2 Issues faced by companies, etc. with regard to the operation of the system specified in Article 35 of the Patent Act and possible solutions thereto (*)

When Article 35 of the Patent Act was revised in 2004, the employee invention system was established for the purpose of raising the predictability of the amount of consideration that the employer has to pay and increasing the level of the employees' satisfaction with the fairness of the evaluation of their inventions.

However, even after this legal revision, some people request re-revision of Article 35 of the Patent Act, saying that the employees' right to receive "reasonable consideration" remains a managerial risk factor. On the other hand, due to the absence of relevant court precedents after the legal revision, some people consider it unnecessary to review the employee invention system, saying that it is necessary to observe the situation for the time being. In this way, opinions are divided over the necessity of further revision.

Against this backdrop, we carried out this research by having our overseas information centers gather information and conducting a questionnaire survey on companies, and revealed how the employee invention systems in and outside Japan have actually been operated. Furthermore, we established a committee and had it examine the information collected through these activities and had each committee member give us various comments and referential information from the perspectives of the intellectual property laws, labor laws, the Civil Code, corporate IP activities, and the treatment and awareness of researchers, which we found very useful for further discussion on the roles of the employee invention system.

I Introduction

1 Background of this research

On the premise that the right to obtain a patent for an employee invention is initially attributed to the employee who made the invention (the main part of Article 29, paragraph (1) of the Patent Act), Article 35 of the Patent Act specifies the details of the employee invention system such as a non-exclusive license granted to the employer, the reserved succession of the right to obtain a patent, and the employee's right to demand "reasonable consideration" for the succession of the right. Since many disputes arose between companies and inventors over "reasonable consideration," Article 35 of the Patent Act was revised in 2004 (effective from April 1, 2005). The revised legal system raised the predictability of the amount of consideration that the employer has to pay and increased the level of the employees' satisfaction with the fairness of the evaluation of their inventions, while letting the parties concerned decide the amount of consideration at their own discretion in principle.

However, even after this legal revision, especially in the industrial circles, some people still call for re-revision of Article 35 of the Patent

Act, saying that the employees' right to receive "reasonable consideration" remains a managerial risk factor and that companies are increasingly diversified in terms of R&D activities, employment management practices, etc. On the other hand, in view of the facts that Article 35, paragraph (4) of the current Patent Act, which was revised in 2004, has not been applied to any court cases and that the operational practice and evaluation of the current legal system have not been established yet, some people consider it unnecessary to review the employee invention system, saying that it is necessary to observe the situation for the time being. In this way, opinions are divided over the necessity of further revision.

Against this background, opinions concerning revision of the employee invention system were stated in some publications such as the "Intellectual Property Strategic Program 2013" and "Japan Revitalization Strategy -- Japan is Back."

2 Purpose of this research

Regarding the employee invention system, the JPO previously conducted research titled "FY 2002 Research on the Employee Invention System," where discussions were conducted with regard to the system that had existed until the

^(*) This is an English summary by Institute of Intellectual Property based on the FY2013 JPO-commissioned research study report on the issues related to the industrial property rights system.

2004 legal revision. Therefore, this research did not provide a sufficient basis for discussions within the framework of the current Patent Act.

For this reason, we conducted this research for the purpose of identifying the issues faced by companies, etc., with regard to the operation of the employee invention system under the current legal system and providing a basis for further discussion on the necessity of revising Article 35 of the Patent Act.

3 Method of this research

This research was conducted on the following research topics.

(1) Discussions at a committee

In order to obtain support from the perspective of experts when examining and analyzing the research findings or when in need of advice, we established a committee consisting of a total of 15 persons whose specialties are related to this research, namely, eight persons with relevant knowledge and experience, five corporate workers, one labor union member, and one attorney.

At the committee, discussions were conducted from the following perspectives.

- Issues faced by Japanese companies, etc. with regard to the employee invention system
 - ➤ With regard to the amount of consideration that must be paid to an inventor who made an employee invention, is the level of predictability sufficiently high?
 - > Should the payment to an inventor be regarded as a consideration for the assignment of the invention or as an additional incentive?
 - ➤ The employee invention system has a labor law-related aspect such as an adjustment of interests between the employer and employees. What kind of employee invention system is desirable from the perspective of the labor laws?
 - ➤ Is it possible to harmonize employee invention systems on a global scale?
 - ➤ Do inventors find the current system and environment attractive?
- Solutions to the aforementioned issues

(2) Information gathering activities at overseas information centers³

In order to obtain information about the situations in other countries such as the details of the employee invention systems and the court precedents concerning the employee invention systems, we conducted research covering a total of eight countries and regions, namely, the U.S., Germany, France, the U.K., Switzerland, China, South Korea, and Taiwan. More specifically, we had the following law firms in these countries conduct the research.

Countries	Information centers
U.S.	Foley & Lardner
Germany	BOEHMERT & BOEHMERT
France	Cabinet Beau de Lomenie
U.K.	Baker & McKenzie London
Switzerland	Baker & McKenzie Zurich
China	East Associates Law Firm
South Korea	Kim & Chang
Taiwan	Formosa Transnational Attorneys At Law

(3) Questionnaire survey on companies

In order to obtain information about the employee invention system in Japan, we conducted a questionnaire survey mainly on the following topics.

- Rules concerning employee inventions
- Incentives (both monetary and non-monetary) for inventors, etc.
- Issues related to the operational practice concerning employee inventions
- Opinions, etc. about the employee invention system

I Current situation and the background of the Japanese employee invention system

In Japan, the employee invention system was initially introduced by the Patent Act of 1909. This Act adopted the "employer principle," under which the right to obtain a patent for an employee invention is attributed to the employer.

The subsequently established Patent Act of 1921 abolished the "employer principle" from the employee invention system and introduced a system that grants a license to the employer for free on the premise that the rights to an employee invention are initially attributed to the employee. If the employee allows the employer to succeed to the rights to the employee invention, the system guarantees the employee's right to receive "reasonable compensation." The same system with minor modifications was adopted by the Patent Act established in 1959.

Since many disputes subsequently arose between companies and inventors over "reasonable consideration," Article 35 of the Patent Act was revised in 2004 (effective from April 1, 2005). The revised legal system is designed to let the parties concerned decide the amount of consideration at their own discretion in principle.

Ⅲ Employee invention systems in other countries

We conducted research on the employee invention systems in a total of eight countries and regions, namely, the U.S., Germany, France, the U.K., Switzerland, China, South Korea, and Taiwan. The research has revealed that each country and region has its own unique employee invention system. The legal provisions of classification, concerning the systems attribution and compensation for employee inventions are shown in the following table as an example.

	U.S.	Germany	France	U.K.	
	- Inventions are	a. Employee	a. Employee	a. Employee	
	classified according to	invention (service	invention (Article	invention (Section	
	the case law.	· · · · · · · · · · · · · · · · · · ·		39(1) of the Patents	
		paragraph (2) of the	Intellectual Property	Act)	
	a. Invention that the	Law on Employee	Code)	- The invention shall	
	employee is obliged to	<u>Inventions</u>)	- The invention shall	be attributed to the	
	assign to his/her	- The invention shall	be attributed to the	employer. (Section	
	employer (employee	be attributed to the	employer. (Article	39(1) of the Patents	
	<u>invention</u>)	employee. (Article 6 L611-7 (1) of the		Act)	
	- The invention shall	However, the Code)	Intellectual Property	- If the invention is of	
	be attributed to the		· · · · · · · · · · · · · · · · · · ·	"outstanding benefit"	
	employee. (35 U.S.C.	employer may claim a	- The salaried person	to the employer, and	
	101)	service invention by	who is the author of	if it is appropriate for	
		means of an	such an invention	the employee to be	
	b. Invention for which	unlimited or a limited	shall enjoy "additional	awarded	
	the employer is	claim. (Article 6,	remuneration."	compensation, the	
	granted a	paragraph (1) of the	h Inventions	employee may file an	
	non-exclusive license for free	Law on Employee Inventions)	<u>b. Inventions</u> (excluding employee	application with a court or the	
	- The invention shall	- The employee shall	inventions) that the	comptroller for an	
	be attributed to the	have the right to	employer may	award of	
	employee. (35 U.S.C.	reasonable	succeed to (Article	compensation.	
	101)	compensation as	L611-7 (2) of the	(Section 40(1) of the	
		against his/her	Intellectual Property	Patents Act)	
Systems of	c. Free invention (any	employer, as soon as	Code)	,	
classification,	inventions other than	the employer has	- The invention is	b. Inventions other	
attribution and	a. and b. above)	made an unlimited	attributed to the	than employees'	
compensation	- The invention shall	claim to a service	salaried person,	inventions (Section	
for employee	be attributed to the	invention.	provided, however,	39(2) of the Patents	
inventions	employee. (35 U.S.C.	(Article 9, paragraph	that the employer	Act)	
	101)	(1) of the Law on	shall be entitled to	- The invention shall	
	T	Employee	have assigned to	be attributed to the	
	In the case of any type	Inventions)	him/her the	employee. (Section	
	of invention,	1. Dona immandian	attribution or	39(2) of the Patents	
	compensation shall be	b. Free invention	enjoyment of all or	Act)	
	provided based on the agreement concluded	(Article 4, paragraph (3) of the Law on	some of the rights in the patent protecting	- The employee may file an application	
	between the employer	Employee	his/her employee's	with a court or the	
	and the employee.	Inventions)	invention. (Article	comptroller for an	
	and the employee.	- The invention shall	L611-7 (2) of the	award of	
		be attributed to the	Intellectual Property	compensation, if the	
		employee. (Article 6	Code)	benefit derived by the	
		of the Patent Law)	- If rights are	employee from the	
		,	assigned, the salaried	contract of	
			person shall be	assignment, etc. is	
			entitled to obtain a	inadequate in relation	
			"fair price." (Article	to the benefit derived	
			L611-7 (2) of the	by the employer and	
			Intellectual Property	if the employee	
			Code)	should be awarded	
				compensation.	
			c. Free invention (the	(Section 40(2) of the	
			first sentence of	Patents Act)	
			<u>Article L611-7 (2) of</u>		

the Intellectual Property Code) - The invention shall be attributed to the salaried person. (the first sentence of Article L611-7 (2) of the Intellectual Property Code)

	Switzerland	China	South Korea	Taiwan	
	a. Employee invention	a. Employee	a. Employee	a. Employee	
	(Article 332 of the	invention (Article 6,	invention (Article 2,	invention (Article 7,	
	Code of Obligations)	paragraph (1) of the	paragraph (2) of the	paragraph (1) of the	
	- The invention shall	Patent Law)	<u>Invention Promotion</u>	Patent Law)	
	be attributed to the	- The invention shall	Act)	- The invention shall	
	employer. (Article 332,	be attributed to the	- The invention shall	be attributed to the	
	paragraph (1) of the	employer. (Article 6, paragraph (1) of the	be attributed to the employee. (Article	employer. (Article 7,	
	Code of Obligations)			paragraph (1) of the	
		Patent Law)	33, paragraph (1) of	Patent Law)	
	b. Occasional	- If a patent right is	the Patent Act)	- The employer shall	
	invention (Article 332,	granted, the	- An employee shall	pay the employee a	
	paragraph (2) of the	employer shall	have a right to obtain	reasonable	
	<u>Code of Obligations)</u>	"reward" the	"fair compensation"	remuneration.	
	- The invention shall	employee.	when he/she agrees	(Article 7, paragraph	
	be attributed to the	If the invention is	with his/her employer	(1) of the Patent Law)	
	employee. However,	exploited, the	to have the employer		
	the employer may	employer shall pay	succeed to his/her	b. Inventions that the	
	reserve the right to	"remuneration " to	rights to the patent,	employer may exploit	
Systems of	acquire inventions.	the employee (Article	etc. for an employee	(Article 8, paragraph	
classification,	(Article 332, paragraph	16 of the Patent Law)	invention. (Article 15,	(1) of the Patent Act)	
attribution and	(2) of the Code of	1. Tanantiana athan	paragraph (1) of the	- The invention shall	
compensation	Obligations)	b. Inventions other	Invention Promotion	be attributed to the	
for employee inventions	- Where the occasional invention is not	than employee	Act)	employee. However,	
inventions	released to the	inventions (Article 6, paragraph (2) of the	b. Inventions other	the employer may exploit the invention	
	employee, the	Patent Law)	than employee	after paying the	
	employer must pay	- The invention shall	inventions (Article	employee a	
	him a separate,	be attributed to the	10, paragraph (3) of	reasonable	
	"appropriate	employee. (Article 6,	the Invention	remuneration.	
	remuneration."	paragraph (2) of the	Promotion Act)	(Article 8, paragraph	
	(Article 332, paragraph	Patent Law)	- The invention shall	(1) of the Patent Act)	
	(4) of the Code of	Tutone Butty	be attributed to the	(1) of the fatements)	
	Obligations)		employee. (Article	c. Free invention	
	3 g 1,		33, paragraph (1) of	(Article 8, paragraph	
	c. Free invention		the Patent Act)	(1) of the Patent Act)	
	(Article 3, paragraph		,	- The invention shall	
	(1) of the Patent Act)			be attributed to the	
	- The invention shall			employee. (Article 8,	
	be attributed to the			paragraph (1) of the	
	employee. (Article 3,			Patent Act)	
	paragraph (1) of the				
	Patent Act)				

IV Results of the questionnaire survey on companies

A questionnaire survey was conducted on a total of 2,485 companies consisting of 1,233 large

companies and 1,252 small & midsize companies, of which 1,086 companies responded (response rate: 43.7%). The breakdown of the respondents is shown below.

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Breakdown by industry

	No response	30
	Number of	Ratio
	respondents	
1. Agriculture, forestry and fisheries	1	0.1%
2. Mining	2	0.2%
3. Engineering, construction	57	5.4%
4. Foods	33	3.1%
5. Textile	19	1.8%
6. Pulp, paper	7	0.7%
7. Publishing, printing	8	0.8%
8. Chemistry (excluding medicines)	149	14.1%
9. Pharmaceuticals	36	3.4%
10. Petroleum products, coal products	5	0.5%
11. Plastics	32	3.0%
12. Rubber products	14	1.3%
13. Ceramics	25	2.4%
14. Iron and steel	10	0.9%
15. Non-ferrous metals	28	2.7%
16. Metal products	51	4.8%
17. Machinery	121	11.5%
18. Electric appliances, home electronics, heavy electrical machinery	102	9.7%
19. Telecommunications, electronics, electric measurement	61	5.8%
20. Automobiles	42	4.0%
21. Transport equipment (excluding automobiles)	27	2.6%
22. Precision equipment	42	4.0%
23. Manufacturing other than those listed from 4 to 22 above	96	9.1%
24. Transportation, public utilities	13	1.2%
25. Software, information, telecommunication services	23	2.2%
26. Basic research not specialized in the specified industrial fields	4	0.4%
27. Others	48	4.5%
Total number of respondents 1,		

In response to the question "Do you have any rules concerning employee inventions?," many respondents answered "Yes" (Yes 91.6% (986 companies), with "No" accounting for 8.4% (90 companies)). A breakdown by company size revealed that small & midsize companies are more likely to say "No" in comparison with large companies.

In response to the question "Do you have any problems related to the operation of the employee invention system?," 59.1% (598 companies) answered "Yes," while 40.9% (413 companies) responded "No particular problems."

The results of this questionnaire survey

enabled us to understand how companies have actually been operating their employee invention systems and whether they have faced any problems.

V Analysis by the committee

From July 2013 to January 2014, the research committee held a total of 14 meetings to discuss the issues related to the employee invention system. In those meetings, discussions were held from various perspectives such as the problems faced by companies within the framework of the current employee invention system, the

relationships between the employee invention system and such laws as the Copyright Act, the labor laws and the Civil Code, the initial attribution of employee inventions (to which party, the inventor or the company, should the invention be attributed?), the nature of incentives (a consideration for the assignment or an incentive for the labor), the inventors' motive for making inventions, the work ethic of researchers, etc., the opinions from the viewpoints of workers and researchers, and the actual operation of the employee invention system by small & midsize companies.

In the discussions, the committee members presented specific drafts and discussed a draft bill specifying that any employee invention shall be initially attributed to the inventor, as is the case with the current Act, and a draft bill specifying that any employee invention shall be initially attributed to the employer.

VI Conclusion

In this research, we used our overseas information centers to carry out detailed research on the actual operational practice of the employee invention systems in other countries, namely, the U.S., Germany, France, the U.K., Switzerland, China, South Korea, and Taiwan. We also conducted a questionnaire survey on companies and obtained information as to how the employee invention system has been operated by Japanese companies (large companies as well as small & midsize companies). We established a committee consisting of representatives from industrial circles and labor circles and persons with relevant knowledge and experience and asked the committee to analyze the information collected through the aforementioned activities. Each committee member provided us with various comments and referential information from various perspectives such as the perspectives of the Intellectual Property Act, the labor laws, the Civil Code, the IP-related practices at companies, and the treatment and attitude of researchers. Their comments and information helped us deepen our discussion on employee inventions.

In addition to this research, another questionnaire survey was conducted on researchers⁴. This survey was briefly explained to the committee established for this research. When it comes to the employee invention system, it is important to determine the necessity and direction of a future revision of the system in consideration of the actual operational practice of

the system by employers as well as their opinions and requests and also of the actual practices at the R&D departments as well as the opinions and requests of employees (researchers and engineers).

It would be beneficial if the results of this research and the results of the questionnaire survey on researchers are both analyzed comprehensively and used as a basis to accelerate future discussion on how to improve the employee invention system.

(Seniror Researcher : Hideki TAKAHASHI) (Researcher : Shinji KAWAMURA)

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¹ Intellectual Property Strategic Program 2013 (June 25, 2013, Intellectual Property Strategy Headquarters) [the latest date of access: January 17, 2014] http://www.kantei.go.jp/jp/singi/titeki2/kettei/chizaikei kaku2013.pdf

^{*} In this paper, the latest date of access to any and all URLs stated hereunder is January 17, 2014. Therefore, the latest date of access will be omitted from the following statements regarding the sources of referential information.

² Japan Revitalization Strategy -- Japan is Back (endorsed by the Cabinet on June 14, 2013) http://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/saikou_ jpn.pdf

³ Based on the results of the discussions at the committee, we sent overseas information centers a request for research two times.

⁴ FY2013 JPO projects such as a comparative study on overseas IP systems, "Research on the Leakage of Human Resources such as Researchers and Engineers from the Perspective of Overseas Employee Invention Systems and the Operational Practices for the Systems" (conducted by Nomura Research Institute, Ltd.)