

## 20 Problems Arising from Duplicated Protection by Patent Rights and Copyrights – With a Particular Focus on Computer Programs Created in the Course of Duty – (\*)

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*This research paper aims to develop a theory of interpretation and enactment regarding the way to adjust the relationship and effects of patent rights and copyrights in cases where an employee's creation of a computer program in the course of his or her duty gives rise to a mixture of protections of by multiple intellectual property rights.*

*For this reason, and with regard to the ownership of patent rights and copyrights, I will compare the requirements and effects of an employee's invention and an employee's work, clarify the differences and determine whether these differences may be resolved through interpretation. Moreover, I will examine the relationship between patent rights and copyrights in cases where protections are entangled due to different ownership entities for the patent rights and copyrights are different as a result of the differences between an employee's invention and an employee's work, from the perspective of the nature of these rights and provisions (the Design Act, Article 28 and the SIC Act, Article 13) which make adjustments for conflicts of rights. Through this review and by means of comparisons with the employee's invention system in the U.K., I will expose a desirable method for adjustment in cases where protections are mixed due to differences in the requirements and effects of an employee's invention and an employee's work.*

### I Introduction: Issues

With regards to the rights to a thing under the principle that a single real right can exist for a single thing, it is basically assumed that the same real rights cannot be shared for one thing. However, because certain creations may be evaluated multiply in the sense that they are protected by multiple intellectual property rights, multiple rights may exist for one thing simultaneously. And in cases where a creation that would be evaluated multiply has different ownership entities for its intellectual property rights, if the relationship between the rights is not clarified, it is unclear whether the use of the creation is legislative and its use may be inhibited. For this reason, it is essential to clarify and adjust the relationship between rights.

Several types of creations can be evaluated multiply (for instance, a building structure subject to protection under the Patent Law and a building subject to protection under the Copyright Law). Computer programs (hereinafter referred to as "Programs"), which have traditionally been protected as works by the Copyright Law, have also come under the protection of the Patent Law as inventions of an object due to amendments to the laws, especially in recent years. This has caused a situation where copyright and patent rights exist together for the same Program. As a result, in certain cases, the utilization of a Program by a third party will be restricted by two rights: patent rights and copyrights. Intellectual property law has already recognized this problem of a tangle of protection between different intellectual property rights and established some

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provisions for adjusting the effects of those rights (with regard to provisions for adjustment between the same intellectual property rights, there are Patent Law, Article 72, which adjust patent rights for improvement invention and that for initial invention; and Patent Law, Articles 10 and 28, which adjusts rights for secondary works and rights of initial right holders; with regard to provisions for adjustment between different intellectual property rights, there are the Patent Law, Article 72; Design Law, Article 26; Trademark Law, Article 28, the Act Concerning the Circuit Layout of a Semiconductor Integrated Circuit, Article 13; and the Seeds and Seeding Act, Article 21, paragraph 1). Despite this situation, neither the Patent Law nor the Copyright Law have any provisions regarding the effective relationship between patent rights and copyrights, and the Copyright Law generally does not have provisions for adjustments. Thus, the relationship between copyrights and other rights is left entirely up to interpretation. This problem of adjustment of effects between intellectual property rights arises only when the ownership entities are different, but does not arise when the ownership entities are the same person (the issue of concurrent claims should be argued separately).

When looking at the ownership of intellectual property rights, the intellectual property rights for a creation basically belong to the person who created it. With regards to a creation in service, there are two types of provisions: (1) the intellectual property shall belong to the employer primitively (Copyright Law, Article 15; and the Act Concerning the Circuit Layout of a Semiconductor Integrated Circuit, Article 5), (2) the original ownership entity of the intellectual property rights shall not be changed (Patent Law, Article 35; the Design Law, Article 15, paragraph 3 (Patent Law, Article 35 is applied *mutatis mutandis*);

Seeds and Seeding Act, Article 8.) With respect to these effects, the intellectual property rights for a single creation may belong to different entities. The abovementioned provision (2), with regard to creation in service, allows for the employer to act as the ownership entity of the intellectual property rights by contract, etc. under certain conditions and it is considered that such contracts exist in many cases<sup>(\*1)</sup>. In this case, the employer is the ownership entity of the rights under both provisions (1) and (2); however, the requirements for application of the provisions are different. Consequently, the ownership entities of the rights are different because the requirements are different

In this regard, when reviewing Programs, which are one of the creations that can be evaluated multiply, provision (2): Patent Law, Article 35 (employee's invention) may apply to the Program since the Program is subject to protection under the Patent Law, and provision (1): Copyright Law, Article 15, paragraph 2 (employee's work) may also apply since it is also subject to protection under the Copyright Law.

As mentioned above, Programs are one of the creations that may be evaluated multiply and in cases where the ownership entities of the rights are different, the relationship between the rights becomes controversial. With regard to the ownership of rights of the Program, the requirements and effects of an employee's invention and an employee's work are different. Although there seem to be common requirements, it is not clear whether they can be interpreted as being the same, due to their different expressions. It is therefore necessary to clarify cases where the ownership entities of the rights differ. If the problem is not clarified in cases where the ownership entities of the rights are different, it becomes unclear whether use of the Program is legal and such a situation may inhibit its use.

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(\*1) Hisayoshi Yokoyama, "Shokumu hatsume ni okeru "soto no taika" no kihonteki kangaekata" [Basic concept of "reasonable compensation" in employee's invention] in Hidetaka Aizawa, et al., representative editor, Chiteki zaisan no riron to gentekiteki kadai: Nakayama Nobuhiro sensei kanreki kinen ronbunshu, [Theory and Current Issues of Intellectual Property Law in Memorial Anthology for the 60th anniversary of Prof. Nobuhiro Nakayama] (2005), p.72 infra.

For this reason, it is essential to clarify the relationship between these rights and to adjust them accordingly.

Consequently, with regard to the right to obtain a patent, the patent rights (hereinafter referred to as “Patent rights, etc.”) and copyright of the Program which is created in service, this paper aims to clarify and resolve the problems that arise from the commingling of the protections of patent rights and copyrights due to differences in the requirements and effects of an employee’s invention (Patent Law, Article 35, paragraph 1) and an employee’s work (Copyright Law, Article 15, paragraph 2).

## II The System for an Employee’s Invention and an Employee’s Work under U.K. Law

With regard to the U.K. Patent Act <sup>(\*2)</sup>, Section 39, subsection (1), which stipulates ownership of an invention in the course of employee’s duty and the Copyright, Designs, and Patents Act of 1988 <sup>(\*3)</sup> (hereinafter referred to as “CDPA”), which stipulates ownership of the copyright of a work created in the course of employee’s duty, Section 39, subsection (1) of the Patent Act requires that “an invention might reasonably expected to result from the carrying out of his duties;” or “in the nature of his duties he had a special obligation to further the interests of the employer’s undertaking.” For that reason, if the employer fails to establish the requirement of Section 39, subsection (1) of the Patent Act, the invention belongs to the employee pursuant to Section 39, subsection (2) of the Patent Act. In some cases where

the employee made the work (or design) during his or her employment, the copyright (or design right and registered design right) concerning the invention may belong to the employer. <sup>(\*4)</sup> In cases where neither Section 39, subsection (1) of the Patent Act nor Section 11, subsection (2) of the CDPA apply, but the employee made a contract to assign the copyright to the employer in advance, the invention belongs to the employee, but the copyright belongs to the employer. Therefore, provisions for adjustment for cases where the copyright (or design right, or registered design right) belongs to the employer and the invention or the patent rights belong to the employee have been added to Section 39 of the Patent Act. <sup>(\*5)</sup> The provisions stipulate that when the invention belongs to the employee pursuant to Section 39, subsection (2) of the Patent Act, the following two acts do not infringe on a copyright (or design right) to which, as between employee and employer, the employer is entitled in any model or document relative to the invention: (a) an act on behalf of the employee claiming under his or her name for the purposes of pursuing an application for a patent; or (b) an act for the purpose of performing or working with the invention.

The background for the establishment of this provision is not clear from the materials for establishment: however, it is assumed that it was to avoid the occurrence of an unreasonable result where an application by the employee is restricted by the employer who obtained the copyright, <sup>(\*6)</sup> and that the amendment is to accomplish the purpose of vesting the employee with the invention in subsection (2). <sup>(\*7)</sup>

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<sup>(\*2)</sup> Patents Act 1977 c. 37.

<sup>(\*3)</sup> Copyright, Designs and Patents Act 1988 c. 48.

<sup>(\*4)</sup> Stephen F. Jones and Alan W. White for the Chartered Institute of Patent Attorneys, C.I.P.A. guide to the patents acts, (4th ed. Sweet & Maxwell 2007) para.39-17.

<sup>(\*5)</sup> CDPA Sch 5, para 11. The Patent Act, Section 39, subsection (3).

“Where by virtue of this section an invention belongs, as between him and his employer, to an employee, nothing done-

(a) by or on behalf of the employee or any person claiming under him for the purposes of pursuing an application for a patent, or

(b) by any person for the purpose of performing or working the invention, shall be taken to infringe any copyright or design right to which, as between him and his employer, his employer is entitled in any model or document relating to the invention.”

<sup>(\*6)</sup> J. Phillips & A. Firth, Introduction of Intellectual Property 4th ed. (London, Butterworth 2001) 23.17.

<sup>(\*7)</sup> Gerald Dworkin & Richard D. Taylor, Copyright, Designs & Patents Act 1988, (London, Blackstone 1990.) p. 209.

### III Ownership of the Right to a Program Made During Duties

With regard to the requirements for an employee's invention and those of an employee's work, there is a distinct difference: the requirements for an employee's invention do not include nonjudicial organizations, etc. in judicial persons, while those for an employee's work include them in "judicial person, etc."; and the requirements for an employee's invention include present or past duties, while those for an employee's work do not include past duties expressly or by interpretation.<sup>(\*8)</sup> With regard to the interpretations, "a person who engages in the business of a judicial person, etc." is decided by the offer of labor under direction and supervision and by the payment of money as a compensation for the offer of labor. Moreover, judgments by the relationship of direction and supervision have different criteria.

Since there are at least the differences mentioned above between an employee's invention and an employee's work, in such cases, the ownership entity of the patent rights and the copyrights may be different. With regard to such differences between the requirements of an employee's invention and an employee's work, there are some opinions that suggest that the abovementioned requirements should be included in a uniform interpretation. It is necessary to examine whether this interpretation of requirements for an employee's inventions and an employee's work is appropriate. In this case, it is considered to "be important" in theories "to recognize once again the difference of effects and purpose of an employee's work and an employee's

invention."<sup>(\*9)</sup> Consequently, I will review the appropriateness of these interpretations of requirements from the perspective of the difference between effect and purpose. The interpretation of requirements makes a difference in the case of the Patent Law which adjusts benefits and results in an employee's invention for an employer and an employee and in the case of employee's work which generates no benefits directly for a person who engages in the business of a judicial person, etc. since the intention of both a judicial person, etc. and a person who engages in the business of the judicial person, etc. are estimated.

In concrete terms, based on the difference in effects of the existence or absence of monetary compensation for a succession of rights, the requirement of an employee's work - "a person who engages in the business of the judicial person, etc." and who "creates in service" - are different from the requirements of "an employee, etc" or that "belongs to the duty." An employee's work should be defined to the extent that the money is paid for the creation as compensation of an offer of labor.<sup>(\*10)</sup> In the context of purpose, unlike an employee's invention, which requires the inclusion of past duty in terms of the adjustment of benefits, the "duty" of an employee's work is a presumption of intentions between a judicial person, etc. and a person who engages in the business of a judicial person, etc., and does not include a past duty since the intention that admits a judicial person, etc. as an author cannot be presumed for those acts which are not a duty at the time of creation. These interpretations are backed up by the differences in the expression of the provisions concerning an employee's

(\*8) Nobuo Monya, *Shokumu chosaku: shokumu hatsumei tou hoka no shokumujo no sosaku tonon kanren* [Employee's work: relationship with employee's invention and other creation in service], Copyright Vol. 43, No.10, p.9. Nobuhiro Nakayama, *Chosakuken ho* [Copyright Act] (2007), p180 notes, with regard to the past duty, that it is not excluded from the requirements of "made in the course of duty," however, the creation requires "initiative," therefore, past duties are not included in employee's work.

(\*9) Tatsuhiro Ueno, "Shokumu chosaku / shokumu hatsumei ni okeru jugyoshatou" [An employee, etc. in the case of employee's work / employee's invention], *Kigyo to hosozoku* [Creating New Legal System for Corporation and Society], Vol.1, No.2, p.148 *infra*.

(\*10) With regard to a person who engages in the business of judicial person, etc., see Judgment of Supreme Court, the Second Petty Bench, April 11, 2003, Case of RGB Adventure, The Hanreijiho [Judicial Report]No.1822, p.133, and with regard to duty, see Monya, *supra* note 8, p.8

invention and an employee's work.

According to the aforementioned difference in effect and purposes, it is difficult to understand the requirements for an employee's invention and an employee's work in a unified manner. There are cases where the copyright and the right to obtain the patent (patent right) may belong to an employee and an employer separately under certain conditions due to the differences between those requirements.

#### **IV Mixture of Protection between Patent Right and Copyright**

First, neither the Patent Law nor the Copyright Law has provisions to adjust a general mixture of protection between patent rights and copyrights. In cases where the implementation of a patented invention or the use of a work infringes apparently on the copyright or the patent rights, it is not obvious whether the implementation or the use is restricted. In this way, when the intellectual property rights are complicated, the understanding of the relationship between one right and another has been considered from the perspective of the nature of the right.

If patent rights have the nature of exclusive rights as dominant theory claims, since exclusive rights are not restricted to implementation by the exclusive effect of other exclusive rights alone unless there is a particular provision,<sup>(\*11)</sup> the implementation of a patented invention in the way of an apparent infringement of the copyright does not actually infringe on the copyright. Meanwhile, since the copyright not is considered to be an exclusive right, but a right to exclude, as stated above, when there are no provisions for adjustment, the use of the work is restricted by the exclusive effect

of the patent rights.<sup>(\*12)</sup> Therefore, the use of work by the copyright holder, at least, is restricted by the patent rights.

With regard to patent rights, the conclusion drawn from the case where both rights are exclusive rights is applied to the case of exclusive rights against the right to exclude. There is a question as to whether the same conclusion is derived naturally from this case. In the judgment on the Case of gloves, it is reinforced by the underlying theory: the judgment on a case where the implementation is not restricted is reserved by "there is no peculiar provision in the law;" and the arguments on the nature of the patent rights do not naturally arrive at the conclusion of the problem so that it shall be determined by each problem.<sup>(\*13)</sup> Therefore, the conclusion on whether this implementation of the patented invention, where the patent rights holder uses the work, infringes on a copyright may not be derived clearly from the nature of patent rights and copyrights.

The aforementioned problem of the mixture of protection between patent rights and copyrights is recognized by theories which advocate analogical application of the Design Law, Article 26, which adjusts conflicts between design rights and copyrights.<sup>(\*14)</sup> Certainly, it seems that analogical applications of the Design Law, Article 26 define the relationship between patent rights and copyrights in cases where protections by both rights are mixed, and contribute to resolving problems involving the restriction of the use of a Program. However, it is doubtful whether the Design Law, Article 26 takes into account cases where ownership entities of the rights are different due to the difference in requirements for an employee's work and an employee's invention. And, the question is

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(\*11) Judgment of Tokyo District Court, May 12, 1979, Case of gloves, Mutai shu [Collection of Court Decisions of Intangible Property] Vol.11, No.1, p.134

(\*12) Judgment of Supreme Court, the Second Petty Bench, July 20, 1990, Case of Popeye muffler, Saiko-saibansho Minji hanreishu [Supreme Court of Civil Report], Vol. 44, No.5, p.876.

(\*13) Nobuhiro Nakayama, Kogyoshoyuken ho (jo) [Industrial Property Law (First volume)], (2nd and enlarged edition, 2000), p.310

(\*14) Tatsuki Shibuya, "Chiteki zaisan hogo no kousaku, senzoku, kenketsu" [Mixture, exclusivity, and defect], Nihon Kogyoshoyukenho-gakkai nenpo [Annual report of Japan Association of Industrial Property Law] No.30, p.62

not only this conceptual problem, but also whether or not it is possible to apply the Design Law, Article 26 analogically to cases of mixed protection by patent rights and copyright due to a difference in objects, design and invention.

A copyright infringement by implementation of the invention can be assumed so that the implementation of the patented invention with copyright infringement of a previously created work by the patent holder is restricted by analogical application of the Design Law, Article 26. In this case, since the invention is different from the “shape of an article,” etc., it is a technical idea, and “expression” is not limited, whether the implementation of patented invention becomes a copyright infringement may not be decided until the infringement actually takes place. As a result, the execution of the right to exclude against the copyright holder by the patent rights holder is not to be restricted.

As a result, the analogical application of the Design Law, Article 26 is meaningful for defining a relationship with copyrights that is not defined from the perspective of the nature of patent rights. Meanwhile, from the point of view of securing the use of a Program’s work, it may lead to the final conclusion that no one can use the work.

There is a theory <sup>(\*15)</sup> that focuses attention on the nature of copyright as the comparative right to exclude and states a similar solution to Article 13 of the Act Concerning the Circuit Layout of a Semiconductor Integrated Circuit (hereinafter referred to as the “SIC Act”), which stipulates the relationship between circuit layout rights (which are a comparative right to exclude) and patent rights, etc. I will review the theory here. First, the SIC Act, Article 13 stipulates that “where the use of a registered circuit layout corresponds to the implementation of another person’s patented invention or registered utility model, a circuit layout rights holder, a holder of an exclusive right

to use, or a holder of a non-exclusive right to use may not exploit the registered circuit layout as a business.” However, the patent rights holder is not secured in the use of a circuit layout. Eventually, even if the SIC Act, Article 13 is analogically applied to the problem of a mixture of patent rights and copyrights, it leads to the conclusion that no one can use a Program’s work. This is the same as cases where the Design Law, Article 26 is applied analogically.

## V Solution by Legislative Process

In this way, I have examined problems raised by the mixture of patent rights and copyrights using means of solution that call on existing provisions concerning mixtures of protection by multiple rights; however, it is clear that these means cannot resolve the problem. Now, moving away from solution measures by the use of existing provisions, I will examine an ideal means of adjustment with regard to problems of the mixture of protection by the patent rights and copyrights of Programs.

Among theories that refer to enactment, a theory suggests a solution by consigning the protection of Programs to a special act. This is inappropriate not only from perspective of treaty obligations and international harmony, but also in the sense that even if the problem of mixture is solved in this way, it may lead to depriving a patent rights holder or a copyright holder of property rights without compensation. Integration of the requirements and ownership entities of an employee’s invention and an employee’s work by enactment may bring a result which is not in conformance with the purposes of the employee’s invention and the employee’s work, such as the benefits and intentions of the parties involved. It may also bring a result which excessively restricts other benefits to be protected (constitutionally) in the case of an employee’s work. These solutions are therefore unacceptable.

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(\*15) Monya, *supra* note 8, p.12 *infra*.

Therefore, I propose that the U.K. laws will suggest the ideal method of adjustment for Japanese intellectual property system, since there are factors that require particular consideration in the case of creation in the course of duty even when considering problems of protection. The U.K. laws adjust patent rights and copyrights with particular consideration for creation in the course of duties. Due to the difference in the provisions of the U.K. laws and Japanese laws, the problems arising from the mixture of patent rights and copyrights in Japan cannot be solved by directly introducing the U.K. Patent Act, Section 39, subsection (3) into Japanese laws.

However, the U.K. Patent Act, Section 39, subsection (3) suggests that the admissibility of adjustment limited to cases of creation in the course of duties, unlike provisions for adjustments between general rights and adjustment limited to cases of creation in the course of duties, may lead to a solution based on the purpose of the provisions for creation in the course of duties which is different from the nature of patent rights or copyrights.

Then I examine what it means for a work to be an employee's invention and for a work which does not correspond to the requirements of an employee's work. In cases where ownership entities of the rights for a creation in the course of duties are different, adjustment to approve the use of a Program's work created by an employee for an employer, etc. who may implement a patented invention may accomplish the purposes of an employee's invention and an employee's work based on the following reasons: (1) there is a request that an invention shall be implemented by an employer when it corresponds to an employee's invention; (2) provision of an employee's work was established after consideration of only the ownership of a right; (3) if a case does not correspond to an employee's work, there is no active intention or meaning; and (4) the nature of copyrights in the Copyright Law as a right to exclude.

In terms of methods to adjust permission, etc. for use, since it is not the assignment of a "right," it is unnecessary to adjust benefits as well as non-exclusive rights for an employee's invention. However, provided that since the Copyright Law does not include the means to act against a third party with regard to the permission to use a copyright, I conclude that it is necessary to enact provisions so that a right to use held by an employer may be against the assignee of a copyright like the Patent Law, Article 99, paragraph (2).

As for a means of solution by enactment, there may be a method to enact the restrictive positions of rights according to suggestions from the U.K. law. In this case, in order to solve all of the problems of the mixture of rights, it is necessary to stipulate that an author may not exercise his or her right against all patent holders, exclusive licensees, and non-exclusive licensees regarding an employee's invention. This allows use of a work only by a patent holder's permission for a non-exclusive license and leads to the conclusion that it may lose the meaning that the employee holds a copyright. Therefore, I conclude that this type of enactment is inappropriate.

## VI Conclusion

In this paper, I examine issues related to patent rights (the right to obtain a patent) and copyrights for a Program created by an employee in the course of his or her duties, for the purpose of developing a theory of interpretation and of enactment concerning ownership, the relationship between rights and the method for adjusting those rights.

Due to differences in the requirements for both provisions, a right to obtain a patent (patent right) and copyright belong to an employee and employer separately in a certain cases (Chapter III). Problems of mixture of protections that arise in cases where ownership entities of patent rights and copyrights are different were not solved with existing provisions for the adjustment between rights (Chapter IV). Consequently,

I considered methods of solution by new enactment from the perspective of U.K. law (Chapter V). First, the U.K. Patent Act, Section 39, subsection (3) suggests that the admissibility of adjustment limited to cases of creation in the course of duty, which is different from provisions for adjustment between general rights and adjustment limited to a case of creation in the course of duty, may lead to the solution in the purpose of the provisions for creation in the course of duty. Next, I considered the differences in the systems for an employee's invention and an employee's work and concluded that, in cases where the ownership entities of the rights for a creation in the course of duties are different, an adjustment to allow an employer, etc. who may implement the patented invention to use a Program's work created by an employee may accomplish the purposes of an employee's invention and an employee's work according to the following points: (1) there is a request that an invention shall be implemented by an employer when it corresponds to an employee's invention; (2) provision of an employee's work was established after consideration of only the ownership of a right; (3) if a case does not correspond to an employee's work, there is no active intention or meaning; and (4) the nature of copyrights in the Copyright Law as a right to exclude. Since the Copyright Law does not have the means to act against a third party with regard to the permission to use a copyright, I concluded that it was necessary to enact a provision that stipulates a right to use held by an employer that may set it against an assignee of a copyright, like the Patent Law, Article 99, paragraph (2).

As stated above, problems in cases where patent rights and copyrights belong to an employer and employee respectively seem to have been resolved. However, in cases where patent right, etc. are transferred or a permission of use is provided after the transfer, the problem of the mixture of protection arises again and is not yet resolved. This is beyond the scope of a work is a creation in the course of duties and is

now an issue of the mixture of protection of general rights, which is beyond the scope of this paper, which examines the specific issue of creation in the course of duties.

However, as mentioned above, with regard to an act of piracy by implementation of an invention made in the course of duties performed by a patent rights holder, exclusive licensee, or non-exclusive licensee, the establishment of restrictive provisions on the right to execute a copyright becomes a solution when considering only the mixture of protections. However, if such a solution is adopted, the meaning that the copyright holder possesses a copyright will almost be lost by a patent holder's permission for non-exclusive rights. Consequently, the adjustment loses its sense of protecting a Program's work and does not contribute to the creation of a work. Moreover, with regard to the problem of the mixture of general protections, an adjustment by the principle of priority (like the Design Law, Article 26) may be considered. However, as mentioned before, since the invention is a technical idea, and "expression" is not completely limited by the specification or claims, whether the implementation of patented invention becomes a copyright infringement may not be decided until the infringement actually takes place. Therefore, solution by the principle of priority is inappropriate as a means for solving a problem concerning the mixture of protections by the patent rights and copyrights of a Program.

With regard to the general mixture of patent rights and copyrights of a Program, the issues discussed in this paper still remain. Furthermore, examination of the most appropriate means of adjustment for such cases is also pending. I would like to place this concern at the center of my future research.