

## R&D and Intellectual Property

In order to contribute to a ubiquitous networking society and coexistence with the global environment, Matsushita engages in a broad range of R&D activities, including nanotechnologies and other advanced research; digital network software technologies for AV equipment and next-generation mobile communications; component and device technologies such as plasma displays and system LSIs; environmental technologies such as fuel cell cogeneration systems; and various manufacturing technologies.

By coordinating business, technology and intellectual property strategies, the Company works to develop distinct technologies—the source of Matsushita’s competitiveness—and secure intellectual property rights for those technologies to ensure the strength and stability of its businesses. In this way, Matsushita is aiming to drive further growth and become a manufacturing-oriented company.



### R&D Strategy

Matsushita recorded ¥578.1 billion in R&D expenditures in fiscal 2007. This investment was used to strengthen R&D in priority areas including full HD PDPs, Blu-ray disc recorders, the Integrated Platform, High Definition Power Line Communications (HD-PLC), large-capacity lithium-ion batteries, and household fuel cell cogeneration systems.

Matsushita’s R&D activities aim to generate added value by maximizing synergies in a wide range of business fields. Matsushita promotes a high level of cooperation, not only

through in-house production, but also through a sophisticated network of cooperation between materials, components and devices, and finished product divisions. For example, in full HD plasma TVs, this approach helped Matsushita to successfully develop large-screen models, from the world’s largest at 103 inches to 50-inch models, which boast sharp, detailed picture quality.

Matsushita has also promoted a platform strategy to link an array of different product categories. With the creation of its Integrated Platform, the Company has been able to combine and utilize software and hardware assets across digital consumer product lines to enhance the efficiency of software development and boost design quality. In fiscal 2007, the Integrated Platform was incorporated into plasma TVs, BD recorders, SD Memory Card camcorders, and mobile phones compatible with “one-segment” terrestrial digital TV broadcasts.

Aiming to realize more comfortable living for customers, Matsushita also focuses its R&D efforts on developing products that are easier to use. Through research into universal design that makes highly-functional consumer products more user-friendly, the Company has developed refrigerators with top-unit compressors that are easier to fill and unload, and a new function called the VIERA Link. Meanwhile, research that seeks to better understand human physical and sensory characteristics has aided the development of nanoe hair dryers and full-body mist showers.

At the same time, the Company aims to efficiently use technology resources by prioritizing R&D projects based on a medium- to long-term vision. Matsushita actively uses external R&D resources as part of its strategy. One approach is collaborative efforts with academic institutions, illustrated by Matsushita’s support for advanced joint innovation centers at the University of Tokyo and Osaka University.

Matsushita will maintain its focus on a number of key R&D areas in fiscal 2008: higher-resolution PDPs that use

less electricity; network-compatible digital TVs and other networkable products; next-generation mobile phones; fuel cell cogeneration systems that contribute to environmental preservation; healthcare infrastructure and products for the home; and robots designed to provide support in everyday situations.

During the course of the GP3 plan, the three years from fiscal 2008 to fiscal 2010, Matsushita plans to invest ¥1.8 trillion in R&D, centered on advanced priority themes and key devices such as semiconductors. Matsushita aims to further enhance R&D to support its sustainable growth.

### Intellectual Property Strategy

Because the results of Matsushita's R&D initiatives are evaluated in the form of intellectual property rights, they represent valuable management assets that will generate earnings in the future. The Company places a high priority on these intellectual property rights, which help to secure and maintain Matsushita's competitive edge in a wide range of businesses. For this reason, Matsushita is pursuing an intellectual property strategy that will consistently contribute to improved business results by securing high-quality intellectual property rights and effectively utilizing them as a management resource.

Matsushita maintained its No. 1 patent application position in Japan in 2006. The Company actively applied for international patents under the Patent Cooperation Treaty (PCT) to support the development of its business worldwide. As a result, Matsushita ranked high in terms of overseas patent applications. The Company also effectively utilized its previously patented assets in a variety of ways—including protecting proprietary technologies distinct from competitors' products and acquiring technologies from external groups in cross-licensing agreements—in order to reinforce competitiveness. Moreover, Matsushita took steps to enhance the efficiency of its patent asset portfolio by assessing the usability of patents in its portfolio and abandoning unused patents.

In addition to using patents, Matsushita also comprehensively utilizes a vast portfolio of designs and trademarks to secure and maintain its competitive edge. Accordingly, the Company actively pursues the global patenting of designs and the registration of trademarks, and has enhanced initiatives to prevent counterfeiting. In China in particular, where around 70% of the world's imitation products are made, Matsushita has accelerated local initiatives to eliminate counterfeit products.

## Matsushita Develops 103-inch Full HD Plasma TV—the World's Largest\*



**Shinji Masuda**  
Leader, Development Team for 103-inch  
VIERA Plasma TV Panels

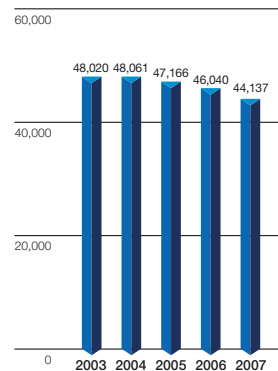
"To develop the new 103-inch panels we pursued improvements not just in size, but also in picture quality. This could not be realized with our existing technologies, so all departments involved in the project were required to raise themselves to a higher level in

the same period. Each department had to overcome major hurdles in areas ranging from materials selection and panel development, to product design, production equipment and manufacturing processes. Everyone worked passionately to overcome these challenges, motivated by the goal of creating the world's largest plasma display panel. Our hard work paid off with the development of a panel as large as a semidouble bed comprising around 6 million illuminant cells and micron-level control that realizes uniform light discharge. We plan to use the high-precision technology created for the 103-inch plasma TV in the development of panels in other sizes to achieve further improvements in picture quality across our entire range of plasma TVs.

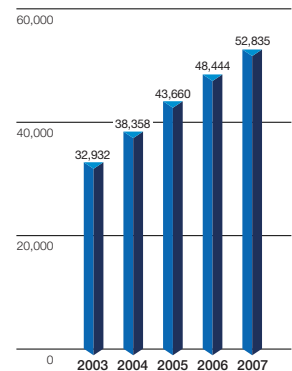
\* As of July 19, 2007; Matsushita research

### Global Patents Held

Number of patents held in Japan



Number of patents held overseas



Note: Each graph depicts the number of patents held by Matsushita and its principal subsidiaries (excluding MEW, PanaHome and JVC) as of March 31 for each year.

Going forward, the Company's intellectual property strategy must achieve the dual goals of securing quality intellectual property assets more efficiently and realizing an even higher level of intellectual property management to utilize these assets directly in business strategies. Based on these perspectives, in fiscal 2008, Matsushita will further intensify efforts to enhance earnings by actively securing patent, design and trademark rights on a global basis, while improving the quality and promoting the strategic use of intellectual property rights.