# Employee inventions in Japan

Following a series of high-profile court cases, the Japanese government has introduced new rules designed to clarify issues around compensation for employees whose inventions are subsequently patented by their employers

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Under the Japanese Patent Law, an employee is entitled to a patent on his invention even if it was made in the course of his work. However, Section 35 of the Law provides that an employer shall have a free and non-exclusive licence over its employees' inventions. Further, an employer can acquire its employees' inventions, if a contract or work rules provides for this. Where the employer acquires the invention, the employee is entitled to "adequate remuneration".

In 2003, in *Olympus*, the Supreme Court ruled that an employee, who had created an invention in the course of his work and who had transferred the invention to his employer in accordance with the work rules, was entitled to the difference, if any, where the amount paid to the employee in accordance with the work rules was less than an adequate remuneration amount according to Section 35 of the Patent Law. Subsequently, employee invention lawsuits, where employees demanded compensation for their inventions, alleging that the amount paid to them was much less than adequate remuneration, have been on the increase in Japan and have attracted considerable attention from companies and the media. In some instances, employees were granted a huge amount of remuneration for their inventions.

Many companies have rules for the transfer of employees' inventions and for the calculation of the value of the inventions. Typical rules have provided both payment to the employee who created the invention at the time of patent application and at the time of registration of patent; and payment linked to profits which the employer earns in connection with the commercialisation of the invention, or the licensing of the patent to third parties. However, in most cases, the total remuneration which can be awarded with regard to the employer's profit has been capped. Due to the increasing number of lawsuits where an employee demands payment beyond the remuneration paid in accordance with the company rules, employers may now need to change the rules for remuneration for employee inventions. However, awarding a huge monetary amount to only a few inventors may not yield good results from the standpoint of fair treatment of employees, even if the invention was significant. Employers need to know what is required under the current law and balance all the interests.

## Pre-amendment provision and recent cases

Prior to the amendment effective in 2005, Subsection 4, Section 35 of the Patent Law provided that adequate remuneration should be decided by reference to the profits that the employer would make from the invention and to the extent that the employer contributed to the creation of the invention.

Under the former Section 35, courts had been giving priority to the sale and licensing of inventions, while employers' contributions, such as marketing costs and improvements made after completion of the invention, ranked lower in priority. Accordingly, the amounts granted to employees tended to be high.

In *Nichia*, the Tokyo District Court decided that adequate remuneration for Nichia's ex-employee, Professor Shuji Nakamura, presently of the University of California, Santa Barbara, was Yen 60 billion regarding the invention of the blue-light emitting diode (note:

this case reached a settlement made in and authorised by the Tokyo High Court for Yen 600 million).

*Nichia* may be a unique case, as the Tokyo District Court pointed out, because the employee's invention was a result of his own original ideas where the employer provided neither information about the blue-light emitting diode nor an advanced research facility as commonly exists in large corporations. However, even in other cases, the courts have granted large amounts. For example, in *Hitachi*, the Tokyo High Court decided that adequate remuneration for an employee's invention relating to an optical disc was approximately Yen 168 million. Further, in *Ajinomoto*, the Tokyo District Court ruled that adequate remuneration for the employee's invention of an artificial sweetener, aspartame, was approximately Yen 200 million. In this case, even though the employee was promoted to chief of one of the employer's research institutes, in addition to the payment of Yen 10 million in remuneration, the court held that the remuneration was insufficient.

In these cases, courts calculated adequate remuneration by multiplying the employer's profits from the employee's invention by the degree of the employee's contribution. Here, the employer's profits means the value of the patent at issue deducted by the value of the non-exclusive licence of the patent because this right is given by the law for no fee: ie, because an employer can manufacture and sell products utilising its employee's invention at no fee without acquiring the employee's invention, the value to acquire the employee's invention is the profits that the employer can make by acquiring the exclusive right to the invention. Concretely, the licensing fees can be used to calculate the employer's profits. In *Hitachi* and *Ajinomoto*, the courts calculated the employers' profits based on the licensing fees that they received. However, the law did not provide that the remuneration should be decided in reference to the profits that the employer had made from the invention, but rather in reference to the profits that the employer would make from the invention. The remuneration is the value of the invention at the time of its transfer to the employer. Accordingly, the employer's profit to be factored into the calculation of adequate remuneration should be predictable for the employer at the time of the invention transfer; contrarily, it is in hindsight in which all the licensing fees are calculated.

With respect to the employee's contribution, it is calculated by first determining the invention contribution ratio between the employer and the inventor(s)/employee(s). Next, the individual contribution ratio is determined between the group of employee inventors, where there is more than one inventor. Lastly, the individual contribution ratio of the respective employee is multiplied by the respective invention contribution ratio to ascertain the applicable employee contribution. However, the exact degree of contribution of the employer and the employee(s) is hard to judge: in *Hitachi*, the Tokyo High Court ruled that the degree of the employer's contribution was 80%; in *Nichia*, while the Tokyo District Court decided that the degree of the employer's contribution was 50%, the appellate court, the Tokyo High Court, thought that it was 95%; in *Ajinomoto*, the Tokyo District Court held that the degree of the employer's contribution was 95%.

In addition to the criticism regarding the unpredictability of the amount of adequate remuneration, the courts' rulings were criticised because the courts ignored facts that the employers bear the risk of failure of an invention, including the costs for facilities and personnel, while the employees do not bear risks because their livelihoods are guaranteed by the salaries received from the employers and they do not need to bear development costs. Further, it was said that the courts undervalued the benefits granted to employees other than money, including improvement of the research and development environment or promotion of the employee.

### Amendment to the remuneration system

As a result of these cases, the Patent Law was amended in order to increase the predictability of employee remuneration. The amended subsections 3, 4 and 5, Section 35 provide:

(3) Where the employee, in accordance with any contract, work rules or any other stipulation, permits the right to obtain a patent for an employee invention or the patent right for an exclusive licence therefor to the employers the said employee shall have the right to receive adequate remuneration.

(4) Where a contract, employment regulation or any other stipulation provides for the remuneration provided in the preceding subsection, the payment of remuneration in accordance with the said provision(s) shall not be considered unreasonable in light of the situation, including the fact that a consultation between the employer and the employee had taken place in order to set standards for the determination of the said remuneration, that the set

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standards had been disclosed, and that the opinions of the employee on the calculation of the amount of the remuneration had been heard.

(5) Where no provision setting forth the remuneration as provided in the preceding subsection exists, or where the payment of the remuneration in accordance with any remuneration provision(s) is considered unreasonable under the previous subsection, the amount of the remuneration under Subsection 3 shall be determined in light of the profit to be received by the employer and the benefit received by the employee, in relation to the invention and any other factors.

Under the amended law, employees cannot raise additional claims unless the remuneration paid in accordance with the contract or work rules is considered "unreasonable". Compared to the former provisions, the amended law attaches more importance to the procedures in establishment of the rules for calculation of remuneration in the contract or work rules and the procedures to decide the amount by applying these rules to each employee's invention – for example: whether there have been proper consultations between employer and employees in order to establish the rules for calculating employee invention remuneration; whether the rules for the calculation of remuneration have been disclosed to employees or have been accessible them; and whether hearings took place with the employee who made the invention in order to determine the specifics of such invention in applying the rules for calculation of remuneration for the employee's invention.

However, even where the procedures to decide the amount of remuneration, which include both the establishment of the rules and the application of the rules, were appropriate, it does not necessarily mean that employers are free from any risk of paying remuneration beyond the amount calculated in accordance with the rules. In addition to the above, some other factors are taken into consideration in order to decide the reasonableness of the rules – for example: the amount of remuneration paid to the employee; and what rules are used in calculation of the remuneration. The Japan Patent Office published *Case Studies of the Procedures under the New Employee Invention System* in November 2004, where it is stated that these substantive elements shall be considered in a more complementary way, compared to the procedural elements in Subsection 4, Section 35 (http://www.jpo.go.jp/shiryou_e/s_sonota_e/case_studies.htm). Accordingly, while this amendment has made it less likely that employers will be required to pay additional amounts, as long as they have granted some remuneration through due process, it still involves a degree of unpredictability because due process alone does not necessarily exempt employers from having to make additional payments to their employees.

If the rules to calculate remuneration for the employee's invention are not established in the work rules or contracts, or if the court decides that the payment in accordance with the rules in the work rules or contract is not reasonable, the court will decide the adequate remuneration itself. In making this judgment, the amended law provides more factors to be considered than the previous law. However, it is expected that in the manner of determining adequate remuneration under Subsection 5, Section 35 may not be significantly different from the cases under the earlier law, whose results are highly unpredictable. To avoid the ordering of payment under this provision, it is important for employers to establish reasonably the rules for calculating remuneration. Actually, companies that have changed their rules for calculation of remuneration for employee inventions have increased in number. Mazda Motor, Takeda Pharmaceutical and many other companies have removed the cap from remuneration payments. Further, some companies have introduced rules where the amount of remuneration is determined in proportion to the profit the employer earns from the employee's invention. Seiko Epson, for example, established new rules under which an employee who has made an invention can be paid a certain percentage of the licensing fee when the invention is licensed to other companies, while the remuneration given at the patent registration was decreased.

However, if employers are bound by the profit that they earn from employees' inventions in determining the remuneration, it may prevent free decision making in IP strategy or other general business judgements. In addition, if the remuneration for an employee who made an invention that brought in a great amount of profit for the employer is enormous, it may not be fair to the other employees. Accordingly, employers need to establish rules for calculation of employees' invention remuneration by carefully conducting hearings with employees: however, they also need to be careful to establish rules that do not constrain their IP strategy or the variety of possible business judgements.