

V. Intellectual Property

1. Intellectual property rights

1.1. Basic policy in IP strategy

1.1.1. IP Group mission

The Intellectual Property Group aims to enhance corporate value based on the “creating intellectual property (IP) value.” Towards this goal, Hitachi is striving to increase IP value through “build a world-class patent portfolio” and “strategic IP use.”

1.1.2. Increasing IP value and patent exploitation contribution

Hitachi uses “IP value” and the “patent exploitation contribution” as an internal management indicator to assess patent activities. “IP value” assesses the current value of intellectual assets. By observing this index, it is possible to obtain a firm grasp of IP activities in each business sector and thereby improve performance.

The “patent exploitation contribution” assesses the contribution to business generated by the patent. In particular, it quantifies the effect of patent royalty income, cross-licensing, increased orders, and internal implementation. The “patent exploitation index” divides the “patent exploitation contribution” by IP-related expenditures to assess the patent contribution in relation to the amount of investment.

1.1.3. Strengthening global patent strategy

To promote the spread of new technologies and the expansion of markets, the Hitachi Group engages in international standardization activities. In addition to existing forums, Hitachi initiates the launch of new standards forums.

Within the Group, Hitachi promotes activities to strengthen IP capability. In 2006, Hitachi established the “Hitachi Group Patent Pool” for unified management related to (a) the invention-creation of Group-wide technologies, (b) patent applications, and (c) patent exploitation.

Going forward, Hitachi will expand these activities as Group management focuses on high profitability.

The Hitachi Group is currently making every effort to globalize its IP exploitation strategy. In particular, Hitachi is expanding patent exploitation activities beyond Japan, the U.S., Europe, and Korea to China and India.

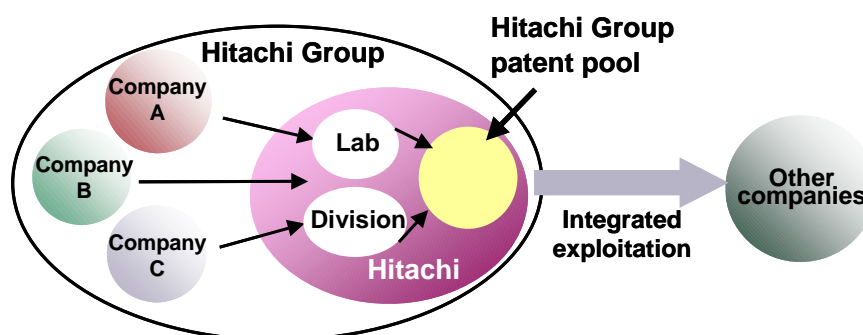


Figure 5.1 Hitachi Group Patent Pool

1.2. Patent strategy

1.2.1. Building an internationally competitive patent portfolio

To support the globalization of Group businesses, Hitachi is making every effort to increase the number of overseas patent applications. Globalizing patent applications is a Group IP objective as Hitachi approaches its centennial in 2010. To achieve this objective, Hitachi is increasing patent application activities overseas. In particular, by 2010 the number of overseas applications of the Hitachi Group will surpass domestic applications. Each business that focuses on overseas markets will also intensify its overseas patent application activities.

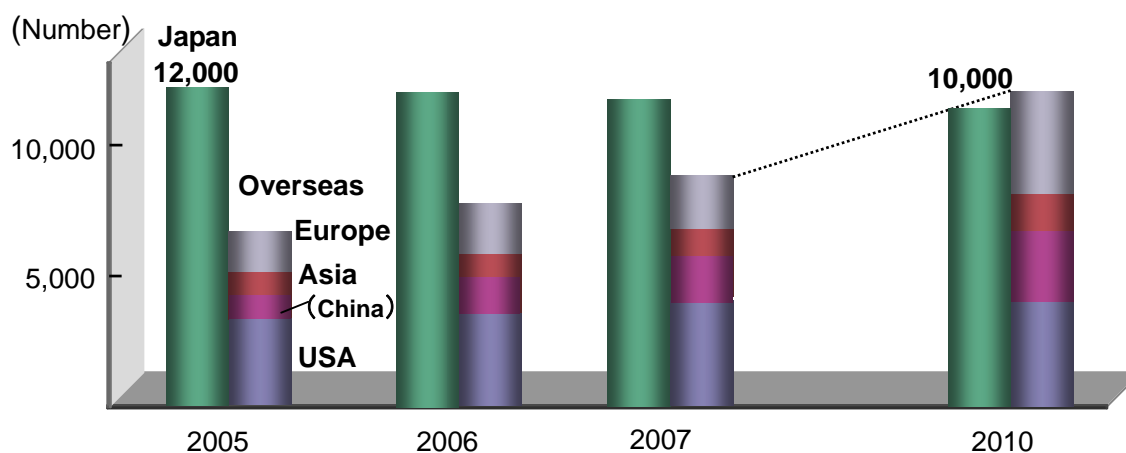


Figure 5.2 Hitachi Group Domestic/Overseas Patent Applications

1.2.2. Patent portfolio

The Hitachi Group is keeping pace with its rivals in U.S. patent registrations. As a Group, Hitachi placed third in registrations in 2006 (See Fig. 5.3*). Hitachi expects to gain the top rank in the near future. Figure 5.1* and 5.4* show 2006 results for the Hitachi Group in number of (a) laid-open patents in Japan, (b) US patent registrations, (c) patents held in Japan, and (d) patents held in the U.S..

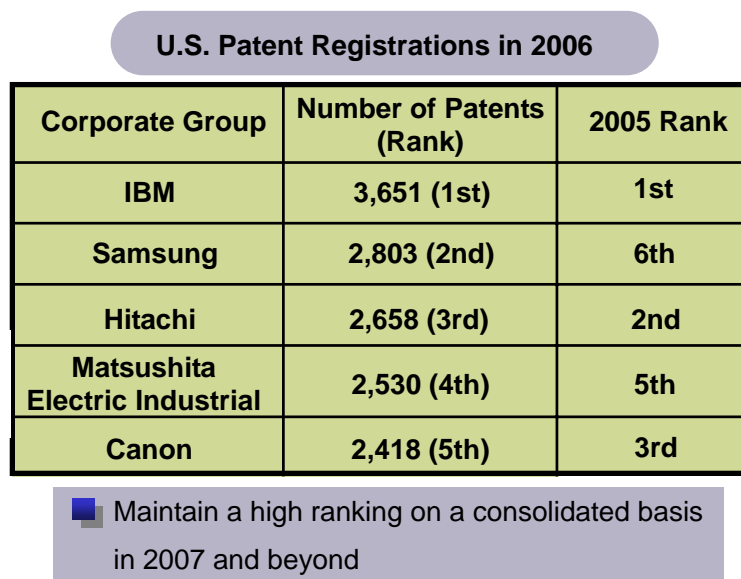
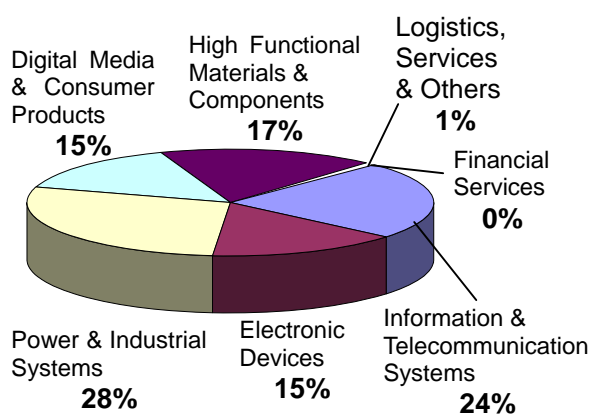


Figure 5.3 US Patent Registrations (2006)

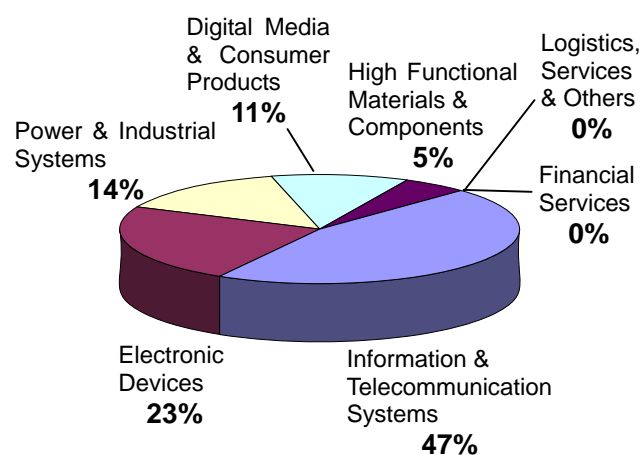
* Search system: IFIPAT/Questel-ORBIT (Prepared by IFI-CLAIMS) and MicroPatent

Table 5.1 Patent Portfolio

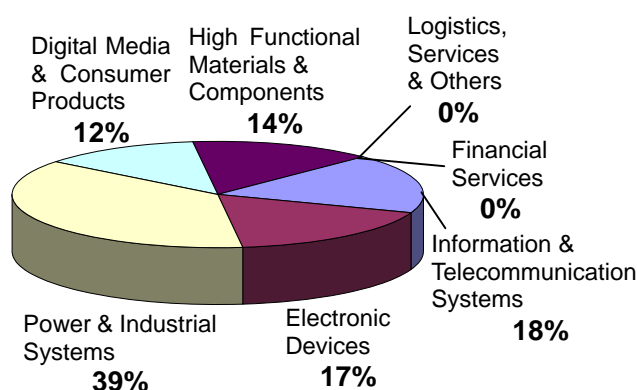
	Laid-Open Patents in Japan (2006)	US Patent Registrations (2006)	Patents Held in Japan (As of 2006/3)	Patents Held in US (As of 2006/3)
Number	11,569	2,658	35,239	22,067



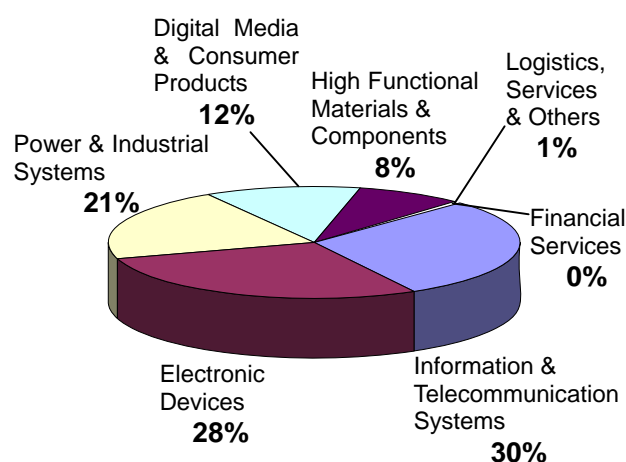
(a) Laid-Open Patents in Japan (2006)



(b) US Patent Registrations (2006)



(c) Patents Held in Japan



(d) Patents Held in US

Figure 5.4 Patent Portfolio (2006)

1.2.3. Strong patent portfolio activities

To achieve the domestic and overseas patent application targets for 2010, the Hitachi Group is pursuing much more than mere numbers. Hitachi wants to enhance the quality of its patent portfolio by acquiring intellectual property rights for strong technologies. Therefore, it is imperative to build patent portfolios that are internationally competitive. Towards that end, Hitachi is selecting themes for developing winning products and establishing strong intellectual property. In addition, each theme must have a clear patent application strategy. At the same time, the Group must strive to create strong, differentiated technologies and to increase global patent applications. An evaluation system to assess whether IP capability clears objectives and a feedback system to discuss evaluation results enable Hitachi to revise theme objectives and strategies as needed. In this way, Hitachi is building patent portfolios that can withstand international competition in 2010 and beyond.

To build an internationally competitive patent portfolio, Hitachi is promoting flagship patent activities "FS" for creating inventions and patent portfolio management activities "PPM" for nurturing patents. Figure 5.5 shows activity themes for 2006.

Examples of themes for building a powerful patent — FS (creation), PPM (nurture) themes —	
Theme	Business Segment
Storage systems (SAN/NAS storage solutions, high-density HDDs)	Information & Telecommunication Systems
Security systems (finger vein authentication systems, secure PCs, "μ-Chip"s)	Information & Telecommunication Systems
Electric powertrain systems	Power & Industrial Systems
Digital consumer electronics (Wooo)	Digital Media & Consumer Products

Figure 5.5 Examples of themes for building a powerful patent portfolio

1.3. Patent exploitation strategy

In 1970, the Hitachi Group introduced the policy to open all patents for licensing. In 1994, the policy to close some patents for licensing was implemented. Today, Hitachi implements the policy of "strategic IP use" for benefiting Group businesses in multiple ways, not merely for the sake of increasing licensing income. In addition to "exclusive use," in which only the patentee has the right to use the patent, Hitachi implements restricted and other types of licensing for a few strategic partners. In the railway car sector, for example, Hitachi implements an exclusive use for patented friction stir welding (FSW) technology that has contributed to over 1,300 railway car orders as of June 2007.

The Hitachi Group also promotes activities to increase product orders. In particular, if a product is based on Hitachi-patented technology, this fact is published on the product Website or in newspaper advertisements. Information is also distributed via brochures and pamphlets to promote the advantages of Hitachi patent superiority and technology compared to competitor products.

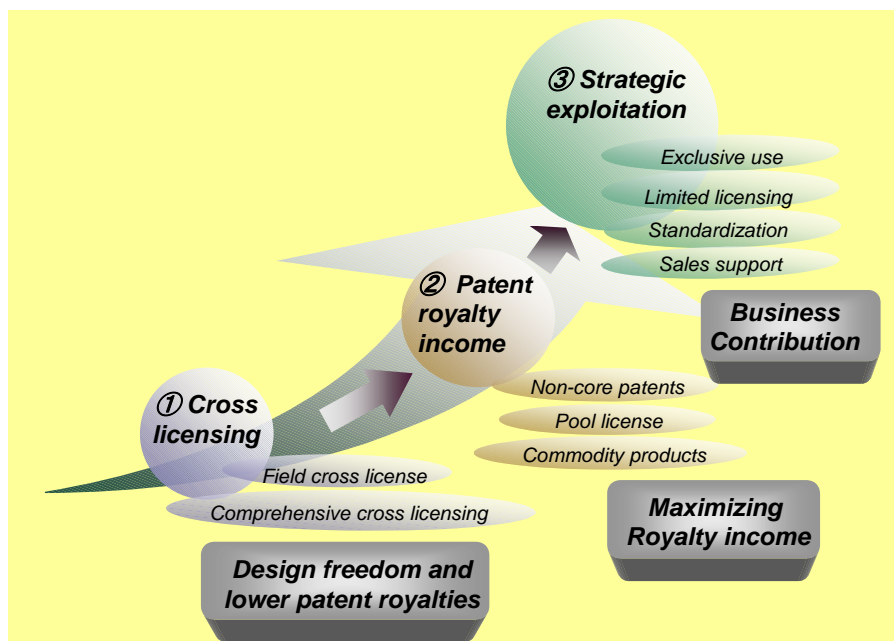


Figure 5.6 From Cross licensing to Strategic Exploitation

1.4. Invention reward system

1.4.1. New invention reward system

In April 2005 Hitachi revised its invention reward system in line with amendment of Article 35 of Japan's Patent Law (effective April 2005).

Inventors now receive rewards at various stages in a patent's lifecycle, including application stage, registration stage, and performance stage. Performance is linked to in-house patent use and royalty income from licensing. These revisions, especially the performance reward, mark a major improvement in the invention reward system. In particular, the revisions standardize the performance reward for contributions to royalty income. The revisions also improve evaluation objectivity related to contributions from in-house use and they improve the reward mechanism related to patents that contribute to business orders.

1.4.2. Invention reward committee

To improve the transparency and trustworthiness of the reward system and the amount of compensation, Hitachi established an invention reward committee to listen to the opinion of inventors and to respond to their concerns.

1.4.3. Invention information system

Hitachi implemented an "invention information system" to inspire innovation and to promote communication between inventors and business divisions that use their patents. Under this system, an inventor can request internal/external use information about his patent through a Web browser interface. The inventor can also use a web browser to view information about his patent performance rewards.

Going forward, Hitachi expects the invention reward system and related implementations to instill even a stronger spirit of invention in employees that will lead to new patents and contribute to business success.

1.5. Trade secret management

The Hitachi Group has been actively managing its trade secrets for a number of years. Upon amendments to the Unfair Competition Prevention Law in 1990, Hitachi felt it was time to strengthen protections for trade secrets, and established the "Hitachi trade secret management regulations" and the "trade secret handling rule for other companies." With the arrival of digital information and networks, Hitachi upgraded company regulations and the management system to handle trade secrets smoothly. To deal with personnel mobility and the risk of unintended technology information outflow from technology transfers to China and other regions, Hitachi is enforcing measures Group-wide based on the multi-disciplinary Trade Secret Management Committee. (Its chairman is vice president for R&D and the secretariat is the IP Law and Trademark Center of the Intellectual Property Group.) Below are the main measures examined and implemented in 2006:

- (1) Implement exhaustive measures to prevent the outflow of trade secrets through a “person.” Measures to make confidentiality stricter include (a) professional confidentiality clauses in labor contracts, (b) collective labor agreements, (c) written pledges at the time of retirement, and (d) a cautionary notice (on a case by case basis) to a company that hires a former Hitachi employee.
- (2) To protect trade secrets for use by Group companies in China, prepare and expand the use of collective labor agreements, formal work regulations, trade secret management regulations, and educational materials.
- (3) To prevent technology information outflow through technology transfer to China, prepare and consistently implement an outflow protection checklist for business divisions.
- (4) Use an e-learning environment to implement trade secret management education activities for all employees.

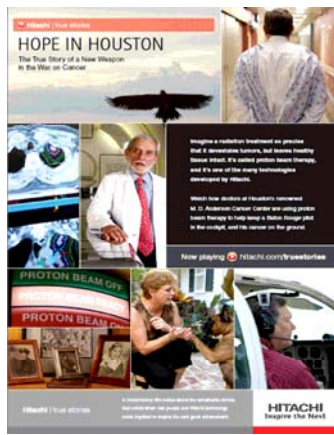
2. Brand management

In a business environment that is attaching more importance to consolidated management, globalization, and intangible assets, the Hitachi Group has positioned the Hitachi brand, which is a common Group asset, as an important management resource to support competitive strength. To bolster brand strength, Hitachi has been promoting brand management since April 2004. The corporate statement “Inspire the Next” means to offer products, systems, and services that are sensitive to the needs of the times and thereby “breathe new life into the next era.” “Inspire the Next” is a base upon which to give full play to the collective strengths of the Hitachi Group. Below is a description of the main brand management activities in 2006.

2.1. External activities

2.1.1. Global brand campaign

To expand Hitachi brand awareness and understanding to a global level, Hitachi is implementing continuous corporate advertising campaigns in North America, Europe, China, Asia, and Japan. The current campaign focuses on the diverse technologies and products made by Hitachi that benefit society. The advertising communicate a balance between global conformity on the one hand and local lifestyle on the other within the context of a competitive environment. In 2006, brand image campaigns in all regions adhered to the theme of striking a balance with globalization. In North America, the “Hitachi True Stories” campaign introduced how main customers use Hitachi products. In Europe, the spotlight was cast on Hitachi’s cutting-edge technologies. China and Asia also had campaigns. And in Japan, the “tsukuro” campaign drew attention to the collective strengths of the Hitachi Group.



Hitachi True Stories
(Medical Service)



Corporate Ad Campaign
in China



“Tsukuro” Campaign
(Landmine Clearing)

Figure 5.7 Overseas & Domestic Brand Campaigns

2.1.2. Strengthening web-based brand management

The Hitachi Group began to strengthen web-based brand management in 2003 on the basis the fact that the Web is an excellent media to harness diverse contact points in brand formation.

(1) Creating business opportunities through more visits to the Hitachi Website

Hitachi's websites in Japan and overseas are creating many opportunities for new business through (a) linking with brand campaigns, exhibitions, and other activities; (b) release of web portals for each country or region; (c) use of AdWords and other advertising solutions; and (d) renewal of website and product site. In 2006, visits to Hitachi's websites compared to the previous year increased by 47% in Japan and by 11% overseas.

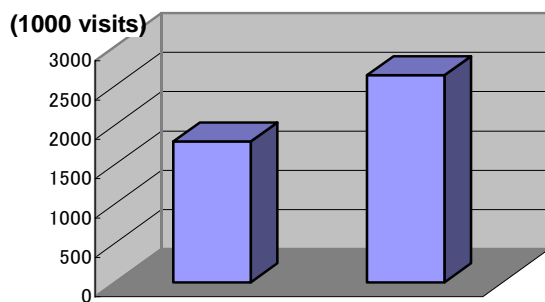


Figure 5.8 Visits to Domestic Websites

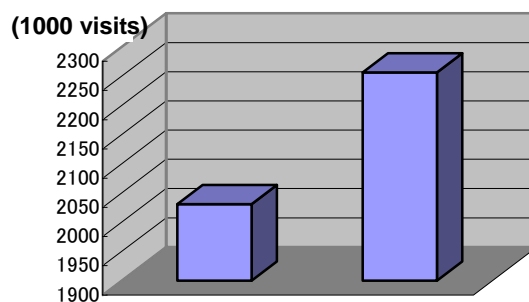


Figure 5.9 Visits to Overseas Gateways & Country Portals

(2) Strengthening website risk management

Website promotion has many benefits as well as increased exposure to risks. To maintain a safe website environment, Hitachi aggregates secure web servers externally in five locations. This configuration also achieves cost benefits. In March 2007, Hitachi completed the aggregation of 233 websites by Hitachi, Ltd. and 109 sites by 99 Group companies.

2.1.3. Improving brand value through environmental management activities

Some of the most important issues facing the Hitachi Group are “prevention of global warming” and “minimizing the use of resources and recycling.” To address these issues, Hitachi is making full use of Group technologies at every stage, from development and design to manufacturing. These efforts are contributing to a lower environmental burden for the whole of Earth. The Hitachi Group’s efforts to improve the environment are also important from a brand point of view, as shown in the following examples.

(1) Hitachi's eco-products and services

From the beginning, Hitachi has participated in major eco-products exhibitions in Japan and overseas to promote and display the Group’s latest lineup of eco-products.

At the expo in Singapore in October 2006, Hitachi exhibited 19 different products including plasma televisions and a monorail system. Later in December at an expo in Tokyo, Hitachi displayed products and gave a well-received demonstration for children about Group environmental activities.



Figure 5.10 Eco-Products Exhibition

(2) Eco Rail Mark

In 2007, Hitachi, Ltd. and Hitachi Maxell, Ltd. obtained approval to use the Eco-Rail Mark to signify their new product transport model. The mark denotes an organization uses the railway system to move over 15% of its products and is thus working to reduce CO2 emissions and lower the environmental burden of the transportation system.



Figure 5.11 Eco Rail Mark

(3) Hitachi Eco Campaign

The Hitachi Eco Campaign, which ran from March 9 to April 16, 2007, introduced the latest household eco-appliances and promoted the Hitachi brand image further. The campaign had its own website. Visitors who responded to an eco-quiz on the latest products became eligible to enter a lottery where they could be given a chance to become a product monitor and experience firsthand the eco-features of Hitachi products. The simple and direct message helped customers to better understand how hard the Hitachi Group is working to preserve the environment. The campaign attracted a total of 39,115 visitors to the website.

2.1.4. Brand image activities targeted at the youth sector

Concerned over low brand awareness among young people, the Hitachi Group engaged in the following activities.

(1) Science and technology activities targeted at middle and high school students

The R&D Group promotes educational activities at research labs to nurture future researchers and to build closer bonds between Hitachi and young people.

The Hitachi Group has been participating in the “Science Spring Camp” sponsored by the Ministry of Education, Culture, Sports, Science and Technology. In 2003, Hitachi invited a total of 40 high school students to Group labs to experience technology in progress firsthand. In 2006, Hitachi introduced four themes centered on “cutting-edge technology in machinery products.”

From 2005, Hitachi also started a “Science Seminar” for middle school students in Hitachinaka City under the auspices of the Board of Education. In 2006, Hitachi invited many students to a test laboratory to observe an experiment related to the manufacture of vacuum cleaners.

(2) Activities targeted at university students

The Hitachi Group has been working continuously since 2004 to improve the Hitachi brand image among university students. Specific activities include young Hitachi employees conducting company, business, and campus seminars for university students. The employees communicate to students the pride and passion they have for their work and the founding principle of “Inspire the Next.” These activities contribute to the recruitment of superior talent and better relations with Hitachi stakeholders. In 2006, 2,000 employees were able to make direct contact with 100,000 students. The results of these activities become apparent in the Nihon Keizai Shimbun, Inc. Employment Ranking (2007/2) where Hitachi, Ltd is ranked seventh. In the Recruit Employment Ranking (2007/4), Hitachi is ranked fifth. These rankings show how popular Hitachi has become among students.

2.2. In-house activities

2.2.1. “Inspiration of the Year” award system

The “Inspiration of the Year” award system (linked with share price) honors employees and companies that contribute to greater brand value. A total of 131 award applications were submitted from Group companies in Japan and overseas. The selection process is based on inspection by top management and votes cast by 9,315 employees (6,929 in the previous year). Nine awards were given for Inspiration of the Year, including the Hitachi Pavilion at the 2005 World Exposition in Aichi, Japan, which was selected as the most popular exhibit by expo visitors. In addition, there were eight awards given for Brand Promotion, 11 awards for Brand Challenge, and three Special Awards for “Cultivating a Scientific Mind.”

2.2.2. Domestic and overseas training tools

Improving brand value does not end with PR and advertising activities, each employee can be mobilized to achieve impressive results. Many educational activities are implemented to promote brand understanding among Hitachi Group employees. Each month approximately 20 general managers from Hitachi, Ltd. and Group companies participate in training courses to deepen their understanding of brand value through lectures and group discussions. The same type of training course is offered to overseas managers as well. For the approximately 100,000 Group employees overseas, Hitachi has prepared basic educational material on brand value, which has been introduced gradually since 2006. These training tools are contributing to greater awareness of the

Hitachi brand among Group employees.

2.3. Measures against counterfeit products

The Hitachi Group is taking the initiative to protect its brand name against counterfeit products (e.g., home appliances, automobile components, electronic components, and power tools) in China, other Asian countries, the Middle East, and Africa. Especially in regions where many counterfeit incidents occur, Hitachi cooperates with local affiliates and assiduously promotes effective measures to expose counterfeit activity with the aim of regaining the sales of authentic products.

(1) Cooperating with industrial organizations and other companies

In December 2004, Chinese authorities relaxed the criminal prosecution standard for intellectual property rights infringement. At the same time, authorities decreased the number of seizures as much as possible at the time of exposing infringers in a policy designed to avoid indictments. Because prevailing administrative punishment has a weak deterrent effect that leads to repeat offenses, Hitachi has a policy to cooperate with other companies to expose businesses that violate the rights of multiple brands and to seek criminal prosecution.

(2) Measures against international distribution of counterfeit products

Hitachi is pursuing measures aimed at both export destinations and exporting countries. Specific measures include (a) performing parallel inspections at export destinations and exporting countries, (b) cracking down on counterfeits at customs of export destinations, (c) uncovering counterfeits in the markets of each country, and (d) capturing a clear picture of counterfeit networks. To promote these measures, Hitachi is taking the initiative to cooperate with relevant authorities and to exchange information. Recently, the Internet has increasingly been used as a platform for illegal activities. To combat web-based infringements, Hitachi is vigorously promoting countermeasures within the context of new laws and regulations.

(3) Lobbying activities

Through industrial organizations, Hitachi engages in lobbying activities aimed at government agencies in countries and regions where many counterfeit incidents occur. In Hong Kong, for example, Hitachi filed a suit against a company that had illegally registered "HITATCHI" in Chinese characters and in English as a trade name. The court issued a registration cancellation order. However, under Hong Kong's company registration system, once a company has registered, the legal cancellation procedure is very difficult to complete. Shortly after thereafter, Hitachi, in cooperation with other companies, approached Japan's Ministry of Economy, Trade and Industry. The Japanese government then held talks with Hong Kong authorities in November 2005 and requested Hong Kong to revise its legal system and infringement management system.