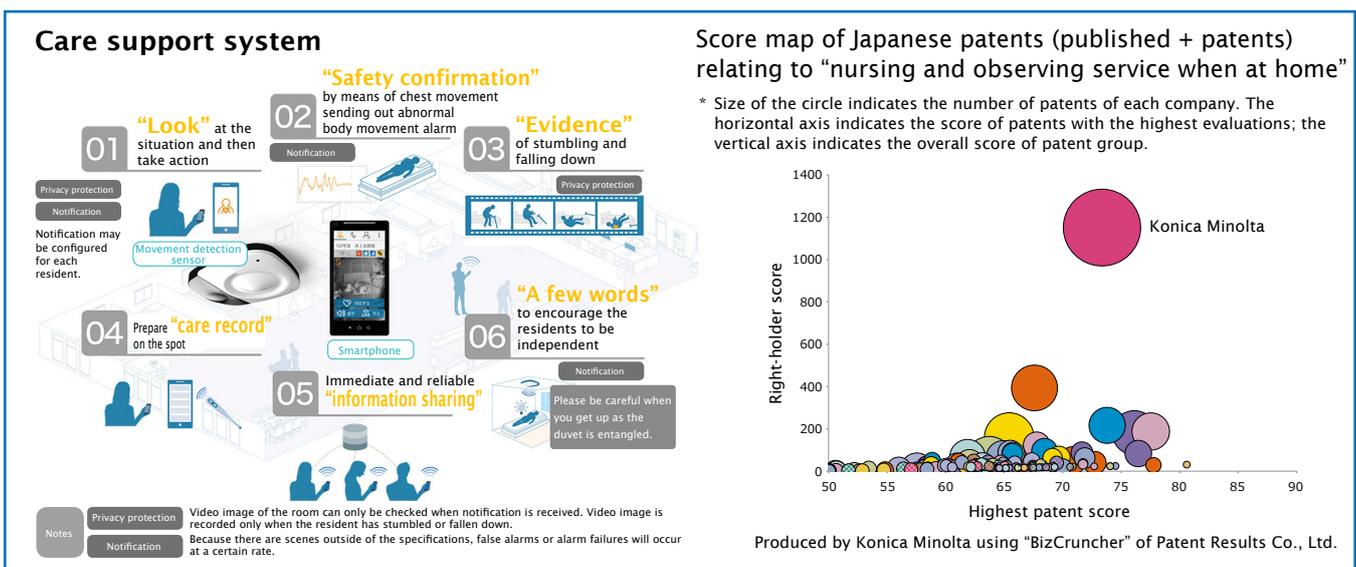
[Production Print]

The Intelligent Quality Optimizer unit IQ-501 (hereafter, IQ-501) for automatically optimizing printing quality, which has been well received since its launch in the summer of 2017, has newly added the automatic product inspection function.⁶ The automatic inspection function automatically detects pages with marks or missing images and ejects them on a specified tray. Together with the recovery printing function, the added value offered by the IQ-501, such as quality printing within shorter job time, is enhanced even further. With respect to Konica Minolta's various proprietary technologies applied to realize the added value as described above, approximately 700 patent applications have been filed worldwide as of the end of fiscal 2018. Particularly in fiscal 2018, prompt and effective acquisition of rights for important applications has been pursued by taking advantage of the "Collective examinations for IP portfolio supporting business strategy"⁷. Through these measures, the Division provides powerful support from the intellectual property aspect to the added value we offer our customers.



[Care support system]

The care support system⁸ is a solution developed to resolve the major social issue of a shortage of caregivers resulting from the increased number of people requiring long-term care in an aging society and decreased working-age population. Built around movement detection sensor and smartphone, the system provides solutions for realizing efficiency in the nursing care business. Improvement in work efficiency helps to ease caregivers' time and mental stress and thereby improve care quality, which could not be achieved with existing devices such as care calls, mat sensors and care record system. Konica Minolta is working on enhancing its patent portfolio by applying for and establishing rights on pioneer patents that protect applications and business models applied to realize this value proposition.



⁶ For technical information on Intelligent Quality Optimizer, visit our website: https://www.konicaminolta.jp/business/products/graphic/ondemand_print/iq-501/index.html

⁷ For details on Collective examinations for IP portfolio supporting business strategy, visit the Japan Patent Office website: https://www.jpo.go.jp/system/patent/shinsa/general/matome_sinsa.html

⁸ For information on care support system, visit our website: <https://www.konicaminolta.com/jp-ja/care-support/service/nursing-home-solution/>

Maintaining and Enhancing Brand Value

Konica Minolta is strongly committed to maintaining and enhancing the Konica Minolta brand by actively filing trademark and design applications. With respect to the company name “KONICA MINOLTA” and symbols, registered trademarks have been acquired in almost all the countries that have trademark systems. As of the end of fiscal 2018, we held approximately 2,700 trademark rights worldwide. In order to prevent damage to our brand, ongoing efforts include using trademark rights of “KONICA MINOLTA” and symbols, in actions such as applying to customs for suspension and reporting vendors of counterfeit products.

Konica Minolta is proactively committed to improving and refining product designs and, as a result of these activities, won the Good Design Award 2018 hosted by the Japan Institute of Design Promotion for the five products and services presented below. Of these, planetarium projector “Cosmo Leap Σ ” was selected for “Good Design Best 100,” which comprises the 100 designs receiving especially high evaluations. The product further received the “Good Design Gold Award” which is selected by the award jury from among the 100 best designs, indicating high recognition of Konica Minolta’s commitment to product design. To protect the designs of these and other products, we continuously file design applications and pursue efforts to acquire property rights in Japan and overseas. As of the end of fiscal 2018, we hold approximately 370 design rights worldwide.

Product that won the Good Design Gold Award

Planetarium projector “Cosmo Leap Σ ”



Products that earned the “Good Design Award”

High-resolution diagnostic ultrasound system
“SONIMAGE MX1 / SNIbLE yb”



Odor visualizing checker
“Kunkun body”



Display color analyzer
“CA-410”



Konica Minolta Planetarium
“TENKU” in TOKYO SKYTREE TOWN



- * KONICA MINOLTA and KONICA MINOLTA logo are the trademark and registered trademark of Konica Minolta, Inc.
- * Cosmo Leap and TENKU are registered trademarks of Konica Minolta Planetarium Co., Ltd.
- * SONIMAGE, SNIbLE and Kunkun body are registered trademarks of Konica Minolta, Inc.



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