

Intellectual Property Activities of the Osaka Gas Group

Our Intellectual Property Strategies

From the viewpoint of technology management, the Osaka Gas Group has been actively committed to acquiring intellectual property rights for technologies resulting from development programs, as well as patents on business models for IT-based business promotion.

We currently implement our strategic intellectual property activities based on the following three basic policies:

■ Building a Strong Patent Network Through Patent Portfolio Management (PPM)

We build a strong patent network of basic and fringe patents for each major product or business, developing a portfolio to secure competitive advantages in our business.

■ Expanding Revenue by Optimum Use of Intellectual Property Rights

In addition to utilizing powerful patents to differentiate our products and businesses in their markets, we endeavor to expand revenue through optimum use of our intellectual assets, such as active licensing of open patents or development of new businesses using the patents.

■ Reinforcement of Risk Management for Intellectual Property Activities

We carry out sophisticated risk management to protect our own intellectual property and deal strategically with the intellectual rights of other companies.

Intellectual Property Right Applications

In the fiscal year ended March 31, 2006, the Osaka Gas Group made a total of 451 patent applications. Based on the strategy of selective and concentrated investment of resources, our recent focus has been on patent applications that are considered critical to our business strategies. We have been particularly active with patent applications for cogeneration systems that contribute to solutions for energy and environment issues.

Annual Number of Patent Applications by Group Companies

99.3	00.3	01.3	02.3	03.3	04.3	05.3	06.3
988	1,095	979	904	759	635	491	451

For major products, we use our PPM system to build a strong patent network by undertaking multiple patent applications centering on the product. For example, for our residential cogeneration systems, we have developed a strong patent

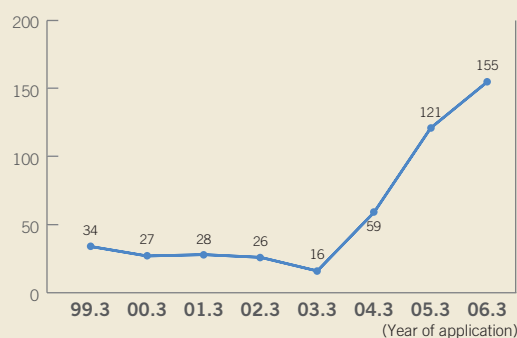
network around our fuel reforming equipment, and learning controlled systems, our key competitive advantages. We also apply for business model patents for customer services and other businesses where there is direct contact with customers. In our electric power business, we are developing technologies and actively applying for patents to maximize supply capacity. We are taking this action to support our efforts to build a competitive electricity-based portfolio using electric power cogeneration and the future generating capacity of the Senboku Natural Gas Power Plant, which will be approximately 1,100 megawatts.

In the fiscal year under review, we made further progress in developing our strategic management system for intellectual property, introducing a value assessment indicator to judge the value of a patent at different times, including at the time of application. Through such measures, we are proceeding with our selective and concentrated investment strategy, carrying out strategic intellectual property activities that contribute even more to our businesses. Among other activities, we applied for 66 trademark patents for company and product brand names as well as 22 design patents.

Securing Intellectual Property Rights for Cogeneration Technology

To cement the role of cogeneration technology as a competitive advantage that differentiates Osaka Gas from its competitors, we are working to secure rights for the patents we have been actively applying for thus far. Under the impact of legal revisions introduced in October 2001, our overall number of patents pending is on an upward trend. However, because we have been active in recent years in applying for patents on cogeneration technology in particular, the pace of growth in patents pending for this technology exceeds our overall average as we strive to secure our rights in this field.

Cogeneration-related Patents Pending
(No. of patents)



Our Patent Ownership and Licensing Activities

Osaka Gas Group holds a total of 1,455 patent rights. Among strategically important rights, we own patents for the non-excavation construction method and other technologies that contribute to cost reductions and safety in our gas processing, transportation and supply business. In the commercial energy market, we own patents for cogeneration and gas heat pump technologies that secure our position. We also own patents for residential cogeneration systems and bathroom heater-drier equipment, which are rapidly gaining popularity in the residential energy business. In the non-energy field, we own many patents for new materials technologies, one of the core technologies of the Group, such as fluorene and other optical materials that are in high demand for use in liquid crystal displays and mobile phones. Meanwhile, we also continue to contribute to earnings growth by active licensing of technologies that can be used outside the Group. As a result, license fee revenue for the fiscal year under review totaled about ¥290 million yen.

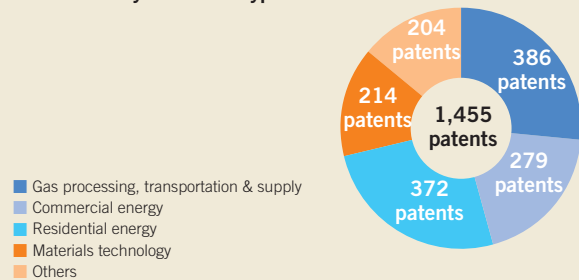
The ratios of patents owned by Osaka Gas that are used by the Company in its own businesses and the patents that are licensed to other companies are shown in the graph to the right for each field (based on sample data from the Japanese Patent Office). Due to the Company's efforts to increase utilization of its patents, the ratios of patents used in-house and patents licensed are both high.

For the patents used by the Company, in the fiscal year under review, Osaka Gas created an in-house method to assess not only the rate of utilization, but also the economic benefits of the patent. We plan to use this assessed value as a management indicator to provide feedback on our intellectual property activities, promoting improved benefits for our businesses.

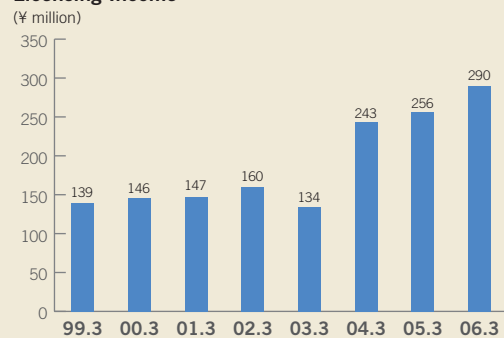
Employee Invention Compensation

In the fiscal year ended March 2005, Osaka Gas revised the intellectual property rules that regulate compensation and performance bonuses. The aim was to enhance competitiveness to meet the demands of a liberalized energy market and provide incentives to encourage unique inventions leading to the creation of new markets. The revision raised the overall levels of awards and abolished the upper limit. To make the rules more transparent, the Company established a board of review, the results of which were disclosed and discussed throughout the Company.

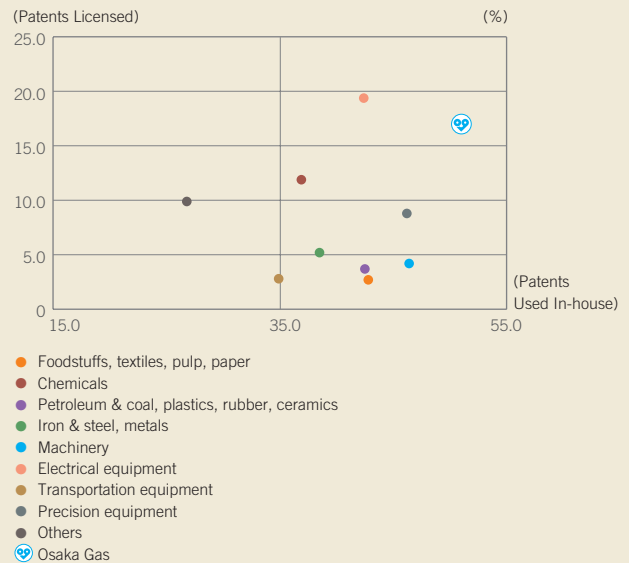
The Osaka Gas Group's Patent Portfolio Breakdown by Business Type



Licensing Income



Ratios of Patents Used In-House and Patents Licensed



Source: Japanese Patent Office, 2003 Survey of Intellectual Property Activities.

In accordance with these new rules, in the fiscal year ended March 2006, Osaka Gas rewarded the performance of inventors whose patents made a substantial contribution to company performance. In doing so, the Company followed the procedure of listening to the opinion of the inventor, holding the review board, and disclosing the results publicly.