

Theory and Practice of Employees' Invention

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I General

1-1 Foreword

Case study

(Case 1)

Researcher A working for company X made an invention relating to a semi-conductor device. In accordance with the company's rules, researcher A assigned a right to obtain a patent on his invention to the company. In remuneration for the assignment, he received a sum of 5,000 yen. Researcher A thought the sum was small but did not complain.

The company filed a patent application with respect to his invention. Around the time when the patent application was granted a patent, the company successfully commercialized the invention made a fairly large profit every year. The company paid researcher A reward of 500,000 yen a year for the utilizing of the invention. Researcher A was satisfied.

(Case 2)

Researcher B was working for company Y when he made an invention relating to an anti-cancer medicine. In accordance with the company's rules, researcher B assigned to the company the right to obtain a patent on his invention. In remuneration for the assignment, he received a sum of 50,000 yen with which he was satisfied. The company successfully commercialized the invention and gained enormous profits. Unfortunately the medicine was later found to have serious side effects and the company was forced to pay damages in excess of 10 times the amount of profits it gained. The company did not

reward researcher B on the grounds that his invention did not contribute to the company. Researcher B did not complain.

* * * * *

The two cases are the same up to the point where the companies gained great profits through the commercialization of the inventions made by their employees. However, one succeeded in its business and the other eventually failed. In Case 1, researcher A eventually profited. Initially the researcher was given a small remuneration which did very little to enhance his incentive to invent. In Case 2, researcher B eventually gained less. The researcher received a larger initial remuneration which enhanced his incentive to invent.

When an invention created at a company is commercialized, the outcome is never certain. Therefore, it is extremely difficult for practitioners in charge of the management of patents to judge when, how and for what purpose (expected effects) a reward should be given to an inventor as an incentive to invent.

At a time when the traditional system of “life employment” is no longer taken for granted, the future course of an engineer who makes an excellent invention while working for a company depends greatly on ones treatment within the company. Administration should carefully determine corporate research development policy and in-house rules on employee’s inventions.

In a related development, an amendment to the Patent Law (effective April 1, 2005) dealing with the method of establishing standards for setting the value of employee inventions makes it possible for the value of an employee invention to be determined through discussions between the user of the invention (e.g. the company) and the employee (e.g. the employee of the company). Of course,

there are limitations prescribed on such issues as the manner of discussions, but at least the user of the invention and others are freed from the legal precedent stipulating that “the value of an employee’s invention must be decided in the courts.”

With consideration to the present situation of the employee’s invention system and its problems as described above, this article was written to provide an opportunity to study the most adequate system for employee inventions in a country that aims to develop itself as an industrial and technological nation..

1-2 What are employees’ inventions?

1-2-1 Definition of Legal Rights and Responsibilities Concerning Employees’ Inventions in Japan

As indicated in Section 35(1) of the Japanese Patent Law, an employee’s invention is determined by the relationship between an “employer, etc.” and an “employee, etc.”

Section 35(1) of the Patent Law stipulates:

“An employer, a legal entity or a state or local public entity (hereinafter referred to as the “employer, etc.”) shall have a non-exclusive license on the patent right concerned, where an employee, an executive officer of a legal entity or a national or local public official (hereinafter referred to as the “employee, etc.”) has obtained a patent for an invention which by reason of its nature falls within the scope of the business of the employer, etc. and an act or acts resulting in the invention were part of the present or past duties of the employee, etc. performed on behalf of the employer, etc. (hereinafter referred to as an “employee’s invention”) or where a successor in title to the right to obtain a

patent for an employee's invention has obtained a patent therefor.”

Under the Patent Law, an “employer, a legal entity or a state or local public entity” employing an inventor is called the “employer, etc.” and an “employee, an executive officer of a legal entity or a national or local public official” is called the “employee, etc.” An invention is called an “employee's invention” under the law in cases where it satisfies the following two conditions:

- ① an invention which by reason of its nature falls within the scope of the business of the employer, etc. and
- ② an act or acts resulting in the invention that were part of the present or past duties of the employee, etc. performed on behalf of the employer, etc.

An invention made by an engineer belonging to a company and engaged in research and development, designing or manufacturing is generally called a “worker's invention.” As apparent from the fact that company executives have no employee ID numbers, it is understandable that they are not called employees. A “worker's invention” here includes an invention made by a company executive, irrespective of company rules.

A worker's invention is divided into the following three categories:

- Free invention: An invention not falling in the scope of duties of an employee, etc.
- Service invention: An invention falling in the scope of business of an employer, etc.
- Employee's invention: An invention falling in the scope of business of an employee, etc. and resulting from the present or past duties of an employee, etc.

The scope of business here is not limited to what is concretely indicated by a

corporate charter, but may also include new business fields still under research and development that are recognized as part of a corporate organization. For a person like a national public official, whose duties theoretically extend over an extremely wide range, it is adequate to interpret the scope of duties in a narrow sense according to the scope of jurisdiction of a government agency or the office that the official belongs to.

It is possible to define a service invention as the generic concept of an employee's invention. Since there is no legal basis for such a definition, however, these are defined as separate from each other in this article to prevent confusion.

Under the Patent Law in Japan, the right to obtain a patent with respect to an invention primarily belongs to its inventor (Principal Clause of Section 29(1) of the Patent Law), who can file a patent application with respect to his or her invention. Because this right to obtain a patent can be transferred, however, in many cases the patent application is made by the companies that inventors are working for..

What happens, then, when a company employee files a patent application individually and obtains a patent with respect to his or her invention?

Applicable to this case, the Patent Law recognizes the right of an employer to have a non-exclusive license on a patent granted to its employee. Called a "statutory non-exclusive license" together with a non-exclusive right based on prior use, it has its effects against a third party even if not registered in the Patent Register. If not registered in the Patent Register, a granted non-exclusive license has no effects against a third party, as in the case where the patent concerned is assigned to a third party. However, a statutory non-exclusive license on an employee's invention will affect a third party without being

registered in the Patent Register. Furthermore, it is stipulated that the owner of a patent on an employee's invention shall obtain consent from the owner of a statutory non-exclusive license concerned before abandoning his patent right.

In cases where a company employee files a patent application without notifying his employer, the employer is legally protected to work the invention without any risk if it is an employee's invention. On the other hand, an inventor can work the invention himself or herself if the patent application is granted a patent, or else license it to a third party and gain profits. Thus, an employer and an employee are balanced in their respective interests.

In case where a company employee makes an invention with the help of the company's vast financial and material resources, a simple non-exclusive license is not sufficient enough. This is because it is possible for the inventor in this case to grant a third party without such resources a non-exclusive license for a cheap royalty or lump sum payment beyond the company's investment. In cases where the third party is a competitor of the company the inventor belongs (or belonged) to, the competitor company can easily obtain the results of the other company's costly efforts .

Therefore, Section 35(2) of the Patent Law stipulates:

“In the case of an invention made by an employee, etc. that is not an employee's invention, any contractual provision, service regulation or other stipulation providing in advance that the right to obtain a patent or the patent right shall pass to the employer, etc. or that the employer, etc. shall have an exclusive license on such invention, shall be null and void.”

Under this provision, a contract, service regulation or other stipulation providing in advance the transfer of a free invention and a service invention

made by an employee, etc. to his company is null and void. With regard to an invention made within the direct scope of an employee's job duties, however, a contract, service regulation or other stipulation is allowed to provide that the right to obtain a patent or the patent right should pass to the employer, etc.

According to precedent ruling, therefore, the only null and void portions of a contract, service regulation or other stipulation providing for the entire transfer of worker's inventions to the company are those concerning free inventions and service inventions. Any inventions made within the direct scope of an employee's job duties, by contrast, are still subject to such agreements. What type of compensation can a company employee expect in return, then, for the transfer of an employee's invention to the company under a contract, service regulation or other stipulation?

Section 35(3) of the Patent Law stipulates:

“The employee, etc. shall have the right to reasonable remuneration when he or she has enabled the right to obtain a patent or the patent right with respect to an employee's invention to pass to the employer, etc. or has given the employer, etc. an exclusive right to such invention in accordance with the contract, service regulation or other stipulations.”

A “reasonable remuneration” in Japan is sometimes mistaken to mean a “fairly large remuneration.” A “reasonable remuneration” is a sum reasonable for effects achieved or expected to be achieved by an invention.

In this respect, Section 35(4) of the Patent Law has heretofore stipulated:

“The amount of such remuneration shall be decided by reference to the profits that the employer, etc. will make from the invention, as well as to the amount of contribution the employer, etc. made toward the invention.”

With respect to an employee's invention, however no further provisions have been made heretofore with regard to the Patent Law. Nor, moreover, are there related provisions in the Regulations under the Patent Law, etc.

In actuality, these provisions are left to interpretation and application according to precedents and practice with sums of remuneration determined and reviewed by individual companies according to a survey conducted, for example, by the Japan Institute of Invention and Innovation or through the exchange of information with other companies.

Recently, however, there have been a continuing number of lawsuits regarding employee inventions claiming very large compensations, where several decisions have awarded more than 100 million yen. In particular, Section 35 of the Patent Law is a so-called "compulsory rule", whereby if the value decided by the company etc. based on employee inventions rules is insufficient, the courts may make a decision with regard to the value. This is dissatisfactory from the company's point of view, however, insofar as the inability to predict the value of an invention is an impediment to business operations.

As a result, Section 35 of the Patent Law was amended through the deliberations of the Industrial Property Rights Deliberation Council. Section 35(4) has been changed to read:

"If the above value is set in employee contracts or regulations etc., the payment of this amount shall not be recognized to be unreasonable, in consideration of factors such as the conclusions reached in discussions between the user of the invention etc. and the employee etc. at the time of establishing standards for setting this amount, the disclosure of established standards in question, or the testimony taken from the inventor regarding the calculation of

the value.”

Further, Section 35(5) has been newly established to read:

“If the above value has not been set, or if payment of the value that has been set is recognized to be unreasonable according to the provisions of this Clause, the value of Clause 3 shall be determined in consideration of factors such as the profit which the inventor should receive from the invention and the costs borne, the contributions made, and the remuneration paid to the inventor by the user with regard to the invention.”

As a transition mechanism for this amendment, Clauses 4 and 5 will be applied to such cases where patent rights are received or renewed after the April 1, 2005 start of enforcement. Thus, provisions before the amendment shall be applied to patents in effect and even to the large number of unregistered patent applications that have not been adjudicated on the day of enforcement, for a very long period (up to 25 years if extensions of existing patents are made). This so-called double standard situation may continue for a long time.

1-2-2 Definition of Employees’ Inventions in Foreign Countries and Related Rights and Obligations

Next is a discussion of the difference between the U.S. system and the German system regarding employee inventions.

The U.S. Constitution in Chapter 1, Section 8 says:

“The Congress shall have power to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respect writings and discoveries.”

With its Congress thereby empowered to secure for authors and inventors the

exclusive right to their writings and discoveries for a limited period of time, it is clear that the United States holds the promotion of science and technology progress as part of its national policy.

The right to obtain a patent on an invention primarily belongs to its inventor, therefore, who is required to file a patent application. In the United States, cases do not exist whereby patent applications are filed by companies employing inventors, as is often the case in Japan. However, the patent publication itself is very similar between the two countries, if assigned to a company before it is granted, the company's name is indicated as the assignee in the Official Gazette. A patent application is mainly handled throughout the course of its examination, however, through the inventor.

In the United States, it is said that the content of employment contracts are different based upon whether or not there exists an expectation of inventions. In cases whereby employment carries the expectation of an invention, the contract commonly includes a clause specifying that all inventions created by an employee belong to the company. Such an agreement considers rewards for inventions made by employees, and payment is not required for the assignment of the right to obtain a patent or profits from the working of the invention.

What happens, however, in cases where an employee makes an invention even if the employment contract does not carry the expectation of an invention? If it is a free invention or an invention not relating to the business of the company employing the inventor, the answer is nothing. As in Japan, the inventor can, at his or her own discretion, file a patent application or assign its right to a third party, or else report the making of the invention and leave it with the company to dispose of.

In cases where an employee whose contract does not include the expectation of inventions makes an invention while using company assets (experiment facilities, materials, important technical information and technical advice from superiors or colleagues), the company is granted a non-exclusive right called a “shop right” that is similar to a non-exclusive right admitted with respect to an employee’s invention in Japan. The English word “shop” implies a “factory” and “plant,” and literally means the right of a factory or plant to work the invention.

According to precedent, an employee is not allowed to demand a remuneration for this “shop right” (compensating for the use of company assets). Like a non-exclusive right admitted with respect to an employee’s invention in Japan, a “shop right” may be transferred only together with the business. The scope of its use admitted for a company is not allowed to exceed the scope of its business (this is unrestricted in Japan if it is within the scope of inventions described in patent claims).

As described above, there is no specific reward in the United States with respect to what is called an employee’s invention in Japan—making it difficult to understand the reason for the abundance of basic inventions in the United States. Under the influence of national pro-patent policies among big enterprises, however, there is an increasing trend towards granting prize money for patent applications and parties whereby inventors receive awards as part of their patent promotion programs.

Germany, a country that has greatly influenced the Japanese patent system, fully protects the rights to worker inventions under the Worker’s Inventions Law (Gesetz über Arbeitnehmererfindungen) that was adopted in 1957 and revised several times later.

The following is the outline of this German law:

Workers' inventions are classified into "employee inventions" and "free inventions."

Employee inventions are further divided into those that are made while carrying out the course of their normal duties, and those based on essential work experience and activities (Section 4).

Employees are required to report both types of inventions to the employer (Sections 5 and 18).

The employer has to, within four months from the date of the report from an employee on his or her invention to make an unlimited demand seeking complete rights to obtain a patent, or else a limited demand seeking a non-exclusive license (Section 6).

When the employer makes an unlimited demand, the employee has the right to demand a remuneration. The amount of remuneration is decided based on an agreement between the two parties within three months from the grant of the patent right. In the absence of an agreement, the employer must decide the amount of a remuneration (Sections 9 and 12).

When the employer makes a limited demand, the sum of a remuneration must be decided in the above manner within three months from the date when the employer works the patent (Sections 9 and 12).

The German law also includes various provisions, including an opposition by an employee in a case where no agreement is reached on the sum of a remuneration, duties of the two parties in the process of an examination and the protection of the employer's and employee's rights.

Thus, it is in contrast with the Japanese Patent Law only with Section 35

covering an employee's invention.

This Worker's Inventions Law makes German companies feel uneasy about employee's inventions. To avoid troubles resulting from in-house rejection to file an low technical level invention proposed, German companies tend to seek a utility model registration that requires no examination. To protect an employee's invention, its implications on other systems need to be taken into account.

1-3 What problems does an employee's invention pose in practice?

1-3-1 Problems Concerning the Relationship between Applicant (Company) and Inventor (Employee)

There are some problems and points of caution when considering whether an invention made inside a company falls into an employee's invention.

One point to consider is where an invention belongs based on its inventor's position.

There was a case where it was contested whether an invention made by the president of a one-man company with only a single person engaged in business operation fell into an employee's invention (Court Decision No. (Wa) 6537 of 1967 dated March 31, 1972). The decision was: "In case of a one-man company, its representative and the company are legally with the conflict of their interests legally denied. In case where its representative totally controls a company, such conflicts of interests do not come to the surface. The court thus decided that the president of a one-man company falls into an "executive officer of a legal entity" under Section 35 of the Patent Law. Naturally, the decision that a president is a worker as far as an employee's invention is concerned is meaningful.

Another problem is a reduction of the sum of a remuneration based on the position of an inventor.

If an invention is made by the head of a plant, a development and research department manager or the director of a research laboratory, the sum of a remuneration is reduced in many cases because, in addition to the fact that their wages are high, such a person in a position to make an invention is somewhat expected. In most cases, no complaints are made. If a complaint is brought to a court, however, the company rarely wins the case. Under the Patent Law recognizing a company executive as an employee, etc., there is not justifiable reason to reduce the sum of a remuneration in accordance with the rank or position of an employee, etc.

Despite this, various surveys still show that there are many companies that reduce the evaluation of an invention according to the position of an inventor.

1-3-2 Problems Concerning Judgment of a Company's Contribution to the Invention Process

The amended Section 35(5) of the Patent Law stipulates that the value be determined in consideration of “costs borne, contributions made, and remuneration paid to the inventor with regard to the invention.” The reason for such consideration is that these factors touch upon the fundamental reason for establishing the so-called employee's invention system, the reason that, in cases where the acts leading up to the invention are included in the past or present duties of the employee, these are to be called “employee's inventions” and that measures working to the advantage of the employer must be taken.

Company environments helpful for the creation of an invention can be largely

divided into the following five aspects.

- ① Human contribution: Technical tradition, advise and cooperation from seniors, colleagues or subordinates
- ② Facilities contribution: Experiment facilities, test devices and equipment and materials
- ③ Technical contribution: Reports, entreaties, drawings and expensive books
- ④ Mobility contribution: Setting of a research and development project, guidance to development policy and assignment of a subject
- ⑤ Capital contribution: Investment in research and development

An invention is generally created based on these contributions and one's creativity. Some may be cleared by individual inventors themselves. In many aspects, however, contribution to an invention from an employer, etc. cannot be denied. These contributions by an employer, etc. will be explained in detail later.

1-3-3 Issue over Commendation or Compensation

In many companies, the payment of the sum of a remuneration for an employee's invention to the inventor is often made in the form of a "commendation." For people working in small and medium-size companies, and large enterprises, making an invention is something that one can be proud of and should be commended on. Receiving a letter of commendation and prize money from their president, would give employees a sense of satisfaction as well as enhance their desire to continue creating. Too much emphasis placed on the form of commendation makes its substance unclear. In short, commendations are made in various manners to enhance the morale of employees. There are an abundance of examples, such as "Sales Award," "Most Excellent Product

Award,” “Improvement Proposal Award” and “10,000-Hour Accident-Free Operation Award” only to cite a few. Commendation could affect daily activities of employees, and therefore its system may not be discontinued even if company performance worsens. However, prize money granted with an award is often reduced. In an extreme case, a commendation system may be suspended.

A problem lies when a remuneration for an employee’s invention is not paid in accordance with the degree of its contribution to the company. In a case where a company is profiting from the exclusive working of an invention, unilaterally suspending the payment of a remuneration is a problem as the inventor has the right to “demand a remuneration.”

In a case where a company falls into a situation where it cannot pay wages, there is no choice but to suspend such a payment whether it is a commendation or a remuneration.

As an inventor’s right to demand a remuneration for his invention remains despite the suspension of a commendation, a company is still bound to pay a remuneration when its business recovers.

There was a case where a leading Japanese company was sued by its employee concerning its rules on an employee’s invention. The employee complained that he had received “prize money” but not a “remuneration” or “compensation” as stipulated under Section 35 of the Patent Law. The suit was settled out-of-court before the case had become widely known. The company, reflecting over its rules’ lack of distinguishment between a commendation and a remuneration, revised the rules clearly distinguishing the two.

In Japan before 1965, words “reward” and “prize” were often used with compensation and remuneration avoided. Today the importance of intellectual

property has become well recognized, remuneration and a commendation need to be clearly distinguished.

People must be made aware that a remuneration for an employee's invention is a "compensation" for its assignment.

1-3-4 Problems Concerning the Sum of Remuneration

According to the Article 35(4) , which existed prior to the amendment and will still be able to be applied to existing patent rights for a long time to come, the sum of a remuneration should be determined with consideration to profits that an employer, etc. will make from an employee's invention and contribution by the employer, etc. to the making of the invention. Concerning ways to determine the sum of a remuneration, however, there are many problems to be resolved, such as "what is profits an employer, etc. will make from an employee's invention," "how can contribution by an employer, etc. be determined," etc.

Next is a discussion on the basic interpretation of the sum of a remuneration. With respect to an employee's invention, an employer, etc., irrespective of the reserved right to succeed, at minimum has a non-exclusive right. If an inventor obtains a patent on his invention, his employer, etc. can freely work the patented invention to gain profits based on the legal non-exclusive right free of charge without providing any compensation to the inventor.

In case where an employer, etc. obtains a patent based on the reserved right to succeed or through voluntary assignment from an employee, the employer, etc. gains an exclusive right against a third party in addition to its non-exclusive right. An employer, etc. gains a profit from the succession of the right to obtain a

patent only when he receives royalty fees from a third party based on the exclusive right or exclusively works the invention as objectively judged.

Because on this point, there is a view that it is not reasonable to calculate the sum of a remuneration based on profits an employer, etc. gains from the working of a patented invention but a remuneration should be calculated based on royalty fees receivable from the grant of a patent to a third party.

According to a Tokyo District Court Decision No. (Wa)11717 of 1979 dated December 23, 1983, “profits that an employer, etc. will make from an employee’s invention” taken into consideration to determine the sum of a remuneration for the assignment of the right to obtain a patent with respect to an employee’s invention should be interpreted as profits receivable from the acquisition of a position to exclusively work the invention but not profits expected to be gained from the working of the invention by the employer, etc. Therefore, it is not adequate to calculate the sum of a remuneration for the assignment of an employee’s invention based on the amount sold or the operating profits with material cost and necessary expenses such as general administrative and sales expenses deducted from the amount sold considered as profits gained by the employer, etc. from the employee’s invention. In case where an employer has obtained a patent based on the right to obtain a patent with respect to an employee’s invention assigned from the employee and grants a license to a third party for royalty fees, received royalty fees can be received by utilizing its position to exclusively work the employee’s invention. It is therefore rational to calculate the sum of a remuneration for an employee’s invention based on this amount of received royalty fees with consideration to other factors such as the degree of an employer’s contribution to the making of

the invention.

There are many cases of similar court decisions. In short, an employer, etc., even in cases where it obtained the right to obtain a patent with respect to an employee's invention, does not need to pay any remuneration for its own working of the invention and only needs to make such a payment if it gains royalty fees with the invention licensed or equivalent contribution to its business is made.

This decision is fully understandable. Since patents bringing in royalty fees are rare in reality and most of patents are worked inside companies, there would be very few cases where remuneration payments are made if the decision was strictly followed. It is not preferable if consideration is given to the promotion of inventions.

On the other hand, even regarding those patent rights for which employee invention compensation is claimed but which are not licensed to a third party, meaning that there are no royalties, if for all practical purposes the patent rights allow the user to monopolize a market and gain high profits, there may be an obligation for the user etc. to pay remuneration to the inventor. At present, therefore, many companies are paying a remuneration amount linked to sales income from products using the patent in question in some form.

Therefore, most companies actually conduct commendations linked with sales.

1-3-5 Problems Concerning In-house Rules Related to Employee's Inventions

It is desirable that rules be set through discussion between the user etc. and the inventor etc. according to Article 35(4) of the Patent Law. Such established

rules were referred to in the Collection of Examples of Execution Procedures of the New Employee Invention System document published by the Japan Patent Office, which concretely explains points of caution with regard to this matter. While we are unable to discuss the concrete cases here due to limited space, we will briefly mention the points to keep in mind when preparing such rules:

First is a method to distribute rules. As rules are, in many cases, prepared separately from general rules of employment setting forth duties and holidays, etc. caution is required to adequately distribute rules at the time of their adoption or revision. In many cases, trouble arises from the ignorance of rules. Therefore, it is advisable to incorporate rules into an adequate library in an internal Intranet or an office computer network system and keep them accessible to all employees.

Second is an obligation to report a service invention. Problems may occur when it is left up to the inventor to judge between a service invention and an employee's invention.

It is preferable to obligate employees to report all inventions and assign the right to obtain a patent only with respect to an employee's invention.

Third is an upper ceiling of remuneration. The law calls for the sum of a remuneration to be decided with reference to the amount of profits an employer, etc. gains.

Since under the free economy, it is not conceivable for an employer, etc. to set an upper ceiling on profits it gains, it is theoretically wrong to set an upper ceiling on the sum of a remuneration.

In fact, however, it is common for most companies to set the sum of a

remuneration, particularly a remuneration based on the working of an invention, at a certain level in accordance with ranks of evaluation or set an upper ceiling even in case where the sum of a remuneration is calculated based on a certain formula. In the above mentioned Collection of Execution Procedure Examples, the stance is not taken that an upper ceiling is bad in itself, stating that “in the overall decision, unreasonableness will not be affirmed merely on grounds that an upper ceiling has been set in the standards.” However, from the point of view of the company, it is desirable to add “or higher” to the maximum sum or not to set a ceiling on a remuneration based on royalty fees from a third party, in order to avoid an unpredictable claim from an employed inventor.

Fourth is an approval of or agreement to rules. A remuneration for an invention, as far as it is paid from a company, needs to be studied and decided with its sum allocated from a total budget including wages. Therefore, it is adequate to require the sum of a remuneration not only decided by people in charge of research and development or executives in charge of intellectual property but also approved or agreed to by executives in charge of personnel.

1-3-6 Problems Concerning Taxation

As for the handling of taxes on sums of money paid by an employer to an employee based on an employee’s invention, the Japanese Finance Minister’s Notice dated July 1, 1980 sets forth:

- Renumerations at Application and Registration: Income from Assignment
- Remuneration Based on Working: Miscellaneous Income
- Prize Money for Improvement Proposal:

: Wage (Tax at Source Required)... Provided improvement proposal falls into one's normal duties.

: Once-Off Income ... Provided payment made in a lump sum does not fall into one's normal duties.

: Miscellaneous Income... Provided payment continuously made does not fall into one's normal duties.

As the handling of incomes for taxation purposes varies from one tax office to another, a company operating over plural places needs to confirm each tax office's handling with respect to a remuneration for an employee's invention.

According to a guideline for a final return for fiscal 2005, an income other than wage incomes, not exceeding 200,000 yen, needs not to be declared. If a normal remuneration at the time of a patent application (commonly ranging from several thousands of yen to 20,000 yen) needs not to be declared if several applications are made a year.

Depending on its sum, a remuneration based on the working of an invention or a patent may need to be declared. A section in charge of intellectual property that pays a remuneration to inventors needs to give advice and data necessary for a final income tax return.

II Itemized Discussion

2-1 Creating an Invention in a Corporate Environment

This section discusses contribution by an employer, etc. to an employee's invention from various aspects, including the provision of a research theme, and of research facilities, tools, materials, technical documents, as well as the provision for research leaders, research funds, joint research, development projects with other companies, loaning of employees, provisions for inventions by employees on loan or study, an improvement proposal system.

2-1-1 Provision of Research Theme

The first contribution by an employer, etc. is the provision of a research and development theme. Except for a few fortunate researchers engaged in free research with funds provided or particularly talented inventors, most researchers working for companies are conducting invention-creating activities under themes given from upper organizations.

A research and development theme is often decided on the results of a market research conducted by sales and planning sections. It is based on a business development program as basic corporate management policy, which sometimes calls for the most advanced technology to be employed to stay ahead of other companies along with all available technologies to gain on advantage in performance and price.

Thus, the selection of a research and development theme itself reflects the true power of a company, etc. This has oft been a subject of research for employees in many cases. The grasp of performance, price and market share of a competitor's product is not possible for a researcher to establish. The provision

of a research and development theme requiring the general ability of a company contributes to an employee's invention as its basis.

Necessity is the mother of invention. A theme as a mother is a great contributor to an invention as a child.

2-1-2 Provision of Research Facilities, Tools, Materials and Technical Documents

In the electric and machinery fields where products are based on classic laws, a theme can be resolved relatively easily. An applied invention or an improved invention can be theoretically worked out.

In chemical and material fields where technology is largely dependent on experience and in case where an unprecedented theme is given even in the electric and machinery fields, however, an invention cannot be created without utilizing assets of an employer, etc.

The development of a new large steam turbine, for example, requires full cooperation from a factory, from the collection of data and information including technical documents to the purchase of materials, the use of high-performance processing machines such as lathes and various test facilities and the utilization of manufacturing know-how.

Cooperation extended by a company as such constitutes contribution to the making of an invention.

In the fields of new chemical materials and medicines, new discovery often needs using unobtainable materials and hundreds of experiments and tests concerning pollution and side-effects before its practical use. If the above condition is not fulfilled, the discovery cannot be recognized as an invention per

se however it is novel. Therefore, contribution by an employer, etc. to an employee's invention is extremely important in this area.

Even if an invention is made without using these facilities, machines, tools, materials, etc., it must be checked whether scientific documents and internal technical documents a company has collected and accumulated over a long period of time has been used before it has been completed.

Technical documents are an item of contribution by an employer, etc. to an employee's invention which tends to be forgotten when considering whether an invention made by an employee is an employee's invention. Therefore, valuable technical documents need to be kept under proper control, with their users kept on record.

2-1-3 Provision of Research Leaders and Research Funds

Technical guidance and advice from research leaders and other employees should not be ignored when judging an employees invention.

Trouble tends to arise when there is a lack of mutual understanding and communication in research section, A research log, etc. needs to be kept in a work area where trouble is likely to arise, making it possible to understand research developments at any time.

Research and development funds naturally invested into a research and development by an employer, etc. need to be counted in as contribution by an employer, etc. from a viewpoint of the provision of funds.

2-1-4 Joint Research and Development with Other Companies

Along with the progressing sophistication and diversification of technology,

there has been an increasing amount of cases where two or more companies or private companies and government organizations jointly conduct research and development in order to meet the needs of society and or people which a single company cannot single-handedly achieve. On an individual basis, joint research and development is not uncommon. In many cases, a contract concluded before the launch of a joint research and development project provides for the filing of a joint patent application in case where an invention is made through the joint project. It is free for parties to decide whether a patent application is jointly made or not.

When an invention is actually made, the way of defining inventors may vary from one applicant to another, leading to a case where an invention with less contribution to the making of the invention is included as a joint inventor. However, one who is included as an inventor should be the one who is directly involved in the making of the invention. Also, one must remember that if an inventor is illegitimate, a patent right may be invalidated or made unenforceable. It is untrue that plural (not a single) inventors be included in a joint patent application.

2-1-5 Loaning of Employees and Invention by an Employee on Loan

If a technical instructor makes an invention where he is dispatched based on a technical guidance contract, there is less chance of the invention becoming a source of trouble. It is common that the possession of such an invention is contractually covered.

An employee on loan under a personnel assignment policy without manufacturing drawings and technical reference materials often becomes a

source of a dispute once an invention is made by the employee.

When such an invention is made to resolve problems particular to facilities of a company to which an employee is loaned, serious problem may not arise because the rights belongs to the receiving company. In case where an invention is applicable to facilities or products of a company which loans out its employee, a view may be split over its ownership between the two parties. There is no problem when the handling of such an invention is agreed on beforehand. If there is not an agreement, the possession of the invention is determined based on which side the authority of approval of a technical improvement (with an invention as its result) lies on. If wages to a loaned employee include a portion specifically covering the making of a technical improvement, the party paying ones wages must be considered. In case where no agreement is reached on the ownership of an invention, a compromise is often made when filing a joint patent application on the invention. In order to prevent problems after an invention is made by an employee on loan, it is advisable to make an agreement on the ownership of an invention made by an employee on loan between the two parties beforehand.

As for a part-timer or temporary employee, a contract should be established, requiring one to transfer the right to obtain a patent to the company if an invention is made. Unlike an employee on loan, a part-timer or temporary employee is often less aware of the technology and know-how owned by his employer and thus make an invention.

However there are cases where a part-timer or temporary employee is responsible for an invention through the execution of an assigned job. Inventions concerning company products or manufacturing technology should be treated

like an employee's invention regardless if the inventor is a part time employee or temporary staffer. It is advisable to cover this under an employment contract.

2-1-6 Improvement Proposal System and Invention Proposal System

Having discussed corporate environments involvement in the creation of an invention, I would like to deal with an improvement proposal (improved device) system which is another major element of an employee's invention.

An improvement proposal system as part of a productivity enhancing campaign in Japan is largely divided into an "invention proposal system" with patentable inventions as its target and an "improvement proposal system" centering on devices for improvement at a workshop.

To realize the mass production of goods low in cost and constant in quality, the latter has played a predominantly large role.

It was in the mid-1960's that the long practiced proposal system changed to a mass proposal system. There is a record showing that in 1975, a single company made a total of 1,080,00 improvement proposals. In 1977, a woman with 3,341 improvement proposals topped the list of proposal makers, taking society by surprise. Around that time, people started raising the question on whether there is too much emphasis on the number of proposals, calling for qualitative enhancement. At one point, individuals were making as many as 6,000 proposals a year. A question was then asked in what kind of a workplace was it that such a large number of improvements was required.

It is important to point out that an improvement proposal does not necessarily require "absolute novelty." In many cases, an improvement proposal is satisfactory enough if it can be defined as "novelty in a workplace." Introducing

what is done at other factories and workplaces independent from your workshop is great if it turns out effective. An excellent idea leading to very profitable patent is often found among improvement proposals which are not patentable in most cases, and therefore it is common to examine each improvement proposal with respect to whether a patent application should be made with respect to it. For such examination, a person capable of judging patentability needs to be assigned as an examiner.

Why do Japanese company employees appear anxious to make workshop improvements or a job-related improvements.

According to the “Proposal System Manual (Version 3 dated September 1979)” issued from the Japan HR Association, the system introduced from the United States recovered its once-lost popularity firstly because its theme was changed from an American idea “ready to buy your idea” to an idea respecting human nature. Amid rapid industrialization, people started seeing themselves as “parts” with little if no connection to their jobs. To remedy this situation, a move rose to take the initiative “to be a hero” through the proposal system. Secondly, an improvement proposal system was activated and built up with small group activities such as QC activities combined with individual proposal activities.

On the other hand, an invention proposal system calls for a proposed invention to satisfy legal requirements for a patent such as novelty and inventiveness. Unlike an improvement proposal system, the system does not allow a proposal to show its effects immediately.

Forced under the first-to-file principle of the Patent Law, a patent application needs to be filed as early as possible, increasing a chance for its specification to lack in description and thereby making it difficult to obtain a patent. If inventors

are required to write proposals in detail to the extent of a specification as they are at some companies, the invention proposal system does not allow, unlike an improvement proposal system, several proposals to be made a day. Compared with an improvement proposal, an invention proposal brings in a larger amount of money. As the number of invention proposals cannot be large, however, the total amount of money expected from invention proposals is small.

Therefore a remuneration based on the working of an invention cannot be expected soon.

The fact that the number of patent applications in Japan is particularly larger than that in other countries does not stem from the spread of invention incentives and commendation systems. Loyalty to and a sense of belonging to a company is possibly one reason for the abundance of patent applications in Japan. During the period from the 1970s to the 1980s when the increase in the number of patent applications was the main target, the number of inventions actually increased due to the introduction of a target management system with the number of patent applications set particularly in the electric and machine manufacturing fields, which changed its form to a norm system in workshops.

The industrial focus has changed from a “shift from quantity to quality” to “increase strong patents and patents expected to gain higher royalty fees” and now to “acquisition of internationally applicable patents.”

Environments to create inventions need to be changed to match this situation.

2-2 Remuneration for Employee's Invention

2-2-1 Invention Evaluation System and Remuneration

An invention evaluation system is referred to but rarely linked to an

evaluation of an employee's invention. The technical level of an invention is not necessarily equal to the level of contribution to a company's business. In fact, there are many cases where an invention, however low-tech, contributes greatly to a business once registered as a patent.

At a point in time when a remuneration is paid for the assignment of the right to obtain a patent, even if an invention is able to be evaluated from a technical standpoint, its economic effects--namely, its workability and the ability to restrict other companies--are still not measurable. As a result, even if the patent is an epoch-making one that is honored by multiple academis, the amount of money paid for an invention at the time of a patent application is normally limited to less than 10,000 yen. Even at a company ranking its inventions, most reach only the second compensation ranking level., and likely never go higher than the third.

Meanwhile, a remuneration based on the working of a patent links itself to business performance and income of royalty fees from other companies. As an invention with respect to which a remuneration is paid is already patented, its evaluation is not involved, such as its novelty or inventiveness. It is free to give higher ranks to inventions in order of royalty fees paid for them. In such a case, ranking is a result and paying a remuneration to an invention in accordance with its ranking is merely a means of convenience.

For the above reasons, a detailed explanation of the evaluation of an invention is omitted from this article.

2-2-2 Real State of Remuneration in Private Sector

In January 1997, the Japan Institute of Invention and Innovation conducted a

survey on the real situation of invention promotion activities at private companies (Note 1). From 800 the survey covered 300 companies with a large numbers of laid-open patent applications picked at random. Responses were received from 173 companies.

Because companies were selected from those that filed the largest numbers of patent applications, their fields were limited to large companies in the electric, machinery, communications and electronic fields with their capital ranging from one billion yen to 30 billion and the numbers of employees from 1,000 to 5,000.

According to the survey, the sum of a remuneration for an employee's invention paid at the time of a patent application and based on the working of an invention increased compared with 10 years ago. The survey also uncovered the following:

- (1) The time of the payment of a remuneration is the time of a patent application (98 percent), the time of the registration of a patent (88 percent) and the time a remuneration is paid based on the working of the invention (75 percent).

While cases of remuneration paid at the time of a patent application top the list, a remuneration for the working of the invention is paid in three quarters of cases.

- (2) The majority of payment methods are uniform payment systems with a fixed sum paid at the time of a patent application and the registration of a patent (87 percent).

Cases where a remuneration is paid based on the evaluation of an invention makes up the majority of cases (96 percent).

- (3) The sum of a remuneration paid under a uniform payment system is about

7,400 yen at the time of a patent application and about 16,000 yen at the time of the registration of an invention. A remuneration paid under an evaluation-based payment system ranges from about 35,000yen to about 600,000 yen.

For details, please see the report published by the Japan Institute of Invention and Innovation.

2-2-3 System for Payment of Remuneration for Employee's Inventions by National Public Officials

What method does the state employ for the remuneration payments for employee inventions?

Reference Material 1 shows the amount of remuneration for employee inventions paid to employees of the Ministry of Education, Culture, Sports, Science, and Technology as set by the same Ministry. While there existed previously one set of general guidelines for remuneration payments to all national government employees, since 2003 these have been set separately by each ministry or bureau. While the registered remuneration amounts have not changed since the 1996 revision, moreover, the actual remuneration amounts have greatly increased. It should also be noted that the upper ceiling stating that “remuneration to one person shall not exceed 6 million yen per year” has been abolished.

The registration-based remunerations shown in Reference Material 1 are not largely different from those employed at private companies, but working-remunerations only counting in royalty incomes are different from

those employed at private companies counting in profits of their own working inventions.

For example, if the state earns 10 million yen in royalties, it pays a remuneration of 2,750,000 yen. If royalties are 100 million yen, remuneration is 25,250,000 yen. These remunerations may seem much higher than those for employees of private companies.

Private companies handle patents differently, from those companies pursuing royalty incomes to those negative to licensing. In reality, many companies have no choice but to link the calculation of a remuneration to sales of products working an invention. Therefore, private companies cannot be simply compared with the state, etc. which does not manufacture nor sell products working an invention. When a company licenses a patent to another company, the company makes a judgment, allowing competitive products or technology or seeking another party's patent in order to lower its own royalty fees according to the party's request. Because a company's contribution to gain royalty is thus great, the amount of a payment from private companies, if lower than the one from the state, cannot simply be blamed.

2-3 Employee's Invention Rules and Patent Commendation Rules

2-3-1 Situation of Company Rules Concerning Employee's Inventions

According to the earlier-introduced survey by the Japan Institute of Invention and Innovation, 171 companies (98.8 percent) out of 173 that responded to a questionnaire adopted rules concerning an employee's inventions.

Provisions in order of their inclusions in these rules are:

- ① Report on an invention
- ② Definition of an employee's invention
- ③ Remuneration calculation method
- ④ Determination of assignment of an invention
- ⑤ Confidentiality obligation
- ⑥ Framework of remuneration amounts
- ⑦ Remuneration in case of an inventor's retirement or death
- ⑧ Determination of the recognition of an employee's invention

Among these provisions it is a fact that, a “provision for the notification of an invention made by an employee” and a “provision for the definition of an employee's invention” account for 98.8 percent and 97.7 percent, respectively, far surpass the others.

The effects of rules concerning an employee's inventions include:

- ① Employees' consciousness of invention enhanced (91.7%)
- ② Supervisors' consciousness of invention enhanced (44.0%)
- ③ Employee's inventions and proposals increased (42.9%)
- ④ Quality of patent management improved (37.5%)
- ⑤ Trouble between supervisors and employees prevented (37.5%)

From the above, it can be determined that rules concerning an employee's inventions have been set up to enhance employees' and supervisors' consciousness of inventions and provide for the payment of remunerations in order to increase inventions, proposals and prevent problems.

2-3-2 Examples of Company Rules Concerning Employee's Inventions

With the amendment of Article 35 on April 1, 2005, businesses have been obliged to revise their rules on employee inventions, but as of the end of 2005, no rules have been developed that are able to serve as models. Reference Material 2 gives examples of employee invention rules from the Japan Patent Office. While there are one or two examples for each article, only one example for each is included in Reference Material 2 in order to avoid confusion in making a choice. Since employee invention rules must basically be decided through discussion between the user etc. and the employees etc., however, for the time being there is no possibility of uniform or average remuneration payment standards. The results of the survey that will likely be conducted by an organization such as the Japan Institute of Invention and Innovation concerning compensation for employee inventions is being awaited in this regard.

2-3-3 Company and Other Patent Commendations

Commendations at companies have various features. Some with interesting names are listed below with their aims and prize money.

- Strategic Patent Award: Promotion of the development and active utilization of a patent which the inventor's own company and other companies are inevitably required to use, 100,000 yen
- Multi-Registrations Award: 100 patent registrations, 200,000 yen
- Patent Master Award: Depending on the number of registrations, 100,000 yen to 500,000 yen
- Young Patent Creator Award: Seminal invention made by a young researcher aged under thirty, 300,000 yen

Other Commendations

- “National Invention Award” and “Local Invention Award” granted by the Japan Institute of Invention and Innovation
- “Certificate of Remarkable Invention” and “Inventive Workshop Creator Award”
- “Good Design (G) Mark” granted by the Japan Industrial Design Promotion Association

These commendation systems serve to enhance inventors’ enthusiasm when creating an invention.

2-4 Future Issues to Establish an Invention Promotion System Helpful for Technology- Based Country

2-4-1 Life time Employment System and Promotion of Invention

In Japan, the life time employment and seniority pay systems have been maintained by major companies. At major companies largely in the manufacturing industry, these systems have help them to secure experienced and skilled workers and minimize loss of investment on training of workers and engineers. The life time employment system and the seniority pay system working together have keep it possible for Japanese companies to secure loyal workers with a deep sense of belonging to their companies. This, in turn, has made it possible for Japanese companies to establish cooperative labor-management relationship unseen in other parts of the world and enhance the international competitiveness of their industrial products.

At small and medium-size companies, where workers tend to move from one company to another, the seniority pay system has not been established as it has

been at major companies. At major companies, the seniority pay system based on the length of service has become difficult to maintain and the weight of ability-based pay system has increased as a result of irregular personnel reinforcements. Under the stagnant economic situation continuing since 1991, Japanese companies are actively restructuring themselves, increasing out-sourcing transferring and loaning of senior employees.

As a result of this situation the employee's invention remuneration system requires change.

In case where an employee has moved from another company, it is difficult to clearly distinguish between an employee's invention made by the employee and his employee's invention made at his previous company. As in many cases, no clear distinction is needed as far as there is no dispute arising between the two companies. However, an intellectual property section needs an understanding of the history of an inventor's inventions at the previous company (not only the Patent Gazette publishing patent applications with the employee as an inventor but roughly the contents of the patent applications pending at the time of his employment) and articles or entreaties published at academic meetings or in special magazines. In case where the employee is obligated by a previous company to keep confidentiality after leaving the company, one should not be not forced to disclose information in violation of a contract with the previous company.

Another problem is how a company binds a retiree with respect to his employee's invention. It is extremely rare at Japanese companies for an employee working on an invention to move to a competing company.

However in Europe this is very common. Evidence of this is the Worker's

Inventions Law of Germany introduced earlier stipulates in its Section 26 that “rights and obligations arising under this law shall not be affected by the termination of employment relationship.” In many other countries, a company can claim an invention made by its former employee within six months to one year from then one leaves a company or such an invention is deemed to have been made at the previous company.

In Japan, there has been a court precedent recognizing an invention made by a person 11 days after he left a company as an employee’s invention and calling for the inventor to assign the right to obtain a patent to the company (Osaka District Court Decision No. (Wa) 1948 of 1975 and dated May 18, 1979). Aside from this, there are few precedents of this kind with no general standard established for the handling of a former employee’s invention.

It is not always possible to smoothly work out an agreement on future patent applications including inventions that are made by an employee who leaves his company. At the time of concluding an employment contract with an employee, not limited to a mid-course employee, it is advisable to get the employee’s agreement allowing an employer not only to demand the right to obtain a patent but to call for an inventor to provide his explanation with respect to an invention if made during a certain period after he leaves the company and, if the company judges such an invention as an employee’s invention, to demand the assignment of the right to obtain a patent.

2-4-2 Length of Examination and Promotion of Invention

A long period of time required by a patent granting authority such as a patent office to examine a patent application made by an employer, etc. with respect to

an employee's invention causes the following problems from the standpoint of the invention's promotion.

Because a remuneration at the time of a patent application is smaller in amount as compared with a remuneration at the time of the registration of a patent or a remuneration based on the working of an invention as explained earlier, an inventor is anxious to receive a remuneration at the time of the registration of a patent and a remuneration based on the working of an invention. An inventor with a number of inventions initially gains very little, However once patents have been granted, the invention will be able to gain remunerations yearly. It is possible for an inventor with only a few inventions however to receive nothing for several years besides a small initial remuneration. If this occurs it obviously hinders ones enthusiasm to invent.

In order to prevent undesirable situations due to remunerations, some major companies filing several thousands of patent applications a year bring forward a remuneration due to be paid at the time of the registration of a patent. This method excludes where a remuneration is conditional on the registration of a patent (excluding registration without an examination), and therefore does nothing to improve the inventors situation.

Fortunately, the Japanese Patent Office has become more efficient year, making it possible to grant patent applications before their laid-open dates. This has been shown by the declining number of complaints caused by the late granting of patents.

Similar problems are still immanent in some Southeast Asian countries where an examination procedure requires a long period of time.

In order for a country to develop itself as a technology-based country through

the promotion of invention, the acceleration of examination needs to be taken into account.

2-4-3 Examination Level and Promotion of Invention

When the number of patent applications in Japan reached a yearly level of 500,000, a question was often asked why so many applications were filed in Japan. The answer to the question was simple.

Low level patent applications by competitors were being passed examination of patent office.

The level of examination at the Japanese Patent Office is up to world standards. A contest among patent office officials from Japan, the United States and Europe under the same theme proved that their judgement levels with respect to novelty and inventiveness were almost identical.

The answer to the question was given that way because there was a period of time when searching of prior art by examiners could not fully cope with the mass of laid-open patent applications.

Thanks to progress in the completion of databases and search tools, the precision of searching for citations at the Japanese Patent Office has remarkably increased. Also, it has become common practice for an applicant to conduct a search before filing a patent application. As of yet there has been no criticism of the level of examination at the Japanese Patent Office.

Enabling and facilitating the detection of prior art and promoting the creation of inventions already excelling existing technologies are the most effective way to promote an invention.

2-4-4 Risk Hedge and Promotion of Invention

At companies with many competitors, it is possible to file a patent application with respect to an invention of which the inventiveness is judged as low level as a result of its internal examination based on an employee's proposal. It is an option for patent practitioners who are well aware of how difficult and troublesome it could be to prevent a patent application if filed from another company from being granted a patent on the same invention with no patent application filed as proposed by an employee.

This does not necessarily deprive an inventor of the right to receive a remuneration.

If an employer, etc. is confident that a patent application will not pass an examination, the employer can simply return the assigned right to obtain a patent to the inventor. As long as a patent application is filed, an employer, etc. will benefit from it in one way or another.

Based on this argument, it may be possible for an inventor to claim a remuneration. An employer, etc. needs to decide to pay a remuneration if it is to file a patent application.

In many cases, companies file patent applications overseas to prepare for their future exportation or transfer of technology. Therefore, countries where patent applications are filed are selected from a risk hedge viewpoint. The large number of patent applications filed overseas means to an inventor that his invention is important for his employer, etc. and motivate him to seek a larger remuneration.

It should however be made clear to the inventor the reasons for filing the overseas applications. The number of countries where applications are filed does not solely serve as a criterion for such a judgment because often many

applications are filed simply to protect any future endeavors the company might have, and, if an invention is worked and local production employing a overseas patent is started, the employer, etc. should be prepared to count them into a remuneration based on the working of a patent.

Problems like this arising from the working of an invention at an overseas production base are expected to increase as the internationalization and globalization of business continues.

2-4-5 Invention Promotion System Providing Dream

How the way the promotion of an invention should be viewed in respect to an employee's invention, varies greatly from industrial and technology-based policies of the governments and research and development policies of individual companies.

For example, remuneration in the United States is basically include in an employee's salary. In Germany the right of an inventor is stipulated in detail by law. It may be possible to stipulate a framework by law and leave it with companies to judge its applications as done in Japan.

At any point in time and in any country, the best invention promotion policy is the one which provides an inventor with great honor or a generous reward.

From this viewpoint, inventor-honoring events as represented by the national invention award offered by the Japan Institute of Invention and Innovation are expected to further expand and improve. Besides company commendation, there may be a need for another form of commendation giving incentive to young inventors in their 20's.

Although various measures are being taken at private companies to commend

all inventors whose inventions have received a large number of patents as well as employees in charge of patents that have greatly contributed to internal patent education, the measures however only tend to serve as an incentive to specific individuals.

Proposed here with consideration to the above is a system under which a company assigns or lends a non-active patent right to the inventor. Although efforts are made in both private and public sectors to utilize sleeping patents, such organizational utilization does not serve as an incentive to an inventor. The inventor of an invention knows the invention best and with this system, a patent right which is not active in a company is assigned or lent to the inventor for a certain period with the rights reserved. If the inventor finds an infringer of the right or a third party wishing to obtain a license, the company will share any financial gain with the inventor. Such a system is believed to greatly encourage inventors' enthusiasm and enhance employees' respect for intellectual property.

An invention needs to be actively promoted by the parties whom will benefit. If it is the state, a non-profit organization, a company or an internal organization, the promotion of an invention supported by enhanced respect for rights will surely benefit every operating unit.

Note 1: "Survey on Real situation of Invention Promotion Activities at Private Companies" issued by the Japan Institute of Invention and Innovation and dated March 1997

[Reference Material 1]

The System of Remuneration for Inventions by Employees of the Ministry of Education, Culture, Sports, Science and Technology

(partially revised in fiscal 2003)

(1) Remuneration for Registration

Current Rule (until fiscal 1995)	Revised Rule (from fiscal 1996)
Per Patent Old Law: 3,000 yen + (No. of Inventions) * 3,000 yen New Law: 5,000 yen + (No. of Claims) * 1,000 yen	Per Patent Old Law: 4,500 yen + (No. of Inventions) * 4,500yen New Law: 7,500 yen + (No. of Claims) * 1,500 yen
Per Utility Model Old Law: 2,000 yen New Law: 1,700 yen + (No. of Claims) * 300 yen	Per Utility Model Old Law: 3,000 yen New Law: 2,500 yen + (No. of Claims) * 500 yen
Per Design 2,000 yen	Per Design 3,000 yen

(Note: Patents under the old law are those whose applications were filed on or before December 31, 1987.

Patents under the new law are those whose applications were filed on or after January 1, 1988.

The same applies to utility models.

(2) Remuneration Based on the Working of a Patent

Before amendment (1996-2002)	
Actual State Income	Sum of Remuneration
500,000 yen \geq	Income \times 30%
500,000 yen $<$	(Income $-$ 500,000 yen) \times 20% $+$ 150,000 yen
1,000,000 yen $<$	(Income $-$ 1,000,000 yen) \times 10% $+$ 250,000 yen
1,500,000 yen $<$	(Income $-$ 1,500,000 yen) \times 5% $+$ 300,000 yen



Revised (from 2003)	
Actual State Income	Sum of Remuneration
1,000,000 yen \geq	Income \times 50%
1,000,000 yen $<$	(Income $-$ 1,000,000 yen) \times 25% $+$ 500,000 yen

(3) The upper ceiling of the sum of a remuneration shall be double the current amount.

“A remuneration accumulated over a year shall not exceed 3,000,000 yen per person.” shall read “A remuneration accumulated over a year shall not exceed 6,000,000 yen.”

[Reference Material 2]

Example of Rules for Employee's Inventions

(These are based on examples of rules prepared by the Japan Patent Office, and supplemented with terms required for translation.)

1. General rules

(1) Purpose

Article 1

According to these rules, employees will be encouraged to make inventions whereby the protection and utilization thereof will promote the development of the company's business.

(2) Definition of terms

Article 2

In these rules, the three terms below shall be defined as follows:

- a. Employee's invention – an invention whose nature is in the range of the company's operations, and which was developed through the actions of an employee of the company in the course of that employee's past or present company duties, as certified by the company based on Article 4.
- b. Inventor – the employee who made the invention
- c. Employee - a person employed by the company (regardless of whether the period of employment is set or not), or an officer of the company

2. Reporting an invention, etc.

(1) Reporting an invention

Article 3

An employee making an invention that falls within the range of company operations shall promptly fill out the Invention Notice form (Format no. __,

omitted here) and deliver it to the company through his/her section chief.

- 2 If the invention of the above clause has been made by two or more persons, the above Invention Notice shall be signed by all inventors, and information regarding the relative contribution made by each to the invention shall be included.

(2) Verification of employee's invention

Article 4

Upon receiving an Invention Notice (as described above in Article 3), the Chief of the Intellectual Property Division shall determine or verify the following:

- a. Whether the invention is an employee's invention
- b. Whether it is necessary for the company to maintain rights for the employee's invention in question
- c. The relative contribution of each inventor to the employee's invention in question

- 2 The Chief of the Intellectual Property Division shall promptly inform the inventor(s) of the way in which the above items have been determined or verified, through their section chief.

3. Transfer of rights, etc.

(1) Transfer of rights

Article 5

The inventor shall transfer rights to the company for a patent on the employee invention. If the company decides that it does not need the rights, however, this transfer need not be done.

- 2 The transfer of the above clause shall be carried out via a transfer of rights certificate provided to the company by the inventor.

(2) Disposition of rights

Article 6

The company shall apply for a patent for the employee's invention in cases where the company receives the rights to do so. If this is not done, however, some other disposition shall be decided.

2 If rights to obtain a patent for an employee's invention have been transferred but it is decided that a patent application for the employee invention shall not be made, it shall not be understood that the company has not received the rights to obtain a patent for the employee's invention.

3 The configuration and content of the patent application shall be decided by the company.

4 The employee who has transferred rights to obtain a patent for the employee's invention must cooperate with the company's patent application and other measures necessary to obtain the patent.

5 If the company decides that it does not need to obtain or maintain patent rights for the employee's invention for which the company has received rights to obtain a patent, the company can relinquish rights to receive a patent, withdraw any patent application for the invention in question, or relinquish patent rights.

4. Decision of remuneration

(1) Remuneration calculation method

Article 7 When the company receives rights to obtain a patent for the employee's invention as stipulated in Article 5, the company shall pay the following remunerations to the inventor:

- a. Payments made at the time of application
- b. Payments made at the time of registration

c. Payments made when profits are generated

2. The remuneration of the previous clause shall be distributed among the inventors according the relative contribution of each inventor as determined by the Chief of the Intellectual Property Division.

3 The remuneration of Clause 1 above shall be calculated based on detailed rules for execution to be decided separately.

(2) Timing of remuneration payment

Article 8

Among the types of remuneration decided in Article 7, remuneration for application shall be made promptly after the application is made, remuneration for registration shall be made promptly after registration is made, and remuneration for profits generated shall be made promptly after the portion of those profits which are based on the invention are calculated (which shall be done according to a method to be established separately).

(3) Testimony taken from the inventor

Article 9

If the inventor objects to the amount of remuneration paid by the company, the inventor can present an Objection (Format no._, here omitted) to the Chief of the Intellectual Property Division (or the Invention Committee) within _ days after receiving remuneration, upon which an objection proceeding shall be carried out.

2 If the inventor makes an objection according to the previous clause, the Chief of the Intellectual Property Division (or the Invention Committee) must give the inventor an opportunity to state his/her views in the course of investigation of the objection.

5. Invention Committee

(1) Establishment of Invention Committee

Article 10

In order to implement the provisions of these rules, an invention committee shall be established with an office in the Intellectual Property Division.

(2) Agenda of the Invention Committee

Article 11

The Invention Committee shall be convened by the Committee Chairman, and shall hold discussion on the following items:

- a.
- b.
- c.

2 Regardless of the previous clause, the Invention Committee shall be convened and shall hold discussions on items relating to an objection made according to Article 9.

3 Items deliberated by the Invention Committee shall be decided by a majority of the Committee members present, whereby a majority of members constitutes a quorum.

6. Miscellaneous rules

(1) Limitations on actions

Article 12

The inventor shall not transfer rights to obtain a patent for his/her invention to a third party, unless the company determines that the invention is not an employee's invention or the company decides not to receive rights to obtain a patent for the invention.

2 The inventor shall not disclose the contents of the employee's invention

without previously obtaining permission from the company.

3 The inventor shall not work the invention his/herself, make a patent application his/herself, or permit a person outside the company to work the invention.

(2) Maintenance of confidentiality

Article 13

The inventor and any persons related to the employee's invention shall maintain confidentiality regarding the invention during the time such confidentiality is necessary as a matter affecting the profits of the company.

2 The previous clause shall be effective even after the employees concerned leave the company.

(3) Disposition of inventions which are not employee's inventions

Article 14

If the inventor of an invention which has been determined not to be an employee's invention in accordance with the provisions of Article 4 wishes to transfer rights to obtain a patent for this invention, the company must decide whether to receive rights to obtain a patent for the invention.

2 If the rights to obtain a patent for an invention which is not an employee's invention are to be received by the company, this shall be executed by a separate agreement between the company and the inventor.

(4) Disposition of an invention by an employee and a person outside the company

Article 15

These rules shall also apply to inventions made jointly by an employee and an outside individual, company, university or other body which fall within the range of business operations of the company with regard to the share of the rights to

obtain a patent held by the employee.

(5) Inventions of persons who have left the company

Article 16

These rules shall apply to an invention that was completed by an employee while employed with the company, even if the completion of this invention is only learned after the employee leaves the company.

(6) Invention of a dispatched employee

Article 17

Disposition of an invention completed by an employee while being dispatched to another company shall be decided by the agreements made between the two companies and between the company and the employee.

(7) Disposition of rights overseas

Article 18

The rights to an overseas patent for an invention determined to be an employee's invention according to the provisions of Article 4 shall be transferred from the inventor to the company by delivery of a Deed of Transfer of Rights (Format no. omitted here).

(8) Application to utility models and designs

Article 19

These rules shall apply mutatis mutandis to inventions specified by the Utility Model Law Article 2(1) and designs specified by the Design Law Article 2(1).

(9) Disclosure of these rules

Article 20

The company shall continually post these rules at headquarters, all branch offices and all operations sites (laboratories, factories) for perusal.

(10) Amendment of these rules

Article 21

These rules shall be amended as necessary.

2 Amendments to these rules shall be made through discussion between the company and employees. The concrete method of making amendments shall be decided in separate detailed rules.

7. Supplementary provisions

(1) Supplementary provisions

Article 22

These rules shall come into effect on __ __, __.