The corporate competition paradigm is rapidly shifting from tangible assets such as price, functionality, quality, and other criteria to intangible assets such as patents, designs, and the like. Now, intellectual property does not comprise just the results of R&D activities but is recognized as a business and industry. Under these circumstances, Samsung Electronics regards development of key technologies and strengthening of its intellectual property rights portfolio as having core value, and the company has made various efforts to protect its valuable intellectual property patent rights.

First of all, a dedicated team for patents was reorganized. We also prepare active defensive measures against potential lawsuits through active patent applications. Moreover, we continuously strengthen our patent alliance by expanding a cross-license patent cooperation strategy with global IT companies.

### Patent-related Capacity Building

Last year, the number of patent-related disputes and litigation soared in the United States, the European Union, and in other major economies; the global hegemony of smart devices warns that the war is only going to accelerate. In fact, as the competition in technology is ever intensifying, while the convergence of different IT technologies is in trend, the patent disputes are bound to become fiercer. In particular, it is the smart device as with a combination of communication, video, and software with rapid technology innovation cycles that has escalated patent competition. Samsung Electronics expanded the strength of its workforce significantly and reorganized the patent-related organization in order for it to protect its know-how in technology and to sustain its competitive edge in 2010. At the end of 2010, based on a rapid decision-making process, the Intellectual Property Center (IP Center), affiliated with the Samsung Advanced Institute of Technology, was brought directly under the pursue of the CEO. Meanwhile, the organization integrated scattered IP applications and related services, excluding work closely linked with R&D, under one center, and strove to strengthen the patent-related organization and secure professional manpower via recruiting outside experts.

### Patents through Partnerships

Samsung Electronics proved the enormous strength of its patent protection portfolio by signing cross-patent contracts which allow a broader cross-use of patents with other global IT companies. We shook hands with Qualcomm (mobile phones), Kodak (camera technology), Rambus (entire semiconductor products), and Sharp (LCD panel module) in 2010, followed by deals with IBM and Microsoft (MS) for the cross-license of technologies of the mobile phone operation system. In particular, through the partnership with MS, we obtain the various basic patent rights related to MS operating system technologies, and synergies are expected to be generated at the time of development of future mobile phone products.

Securing a company is also an effective means of developing patent competence as it allows the obtaining not only of the technological capacity but...
also the patent rights of the company. We obtained the basic source of Electro Wetting Display technology, which is emerging as a core technology for the next-generation display, by acquiring Liquavista, a Netherlands-based display research and development company in 2010. This is part of the strategy to strengthen our position in the e-paper and large advertising field in the display market.

In 2011, the original technology and patent rights of STT (Spin-Transfer Torque) RAM, which is the next-generation memory semiconductor technology, was obtained through the acquisition of Grandis, a U.S.-based M RAM development company in the field of semiconductors; furthermore, other new business technology and patent rights were obtained through the acquisition of the medical device manufacturers, Medison and Prosonic.

Cross License Partnership

Second Position for Patent Applications in US

Samsung Electronics currently holds approximately 100,000 patents which are utilized for technological development in the fields of flash memory, system LSI, mobile phones and other major products. According to a patent research company IFI Claims Patent Service, patent applications of Samsung Electronics increased by 7.5%, posting a total of 4,894 patent applications compared to the figure of 4,551 in the year 2010. Based on this result, we were again ranked second in the United States for six consecutive years since 2006.

Current Status of Patent Rights Possession

<table>
<thead>
<tr>
<th>Year</th>
<th>Accumulative</th>
<th>Patent applications, yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>3,611</td>
<td>27,048</td>
</tr>
<tr>
<td>2010</td>
<td>4,551</td>
<td>29,351</td>
</tr>
<tr>
<td>2011</td>
<td>4,894</td>
<td>33,816</td>
</tr>
</tbody>
</table>

Based on the applications at the US Patent Office. Excluded are expired patents (with right period over 20 years) from the yearly accumulative patent applications.

Strengthening the Design Patent

In light of the trend shown by the industry of competitiveness shifting from hardware to software and contents, Samsung Electronics has begun paying more attention to designs that enable us to realize contents in a more efficient way. Likewise, in the field of patents, the technology-driven patent management strategy of the past has expanded to include design, design rights, and user experience (UX). Hence, we endeavor to reinforce our design patent competitiveness as well. We place emphasis on the unique and soft design that enables the maximization of the user experience to enhance the feel of comfort, familiarity, and convenience in product development. This unique design approach by Samsung Electronics has, naturally, led to the obtaining of the design patents. In order for us to strengthen our design patents, we realized, recruiting talent is a must. We secure talented people in the design field through special recruitment and are considering pursuing a plan to empower the design center, next-generation design institutes and other research institutes related to design matters in their role and independence.

As a result of these efforts, for the past five years, 2,499 design patents by Samsung Electronics have been registered in the US Patent Office. This figure is approximately three times higher than our competitor’s, and this is one of our major achievements. We invested heavily in product design and established design institutes in seven countries including Korea.