# CTO Message

Representative Executive Officer
Senior Vice President
Industry and Mobility Business Area Owner,
CTO (In charge of Technology Strategies)

**Kunihiko Kaga**

## To Transform into Being a "Circular Digital-Engineering Company"

The Mitsubishi Electric Group is aiming to realize sustainability, mainly through contributing to bringing about a sustainable society by contributing to solving social challenges with our businesses. To do this, we are promoting our transformation into being a "Circular Digital-Engineering Company" that aggregates and analyzes technological information and information from customers in digital spaces and collaborates within the Group to create wisdom and new value to make returns to a wider range of customers and to contribute to solving social challenges together.

In the Business Area (BA) system, we have established a structure in which BA owners enhance businesses across the areas they are responsible for. Our corporate research and development divisions are making speedy management decisions and allocating research and development resources in the most appropriate manner to transform into being a "Circular Digital-Engineering Company," coordinating activities with the respective BA's medium- and long-term strategies.

## Research & Development Strategies

In research and development, we will enhance and advance the core components and systems that we have accumulated over many years, and deepen our fundamental technologies that underpin the functions, performance, quality, and reliability of our equipment, systems and services. We will more smartly digitalize the field knowledge based on customer data and merge it with cutting-edge digital technologies, such as AI that makes uses of deep mathematical and physical insights, and modelling, to increase our strengths as much as possible and to transform into a future-oriented business model. Further, we will develop new technologies to be ready for a game-changed future, creating and providing new value in a timely manner. The Mitsubishi Electric Group plans total research and development costs of 235 billion yen for fiscal 2024 (up 11% year on year) to advance these developments in a balanced manner.

## Advancing Value through the Use of Digital Spaces

In utilizing data aggregated in digital spaces, the "digital twin" is key technology. It brings new value to customers in various scenes of component and system lifecycles (including in the design, development, operation, maintenance, and updating of the actual environment, such as facilities). In facility design, for instance, the placement and movement of the facilities can be accurately reproduced in a digital space with modeling technologies to prevent failures and to shorten the design period. In operations, various data from the job site (the physical space) are used to visualize operations to save energy and for efficient control. In maintenance, the operational status of the equipment is visualized, and its data analyzed to project how it will behave in the future, which enable failure problem-preventing maintenance and optimized updating.

We will aim to create even more advanced value by utilizing data in digital spaces in this way for all Mitsubishi Electric components and systems, expanding it to all the equipment connected to Mitsubishi Electric systems.

## Driving Open Innovation

We cannot solve the increasingly diverse social challenges alone. We will actively promote cross-organizational collaborations with universities and external research and development organizations, including the Mitsubishi Electric and The University of Tokyo Future Design Conference, to verify the vision of the future society and its social implementation, through these co-creations and proposing policies. Through the Open Technology Bank, we have also been providing licenses to various industries and domains so they can use technologies that will contribute to solving social challenges.

We will continue to provide new value through co-creating with different industries.

CTO：Chief Technology Officer

## Intellectual Property Activities

We position standardization and intellectual property activities as tools for front loading activities and co-creations in our businesses. These activities will support our businesses, marketing and sales, and research and development, to help solve social challenges and to create new markets through our businesses. In the standardization activities, we will actively establish rules to expand and acquire global markets. In intellectual property activities, we will enhance not just intellectual properties for equipment, but also for AI and solutions so that we can respond to changes in our business environment, aiming to raise the ratio of filing solution and AI-related patents to over 30% and 13% respectively by fiscal 2026.

We will drive open innovation with our technological and creative prowess to reach the ideal state, creating new value in a timely manner and collaborating with our customers to help solve social challenges.

# Research and Development Strategy

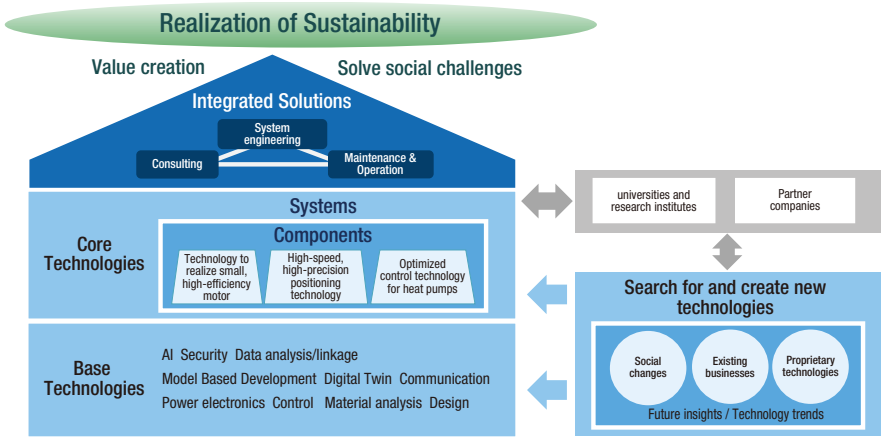
## Basic Policies for Research and Development

The Mitsubishi Electric Group is aiming for sustainability mainly by playing our part in realizing a sustainable society by helping to solve social challenges with our businesses. As a "Circular Digital-Engineering Company," we will drive research and development to provide solutions that incorporate expertise from inside and outside the Group.

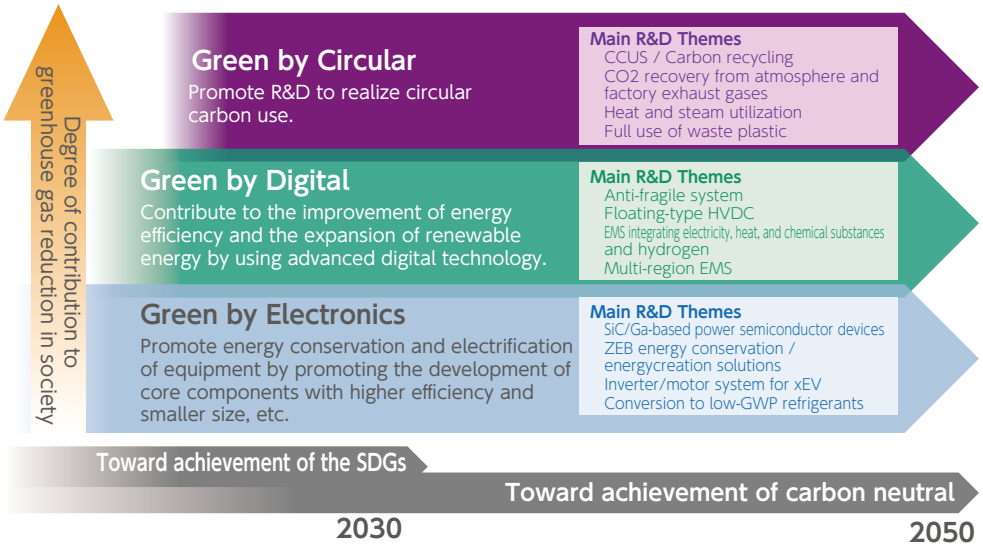
We will enhance core technologies that will generate business competitiveness, and deepen fundamental technologies that support the functions, performance, quality, and reliability of our equipment, systems and services. Further, we will explore and develop new technologies for a game-changed future. The Mitsubishi Electric Group plans total research and development costs of 235 billion yen for fiscal 2024 (up 11% year on year) to promote the development of core technologies, fundamental technologies and new technologies in a balanced manner. We will also actively collaborate with research and development organizations including universities inside and outside of Japan, and partner companies, to accelerate development and create value to play our part in solving the increasingly diverse social challenges.

## Research and Development to Achieve Sustainability

To create and expand businesses that will contribute to society as a whole becoming carbon neutral, we will accelerate research and development in three innovation areas, which are "Green by Electronics," "Green by Digital," and "Green by Circular." In fiscal 2024, we will invest up to about 30% of corporate research and development costs into these areas (up 50% year on year.)




■ Basic policies of Mitsubishi Electric's research and development




CCUS(Carbon dioxide Capture, Utilization and Storage), HVDC(High Voltage Direct Current)
EMS(Energy Management System), ZEB(net Zero Energy Building), GWP(Global Warming Potential)

■ Initiatives for carbon neutrality

In "Green by Electronics," we will promote research and development to make our superior core components, which include power electronics and motors, more efficient and smaller, to contribute to energy conservation and the electrification of FA equipment, air conditioners etc. We will also promote research and development on shifting buildings to ZEB (net zero energy), air conditioning and refrigeration systems with coolants with low global warming potential, and power devices made with new materials.

In "Green by Digital," we will utilize advanced digital technologies to improve energy efficiency and expand the use of renewable energy. We will promote research and development, including by verifying an energy management system (EMS) in Europe, which balances the demand and supply of renewable energy generation, and the power used by air conditioners, heat pumps for boilers, and other equipment. Through these activities, we will contribute to reducing greenhouse gas emissions throughout our value chains.

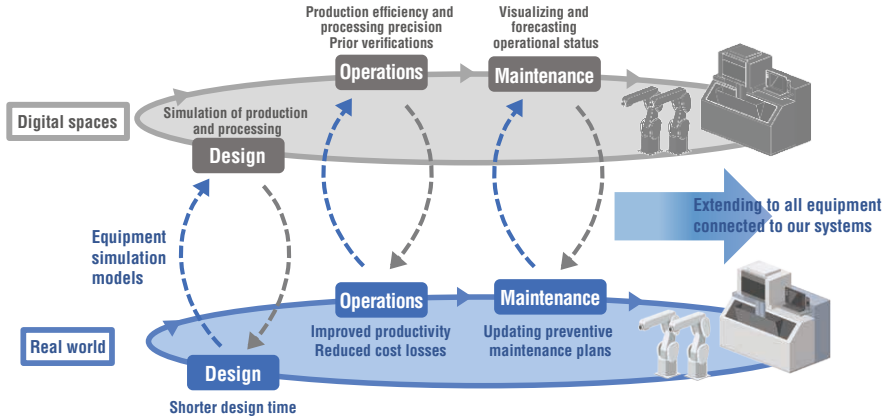
In "Green by Circular," we will promote research and development with a focus on resource recycling, such as Carbon Capture, Usage and Storage (CCUS) and carbon recycling. We will promote research and development on waste plastic recycling, which has been difficult to do as the waste plastic contains compound materials, as well as research and development on how to recycle more plastic not limited to Mitsubishi Electric products, so that these activities will contribute to the circular use of carbon.

## Research and Development to Transform into Being a "Circular Digital-Engineering Company"

We will promote research and development in advanced digital technologies such as data collaboration, AI, and the digital twin, to transform into being a "Circular Digital-Engineering Company" in which we aggregate and analyze technological information and customer data in digital spaces in which the Mitsubishi Electric Group's experts will become connected and bring together their expertise to return new value to customers.

We will also integrate our superior OT (Operational Technology), domain knowledge, security, network design and other technological assets and promote data linkage between the systems of different business domains to create solutions that can help to solve more complex social challenges. Mitsubishi Electric's AI technologies, as represented by "Maisart," will be continuously deepened so that they can be applied not just to equipment and edge computing, but also to the Cloud.

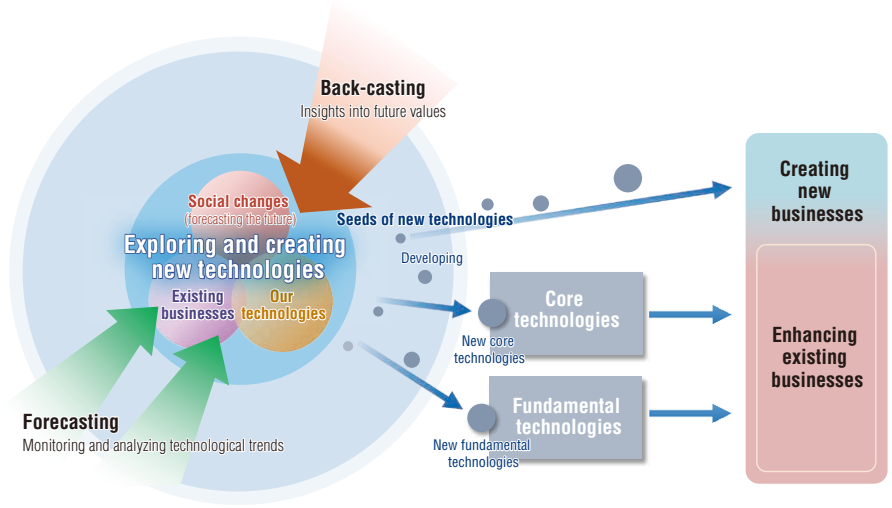
The digital twin brings new value in various scenes of core components and system lifecycles. For instance, when designing factory equipment, we will build the equipment's simulation models in digital spaces to accurately emulate the actual production and processing, so that evaluations can be performed in advance to improve production efficiency and processing precision and to shorten the total designing time. For operations, the use of digital twin simulations will enable optimized production and processing from the start, which will result in greater productivity, such as shorter launch times for production facilities and better yields, as well as reducing cost losses during production and less power use and waste. For maintenance, we will propose problem-preventing maintenance and equipment updates in a timely manner, in which the equipment's operational status is visualized and data analyzed so that its future behavior can be predicted. We will also feed these data swiftly back to the digital spaces to be used for the Mitsubishi Electric systems that customers are using and all other equipment connected to the systems, so that systems will be developed that generate even more advanced value.




■ Digital twin in the factory

## Exploring and Creating New Technologies to be Ready for a Game-Changed Future

In today's ever-more complex and changing society, it is important to keep an eye on uncertain risks and potentials in the future and to be prepared for them. For this, we are taking a back-casting approach to imagine the likely future and to think about the value we should provide, and a forecasting approach to monitor and analyze technological trends and to explore and create research and development themes that will contribute to realizing a sustainable society. We will take on the challenge of developing new technologies that respond to the needs of a future society, and technologies that enhance and transform existing businesses to create new usages and acquire new customers. Also, to maximize the customer value of Mitsubishi Electric products and services, we will advance research and development on the use of quantum computers. Quantum computers are expected to perform simulations of large-scale systems that conventionally have required a long computation time, and compute and solve optimization problems at super high-speeds, deriving the best possible answers under given conditions. We have developed a technology that can derive sufficiently functional inferencing from limited learning data by combining quantum machine learning and classical machine learning for collaborative learning. Going forward, we will continue research and development on the use of quantum computers, including quantum machine learning, aiming to apply our findings to a wide range of industries including FA, air conditioning, building systems, and mobility. We will also develop "photonic crystal laser modules for next-generation laser processing machine" that will save space by realizing super miniaturization, and energy conservation from high efficiency through optical and quantum technologies, as well as explore and create new technologies that will utilize human cognitive characteristics such as "evolutionary remote operation service platforms" to create the work-styles for a new era that are not bound by location or distance.




■ Exploring and creating new technologies

## To Create Value in a Timely Manner through Co-Creation

In fiscal 2023, we collaborated with 127 research and development organizations, such as universities inside and outside of Japan. We will enhance such organizational collaborations to solve the increasingly complex and diverse social challenges, not just through joint research on individual technological development themes, but also by setting comprehensive themes through inter-organizational discussions. Out of the joint research costs for fiscal 2024, we will invest about 20% into such organizational collaborations. At the Mitsubishi Electric Energy & Carbon Management Collaborative Research Center established in the Tokyo Institute of Technology, we are utilizing both parties' strengths to explore and create GX-related technologies, such as energy & carbon management and carbon recycling over environmental value trading for energy, and substances such as power, heat and chemicals, as well as new technologies with insights into future values and technological trend analysis as the starting point.

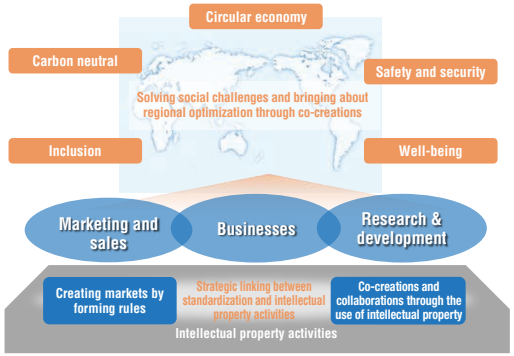
Further, at the Mitsubishi Electric-AIST Human-Centric System Design Cooperative Research Laboratory that we jointly established with the National Institute of Advanced Industrial Science and Technology, we are striving to develop innovative technologies for a "personal well-being society" in which everyone can live a comfortable and healthy life, and to realize a system design that integrates "industry-connecting CPS," aiming for an enriching future beyond innovation.

In the Mitsubishi Electric and The University of Tokyo Future Design Conference we established jointly with the University of Tokyo, we are merging our five challenge domains with the University's research and education activities to discuss the ideal future. We will boldly forecast what kind of a society the various forthcoming events will bring about, consider what we should do now and going forward to bring about the future we want, and summarize the findings as a vision of a future society. The results from this initiative will be released widely through open forums etc., to share them with various stakeholders. We will also promote the verification and social implementation of our vision of a future society by proposing policies and through co-creation. With our technological and creative prowess, we will drive open innovation to achieve the ideal state and create new value in a timely manner.

# Intellectual Property Strategy

## Basic Policy

To help solve social challenges and create new markets through our businesses, we will strategically link our intellectual property activities and standardization activities to form the required rules and to secure competitiveness. By underpinning our businesses, marketing and sales, and research and development with such initiatives, we will aim to transform into being a Circular Digital-Engineering Company that achieves sustainability management.




The structure of contribution through intellectual property activities

### The Mitsubishi Electric Group's intellectual property in numbers

| Number of registered patents in Japan*1 | Number of registered designs in Japan*1 | Number of registered trademarks in Japan*1 | NLargest scale of patent assets in Japan*2 |
|---|---|---|---|
| **Second in Japan** | **Second in Japan** | **Eighth in Japan** | **First in Japan** |
| The power to keep other electronic equipment competitors under control*3 | Number of international patents filed*4 | Number of patents filed in Germany*5 | Number of patents obtained in China*6 |
| **Second in Japan** | **Fourth in the world** | **Top-ranked Japanese company** | **Second-ranked Japanese company** |

*1 As announced by the Japan Patent Office (from January-December 2022 data)
*2 As announced by Patent Result Co., Ltd. (from April 2021-March 2022 data)
*3 As announced by Patent Result Co., Ltd. (from January-December 2022 data)
*4 As announced by the World Intellectual Property Organization (WIPO) (from January-December 2022 data)
*5 As announced by the German Patent and Trademark Office (DPM) (from January-December 2022 data)
*6 As announced by the China National Intellectual Property Administration (CNIPA) (from January-December 2022 data)

## Intellectual Property Activity Policy for Sustainability Management

To achieve sustainability management, solving social challenges with economic rationality is needed, and doing everything by oneself is extremely difficult, and so it requires a framework for co-creation and an ecosystem to be developed and operated so that multiple business operators can mutually and effectively collaborate with one another.

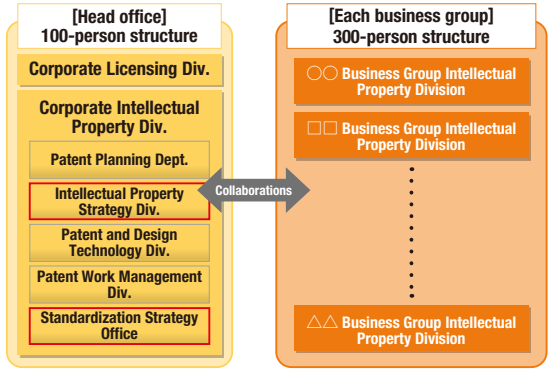
Effective co-creation requires responding to regulations in each country, as well as appropriate standardization and local rules being in place, which is why we believe we need to proactively get involved in establishing these rules. In the ecosystem, intellectual property needs to be secured for the roles of each respective company, and rules must be established to utilize such intellectual property for co-creations.

## Structure to Support Intellectual Property and Standardization and the State of Intellectual Property Activities

Mitsubishi Electric's intellectual property structure consists of the President-directed Intellectual Property Division at the head office, and intellectual property divisions in our works, R&D centers, and affiliates. These intellectual property divisions are collaborating and merging to promote more effective intellectual property activities that are suitable for our businesses.

We established the Intellectual Property Strategy Division in fiscal 2023 and the Standardization Strategy Office in fiscal 2024, and they are conducting more strategic intellectual property activities and standardization activities.

■ Intellectual Property and Standardization: Organization




- Devising Group-wide intellectual property/standardization strategies
- Promoting key projects
- Responding to external institutions, including the Japan Patent Office
- Public relations activities on intellectual property

- Promoting individual strategies based on the Group-wide intellectual property/standardization strategies

### Driving key themes

In response to changes in our business environment, the head office's Intellectual Property Division proposes themes that require Group-wide activities and it takes the initiative in promoting intellectual property activities and standardization activities, together with business groups and affiliates. More specifically, the division selects key themes from social challenge themes, solution themes, technological themes and other themes from various perspectives, evaluating use cases that will result in contributing to solving social challenges and securing the required intellectual property.

#### Key theme examples

| | |
|---|---|
| Social challenge themes | Decarbonization, new normal, mobility |
| Solution themes | Circular economy, security, energy |
| Technological themes | 5G/6G, digital twin, AI |

### Change to the Intellectual Property Portfolio with Management Strategy Taken into Consideration

To transform into being a Circular Digital-Engineering Company, we need to not just enhance digital-related technologies, but also very importantly to maintain and enhance the intellectual properties relating to components and systems of the equipment

that support our businesses. We are developing AI-based solutions and embedding AI into components and systems to raise their value and consider it important to raise the AI ratio. We have set a target of raising the AI ratio in our filed patents to 13% by fiscal 2026.

Our policy is to expand and enhance solution-related intellectual properties on this foundation. We have set a target of raising the ratio of solutions in our filed patents to 30% by fiscal 2026.

**Ratio of solutions-related patents**

| Current | Target for FY2026 |
|---|---|
| 22% | 30% |

**Ratio of AI-related patents**

| Current | Target for FY2026 |
|---|---|
| 11% | 13% |

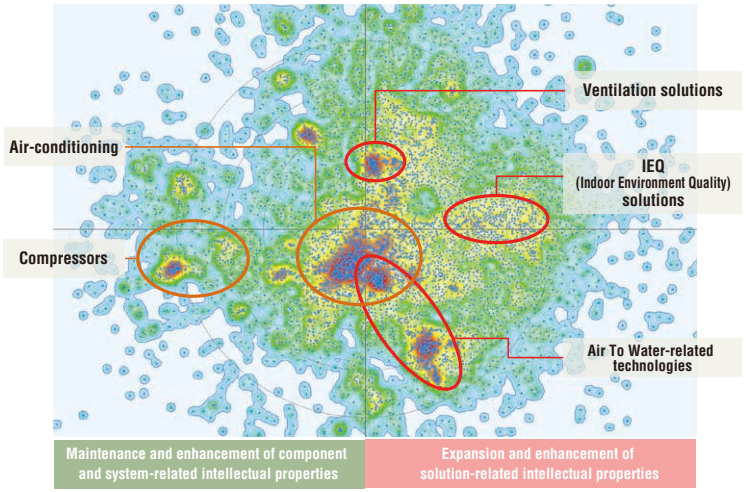
Furthermore, to protect technologies in both function and design perspectives, we have been actively promoting activities to obtain design rights inside and outside of Japan alongside developing a patent network.

Shown below are some examples of Mitsubishi Electric's key growth businesses, in which intellectual-property information is utilized to maintain and enhance intellectual properties for component and system-related technologies, and to enhance and expand information properties for solution-related technologies. The patent diagram below shows technologically similar patents plotted closely to one another to visually explain the filing trends.

## Example: Air-Conditioning and Refrigeration Systems

For component and system-related technologies such as for air conditioners and compressors that Mitsubishi Electric has been enhancing for a long time, the groups are shown on the left and in the middle of the patent diagram, indicating how their intellectual properties have been maintained and enhanced.

**Patents filed (2012-2021)**




■ Air Conditioning and Refrigeration Systems patent diagram (created with VALUENEX Radar)

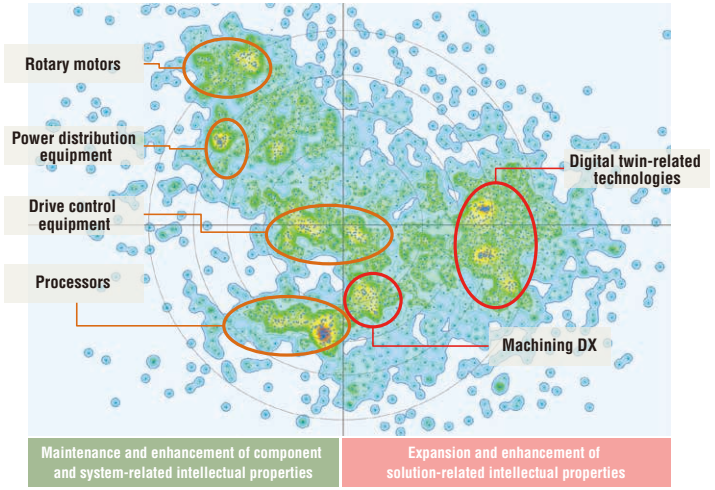
The right hand side of the patent diagram shows how intellectual properties for solution-related technologies have been expanded and enhanced, such as for Air To Water-related technologies (converting the heat source from a combustion type to electrical heat pumps) to contribute to carbon neutrality, IEQ (Indoor Air Quality) solutions for well-being, and ventilation solutions.

## Example: FA Control Systems Business

The left hand side of the patent diagram shows that intellectual properties have been maintained and enhanced for component and system-related technologies that include the FA business' mainstay core components (drive control equipment, processors, rotary motors, and power distribution equipment).

We are realizing next-generation manufacturing by simultaneously providing integrated value from core components and digital technologies. The right hand side of the patent diagram shows that the intellectual properties have been expanded and enhanced for solution-related technologies including digital twin-related technologies and machining DX.

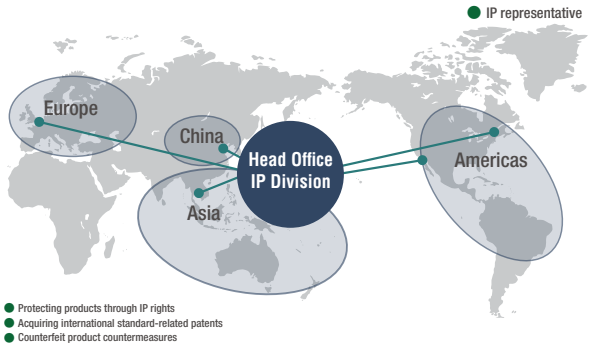
**Patents filed (2012-2021)**




■ FA Control Systems patent diagram (created with VALUENEX Radar)

## Enhancing Intellectual Property and Standardization Strategy Features from a Global Perspective

Mitsubishi Electric assigns intellectual property representative in key countries and regions and enhances local intellectual property strengths in collaboration with the intellectual property divisions of overseas affiliates. We aim to obtain intellectual property rights in the correct proportions on considering the business situations in each country.

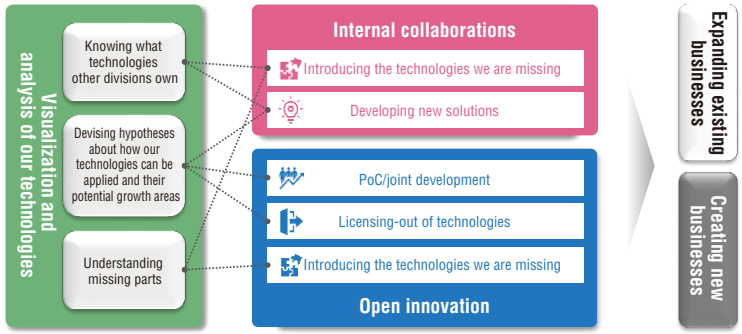



For standardization, we engage in international standardization activities, utilizing European locations. Going forward, we will enhance global standardization activities utilizing Mitsubishi Electric locations not just in Europe, but in other regions as well.

We are aiming to develop what will be globally regarded as a robust patent network by strategically increasing filing overseas. We will also increase the ratio of patents we own overseas in proportion to the increase in overseas revenue.

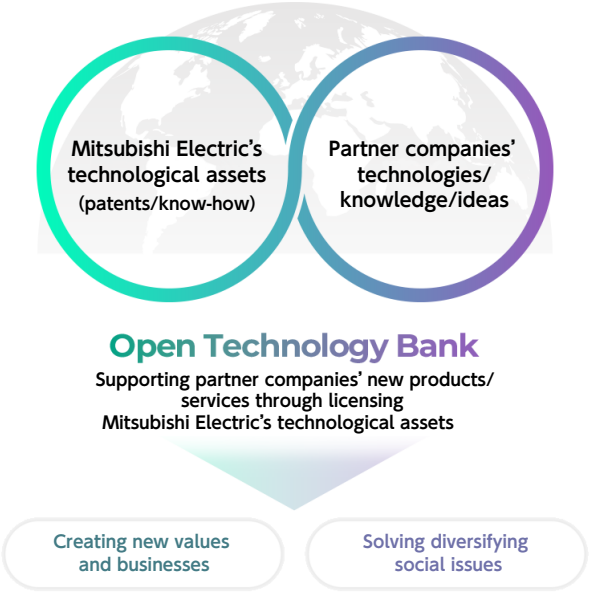
## Open Technology Bank

To realize a sustainable future, in fiscal 2022 Mitsubishi Electric Group started Open Technology Bank activities to promote internal and external collaborations with intellectual property as the starting point. Until then intellectual property had been used mostly for competition with other companies (for monopolies and for exercising rights against other companies), but going forward, we will proactively apply intellectual property as a tool to promote co-creations and as a management resource to form market ecosystems.




## Promoting External Collaborations

To overcome the increasingly diverse and complex social challenges amid faster technological innovation, a co-creating approach is called for that uses open innovation as a method to create new value in a timely manner through collaborations with various stakeholders. In the Open Technology Bank activities, we are striving to create opportunities to collaborate with external partners and maximize business opportunities, capitalizing on the Mitsubishi Electric Group's wide-ranging technological assets ranging from home appliances to space. We devise business model drafts after considering which areas and purposes our technologies can be applied to and approach potential partner companies to ask whether a technological collaboration is possible. We also accept inquiries at our contact website to develop purposes and to explore potential growth areas for our technologies, and we already have a track record of multiple cases of co-creation, including licensing-out of technologies and joint verifications.




### Case study : A co-creating initiative using an advanced plastic filtering technology

To realize a circular society, we are working on plastic recycling that transcends industries by using the advanced plastic filtering technology that our Group has developed over many years for the recycling of home appliances. At present, we are evaluating the efficacy of Mitsubishi Electric's technologies with partner companies from various industries, aiming to start selling advanced plastic filtering devices for plastic recycling and to launch services to provide deployment and operational support for the devices from fiscal 2025 onward.

## Enhancing Collaborations within the Mitsubishi Electric Group

As an integrated electrical manufacturer with businesses in many areas, we have a number of technological assets in a wide range of fields, and this is one of the Mitsubishi Electric Group's strengths. To unlimitedly combine our technologies and expertise to create new impactful value that society needs, we are accelerating the development of integrated solutions across the Group and promoting internal technological collaborations to pursue further technological synergies across divisions. For instance, to promote combinations of technologies, we have internally released a technology map that illustrates as many as 70,000 of the patents we own by category to visualize our technologies, and we are organizing rules and designing incentives for internal technological collaborations. As a Circular Digital-Engineering Company, we will strive to contribute to solving many social challenges by fully utilizing our internal technological assets.

# Enhancing International Standardization Activities

## International Standardization Activities

International standardization is becoming increasingly important as a means to expand and acquire global markets, by forming rules for changing industry structures in which digitalization connects products and services across companies and industries. To secure competitive superiority and to continue to play our part in solving social challenges through our businesses, the Mitsubishi Electric Group will proactively work on shaping rules through international standardization activities.

## International Standardization Strategies

The Mitsubishi Electric Group establishes key projects on cross-business themes and promotes international standardization activities that are united with intellectual property activities, working in coordination with business strategies and development strategies to provide integrated solutions that utilize data to create new value. At the IEC (International Electrotechnical Commission), our members serve important roles in international standardization organizations, including Kazuhiko Tsutsumi serving as Vice-President and Chair of the MSB (Market Strategy Board), Atsushi Miyoshi representing Japan as a member of the BAC (Business Advisory Committee), and Hiroaki Sugiura chairing TC 100/TA 2 (color management), and we are leading global standardization activities and contributing to solving social challenges together with diverse stakeholders. In the field of international standard development, approximately 1,000 members are serving as committee members of various standardization organizations.

## Examples of initiatives

### (1) International standardization to respond to digitalization

As industry structures change with digitalization, communication technologies are being incorporated into all types of products and services. The Mitsubishi Electric Group sees Beyond 5G as a key technology for providing integrated solutions and is driving it as a key project. We participate in the projects of the Beyond 5G Promotion Consortium, the Beyond 5G New Management Strategy Center, the New Energy and Industrial Technology Development Organization (NEDO, a national research and development agency) and the National Institute of Information and Communication Technology (NICT, a national research and development agency), and we are working on international standardization as well as on development and intellectual property.

Also, to digitalize factories and promote smart factories with better productivity from linking data across companies, we have joined the IAF (Industrial Automation Forum) project, proposing SMKL (Smart Manufacturing Kaizen Level) to ISO TC 184 as an international standard indicator to gauge the level of data usage. SMKL can map KPI data collected on decarbonization, displays of carbon consumption, analyses of carbon emissions, and on AI-based carbon emission conservation, thereby contributing to realizing a decarbonized society.

### (2) Taking the initiative in international standardization for power semiconductors

Power devices have been attracting attention as a key device for effective energy utilization and use, and they are one of Mitsubishi Electric's mainstay products. While demand for them is increasing as a key device to realize a decarbonized, all-electrical, and connected society, new materials are also beginning to emerge in the field of power devices, such as SiC, but international standards and authorization systems for them are still insufficient. Such a situation can lead to inferior quality products spreading in the market and adversely impact relationships between manufacturers, users, and the regulating authorities, thereby becoming a factor that disrupts the market's healthy growth. To protect users from inferior quality products and create a power device market that develops healthily, Mitsubishi Electric has taken the initiative in launching an IEC-MSB whitepaper project "Power Semiconductor for an Energy-Wise Society," engaging in international discussions to organize the issues concerning the technologies, markets, international standards, and regulations in this area and to propose how the area should develop. This IEC whitepaper is scheduled to be released at the IEC General Assembly in October 2023.

### (3) International standardization of dynamic signs

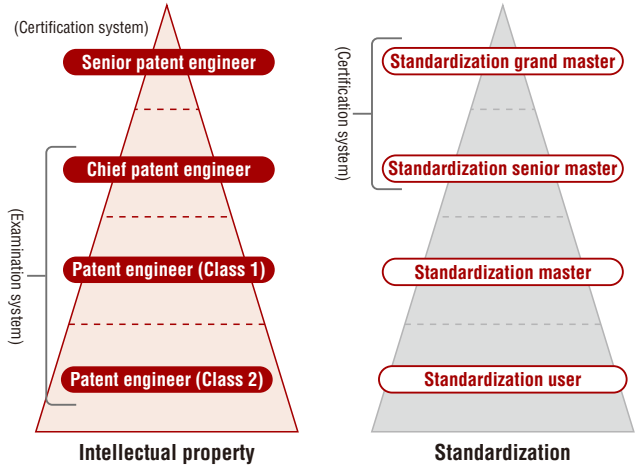
We have conducted technological development on dynamic signs, a technology to display highly visible signs on the floor with optical animation, jointly with the National Institute of Advanced Industrial Science and Technology, a national research and development agency, taking into consideration how the signs will spread due to international

standardization. We proposed international standards to ISO in 2018 concerning this technology, and successfully had it standardized in 2021. The technology and ISO standard has been applied to Mitsubishi Electric Products' "Terasu Guide," which is used to support the smooth transportation of diverse range of facility users, including the elderly, wheelchair users and non-Japanese people. Through our technological developments and international standardization activities, Mitsubishi Electric will contribute to realizing a society in which everyone can enjoy achieving their potential.

## Human Resource Development and Awards System

### Internal Certification System

Mitsubishi Electric has established an internal certification system to encourage personnel to attain outstanding competence in intellectual property and standardization operations, and it provides related training programs. The certification system offers four certifications according to the person's responsibilities, and also corresponding training. We also have a certification system for intellectual property analysts.




### Internal Awarding System

For creative intellectual property activities, we grant incentives to inventors through internal compensation and awards. We also have other systems, such as the President Award, the General Manager Award, and the Center Manager Award, to award inventors for their intellectual property and standardization activities, depending on the content of their activities.

## External Awards

Selected as "Clarivate Top 100 Global Innovator 2023"

Kazuhiko Nakane, Advanced Technology R&D Center, winner of 2023 IEC Activities Promotion Committee of Japan (IEC-APC) Chair Award


Clarivate Top 100 Global Innovator 2023 trophy



IEC Activities Promotion Committee of Japan (IEC-APC) 2023 Chair Award, after the award ceremony

### Respecting Intellectual Property Rights

The Mitsubishi Electric Group firmly recognizes the importance of mutually acknowledging and respecting not only its own intellectual property rights but the intellectual property rights of others as well. This stance is clearly set forth in the Mitsubishi Electric Group Conduct Guidelines and practiced throughout the Group.

In order to prevent any infringement on the intellectual property rights of others, various educational measures are provided mainly to engineers and intellectual property officers, to raise employee awareness and promote greater respect for the intellectual property rights of others. At the same time, a set of rules has been put in place to ensure that a survey of the patent rights of others is carried out at every stage from development to production.

The Mitsubishi Electric Group place particular weight on collaborating with industry organizations while approaching government agencies both in Japan and overseas as a part of a wide range of measures to prevent the counterfeiting of our products.