13 Research and Study on the Future of Intellectual Property Protection

— Issues Concerning Storage of Works —

Among the issues over copyright in Japan, this research and study focused on the issue of the temporary storage of works, raised along with the rapid progress of computer and networking, examined the ideas thereon in Japan, Europe and the U.S., and extracted the points at issue in Japan.

In Europe and the U. S., a legislative approach is prevailing where certain types of temporary storage should be excluded from the scope of right by provisions of limitation of right on the assumption of a broad concept of "reproduction" and "reproduction right".

In Japan, an interpretation approach has been dominant where certain types of temporary storage are considered as originally not included in the concept of "reproduction" under the Copyright Law on the assumption of a narrow concept of "reproduction". However, signs of reviewing the conventional interpretation based on prevailing notions have been emerging recently.

Under these circumstances, with regard to a suitable way of thinking on the issue of temporary storage of works from a legal standpoint, the future issues for Japan can be listed as follows; 1) what cases are to be subject to legal measures; 2) what acts are to be subject; 3) what specific policies should be taken. The specific direction to take in this respect will be covered in future examination.

I Idea of Reproduction Right in International Treaties

1 Berne Convention

In terms of international treaties, Article 9 of the Berne Convention is the cornerstone with regard to reproduction right. Article 9 (1) of the Berne Convention defines reproduction right in the following manner: "Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorizing the reproduction of these works (in any manner or form)." Since the wording "in any manner or form" is inserted here with respect to the concept of reproduction, the concept of reproduction is in principle considered to cover an extremely broad scope. It is thought that discussion should be proceeded to under the assumption that temporary storage can be included in this principle. Article 9 (2) provides limitation of the reproduction right.

Drawn up in 1886, the Berne Convention has not been revised since the last Paris revision in 1971. Consequently, it is the WIPO Copyright Treaty that came into existence to make a revision as one of "special agreements" of Article 20 of the Berne Convention.

2 WIPO Copyright Treaty (WCT)

The concept of reproduction or reproduction right was also one of the issues in the course of the deliberations on the WIPO Copyright Treaty ("World Intellectual Property Organization Copyright Treaty" (WCT)). More specifically, a draft proposed as the Basic Proposal, at first contained clauses on temporary storage, which became a focus of discussion in the course of the deliberations. However, they were finally deleted and were not adopted in the Treaty.

The deleted Article 7 (1) of the Basic Proposal(*1) adopted a principle which affirms that temporary storage also falls under reproduction by regarding temporary or indirect reproduction in any manner or form as being included in reproduction as stated in the Berne Convention. On that basis, that Article 7 (2) allowed Contracting Parties to exclude temporary storage from the scope of the reproduction right by legislation such as limitation of the right within the scope of Article 9 (2) of the Berne Convention.

3 WIPO Performances and Phonograms Treaty (WPPT)

The issue of temporary storage was also discussed with respect to the WIPO Performances and Phonograms Treaty (WPPT).

More specifically, Article 7 (exclusive right of performers) and Article 11 (right of producers of phonograms) of the Basic Proposal provided the possibility of limitation of the right by legislation of Contracting Parties on the basis of providing

(*1) WIPO, Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions concerning the Protection of Literary and Artistic Works to be Considered by the Diplomatic Conference, CRNR/DC/4, August 30, 1996.

that temporary storage is also included in reproduction. However, the wording "whether permanent or temporary," contained in the Basic Proposal was deleted in both Articles in the final version of the Treaty.

For both the WPPT and the aforementioned WCT, the prehistory of reaching such a conclusion is regarded as being based on the fact that no agreement had been reached on the following points at issue; ① whether to provide that "temporary storage" is not reproduction or that it falls under limitation of right on the basis of considering it as reproduction; ② whether provisions of exceptions shall be forcible provisions or be entrusted to the Contracting Parties; ③ the scope of the provisions of exceptions and the way of providing them(*2). Another reason for the insufficient discussion is thought to be the fact that representatives of countries who attended the Diplomatic Conference lacked the technical knowledge required for examining this issue, and did not have a solid understanding of its realities(*3).

However, although no term equivalent to temporary storage was placed in the body of the Treaty, a purport that temporary storage is also reproduction was included in the "Agreed Statements Concerning the WIPO Copyright Treaty(*4)" and the "Agreed Statements Concerning the WIPO Performances and Phonograms Treaty(*5)." This is regarded as being based on the strong insistence of the United States.

4 Summary

As described above, no clear conclusion about temporary storage was specified for the bodies of these Treaties in the discussions on the WCT and WPPT, which have their origin in the meaning of reproduction defined in Article 9 of the Berne Convention, but the purport that temporary storage was also reproduction was stated in both Agreed Statements, and therefore, this can be considered as a half-measure.

Therefore, there is still no wording among international treaties which clearly provides for how to treat temporary storage other than these Agreed Statements.

II Right of Reproduction and Temporary Storage in Europe and the U.S.

1 The U.S.(*6)

In the U.S., temporary storage has been recognized as falling under reproduction in judicial precedents and theories for some time. Such recognition is also clear from the statements of the U.S. at the WIPO. The situation in the U.S. with respect to this point shall be covered in this section.

(1) The U.S. White Paper

In the U.S., a white paper called "Intellectual Property and the National Information Infrastructure(*7)" was published in September 1995. With regard to the storage of a work in computer memory, the white paper set out concrete cases in which one or more "copies" were regarded to have been made in terms of the Copyright Act, legislative history or judicial precedents(*8). As a theoretical background in terms of judicial precedents, the white paper cited that CONTU (the National Commission on New Technological Uses of Copyrighted Works) Final Report noted "The introduction of a work into a computer memory would, consistent with the law, be a reproduction of the work, one of the exclusive rights of the copyright proprietor"(*9).

Then, the white paper concluded that even the temporary storage of a work in computer memory falls under reproduction, based on the definition of "copies" in the US Copyright Act, "Copies are material objects (other than phonorecords), in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a

(*2) Kaoru Okamoto, Chosakuken hogo no kokusaitekidoukou nitsuite (excerpt), Vol. 37, No. 433 Copyright, page 8 (1997).
(*3) Ibid.
(*4) WIPO, Agreed Statements Concerning the WIPO Copyright Treaty, CRNR/DC/96, December 23, 1996.
(*5) WIPO, Agreed Statements Concerning the WIPO Performances and Phonograms Treaty, CRNR/DC/97, December 23, 1996.
(*6) Refer to "'Ichijiteki chikuseki' ni okeru fukuseikoui no sonzaito fukuseibutsu no seisei" Ichiyo Shiozawa, Keio University Discussion and Research on Jurisprudence and Politics, No. 43, (1999).
(*7) United States, Information Infrastructure Task Force, Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights, September, 1995.
(*8) IP and NII, supra N.7, pp.65-66.
(*9) Final Report of the National Commission on New Technological Uses of Copyrighted Works, 1978, p.40.

phonorecord, in which the work is first fixed(*10)" (*11). Behind such conclusion is a perception of storage in computer memory in terms of the case laws or theories, which will therefore be covered below.

(2) Judicial Precedents and Theories in the U.S.

In the U.S., since before examination of the WIPO, storage of a work in a computer memory has been regarded as falling under reproduction in terms of judicial precedents and theories.

The existing US Copyright Act defines "copies" as stated above. However, prior to that, the US Copyright Act of 1909 provided that only readable items fall under reproduction on the basis of the judgement of the US Supreme Court on the case of "White-Smith Publishing Co. v. Apollo Co."(*12). The existing Copyright Law changed this, laying down the definition cited above. Due to this, silicon chips onto which a copyrighted program is written are considered as falling under the scope of "copies," with writing onto RAM from a "relatively" permanent medium such as a hard disk also falling under reproduction (*13). This is because the US Copyright Act requests reproduction to be "sufficiently permanent to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration" based on the definition of "fixed." This is because when data is placed onto RAM, it is possible to access the data up to when the computer is shut down and this fixed period cannot be regarded as merely brief in duration(*14).

In this regard, the judgement of the Ninth Federal Circuit Court of Appeals on the case of MAI v. Peak on April 7, 1993(*15) is regarded as a precedent(*16).

Like this, under the US law, which has definitions of " copies (original works and reproductions)" and " fixed," both judicial precedents and theories coincide in considering the writing of a program into RAM as reproduction.

(3) The Digital Millennium Copyright Act

Based on the DMCA (Digital Millennium Copyright Act)(*17) of 1998, provisions for limitations on the liability of a service provider were established in Section 512 of the existing US Copyright Act. Among the provisions, Section 512(b) concerns system caching (cache). Hereby, a network service provider shall not be liable for infringement of copyright by reason of the storage of material made available online in a cache by a person other than the service provider. Such a provision for exemption of liability of a provider for caching is set because of the accepted assumption that temporary storage such as caching falls under reproduction and infringes the copyright of the cached work.

However, this provision was stipulated in relation to limitations on the liability of a service provider, and it is necessary to pay attention to the points that the provision neither affirms that temporary storage generally falls under reproduction nor limits the right to generally relieve those who have conducted temporary storage.

2 EU

(1) EC Software Directive(*18)

The first provision concerning temporary storage set at EU (European Union) level is considered to be the so-called EC Software Directive of 1991.

(i) Provision concerning reproduction right (Article 4)

In the process of examination of the Directive, with regard to Article 4 providing for temporary storage, there had been opinions that the scope of the reproduction right should be limited to "permanent" storage(*19); however, it was conclusively determined that the right extends to the act of reproduction regardless of the permanence. In the Article, the expression " temporary reproduction" is explicitly used. However, it is necessary to take note of the fact that there is no definition of "reproduction" in

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(*10) 17U.S.C. § 101

(*11) IP and NII, supra N.7 pp.64-65.

(*12) 29 U.S. 1 (1908).

(*13) Nimmer, Melville B. & Nimmer, David, [1997], Nimmer on Copyright (Matthew Bender & Co., Inc.) § 8.08[A][1].

(*14) Ibid.

(*15) MAI Systems Corporation v. Peak Computer Inc., 991 F. 2d 511 (9th Cir. 1993).

(*16) As introduction, criticism and interpretation of this judgement, refer to Daisuke Yoshida, computer no maintenance service no tameni maintenance gyousya ga user no computer no RAM ni program wo load suru koto ha chosakuken no shingai ni ataru to shita jirei, US Law (1996, No.1), p.227.

(*17) Public Law No. 105-304, 112 Stat. 2860 (October 28, 1998).

(*18) Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, Official Journal L 122,17/05/1991 p.42-46.

(*19) B. Czarnota/R. Hart, LEGAL PROTECTION OF COMPUTER PROGRAMS IN EUROPE, 1991, p.56.

the Directive(*20).

With regard to the purport of this Article, Mr. B. Czarnota, who engaged in enactment of the Directive at the DG III (Directorate General III) of the European Commission of the time, explained that since "temporary copy" arises in the course of computer-based fraud, the planting of computer viruses, the unauthorized deletion of data, and so on, it was necessary to ban "temporary copy" by exclusive right(*21).

(ii) Provision concerning limitation of right (Article 5)

Requirements for limitation of reproduction right are as follows.

- Absence of specific contractual provisions;
- Necessary for the use of the computer program;
- By the lawful acquirer of the computer program;
- In accordance with the intended purpose of the computer program.

"In accordance with the intended purpose" makes it a requirement for the limitation of reproduction right to be in accordance with various conditions which may be set in a license agreement for the computer program (designation of computers used, limitation of number of computers concurrently used, purpose of use, etc.). It is necessary to pay attention to the point that those which are originally contractual problems become requirements.

(2) EC Neighboring Right Directive(*22)

In a provision for reproduction right in Article 7 of the directive concerning neighboring rights of copyright, enacted at about the same time as the EC Software Directive, there is no expression about whether or not it be "temporary," and there is also no such description thereof in the whereas clause. Article 7 of this Directive is merely using the wording of Article 10 of the WIPO Neighboring Right Treaty (Diplomatic Conference on Certain Copyright and Neighboring Rights Questions). It is speculated that the watching and listening to music contents and image contents by use of computer, etc. and the distribution of them through networks were not as much developed at that time as they are today, and the environment was not one in which people were especially conscious of temporary storage. With regard to limitation of right, there is no specific provision related to temporary storage.

(3) EC Database Directive(*23)

(i) Provision concerning reproduction right (Article 5)

After the EC Software Directive, discussions arose in the directive concerning protection of databases. Article 5 of the directive set a provision succeeding the EC Software Directive and stated with regards to reproduction right that "in respect of the expression of the database which is protectable by copyright, the author of a database shall have the exclusive right to carry out or to authorize: (a) temporary or permanent reproduction by any means and in any form, in whole or in part."

In this provision, the purport is explained in the whereas clause of this Article, so that it is possible to know that the provision is one with an aim to place the screen display of the contents under the control of the copyright holder by using personal computers, etc. in light of characteristics of databases. In the whereas clause, the term "temporary transfer" is present, and it is regarded as an act which falls under "temporary reproduction."

(ii) Provision concerning limitation of right (Article 6)

Limitations of reproduction right are composed of the following requirements.

- Necessary for the purpose of access to the contents of the databases and normal use of the contents;
- By the lawful user.

In the Article, "lawful users" are considered to be users who access or have acquired media by fairly paying the counter value, and this act of payment, originally unrelated to the act of use of work is required in the same manner as in the EC Software Directive.

(4) EC Electronic Commerce Directive(*24)

For the purpose of defining the liability which Internet service providers should bear for transmission of illegal information on the Internet, etc., the EU enacted the EC Electronic Commerce Directive.

Article 13 of the said Directive provides that Internet service providers shall not be liable for compensation for damage regarding temporary

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(*20) In that context, although it is still unclear in the Directive whether or not "temporary storage" is regarded as "reproduction," it can be said that in the Directive, it is considered possible to extend reproduction right to cases of temporary storage.

(*21) B. Czarnota/R. Hart, supra note 19.

(*22) Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property, Official Journal L 346, 27/11/1992 p.61-66.

(*23) Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, Official Journal L 77, 27/03/1996 p.20-28.

(*24) Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), Official Journal L 178, 17/07/2000 p.1-16.

storage when satisfying all the following requirements.
(a) the provider does not modify the information;
(b) the provider complies with conditions on access to the information;
(c) the provider complies with rules regarding the updating of the information, specified in a manner consistent with industrial standards;
(d) the provider does not interfere with the technology, consistent with industrial standards, used to obtain data on the use of the information;
(e) the provider acts expeditiously to remove or to bar access to the information upon obtaining actual knowledge of one of the following:
• the information at the initial source of the transmission has been removed from the network;
• access to it has been barred;
• a competent authority has ordered such removal or barring.

Since it is unclear whether temporary storage provided is that to which reproduction right can extend, the draft of the EC Copyright Directive examined in parallel with the EC Electronic Commerce Directive includes a provision requiring it to be made clear in the context of the copyright laws of Member States.

(5) Draft of EC Copyright Directive

(i) Provision concerning reproduction right (Article 2)

Since this draft of the Directive is placed in the position of comprehensively handling related directives such as the EC Software Directive, the EC Database Directive, the EC Neighboring Right Directive, etc., the wordings of these prior directives are borrowed in Article 2, in the attempt to express the scope of right to the fullest extent. Furthermore, the Article has been maintained as the original up to end of the second deliberation of the European Parliament, and it seems that the Article will be established as the suggested draft(*25). There is no definition of "reproduction" in the same manner as in the EC Software Directive.

"Article 2: Reproduction right

Member States shall provide for the exclusive right to authorize or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part"

(ii) Provision concerning limitation of right (Article 5)

After going through draft and amended suggestion stages, the final draft at the present moment is the Common Position(*26) and the right will be limited when all the following are satisfied.
• being transient or incidental;
• being an integral and essential part of a technological process whose sole purpose is to enable a transmission in a network between third parties by an intermediary or a lawful use of work;
• have no independent economic significance.

Here, the meaning of "lawful use" becomes an issue, and the whereas clause 33 defines that use with license from a right holder or with legal authorization is lawful. Based on this, license for "use" of a work which is not the exclusive right of the copyright holder becomes a condition for reproduction accompanied by "use", and as a result, copyright holders become able to indirectly prohibit "use"; however, since the "intended purpose" in the EC Software Directive is not included in requirements, it seems appropriate to have the understanding that the whereas clause merely provides that the "use" of illegal reproduction such as pirated copies is illegal.

(6) Schedule of Future Examination in Europe

The European Commission declared that it will review the EC Software Directive after establishment of the draft EC Copyright Directive(*27).

3 Germany

(1) Copyright Law

Reproduction right is provided in Article 16 as below; however, no definition of reproduction is supplied.

"Article 16

1. Reproduction right refers to the right of making reproduction of work regardless of method or quantity.
2. Duplication of works in equipment from which image and sound series (visual recordings and sound recordings) may be repeatedly reproduced is also termed reproduction. This is regardless of whether they are reproductions of original visual or sound recordings or reproductions of reproductions of visual or sound

(*25) Proposal for a European Parliament and Council Directive on the harmonization of certain aspects of copyright and related rights in the Information Society (98/C 108/03), COM(97) 628 final, Official Journal C 108, 07/04/2000 p.6-13.
(*26) Common Position (EC) No 48/2000 of 28 September 2000 adopted by the Council, acting in accordance with the procedure referred to in Article 251 of the Treaty establishing the European Community, with a view to adopting a Directive of the European Parliament and of the Council on the harmonization of certain aspects of copyright and related rights in the information society, Official Journal C 344, 01/12/2000 p.1-22.
(*27) REPORT FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT AND THE ECONOMIC AND SOCIAL COMMITTEE on the implementation and effects of Directive 91/250/EEC on the legal protection of computer programs COM (2000) 199 final, 10/04/2000.

recordings."(*28)

There are temporary storage-related clauses which were introduced when the EC Software Directive was put into force (Article 69 c, d). The wordings of both clauses are identical to those of Article 4(a) and Article 5.1 of the EC Software Directive, respectively.

(2) Judicial Precedents

Judicial precedents define that not all technical reproductions are regarded as reproduction under the Copyright Law(*29), and take the position of considering " technical reproduction" and " reproduction" separately under the Law.

(3) Relation with Obligation of Remuneration with Respect to Sound Recording and Visual Recording

As an issue particular to Germany with relation to temporary storage, there is a concern about the right to claim remuneration for private reproduction.

Articles 54 (1) of the Copyright Law places the obligation of payment of remuneration with the manufacturers of equipment, etc. which is obviously provided for reproduction by "recording of broadcasts in video or sound format" and (2) places the obligation of payment of remuneration with the manufacturers of equipment, etc. which is provided for the purpose of reproduction, as in by actual "reproduction of a work" "or by a method with similar effect". If "recording" in the above Article 16(2) or "reproduction" "or method with similar effect" in Article 54(2) include temporary articles without permanence, the scope of equipment, etc. which becomes subject to Article 54 (1) and (2) will extend to general IT-related equipment with RAM, causing a big problem for the IT equipment-related industry.

III Regarding Reproduction Right and Temporary Storage in Japan

1 Copyright Law

With regard to reproduction, the Japanese Copyright Law provides just the following, and there is no express provision to distinguish the feasibility of infringement of reproduction right based on whether the reproduction is permanent or temporary.

"Article 21: The author shall have the exclusive right to reproduce his work."

The "Main paragraph of Article 2(1)(xv) (definition of reproduction): 'reproduction' means the reproduction in a tangible form by means of printing, photography, polygraphy, sound or visual recording or otherwise…"

On the other hand, Article 113(2), which provides that the act of using programs shall be considered to constitute an infringement on that copyright only when fulfilling certain subjective requirements, is sometimes brought up as a basis of argument for the legitimation of temporary storage, regarded as a provision naturally assuming that temporary storage necessarily accompanying the use of a program does not in principle constitute infringement.

"Article 113(2): An act of using on a computer, in the conduct of business, copies made by an act infringing copyright in a program work … shall be considered as constituting an infringement on that copyright, so long as a person using such copies is aware of such infringement at the time when he has acquired the authority to use these copies."

2 Rule for Usage Fees of Works

In "Rules of usage fees of works related to the music interactive distribution business", JASRAC (Japanese Society for the Rights of Authors, Composers and Publishers)(*30)(*31) accepted the claims of the NMRC (Network Music Rights Conference)(*32) and treated streamed distribution (Receivers reproduce online) and downloaded distribution (Receivers reproduce off-line) differently, with the fixed usage fee for the former at a lower level. Even streamed distribution also requires the act of buffering by those that will receive the data, and that distinction is made between this and off-line reproduction (downloading) can also be taken to signify that the temporary storage necessarily accompanying on-line reproduction does not fall into "reproduction" under the Copyright Law.

3 Copyright Council of the Agency for Cultural Affairs

Although the Copyright Council of the Agency for Cultural Affairs has expressed its

(*28) "Gaikoku chosakuken houreishu (16) --- Doitsu-hen," translated by Hiroshi Saito (Copyright Research and Information Center, March 1995).

(*29) Federal Supreme Court, 'Betriebssystem', CR 1991, 80,85; M. Lemann & C. F. Tapper, European Software Law, pp. 169-170.

(*30) http://www.jasrac.or.jp

(*31) http://www.jasrac.or.jp/network/docs/ninkakitei.htm

(*32) http://www.enc.or.jp/nmrc/

views concerning temporary storage several times up to now, it always takes the position that temporary storage does not constitute infringement of copyright. And, the International Subcommittee Report (November 2000) stated as follows.

"With the progress of digitization and networking, the handling of 'temporary storage' of electronic data related to programs and other works, including momentary and transient storage such as storage in telecommunication equipment, in computer memory and in cache/server, becomes an important issue."(*33)

"With regard to 'temporary storage,' there are varying ideas in different countries on the scopes not covered by the right, and it seems necessary to examine the handling considering changes of technical background and the international trend of discussion.

<Way to proceed measures> The Copyright Council, etc. will conduct examinations with regard to the treatment of the 'temporary storage' of electronic data related to programs and other works."(*34)

4 Trial Example

For perhaps the only trial in which temporary storage was squarely referred to, there are two judgements in relation to the so-called Star Digio case at the Tokyo District Court, dated May 16, 2000.(*35)

One of the points at issue in this trial was whether or not transmission of music data by the defendant fell under the reproduction of data into RAM within the receivers of those receiving the data. The Tokyo District Court made the judgement that since "reproduction" under the Copyright Law means production of reproduction in a form which may be repeatedly used in the future, temporary and transient storage of music data in RAM does not originally fall into "reproduction" under the Copyright Law in the sense that it can persist only in an electric state.

In light of this judgement, the following issues need to be examined. First of all, the scope, in other words, whether the requirement of the possibility of repeated use cited in the findings of the judgement or the requirement of temporality/transience becomes a determining factor and what relation both requirements have to each other, becomes an issue. Next, the theoretical ground of the findings of the judgement. In other words, why the possibility of repeat "use" of a work has bearing on the establishment of "reproduction" becomes an issue. Then, the subject of the temporary storage (sender, receiver or equipment itself), especially in this case, becomes an issue.

5 Theories

There is the Noishiki theory, a theory which espouses the idea that temporary storage constitutes infringement(*36).

In contrast, theories which deny infringement can be divided into the following three categories according to their basis of argument.

(1) Standpoint Based on the Idea That Temporary Storage Necessarily Accompanies Originally Lawful Use(*37)

It is possible to make counterargument against this view that grounds for always giving "freedom of the use of a work" priority over "limitation of the use of a work" are unclear. In other words, for example, even though reading is certainly an act of the free use of a work, in order to always regard the act of use (reproduction) necessarily accompanying it as lawful, the further proof that mere use is taking priority over utilization for some motive seems necessary.

(2) Standpoint Based on the Idea That There is no Disadvantage to the Copyright Holder(*38)

It is possible to make counterargument against this view that in a case of usual infringement of reproduction right, which is not temporary storage, the Copyright Law does not necessarily recognize reproduction based on the loss of opportunities for sales (On the basis of regarding cases in which opportunities for sales are not lost as reproduction, the right for certain categories of acts is specially limited).

(*33) Report of the International Subcommittee of the Copyright Council, p.33 (November 16, 2000).

(*34) Id, p.34.

(*35) Tokyo District Court on May 16, 2000, (wa) No. 17018 of 1998; Tokyo District Court on May 16, 2000, (wa) No.19566 of 1998.

(*36) Isao Noishiki, Kompyut? niokeru fukusei, Copyright Research, No. 16, p.91 (1989).

(*37) Hiroshi Saito, Kousakusuru shinky?no kadai, Jurist, No. 1132, p.5 (1988); Hiroshi Saito, Chosakukenhou, p.159 (Yuhikaku, 1998).

(*38) Nobuo Monya, Proguramu no hogo nikansuru shomondai, Copyright, Vol. 33, No. 6, p.5 (1993); Yoshiyuki Tamura, Chosakukenhou gaisetsu, p.113, (Yuhikaku, 1998).

(3) Standpoint Based on the Idea That There are No Subjective Factors Such as Intention/Purpose/Recognition in the Involvement of the Person Who Conducts Reproduction(*39)

With regard to this view, there seem to be issues that remain to be examined, such as what specific subjective factors are required as requirements for infringement of reproduction right, for example, whether the level of knowledge of each individual actor becomes an issue (whether constitution or non-constitution of infringement differs for computer engineers and the general public).

Ⅳ State of Discussion with Respect to Temporary Storage and Points at Issue in Japan

1 State of Discussion

Domestic and international ideas over issues of temporary storage can be categorized as follows.

(1) Idea That Temporary Storage is Included in the Scope of Right under the Copyright Law

This idea assumes the understanding that temporary storage is "reproduction" under the Copyright Law and is covered by the provision of reproduction thereunder. According to this idea, temporary storage shall be infringement of copyright as long as it is conducted without permission(*40).

However, even if temporary storage is considered as being included in the scope of the right under the Copyright Law, the possibility remains that temporary storage cannot be said as always constituting infringement of copyright. This is because even if certain temporary storage is included in the scope of right under the Copyright Law, it does not constitute infringement with license from the right holder. Also, even if it is illegal under the Copyright Law, there is room for establishment of the interpretation approach which denies the infringement by concepts from the Copyright Law such as abuse of the right(*41).

(2) Idea That Temporary Storage is not Included in the Scope of Right under the Copyright Law

(i) Idea of including temporary storage in "reproduction right" at first and then limiting the right

This is the idea of comprehending temporary storage by including it in the subject of the provision of "reproduction right" at first, and then excluding it from the scope of right by the provision of limitation of the right. This idea is based on the assumption of a broad comprehension of the concept of "reproduction" and of the subjects of "reproduction right." According to this, it becomes possible to freely conduct temporary storage in principle. Some EC Directives (Software Directive, Database Directive, Electronic Commerce Directive, draft of the Copyright Directive [amended draft; including common position]) and European and US domestic laws adopt or assume a broad concept of "reproduction right" and then exclude certain types of temporary storage from the scope of right by the provision of limitation(*42). Recently, in particular, not a few examples can be observed in which a broader concept of "reproduction right" is defined by using terms such as "temporary or permanent" in consideration of the issue of temporary storage(*43). Similarly, many examples of legislation in various foreign countries based on this idea are evident. It is also considered that behind the fixing of such interpretation is the reason that there is a broad concept of "reproduction right" in European and US domestic laws and Article 9 (1) of the Berne Convention

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(*39) Kenji Naemura, Maruchimedia shakai niokeru chitekizaisanken: Maruchimedia shakai no chosakuken, written and edited by Naemura and Komiyama, p.66, (Keio University Press, 1997) and Shiozawa, cited in above Note 6, p.213 (1999). In particular, the latter is a noteworthy opinion in the point that it consider reproduction and act of reproduction separately stating that generation of reproduction is also recognized for temporary storage; however, there is no "act" of reproduction which constitutes infringement of copyright (accompanying subjective factor).

(*40) Isao Noishiki, Computer ni okeru fukusei, Copyright Research, No. 16, p.68, (1989) states that use of a program is included in the scope of the reproduction right based on such idea.

(*41) Based on indication by Shimanami, Commission Member.

(*42) Refer to Article 5(1) of the EC Software Directive, Article 6(1) of the EC Database Directive, Article 13 of the EC Electronic Commerce Directive, Article 5(1) of the draft of the EC Copyright Directive and Section 512 of the US Copyright Act.

(*43) Refer to Article 4 (a) of the EC Software Directive, Article 5 (a) of the EC Database Directive and Article 2 of the draft of the EC Copyright Directive.

(Paris revision)(*44).

(ii) Idea that temporary storage is originally not included in "reproduction right"

This idea is based on the assumption of not necessarily comprehending the concept of "reproduction right" in broad terms, and defines that temporary storage is originally not included in the scope of right under the Copyright Law. This idea can be further divided into the following two.

① Idea that temporary storage is "reproduction" but is not included in the "reproduction right"

In this idea, it is considered that as long as temporary storage is "reproduction," it shall be included in the subject of "reproduction right" defined in Article 21 of the Copyright Law of Japan. However, this is an idea that although that which is generated by temporary storage is certainly "reproduction" under the Copyright Law, there is no "act of reproduction provided in the Copyright Law" in terms of unconscious temporary storage which is not based on the intention of a computer operator, and temporary storage does not infringe the reproduction right which is "the right to reproduce to the last(*45)."

② Idea that temporary storage is originally not included in "reproduction"

This is the idea of normatively interpreting the concept of "reproduction" under the Copyright Law in a kind of narrow way and regarding temporary storage as not being included in the concept of "reproduction" under the Copyright Law. It can be said that such an idea had been adopted as the conventional interpretation based on the prevailing notions in Japan(*46). Recently, there have also been some court examples following this idea in Japan(*47). The grounds to justify the reason for being able to adopt such sort of normative concept of "reproduction"(*48) do not necessarily seem to be uniform. Among these grounds, one which is dominantly discussed is to justify it in relation to the provision of infringement deemed concerning the use of programs (Article 113(2) of the Copyright Law)(*49). In other words, the justification is attempted as follows; the same paragraph provides that the act of using a program shall be "deemed" to constitute an infringement of copyright when satisfying a certain requirement, and if so, the Copyright Law is based on an assumption that the act of using a program itself is free except for cases falling under the same paragraph, and temporary storage accompanying such acts of using is also free(*50).

2 Points at Issue in Japan

(1) Subject Cases

(i) Conventional discussion

(*44) According to "Iwayuru ichijitekifukusei nitsuite: Sono chosakukenhou jouno hyouka," Yasuto Komada, (September 4, 1999, Research Report at the International Institute for Advanced Studies). According to this document, the trend of expanding the concept of reproduction to cover sound recording by reproduction right can be seen in the course of development of copyright laws in European countries and the U.S., and on the other hand, the old Japanese Copyright Law adopted a extremely broad concept of "reproduction" including not only sound recording but also intangible use such as musical playing and performance (Article 1 (1) of the old Copyright Law), and the trend of narrowing the concept of reproduction can be seen in the existing law, which rather limited the concept of reproduction to tangible things. And it is pointed out in the document that this different trend is one of background factors which caused the difference in interpretation of temporary storage based on the prevailing notions of Europe and the U.S. and those of Japan.

(*45) Refer to Shiozawa, cited in Note 6 above, p.213 and 240. This opinion assumes the understanding that the "act of reproduction in the Copyright Law" is an "active and intentional act which can be achieved only with an intention to produce the same thing as the original (page 236)."

(*46) Refer to "Report of the Second Subcommittee of the Copyright Council (computer-related)", (1973); Zentaro Kitagawa, Gijutsu kakushin to chitekizaisan housei, p. 73, (Yuhikaku, 1992); Monya, cited in Note 38 above, page 5; Agency for Cultural Affairs, "Report on Process of Examination by Working Group of Multimedia Subcommittee of the Copyright Council," p. 7, (1995); Written and edited by Naemura and Komiyayama, cited in Note 39 above, p.66 and after [written by Naemura]; Tamura, cited in 38 above, page 112; Saito, cited in 37 above.

(*47) Star Digio case, refer to the Note 35 above. This case is considered to belong to the trend of "standardization of the concept of reproduction" which can be seen from quite recent court examples (For that which already pointed out this trend in December 1999, refer to Toshiaki Iimura, Saibanrei niokeru inyouno kijun nitsuite, No. 26, p.95, (2000).).

(*48) Also refer to III.5 of this article.

(*49) Refer to Kitagawa, cited in Note 46 above, p.71; Tamura, cited in Note 38 above, p. 112, Star Digio case, cited in Note 35 above, etc.

(*50) There remain some doubts as to this ground of justification. If temporary storage is reproduction under the Copyright Law, there is no need to purposely set a provision which regards the act of using a program as constituting copyright infringement. However, it is proper only by assuming the fact that the use of a program is always accompanied the temporary storage of that program. In fact, however, when a program is used, there is no guarantee that the whole program is always temporarily stored. If so, even if temporary storage is considered as reproduction, the significance of the existence of the provision deemed in the same Article does not seem to be denied in respect to that (in other words, with the function of constant legal fiction of copyright infringement for works as a whole).

In various conventional discussions, what were considered as cases of temporary storage were not always so. The following two approaches can be observed.

① Individual approach

This approach can be observed in many conventional discussions. For example, Article 5(1) of the EC Software Directive covers temporary storage accompanying acts of using a computer program, and Article 13 of the EC Electronic Commerce Directive brings temporary storage connected with the cache into question. What can be observed from such legislation examples is nothing more than provisions which take a certain individual case into consideration and exclude certain types of temporary storage in connection with such cases. Furthermore, provisions concerning the cache, such as Article 13 of the EC Electronic Commerce Directive and Section 512 (B) of the US Copyright Act, are nothing more than provisions which exclude temporary storage from the scope of the right by limiting the subject to cases of limitation of liability of a service provider. In this sense, the individual approach has already been realized for some legislation examples.

② General approach

On the other hand, there is the general approach which excludes temporary storage from the scope of the right as a general concept without limitation to individual cases. Actually, such approach has been attempted several times up to now. However, it should be said that no attempt was sufficiently realized(*51).

(ii) Future tasks of Japan

When considering legislative policy in Japan, it will be necessary to select whether temporary storage in consideration of a certain individual case shall be the subject (individual approach) or whether general concept provisions shall be stipulated (general approach). The repercussion effect caused by the adoption of the general approach is surely larger. On the other hand, in consideration of the rapid developments in technology, the individual approach assuming existing techniques is liable to be outdated around the time when the legislation is finally realized. It is also necessary to examine these points in depth in the future.

(2) Subject Acts

(i) Conventional discussion

With regard to subject acts, common understanding on the meaning of "temporary" and "reproduction" has not been reached in conventional discussions. Following is a more detailed explanation of the reasons.

① "Temporary"

First of all, "temporary" storage used in conventional discussions does not always seem consistent. Many terms relating to this have already appeared, such as " temporary," "transient," "incidental," "ephemeral," etc. The nuances of these words seem different, and it is considered to be accepted that "temporary" is at least temporally longer than "transient(*52)."

② "Reproduction"

The concepts of "reproduction" used in conventional discussions cannot be always be taken as being uniform. In particular, in discussion in Europe and the US, the concept of "reproduction" is interpreted broadly, in a sense factually and objectively, whereas in the conventional interpretation based on the prevailing notions in Japan, the concept of "reproduction" is interpreted narrowly, in a sense normatively. This makes this issue more complicated.

(ii) Future tasks of Japan

In light of the above, it cannot be said that common understanding has been reached on the meaning of either "temporary" or "reproduction". Therefore, for copying with the issue of temporary storage, one of the future tasks is the issue of subject acts. Now, let's focus on the subject acts of the concepts of both 'temporary' and 'reproduction'.

① "Temporary"

It is necessary to examine what it is appropriate to call "temporary" based on what standard.

Based on conventional discussions, the following can be cited as objective factors which may be included in this standard. (a) The length of time of accumulated storage: This becomes an issue in the sense that the longer the retention time between storage and deletion or destruction, the less the possibility of it being recognized as " temporary storage" . It can be said that acceptance of the importance of this factor is widely accepted. (b) The form of storage: For example, it is questioned whether or not the storage will be terminated when the power is turned off. (c) The mode of medium for storage: Here, it is questioned whether the medium on which it is stored is computer memory, on a hard disk or on a network.

(*51) A typical example is that Article 7 of the WIPO Copyright Treaty (Basic Proposal) was finally deleted. Also, amendment of the draft of the EC Copyright Directive from the draft amendment to the common position seems to be based on an intention to limit the subject of application.

(*52) With regard to this, refer to the point that terms are creatively used such as "transient" in Article 12 (mere conduit) and "temporary" in Article 13 (cache) respectively in the EC Electronic Commerce Direction.

What can be cited as a subjective factor is (d) the subjective factor of the involvement of the reproducer, that is, whether the reproducer is planning deletion before long. For example, it becomes a question in the form that even storage in a physically permanent mode is liable to be recognized as "temporary," if deletion thereof is planned before long. The establishment of Article 44 of the Copyright Law (ephemeral recording by broadcasting organizations, etc.), which approves ephemeral sound or visual recording for broadcasting, seems to include such idea(*53).

② "Reproduction"

With regard to the concept of "reproduction," it also seems necessary to examine what it is proper to call "reproduction" and based on what standard. In terms of Japan, this is an issue of interpretation of "reproduction in a tangible form" stated in Article 2 (1)(xv) of the Copyright Law (*54).

The following can be cited as factors included in the standard for determining "reproduction". (a) The pluralization (independence of reproduction and original) of existence by the act in question. The necessity of this factor seems to be widely accepted as it is directly derived from the etymology of the word, "reproduction." (b) The possibility of use, viewing or listening after the act of reproduction. By this factor, the so-called download form and streamed form are distinguished, and the latter is not considered as reproduction(*55). (c) The material change of the storage medium (corporeal thing). By this factor, the memory cache and display on the screen are distinguished, and the latter is not considered as reproduction(*56).

In light of this, it seems extremely difficult to establish the primary concept of "reproduction."

A more difficult problem arises when the concept of "reproduction" is interpreted normatively in the same way as the conventional interpretation based on the prevailing notions in Japan. This is because when adopting a normative interpretation, not only objective factors but also evaluative factors such as the subjective factors of a reproducer and other external factors (economic influence on the reproduction right holder, etc.) are taken into consideration as standards for determining "reproduction." Therefore, it becomes gradually more difficult to form a consistent explanation of what is referred to by "reproduction" under the Copyright Law. Furthermore, if there is an insistence on taking diverse factors into consideration by adopting a normative interpretation, it also becomes necessary to explain grounds to justify the insistence.

(3) Concrete Legislative Policy of Japan

(i) Conventional discussion

With regard to concrete legislative measures, the legislative trend of excluding certain types of temporary storage from the scope of right by provision for limitation of right after appointing a broad concept of "reproduction" and "reproduction right" has been general in conventional discussions in Europe and the U.S. An interpretation approach in which certain types of temporary storage shall not be originally included in the concept of "reproduction" under the Copyright Law has been dominant in Japan.

(ii) Future tasks of Japan

① Basic policy and grounds of justification

What first requires a basic decision is the issue of whether or not temporary storage should be originally included in the scope of right under the Copyright Law. And, what is important then is the issue of grounds, that is, how to justify such basic decisions. However, this is perhaps not an easy task. This is because in order to justify a decision as to whether or not temporary storage should be included in the scope of right under the Copyright Law theoretically, the issue of why copyright should be originally protected cannot be avoided. With respect to this, only the points at issue are pointed out.

② Interpretation approach/legislative approach

Next, when a certain basic decision has been made, there will be the issue of whether the interpretation approach or the legislative approach should be adopted to realize the decision. Here, it seems necessary to examine the flexibility and definiteness of the interpretation approach and of the legislative approach respectively, in line with the nature of this issue.

And in case of selecting a solution based on the legislative approach, the next issue is what method of provision should specifically be used. The practical meaning which the legislative method generally has also becomes an issue there. In particular, what difference in effect

(*53) It is stated in Moriyuki Kato, Chosakukenhou chikujokougi, p.277, (Copyright Research and Information Center, new edition after three corrections, 2000) that even for "temporary" storage, the characteristics of the act of sound recording/visual recording are not different, and so "temporary" shall be understood rather in terms of purpose.

(*54) Refer to Shiozawa, cited in Note 6 above, p.230 and after.

(*55) Refer to III. 2 of this article.

(*56) There still remain problems even if this factor is added to the standard. For example, although the act of cinematographic presentation on screen is not generally regarded as "reproduction," in the case of a liquid crystal screen, it cannot be denied that there is a physical change on the screen.

arises between a method of excluding temporary storage from the concept of "reproduction" in advance and a method of limiting the right on assumption of a broad concept of "reproduction" becomes an issue.

③ Specific direction

The specific direction to take will be covered in future examination.

Recently, cases and acts relating to temporary storage have been becoming extremely diversified and individual, such as the use of computer programs, caches on network, or the relation to the theory of the liability of service providers. In order to deal with such diversified cases individually, a method of making a judgement in a single sweep at the entry stage of whether temporary storage conducted is originally "reproduction," seems a little too severe, and seems to make the possibility of a fine-tuned approach difficult. If this is so, to adopt direction (a) of excluding certain types of temporary storage from the scope of right under the Copyright Law by establishing individual legislative requirements to limit the right, or that of (b) of including certain types of temporary storage in the scope of right under the Copyright Law after approving such temporary storage as "reproduction," not only enables fine-tuned legislative response based on wide-ranging alternatives but also is seemed relatively effective from the standpoint of definiteness. Therefore, from the standpoint of international harmonization, now also seems to be the time to examine such directions again.

However, it is also anticipated that individually enacted provisions do not have much meaning practically or result in a lack of flexibility due to the rapid progress of technology . Based on such reasons, there are also trends of criticizing the legislative approach by individual provision. Therefore, even if legislative dealing is conducted, suitable methods will be required for the specific manner of provision therefor.

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