

INTELLECTUAL PROPERTY

The Mitsubishi Electric Group is vigorously promoting intellectual property ("IP") activities worldwide in support of global business development.

The Mitsubishi Electric Group recognizes its IP as a vital management resource for the development of its business and integrates its business and R&D activities with its IP activities. We own approximately 36,000 patents and file about 9,000 applications every year in Japan and overseas for a portfolio of competitive patents around the world.

Structure of the Intellectual Property Division

Our IP promotion activities are managed at our IP division at headquarters, directly under the president, and through individual IP departments at respective facilities and R&D centers. We have also established the position of IP executive officer.

The headquarters IP division formulates strategies for the entire company, promotes IP focus issues, and handles interactions with the patent office. IP departments at facilities and R&D centers strive to execute individual IP strategies within the scope of the overall strategies of the entire company. We are building an IP network and are working to enhance the effectiveness of IP activities.

Link Business, R&D and IP Activities



IP Strategy

The basic philosophy underlying our IP activities emphasizes enhancing IP capabilities in response to the environment and features of the IP creation cycle. These activities help to further reinforce the competitiveness of Mitsubishi Electric's businesses. The IP division and departments promote strategic IP activities through the designation of IP focus themes for businesses to concentrate on and major R&D projects.

With international standardization becoming an increasingly

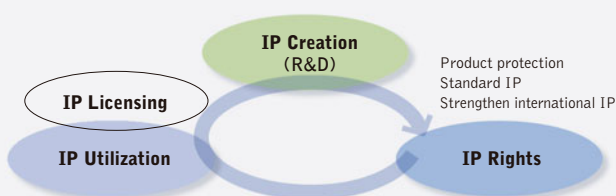
important factor, we are stepping up our activities to obtain certificated patents for standards, aiming for increasing recognition of Mitsubishi Electric technologies as international standards.

In patents related to MPEG*¹, DVD and 3G mobile handset standards, and ARIB*² digital broadcasting standards, Mitsubishi Electric has taken the lead in promoting the establishment and management of patent pool organizations such as MPEG LA, DVD6C, Platform WCDMA and ULDAGE Inc. These IP activities are contributing to the improvement and expansion of business performance.

In response to further business globalization, the acquisition of overseas IP rights is also an important matter. We have therefore dispatched to the U.S., Europe and China IP representatives who work to strengthen IP capabilities and to accelerate our global IP activities.

Preventing infringement on intellectual property rights by other companies is another important aspect of our efforts. We are taking rigorous measures to eradicate counterfeiting by working closely with relevant industry associations and government agencies. We are also working to reinforce in-house measures, such as amending company regulations, designed to manage confidential IP material and prevent the leaking of it.

IP Creation Cycle and IP Activities



External Invention Prize

2007 National Commendation for Invention, held by the Japan Institute of Invention and Innovation (JIII)
The Prize of the Chairman of HATSUMEI KYOKAI (JIII): Environmentally Friendly Air Conditioners and Replacement Technology that Enable Use of Existing Pipes

When aging multiple air conditioner (AC) units in buildings are being replaced with units that use hydrofluorocarbons (HFCs), a new cooling refrigerant containing no ozone-destroying components, the technology removes and recovers lubricating oil contained in the refrigerant pipes while the new AC unit is operating.

Previously, the pipes had to be washed or replaced. The new technology enables reuse of existing pipes, reducing installation time, lowering costs, and contributing to conservation of the environment.

Mitsubishi Electric's Core Technologies and Patents

SEGMENT	FIELD	CORE TECHNOLOGIES/PATENTS/PRODUCTS
Energy and Electric Systems	Power Systems	Power generation systems, Substation systems, Power distribution systems, Insulation technology, Large-current control systems
	Transportation Systems	Vehicle propulsion systems, Rail traffic control technology, In-car data systems
	Elevators/Escalators	Machine-room-less elevators, Variable speed elevators, Finger identification device by penetrated light
	Supervisory Control Systems	Multiple large-screen display technology, Individual authentication technology, Network visual monitoring systems
Industrial Automation Systems	Factory Automation Products and Systems	Sequencer systems, Computerized numerical controllers, AC servos, Inverters, Electrical discharge machines, High-power laser processing equipment
	Measurement and Control Systems	Energy diagnosis technology, Power meters, EcoMonitor
	Automotive Electric & Electronic Products and Car Multimedia Systems	Electric power steering, High-efficiency alternators, High-power starters, Onboard ETC equipment, Car navigation systems
	Information and Communication Systems	Mobile Handsets and Base Stations
Space, Satellite Communication Systems		Satellites, Location Based Service (LBS), Positioning augmentation services (PAS), Posture control technology
Antennas and Radar Devices		Antennas, Microwave and millimeter wave technology, Tracking and signal processing technology
Information Communications Network Systems		Power line communication systems, Home networking technology, Optical access technology, Information security technology
Electronic Devices		Power Devices
	High Frequency and Optical Devices	Semiconductor lasers, MMIC* ³ , Optical transmissions modules
	LCD modules	Display image processing technology, 3-D LCDs
Home Appliances	Air-Conditioning Systems	High-efficiency compressor, High-efficiency heat exchangers
	Solar Power Generation Systems	Solar battery cells, Power conditioners
	Projection TVs	Optical engineering technology, Color management technology, Digital broadcast receiver technology
	DVD Recorders and Players	Disc formatting, Highlight replay technology, Optical disk recording and play technology, MPEG encoding technology

*1 MPEG: Moving Picture Experts Group

** ARIB: Association of Radio Industries and Businesses

** MMIC: Monolithic Microwave Integrated Circuit