

Intellectual Property

Basic Policy

Sumitomo Chemical has traditionally engaged in “defensive” intellectual property activities aimed at protecting its business and securing freedom of operation based on its business strategy. While continuing to value this “defensive” aspect, we are now also advancing “offensive” intellectual property activities, focusing on building a strong patent portfolio that creates competitive advantages and entry barriers against competitors.

On the other hand, addressing societal issues such as reducing environmental impact and preserving biodiversity requires “co-creation and collaboration” among various players, each leveraging their strengths to the fullest. Within this framework, our company is tackling new challenges from the intellectual property perspective, focusing on how to protect and utilize the new value generated through transformation and connect it to sustainable growth.

By actively promoting intellectual property activities that encompass “offense,” “defense,” and “co-creation and collaboration,” we will lay the foundation for our company’s business competitiveness and drive business growth and the enhancement of corporate value.

We promote intellectual property activities under the following basic policy.

Basic Policy

1. Promote activities in line with our business strategies
2. Create global business value
3. Strive to utilize all technological development accomplishments
4. Respect rights and comply with the law

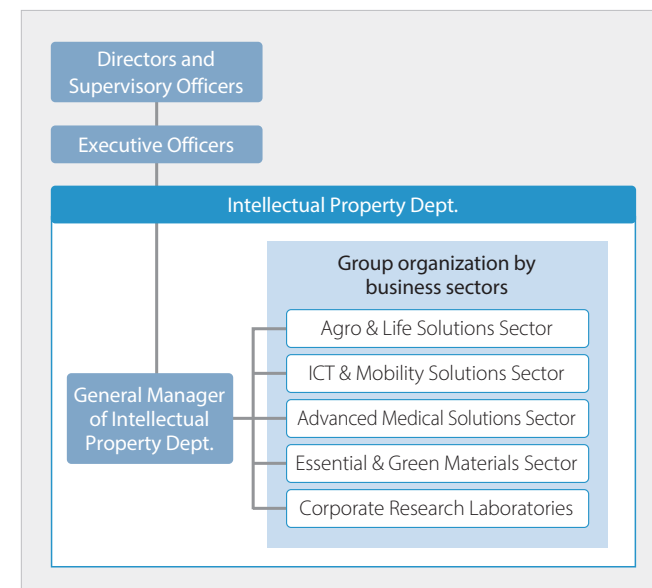
Management System

The Intellectual Property Department, under the direction and supervision of the responsible Directors and Supervisory Officers, is located within the headquarters section and operates from bases in Tokyo, Osaka, and Ehime. To conduct intellectual property activities closely aligned with our business operations, the department is organized into groups corresponding to each business sector. Each group is responsible for formulating intellectual property strategies, managing patent portfolios, handling patent applications and rights acquisition, and conducting research and analysis. These activities are carried out in collaboration with the intellectual property teams within the business divisions and laboratories.

The Company holds dialogues and makes decisions through meetings with divisions and research laboratories in each phase of intellectual property (IP) activities while developing IP consistent with business policies and strategies.

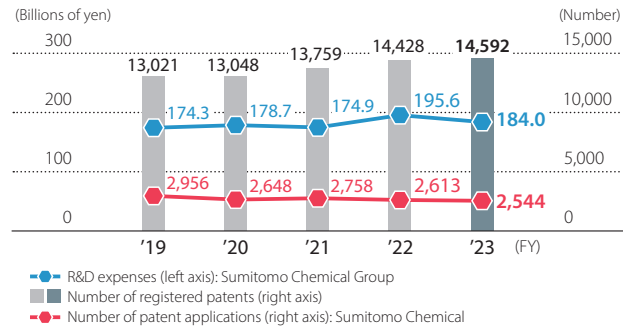
For example, with the participation of the directors in charge and supervisory officers, an IP manager meeting is held every year so that the intellectual property department, business sectors, and research laboratories can discuss planned activities and policies for the year. In addition, each business sector holds IP strategy meetings to discuss and share IP strategies aligned with their businesses. On an individual project level, we conduct IP activities consistent with our business policies and strategies through invention disclosure meetings in which discoveries up for patent are subject to preliminary discussion, overseas patent review meetings in which the pros and cons of applying for patents overseas and in which countries applications said patents should be submitted are discussed, and review meetings in which decisions to maintain or drop patents are made.

Implementation Structure Closer to the Business

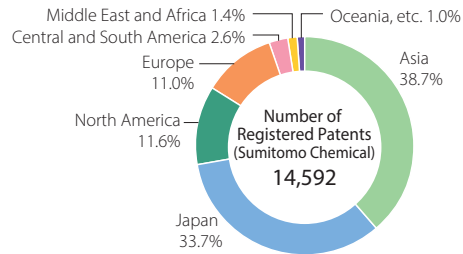


Results

Number of Registered Patents, Number of Patent Applications, and R&D Expenses

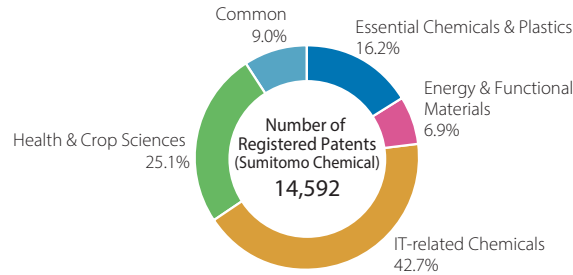


Number and Ratio of Registered Patent by Region



Note: as of April 2024

Number and Ratio of Registered Patents Held by Sector



Note: as of April 2024

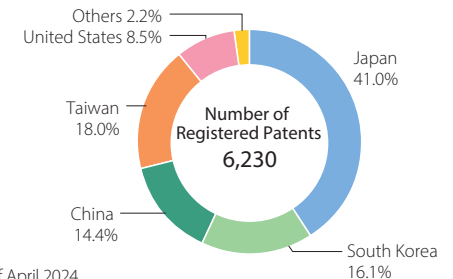
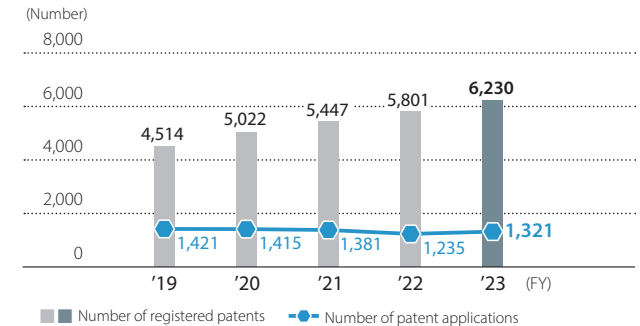
As shown in previous graphs, the Company diligently files patent applications for its accomplishments involving research and development activities based on business strategies. The Company is also building and strengthening its robust patent portfolio in line with its business size.

Examples of Initiatives

Building a Patent Portfolio to Bolster Our Competitive Advantages

While routinely utilizing visualization data related to IP in response to the increasingly global and complex business environment, we have formulated an IP strategy and built a patent portfolio. For example, in the ICT field, which the Company has positioned as growth driver, competition is growing even more intense in terms of IP. In the major manufacturing and sales countries and regions of Japan, South Korea, China, Taiwan, and the United States, we have maintained our competitive advantage by acquiring many high-quality patents that impact rival companies. Because the business cycle is quite fast, we utilize a rapid examination system as appropriate as we strive to swiftly build a patent portfolio in line with the speed of development.

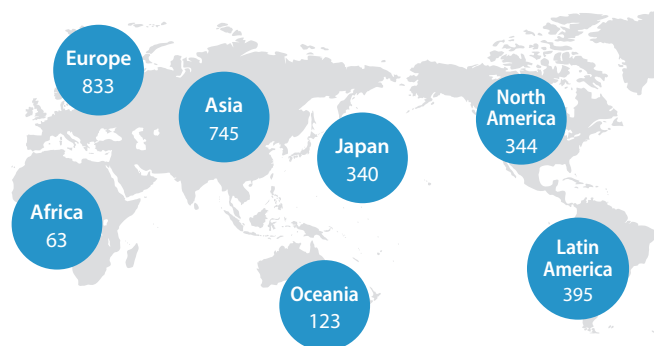
Patent Portfolio in the ICT Sector (Top: Number of Patents Over Time, Bottom: Number and Ratio of Registered Patent by Country/Region)



Note: as of April 2024

In the agriculture field, another of the Company's growth businesses, we have built a patent portfolio in countries around the world, especially in the top agriculture markets of the United States, South America, Asia, and Europe. We have steadily acquired substance patents for active ingredients in crop protection chemicals and placed tough barriers to entry by systematically acquiring patents for peripheral technologies related to formulations, methods, and uses while leveraging our development schedule and product lifespans. By fully utilizing the system for extending patents, we aim to maintain and expand our market share and profit margins, which will help maximize business value.

■ Number of Patents Held in the Agrochemical Sector



Note: as of April 2024


Intellectual Property Activities Contributing to GX/DX/BX

Transformation technologies, which serve as the foundation for value creation, are widely utilized across the supply and value chains. Therefore, we aim for strategic and comprehensive patent acquisition with a focus on co-creation and collaboration. In particular, in BX-related technologies, including regenerative medicine, we have already acquired around 200 patents, establishing a solid foundation for growth. Additionally, in the area of SDGs-related patents, we hold a top-tier patent portfolio among domestic general chemical companies.

Maximizing Business Value by Merging Technologies and Brands

The Company provides highly functional products and technical services that meet customer needs based on the technological prowess we have cultivated throughout our history. Our efforts have garnered us a reputation for a secure, trustworthy, and stable product supply, high quality assurance capability, and stalwart business presence. We have merged our technical capabilities and trustworthiness—two areas of strength—to help sustainably enhance the value our businesses. In addition, we have acquired patents and trademarks with the aim of maximizing business value. For example, regarding the chemical and mechanical recycling of plastics aimed at reducing environmental impact, we have steadily patented basic technologies that broadly protect the value chain and bolstered the brand power of our product lineup by attaching the Meguri® label.

In addition, under the slogan “bringing the power of nature to the world,” we have established a wide range of naturally derived products, including biorationals developed using microbial cultivation technology and botanicals (plant-based ingredients) obtained using extraction technologies. Using the trademarked Natural Products symbol has enhanced brand awareness and helped promote sales.



Chemical/Mechanical Recycling technology for plastic aimed at reducing environmental impact

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Recycled plastic brand Meguri®



Biorational (Microbial Cultivation Technology) and Botanical (Plant Extract Research and Development Technology)

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Naturally derived products Natural Products



Advanced Analytical Technology and Extensive Natural Resources Data

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Japan's first digital platform connecting buyers and sellers of natural materials

▶ **Contribute to Recycling Resources:**
Development of the Meguri® brand 

▶ **Responsibility to Our Customers:**
“Natural Products” Designated Symbol 

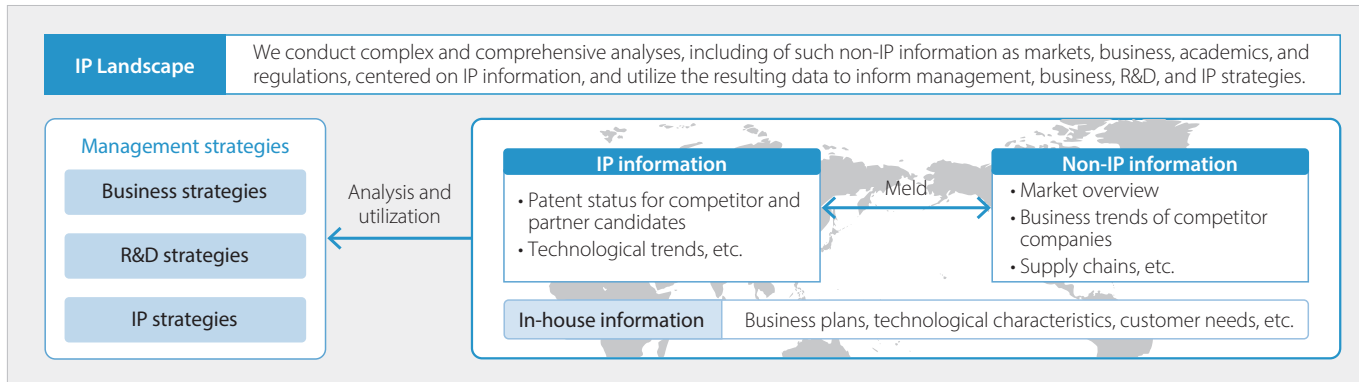
Intellectual Property Activities in “Meguri with Chemical Recycling”

While the plastics business is a mature field, plastics made from recycled materials are a critical growth area from the perspective of carbon neutrality, requiring development with new values and concepts. For example, in the PMMA chemical recycling business, various companies are involved, from resin recovery to the regeneration of resin raw material monomers, re-resinization, and sales. The first step taken by researchers and intellectual property personnel was to take a bird's-eye view of the supply chain, organizing and visualizing the players and technical challenges at each layer. By comprehensively considering not only competitors but also all aspects from upstream (resin recovery) to downstream (use of recycled resin), about 20 patents were obtained, covering a wide range of the supply chain while nurturing the mindset of those involved. Based on these technologies and patents, the “Meguri” branding is also being advanced, leading to applications such as Koizumi Lighting Technology Corporation's use of recycled acrylic materials in lighting fixtures, Star Jewelry Co., Ltd.'s first-ever use of recycled acrylic materials in jewelry in Japan, and collaboration with Lumus Technology on a licensing business.

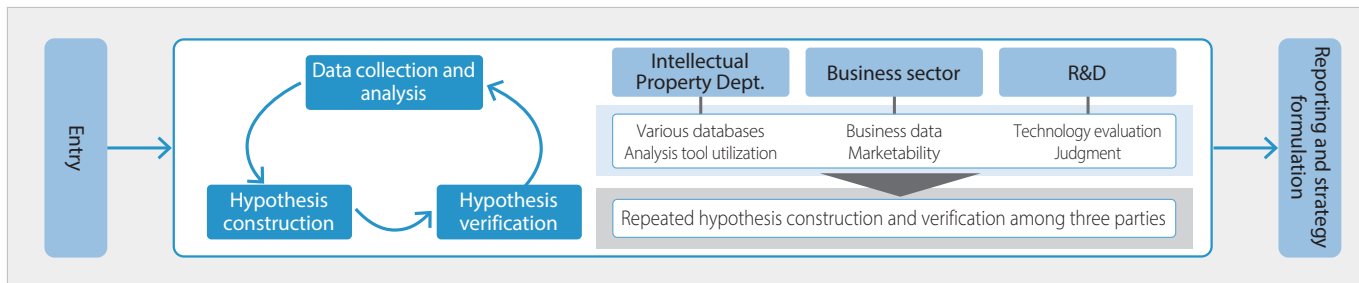
Strengthening IP Intelligence

The Intellectual Property Department, in collaboration with business divisions and research institutes, is promoting activities (IP landscape) that integrate and visualize intellectual property and market analysis to support management and business strategies. Typically, this approach is utilized for assessing the feasibility of new market entries, formulating new development themes, and evaluating the intellectual property of potential M&A partners. Notably, in our area of strength— inorganic membrane separation technology—we have begun to see successful cases where we identified and proposed potential joint research partners and customers by analyzing the supply chain from a patent perspective. This analysis led to the selection of candidate companies and discussions on collaboration within the business divisions. We will continue to actively strengthen these activities moving forward.

■ IP Landscape Activity Outline



■ IP Landscape Process Example



In-House Intellectual Property Training:

Human Resource Development and System Building

At our company, we conduct intellectual property training tailored to different job roles and positions. For example, researchers who have been at the company for a few years receive IP training to gain an overall understanding of the IP system, inventions, discoveries, surveys, application review responses, the importance of IP in business, and other topics. The basic level has about 100 participants per year, and the practical level around 80. As for mid-career professionals, around 50 team leaders receive training every other year focused on drafting and executing IP strategies that support businesses, contracts, disputes, and data utilization. Through this training, we are working to build human resources and systems able to both strategically utilize data in a manner reflective of the IP landscape and execute practical applications.

Revising the Patent Incentive System

—Enhancing Incentives for Inventors

The Company has established a patent incentive system reflective of scale of business impact for patents that protect its businesses. The newly revised system incorporates tiered incentives, ranking patents in terms of contribution to competitive advantages that impact other companies. We have enhanced incentives for inventors and upgraded our system to encourage the strengthening of our patent portfolio.

Sumitomo Chemical Receives Clarivate Top 100 Global Innovators 2024™ Award – Recognized as One of the World’s Top 100 Innovators for the Third Consecutive Year–

Top 100 Global Innovator 2024

Clarivate™

Sumitomo Chemical has received the Clarivate Top 100 Global Innovators 2024™ Award, which is selected by Clarivate, a U.S.-based global leader in providing trusted information and insights to accelerate innovation. This was the third consecutive year we received the award. The Company was lauded for its advanced R&D capabilities and IP activities and will continue further promoting activities.

Sumitomo Chemical Receives Clarivate Top 100 Global Innovators 2024 Award (Japanese only)

<https://www.sumitomo-chem.co.jp/news/detail/20240404.html>