25 Database Protection and Competition Policy

Consideration on Protection of Databases without Creativity Requirement: A Competition Policy Perspective

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This research attempts to consider the legal protection of databases without the creativity requirement from the competition law standpoint.

Some lower court decisions regulated the piracy of an automobile information database and news article headlines under tort law. On one hand, these decisions and the special law bill on database protection have raised concerns that they will cause information monopoly. Or exclusive possession of information by certain specific persons would hinder the business activities of other business entities or impede on the development of culture. On the other hand, there is a view that suggests the application of the Anti-Monopoly Law for such information monopoly while protecting the information.

This research refers to recent court decisions and academic theories in Europe, and states, for example, that the Anti-Monopoly Law is not a proper remedy for information monopoly and that, while granting proper protection, the problem of information monopoly can be avoided by limiting the scope of protection depending on the nature of the database.

Ⅰ Introduction; Issues

Databases are widely used in many industries and by many people, and many companies engage in producing or providing databases. However databases especially digital medium databases like CD-ROMs, are exposed to the piracies by third parties. Piracy, in other words, a free-riding by third parties, damages the inventive of database producers and providers if such act is not regulated.

In Japan, the Copyright Law provides the protection of creative databases. However not all socially useful databases have creativity and even creative databases are not awarded sufficient protection under the Law. Therefore some commentators have been suggesting that databases be protected under the general tort law regardless of whether or not creativity and some lower court actually applied these suggestions, but many problems remain.

In these circumstances some propose that database should be protected, for example, under the Unfair Competition Law(*1) or by the sui generis type protection(*2).

In this report I will list the issues of tort law protection of databases. Next I will review the sui generis right that the European Communities – EC, hereinafter- adopted through the Database Directive, and considering the discussion of EC, I will make some suggestions to the Japanese law.

Ⅱ Status and Issues of Database Protection in Japan

1 Limit of Copyright Law Protection

The Copyright Law defines databases as "an aggregate of information such as articles, numericals or diagrams, which is systematically constructed so that such information can be searched for with the aid of a computer" (Article 2 (1) (x*ter*) of the Copyright Law), and prescribes that "databases that, by reason of the selection or systematic construction of information contained therein, constitute intellectual creations shall be protected as independent works" (Article 12*bis* (1) of the said law).

Although the framers of this Law thought that this provision would protect most databases, the protection under the Law is not sufficient. One reason why it is not sufficient is that such protection is limited to the selection or systematic construction of information and thus does not cover the extraction of data themselves. Suppose a case of a yellow page or a business

(*1) Futoshi Nasuno, *De-ta-be-su no hyousetsubutsu no jouto kinshi – fusei kyousou boushi hou ni yoru koui kisei gata hogo no kanousei* –[Prohibition of Transferring Pirated Databases – Possibility of Property Rule Type Protection under Unfair Competition Law], 3-35 CHIZAI PRISM 38 (2005)

(*2) Intellectual Property Promotion Plan 2005 noted that as to the protection of databases a sui generis type protection will be one option.

telephone directory. Extracting and reproducing all of the telephone numbers in the directory seem to infringe the copyright of the directory, but it does not if the person who copied them re-arranged the numbers in a common way, say, alphabetical order, because the systematic construction, that is the business category, is not reproduced.

The other reason is that not all databases in the society have creativity. In this regard it is said that the more comprehensive you collect information, the less creative the database will be because the selection of information is not original.

2 Actual Cases of Tort Law Protection

In these circumstances the protection by tort law has been proposed and the Tokyo District Court in Tsubasa System applied this proposal. In *Tsubasa System*, the defendant copied and sold a database for automobile services. The court denied the copyrightability of the database but found the tort liability. The court stated that an infringement of rights as a condition of the finding in tort was not necessarily an infringement of a strict and concrete right under the law and infringement of an interest worthy of legal protection is enough, and granted tort law protection on the grounds that (i) in the case where the other person produces a database by collecting information or otherwise at his or her expenses or labor and manufactured and sold such database and gained profits, (ii) the conduct to sell a database that was created by copying data of such database and selling such secondary database in a territory competing with such person's databases "may in some case constitute an unlawful act because such conduct infringes another person's business interest worthy of legal protection." Then the court ruled that the defendant's conduct constituted a tort.

Yomiuri Online is within this trend. In this case the *koso* appellee, the defendant in the first instance, copied and utilized the headline of online news article provided by the koso appellant. The Intellectual Property High Court stated that information on the Internet would not be useful without a series of daily activities of news medias with great amounts of labor and money and, after pointing out that the headlines of news articles posted on the website (i) had received great amounts of labor and money and (ii) created with reasonable effort and ingenuity to allow a rough understanding of the news, and (iii) the headlines themselves are actually transacted with charge and thus treated as having independent value, the court found that the news headlines in question could be an interest that deserves legal protection. Then, finding that the *koso* appellee made a dead copy of the headlines and practically distributed them "repetitively and continuously for profit without permission of the creator of the news headlines, and furthermore, at the time when the information is fairly new," and that "it cannot also be denied that the Line Topic Service competed in certain aspect with the *koso* appellant's business with regards to the headlines," the court ruled that the production or otherwise of news headlines constituted a tort.

3 Problems of Tort Law Protection

What can we say about these above tow decisions?

First these court decisions only granted damage claims and rejected the claim for an injunction. This proves that not all useful databases are creative.

As to the absence of injunction claim, database producers state that damage is not a sufficient remedy for database piracy. Injunction is important for them because the claimants need not prove the existence of damage, and they can have quick remedy.

Second, these court decisions, in finding a tort liability, pointed out (i) the existence of an investment (money or effort) in creating a database; (ii) a massive or repetitious and continuous reproduction activity; and (iii) a competitive relationship between the plaintiff and the defendant.

There have been questions or ambiguities on how much investment is sufficient, what scale of a reproduction is sufficient to find an unlawful act, and whether a competitive relationship is necessary between a plaintiff and a defendant.

Third we can point out that the balance between the need to protect database and the need to keep free distribution of information. Some commentators noted that, recognizing the need for protection of databases, an excessive protection leads to information monopoly. Others have proposed the active application of the Anti-Monopoly Law in order to solve a monopoly of information by "sole-source databases" whose data is impossible to be independently created, collected, or acquired from another source.

In order to consider these problems I will review EC Law.

Ⅲ Review of EC Law

1 EC Database Directive

EC adopted its Database Protection Directive in 1996(*3). The Directive tried to uniform the copyright protection of databases and expand the database protection by the newly introduced sui generis right. The latter is much important. The requirement for granting sui generis right protection is that qualitatively or quantitatively substantial investment was made to the obtaining, verification, or presentation of the contents of a database. No creativity is required.

Once a database maker passes this bar, they'll have a right prevent the extraction or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of a database. In addition they can prohibit the extraction etc. of insubstantial part of a database under some conditions.

2 ECJ Judgments

Terms for the sui generis right mentioned above are far from clear and the interpretation by the Courts was much expected. A series of recent judgment by the European Court of Justice have tried to clarify some of them(*4). We can summarize the judgments as follows.

First, as to the meaning of investment that is a requirement for protection, the ECJ stated as follows. The expression of the investment in obtaining, verification or presentation of contents means the investment directed to the creation of the database. The "obtaining" of contents means the "collection" of contents that already exist in the public domain, not the "creation" of new contents. Therefore, investments directed to the creation of contents are not considered. This is because the purpose of the sui generis right is not to promote the creation of contents. Because of the same, the "verification" of contents means investments used in assuring the accuracy of collected contents, thus the investments used in assuring the accuracy when creating the contents are not considered. In case the database maker also creates its contents, the investments for the creation of contents are not considered but if there are some investments in verification or presentation of the contents after the creation, such investments are took into consideration. However if the verification or presentation activity is inseparable or closely related to the creation activity, the investments will be out of consideration.

Second, as to the prohibited act under sui generis right, the ECJ stated as follows. The impact on investment should be taken into account in considering whether there is an infringement or not. Substantial part of contents evaluated quantitatively will be considered in comparison with the entire volume of contents in a database, and substantial parts of contents evaluated qualitatively will be considered in taking into account the investment directed to the obtaining or otherwise of the contents extracted or otherwise. Thus a minimal part can constitute a qualitatively substantial part and the extraction or otherwise of such part may constitute an infringement. Furthermore, the intrinsic value of contents, for example, its market price, will not be taken into account. The extraction etc. of insubstantial part is prohibited only when such act damages the investment of the database maker.

These are the summary of the judgments.

3 Evaluation of ECJ Judgments (1)

In view of the fact that a sui generis right intends to promote investment in the creation of databases, the ECJ certainly pays attention to the impact on investments in considering the condition for protection or infringement. Such attitude of the ECJ is generally supported by commentators.

On one hand, criticisms exist. They argue that by limiting the scope of sui generis right protection databases initially intended to be covered will not be protected. These include telephone directories, timetables, and TV program listings. One commentator said "the sui generis right is dead."

4 Evaluation of ECJ Judgments (2)

On the other hand, some commentators appreciate, from the viewpoint of preventing information monopoly, ECJ judgments in that the Court held that the investment in the creation of contents is not taken into account.

I've already stated that in Japan some commentators have proposed that the Anti-

(*3) Parliament and Council Directive No. 96/9/EC, O.J. L 77/20 (1996).
(*4) Fixtures Mktg. Ltd. v. Oy Veikkaus Ab, Case C-46/02, [2004] E.C.R. I-10365; British Horseracing Bd. Ltd. v. William Hill Org. Ltd., Case C-203/02, [2004] E.C.R. I-10415.

Monopoly Law should be used to solve information monopoly, but the situation is almost same in EC. Some argued that, while the EC competition law, Article 82 of the EC Treaty, prohibits undertakings in a dominant position from abusing such a position, a refusal to license the sui generis right can be abusive and a compulsory license can be ordered.

However, according to the EC caselaw about the EC competition law and intellectual property, the refusal to license IP will be an abuse only in exceptional circumstances, i.e., the prevention of new value-added products(*5). Concerns have been raised about the decreasing of investment incentives caused by an ex-post intervention and the enforcement costs such as the determination of terms of transaction in the case of compulsory license. These are pointed out mainly by economists. Actually there are cases that ordered compulsory license of the sui generis right in Member State level, but they are limited to unusual cases like governmental databases or where the establishment of a right was questionable in the first place. There is a case where term of license was disputed and finally not agreed.

Commentators who support the ECJ judgments, recognizing such inconveniences of the Competition law, in sum, stated as follows. If we protect the investments in creation of the contents it follows to protect databases whose contents are only available to the specific database maker. The ECJ ignored the investments for creation of data. This can avoid the information monopoly by sole-source databases. In other words, the risk that the sui generis right gives a business entity a market power will become extremely low. Then it will be no longer necessary to rely on the competition law to solve the problem of information monopoly.

A famous commentator spoke positively of the court decision in that it has cured, albeit only partially, the weakness of the Database Directive of the absence of a compulsory license provision.

Nevertheless, it is not deemed to completely eliminate the need for a compulsory license approach. First, even if the investment in the creation of contents is not taken into account, a sole-source database may be still eligible for the sui generis right due to investments in the presentation or verification of contents. Furthermore, if sui generis right protection is denied, database makers try to keep the content of the database confident, by tightening the technological protection. The report submitted by the EC Committee at the end of the year 2005 also concludes that, because of the court decision that the investment directed to the creation of database will not protected, more and more online databases will be controlled by means of access control systems.(*6)

This may result in the decrease of the amount of information publicly made available, and if such information is essential to business activities of other business entities, it will be still necessary to provide information under the competition law.

5 Evaluation of ECJ Judgments (3)

Here I review the spin-off doctrine that has been developed in the Netherlands. This doctrine states that the sui generis right should not granted when databases are generated as by-products of main business activities of an enterprise. The ECJ judgment does not adopt this doctrine, but it stated that when the creation of contents and the presentation or verification of contents are inseparable of closely related, the investments are not considered. Therefore, some commentators state that, when a database is generated as a by-product, only the investment directly relevant to the database should be taken into account and that accounting records or others may be used in actual consideration.

One of the problems of the sui generis right is the ambiguity of the term "protection". The Directive stipulates that protection continues for fifteen years from the date of creation. However, if the content is substantially modified with substantial investment, the fifteen-year protection will commence from the modification date. This will be the problem especially in a "dynamic database" in which the content or others are constantly updated or modified. When contents are substantially added to a database, does the new term of protection extend only to newly added parts or to the entire database? The construction, such as that provided by the Advocate General of ECJ, extending only to newly added parts seem to be appropriate, but ECJ did not show its interpretation about this. In the case

(*5) IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG, Case C-418/01, [2004] E.C.R. I-5039.
(*6) Commission of the European Communities, First Evaluation of Directive 96/9/EC on the Legal Protection of Databases, DG Internal Market and Services Working Paper (Dec. 12, 2005).

of a telephone directory, for example, it is easy to make a distinction between the newly added part and the original part, but such distinction may be difficult in certain types of database, for example, a map database.

The next problem is the restriction on users. ECJ stated that the restriction by the sui generis right "concerns only acts of extraction and re-utilization" and did not cover the "consultation" and that, if the creator of a database made all or part of his database accessible to the public, it was not possible to prohibit a third party from consulting that database. The meaning of this ruling is still unclear, but commentators construe this court decision as that in limited circumstances the owner may be possibly considered to have given an implied consent to the reference by a third party.

6 Impact on the Database Industry

What economic impact did the Directive give to the database industry in EC? Until now we know no empirical studied that showed it contributes to the development of the industry.
On the contrary ann experimental study by famous researchers is also skeptical about the positive impact on the market by the Database Directive(*7). In addition, the first evaluation report published by the EC Commission mentioned above states that the economic impact of the Database Directive on the database industry in the EC is not clear and it will take more time to draw policy conclusions. It says that under such circumstances it will discuss the future direction of the Database Directive, including withdrawal or all or part of the Database Directive or amendment thereof.

Ⅳ Conclusion; Suggestions for Japanese Law

1 Economic Characteristics

Before discussing the suggestion for Japanese Law, I will point out several economic characteristics of databases. First one is the vulnerability to the reproduction. Information goods, including databases, have a public good nature and are vulnerable to reproduction by third parties. If it is allowed, makers' incentive to invest will be damaged. Thus we need a system enabling the database maker to recoup its investments.

Second, the market entry is difficult because of sunk costs for the creation of database. Furthermore, a user has an incentive to continue using a database of a specific manufacturer due to learning effects or network effects. Last, a maker of a database can exclude rivals from the market by refusing third parties to use its database, thereby imposing high fees on customers. In addition to the foreclosure within the same market, enterprises intending to manufacture value-added products using databases may be also excluded. Such risk is especially high in case where the independent collection of raw data is impossible or where the independent collection, although theoretically possible, is prohibitive.

2 Suggestion to the Tort Law Protection

What similarities and dissimilarities exist between Japan's tort law protection and EC's sui generis right? As to the similarities, we can point out that both schemes focus on the investment in creation of databases, no creativity is required, and scale of copying is examined in determining infringement. As to the dissimilarities, the biggest one is the existence and absence of an injunction claim.

In Chapter I listed the issues of tort law protection. Considering EC law and its discussion, we can say the followings.

Firstly, court cases in Japan have recognized the costs or labor used in producing a database and this is consistent with that a sui generis right in the EC protects investment. Judging from the fact that in EC very few criticisms exists for the protection based on investments, it is favorable that at present the court cases attempt to protect databases focusing on costs or labor.

Next, I will discuss individual cases. The database in the *Tsubasa System* case consists of data existing in the public domain and the court found that an enormous amount of costs was required for the collection and management thereof. Therefore, the investment activities of the plaintiff will constitute a substantial investment which is a condition for sui generis right protection. Accordingly, it will be certain that the database in *Tsubasa System* would be also protected by the EC's sui generis right.

What about the *Yomiuri Online* case? In this case, the *koso* appellant newspaper publisher created the news article and the costs recognized

(*7) Stephen M. Maurer et al., *Europe's Database Experiment*, 294 SCIENCE 789 (2001).

by the decision related to the creation of such news headline. Consequently, it is highly probable that sui generis right protection will not be granted to the headlines in question. The news headlines can be further evaluated as mere by-products associated with the publishing business or the business of distribution of articles online of the *koso* appellant. Therefore, it is likely that the news headlines in question were not protected by sui generis right.

Furthermore, according to the IP High Court, one of the grounds for its ruling that the article headings could be an interest that deserves legal protection is the fact that the headlines alone are transacted with charge and thus have independent value. This ruling considers the value itself of the information utilized by the *koso* appellee and it is close to the view that is denied by the ECJ decision and criticized by academic theories. Considering the value of information under Japanese tort law may not be generally undesirable, but it should be considered that it is not a condition for the finding of unlawful act that the reproduced information has value in the market.

It does not make much sense to discuss the scale of the reproduction of database. Supposing that only a few percent of the total was copied, the reproduction thereof should be restricted if a large amount of money was invested in the collection of such portion and if the incentives for investment would be prejudiced by the reproduction. As the ECJ decision states, "a quantitatively negligible part of the contents of a database may in fact represent, in terms of obtaining, verification or presentation, significant human, technical or financial investment." Although the *Tsubasa System* case found that the copying of the plaintiff's database had been massive, such finding should not be considered to be a condition of the finding of an unlawful act. It just means that the copying of most part of a database to which large investment was made often has an impact on investment. Of course in such case, a defendant will be able to escape the liability by arguing that the copied portion was not generated from a large investment.

In the *Yomiuri Online* case, the court found that the *koso* appellee repeatedly reproduced the appellant's news headlines. On the other hand, according to the EC cases, repetitious copying is not prohibited by the sui generis right unless the reproduced portion is a result of a substantial investment.

A competitive relationship is not required by a sui generis right under the EC Directive. Even a user which is not in a competitive relationship may reproduce in such manner as to prejudice the investment. However, regulating all conduct of users would damage the free distribution of information. Therefore, as the ECJ stated, it seems to be necessary to allow the public to solely use for private purposes a database that is open to the public.

As far as tort law protection is awarded, it is impossible to limit the term of protection as a sui generis right, so it seems to be inevitable under tort law that a defendant is liable as a plaintiff found to be damaged by the reproduction, etc. Furthermore, a dynamic database that is constantly updated may be granted permanent protection, but this is also unavoidable.

The data of the database in question in the *Tsubasa System* case was such that other persons may independently gather, and therefore granting protection to such data will not cause excessive monopoly. On the other hand, news headlines in the *Yomiuri Online* case cannot be created only by the *koso* appellant, but the news articles themselves can be written by anyone and the headline thereof can also be created by anyone. Therefore, there will be little possibility that excessive information monopoly is caused by protecting them. Generally, however, it should be noted that the protection of "created" information would prevent its free distribution, and the protection of database by tort law may be denied in a case where, balancing the interest of securing the investment incentives and that of free distribution of information, the latter interest seems to be excessively prejudiced.

3 Suggestion to the Special Law Protection

Then, what aspect should be noted in introducing a special law, such as a sui generis right, to protect databases? With regards to the requirement for protection and conduct which constitutes infringement, the matters stated above should be considered. Regarding an injunction, in Europe, there are some articles that criticize the system of a sui generis right, but there are no articles that criticize a right to claim for an injunction. The database industry in Japan also requests to introduce a right to claim for an injunction. Accordingly, if Japan introduces a special law to protect databases, a right to claim for an injunction should be granted under such a system.

If sole-source databases are protected by a

special law that grants to a right holder thereof a right to claim for an injunction, such business entity will gain an exclusive control over the information, which may cause an anti-competitive result as discussed in Section 1 of this chapter. Furthermore, if the database that is used as an interface becomes a de facto standard due to the network effect, a right holder of such database may have a strong market power.

Under such circumstances, one option is to order a compulsory license of rights for databases under the Anti-Monopoly Law, but compulsory license is strongly criticized because of the difficulty in determining the license fee or other reasons. It will be hard for a court to calculate a license fee as remuneration for further activities. Some propose to leave it to the Fair Trade Commission as a "specialized agency," but the Fair Trade Commission specializes in the interpretation and application of the Anti-Monopoly Law, not in technology or industry.

Accordingly, considering that the ECJ court decisions presented limited interpretations of sui generis right and that they are positively appreciated as reducing the necessity to refer to competition law procedures, Japan should legislate and construe the scope of a right so as to prevent the problem of information monopoly in enacting a special law. In case of a sole-source database, it will be also possible to include provisions to restrict the enforcement of a right in the special law.

Nonetheless, if a compulsory license is still needed, it seems to be more desirable to establish procedures and requirement for compulsory license in the special law than to refer to the measures under the Anti-Monopoly Law. The industrial policy judgment and the consideration of interests other than "competition" will be desirably left to the administrative agencies that have expertise, and the specified administrative agencies are more likely to improve the transparency and predictability in the procedure in its judgment.

Needless to say, the provisions for procedures for compulsory license in the special law do not eliminate the necessity for remedy under the Anti-Monopoly Law. As discussed in Chapter III, the content of a database may be maintained in confidence by its producer. In such cases, the compulsory license system is useless and remedy under the Anti-Monopoly Law will be required.

4 Concluding Comments

This report discussed database protection, dealing with EC laws. In the future, turning to US law too, I would like to continue to study the relationship between database rights and competition law.