

# Conducting Global Intellectual Property Activities and R&D That Support MHI's Business Strategies

## MATERIAL ISSUE 3

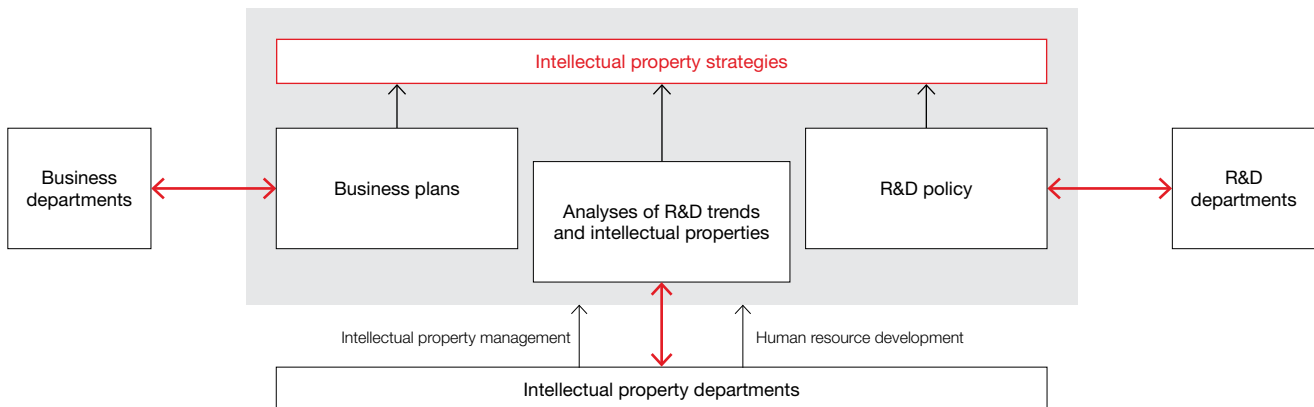
▶ Response to Mega Trends

Manufacturing technologies are the source of value creation for the MHI Group, and intellectual property activities and R&D are the bedrock of its business. Supporting our business strategies for growth, we are promoting the construction of a global system, led by the chief technology officer (CTO), who is the head of technology.

### ▶ An Integrated Approach Linking Businesses, Intellectual Property, and R&D

The MHI Group integrally develops its business, intellectual property, and R&D strategies. The MHI Group defines intellectual property strategies centered on the guiding policies of each business segment, with business, intellectual property, and R&D departments working closely together to implement these

strategies. By having the intellectual property departments coordinate the intellectual property strategies of all business segments, the MHI Group strives to realize the intellectual property strategy of the Group and further enhance its corporate value.



### ▶ Intellectual Property Activity Policy

The 2015 Medium-Term Business Plan, launched in April 2015, sets the objective of MHI becoming a company with a scale of business exceeding ¥5 trillion by fiscal 2017. To achieve this goal, the plan calls for efforts to strengthen the intellectual property structure as a common business strategy by promoting the use of intellectual properties that support an increase in business scale and establishing an intellectual property management system as a global company.

To promote the use of intellectual properties that support an increase in business scale, while pursuing the various collaboration models that will enable us to achieve a business scale

exceeding ¥5 trillion, we will promote collaborative synergies from the aspect of intellectual property. Furthermore, we will position the use of intellectual property as the main thrust of our intellectual property activities, pursuing strategic use of intellectual properties tailored to our business portfolio.

To establish an intellectual property management system as a global company, we will respond to the increasing globalization of the process from invention and creation to the stage of intellectual property management. We will also configure a cooperative Groupwide organization of people involved with intellectual property around the world.

### ▶ Risk Management Related to Intellectual Property

The MHI Group respects the valid intellectual property of others and, at the same time, promotes the appropriate protection and active use of intellectual property.

To accelerate global development, the MHI Group actively pursues overseas M&A and alliance initiatives and builds bases in other countries. Along with the growth in global M&A activities, the external environment and risk factors related to

intellectual property are changing rapidly. Even under these circumstances, when developing its business the MHI Group makes every effort to ensure it respects the intellectual property of others by considering the intellectual property rights of others at every product stage, from basic planning and design to production. In these ways, the MHI Group strives to prevent international intellectual property difficulties from arising.

## ► Research and Development

The MHI Group maintains close ties between its R&D centers and its business domains. This focus enables us to enhance product competitiveness in the Energy & Environment domain and other fields as well as intensify R&D with a view to future business expansion.

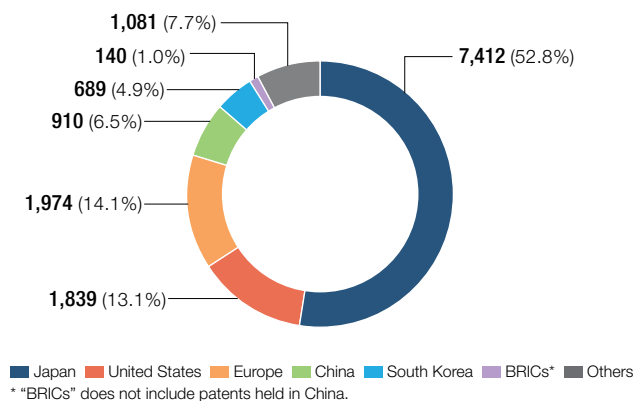
We are working toward the globalization of our R&D structure, and as part of these efforts we are dispatching specialist engineers from five research centers to our bases in the United Kingdom, Singapore, the United States, and China. We are making efforts to secure leading global technologies, information, and human resources, while conducting research and providing technological support that is closely aligned with market needs.

Furthermore, in April 2015 we established a comprehensive Research & Development Center, consolidating five domestic R&D centers. By transitioning toward a system of business domains and strategic business units (SBU) and shifting toward cross-organizational management, MHI anticipates new synergies in technologies and skills, enhanced development of human resources, and greater efficiency in work performance and facility utilization.

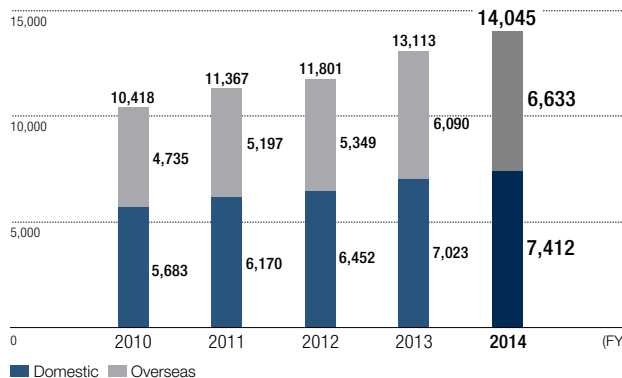
More detailed information on our technology is available for viewing on our website.

 <http://www.mhi-global.com/company/technology/index.html>

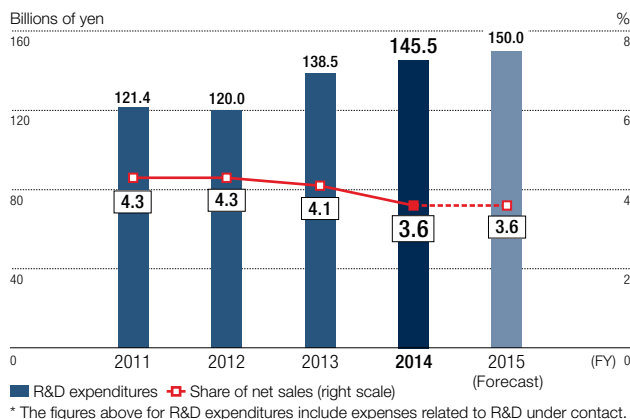
FY2014 Patents by Region



Number of Domestic and Overseas Patents



R&D Expenditures and Share of Net Sales



### TOPICS

#### Thomson Reuters Corporation\* Names MHI among "Top 100 Global Innovators" in 2014

In November 2014, MHI was named one of the world's 100 most innovative companies of 2014 by New York-based Thomson Reuters Corporation for the third consecutive year.

Thomson Reuters annually selects what it considers to be the world's most innovative companies or research institutes based on an analysis of its own patent database. The 100 companies and research institutes honored are recognized as "top global innovators" for the impact of their valuable inventions on the global market, their appropriate protection of intellectual property rights, and the global development that results from their commercialization.

MHI received high marks for its innovations and intellectual property activities, particularly in the categories of patent approval success rate (the percentage of patent applications granted by the Japan Patent Office) and global reach of the patent portfolio.

\* Thomson Reuters is a New York-based global information services company. It was established in 2008 when the Thomson Corporation, a Canadian information services provider, purchased Reuters Group PLC, the British communications giant. Presently, Thomson Reuters has approximately 60,000 employees working in more than 100 countries worldwide.