I. Introduction

In May 1986, the 104th Session of the National Diet in Japan enacted a law for partial amendments of the Copyright Act.\(^1\) The amendments \(^2\) added three new provisions to the Copyright Act to make clear that databases which meet the requirements for the works of authorship are entitled to protection under the Copyright Act. The amendments were initiated by the Agency for Cultural Affairs(ACA)\(^3\) and based on the Report\(^4\) which was prepared and published on September 25, 1985 by the Subcommittee No.7

---

\(^1\) Japan joined the Berne Union in 1899 and enacted the old Copyright Act in the same year. The old Act remained in force until it was replaced by the present Copyright Act of 1970. For a brief history of the copyright system in Japan, see, Agency for Cultural Affairs, Copyright System in Japan, 1-5, (1975). The new Act, Law No. 48, (1970) became effective on 1 January 1971, together with the Copyright Act Enforcement Order (Cabinet Order No. 335, 1970) and the Copyright Act Enforcement Regulation (Ministry of Education Ordinance No. 26, 1970). For detail, see, Masao Handa, Nobuo Monya, Chosakuen no Nohau(Knowhow of the Copyright)2-7, (1987).

\(^2\) Law No. 64, became effective on 1 January 1987.

\(^3\) The Agency for Cultural Affairs (ACA) is an extraministerial agency of the Ministry of Education which administers copyright law and has the Copyright Council as its advisory body. Agency for Cultural Affairs, supra note 1, at 29.

\(^4\) Before this Final Report (hereinafter “Report”) the Subcommittee also issued an interim report in December 1984, most of which was incorporated in Report. Faced with the interim report, the Ministry of International Trade and Industry(MITI) announced its intention to provide its own proposal, including the possibility of a special act for protection of databases, as it did before about the computer programs. The MITI, however, never proceeded to fulfil its intention. Therefore the Report along with the interim report serves as almost sole important source about the legislative history of the 1986 amendment. See generally, Karijala, Protection of Computer Databases Under Japanese Law, [1986] 9 EIPR 267 and Takashi Yuasa, Computer Data Base Protection: The Impact of Japanese Legislative Developments on United States and Japanese Copyright Laws, [1986] 9 : 191 Fordham Int'l L. J. 191.
Previously in Japan the extensive and vigorous investigation and deliberations took place on the suitability and introduction of a special protection system for computer programs. They were mainly carried on by way of the hot debate between the ACA, which preferred the copyright solution and the Ministry for International Trade and Industry (MITI), which proposed that computer programs should be excluded from copyright protection and instead be covered by special protection. The controversy was solved in favor of the ACA by adopting the copyright solution in 1985.\(^5\) The protection of computer databases, however, attracted less debate and public attention at least compared with the highly publicized almost-a-quarrel over the protection of computer programs.\(^6\) Nevertheless, these three new provisions even with the help of the Report leave some basic questions unanswered.

This article will discuss (1) the requirements for works of authorship in general under Japanese copyright law focusing on "creativity," (2) some basic issues regarding the protection of the database under the Japanese copyright law, and (3) the possibility of alternatives to the copyright law in the protection of the database.

**II. Requirements for Works of Authorship**

Under the old Copyright Act, there was no provision to define the concept of works (chosskubutsu)\(^7\) protected and Article 1 of the old Act set forth only 9 examples of works.\(^8\) Article (2)(i) of the present Copyright Act, however, does define "works" that are protected by copyright as:

5) The present copyright Act, which was purportedly designed to be flexible copyright statute able to cope with new problems that may occur as technology develops, went through several partial amendments in 1978, 1981, 1983, 1984, 1985, 1986, 1988. See, Handa et al., supra note 1, at 13-2 and Suzuko Oki, Chosakukenu Ichibukaieho no Kaiyo (Summary of Partial Amendments of the copyright act), 414 NBL (1 December 1988) 15. Among them the first computer-related amendments were 1985 ones to include computer programs within the protection of the Copyright Act. For a discussion of these 1985 amendments, see, Karjala, Protection of Computer Programs Under Japanese Copyright Law, [1986] 8 EIPR 105 and Kumiko Hanto, Chosakukenu no Kaise (Amendments of Copyright Act) 334 NBL (1 August, 1985) 18.

6) See, supra note 4

7) The term chosskubutsu, which is always written in Chinese characters, is Professor Mizuno's version of translation of work, werk, or oeuvre. Keiichi Yamamoto, Chosakukenu (Copyright Law),
“Work” means a production in which thoughts or sentiments are expressed in a creative way and which falls within the literary, scientific, artistic or musical domains.\(^9\)

Thus it follows that (1) protected work must express “thoughts or sentiments,” (2) the thoughts or sentiments must be expressed “in a creative way,” and (3) the work must fall within the literary, scientific, artistic, or musical domain.

Protected works must express thoughts or sentiments. Therefore the fact itself or “the mere arrangement of facts, such as the timetables of the train or the menu of the restaurant cannot be protected as works.”\(^10\) This requirement does not go further. “Except for works in which there is no thought or sentiment at all, it should be considered [only] to refer to the human mental activity in general. Therefore, it is rarely necessary to distinguish between the thoughts and sentiments.”\(^11\) Under the old copyright law, however, the Tokyo District Court denied the copyrightability of the bill of lading form\(^12\) because:

what is expressed in the bill of lading [form] at bar is nothing more than a manifestation of intent between the defendant and the persons with whom the defendant would transact business regarding a contract to be entered in the future. The thoughts of the plaintiff is not expressed at all. So there is no ground for the plaintiff to acquire a copyright in it.\(^13\)

The reasoning of the case No.2686, accompanied by its own ambiguity, seems to con-

---

34(1969). chosskubutsu means, however, at least literally a “thing that is written and made,” or more concisely “writing.” It should be reminded that the concept of copyright is an imported one in Japan. Even though it does not mean that they did not or cannot develop some different concepts or frames regarding the copyright system, the difference should not be exaggerated. See, infra notes 12-30 and accompanying texts.

8) Id., at 32.
9) Act, Art. (2)( i ). Except for provisions of the Copyright Act, the translation of which was taken from ACA, supra note 1 and Karjala, supra note 4, and what is expressly recited from the English materials, all the other translation including the titles of books and articles are by the author.
10) Handa et al, supra note 1, at 22.
11) Judgement of Tokyo District Court, 1981 No. 8371, 28 September 1984, 1129 Hanrei Jiho120, 126. It should be noted that this case was about the copyrightability of the video game program before the Act was amended to include a computer program as a work of authorship.
13) Id., at 41
tradic the basic conceptual principles explained in the case No.8371. There is an argument,\textsuperscript{14} partially based on this reasoning, that the requirement of thoughts or sentiments is one of the distinctive feature in Japanese copyright law "[placing] Japanese copyright law in 'hard to copyright' rather than 'the easy to copyright/hard to infringe' category,"\textsuperscript{15} compared with the U.S. law. This conclusion might be hasty. Though the narrow holding that the bill of lading form is not copyrightable was supported by the commentators in Japan, the reasoning itself was criticized by them.\textsuperscript{16}

Therefore even with the statutory requirement of thoughts or sentiments, the content of a work which is expressed such as thoughts or sentiments is not a decisive criterion in Japanese copyright law.\textsuperscript{17} Similarly the statutory requirement of artistic, scientific, literary, or musical domains does not seem to present a significant barrier to copyright protection.\textsuperscript{18}

It is firmly established in the U.S. copyright system that "the requirement of originality does not refer to ... novelty or nonobviousness, but rather to the origination of the work, viz., that the work has been independently created not merely copied."\textsuperscript{19} There is an argument\textsuperscript{20} that Japanese creativity differs from American originality in general and constitutes a greater obstacle to copyrightability. It even goes further that:

\begin{itemize}
  \item \textsuperscript{15} Id.
  \item \textsuperscript{16} See, e.g., Yamamoto, \textit{Shoji Hanrei Kenkyu} (A Study of Commercial Case), 390 \textit{Jurisuto} (1 February 1968) 143, 144. "(You) should be cautious in considering the expression of thoughts or sentiments as a requirement of the copyrightable works." It should be reminded that Japanese saying of "should be cautious" has a clear negative meaning. \textit{See also}, Koso Mimino, [Bill of Lading Form], 91 \textit{Bessatsu Jurisuto} (Feb. 1987) 52.
  \item \textsuperscript{17} See, Mimino \textit{supra} note 16, at 53.
  \item \textsuperscript{18} See, supra note 11, at 127:
  \begin{quote}
  Among the requirements (of the copyrightable work), the artistic, scientific, literary, or musical domains do not require (conceptual) distinctiveness. Rather it is correct (this requirement) only refers to the product of intellectual, cultural and mental activities in general. Therefore it is useless to determine what categories of the domains a particular work belongs.
  \end{quote}
  \item \textsuperscript{19} W. Patry, \textit{Latman's Copyright Law}, 18 (6th ed, 1986)
  \item \textsuperscript{20} Karjala \textit{et al}, \textit{supra} note 14 at 629
\end{itemize}
While one modern case in Japan [citing the case at infra note 30], in dictum seems to interpret the Japanese creativity requirement in a similar way [as in the U.S. copyright law], others adopt an approach suggesting that novelty is an element of copyrightability in Japan.21)

One rather old case, which apparently supports the above argument, denied the copyrightability of yellow pages of the telephone directory on the ground that a directory of identical arrangement had been published some years earlier.22)

The plaintiff’s telephone directory cannot be considered a product of new thought, because the fundamental concept of arranging the telephone numbers in alphabetical order by occupation is identical to the thought [in the earlier work].23)

The precedential value of this case, especially of this reasoning is at best doubtful.24) The same result might have been reached properly based on the lack of creativity.25) It should also be noted that a more recent case,26) which rather focused on the creativity in the selection or arrangement but without any detailed discussion, approved the copyrightability of yellow pages of the telephone directory.

It is not surprising the above argument27) never found any supporting authorities in a treatise or an article. Rather the opposite of the argument is a kind of Japanese version

21) Id., at 630.
22) Judgment of Tokyo District Court, 20 June 1919, recited from Karjala et al supra note 14, at 631.
23) Id.
24) See, e.g., Hirosi Okagiki, Dengwacho (Telephone Directory), 91 Bessatsu Jurisuto (Feb. 1987) 74, 75.
25) Cf, infra, note 27.
27) The argument also cites the Judgement of the Grand Court of Judicature (Japanese prewar highest court), 4 July 1914, which said in a dictum:

Copyright is born when an author composes a new song with his own creativity or creates a melody that not been found by his predecessors.

Recited from Karjala et al supra note 14, at 632. The fact in this case is that a professional reciter of traditional stories had his performance of reciting the stories in traditional (monotonous) tones and melodies recorded. The defendant was accused of reproducing this recordings without the permission of the purported copyright owner. Recited from Sigeo Oie, (Performance), 91
of a "horn book doctrine." In a recent case, the Tokyo District Court said "the creativity [which is a statutory requirement of copyrightable work] is different from the concept of novelty which requires something out of nothing." Originality in a sense of an independent creation does not give final verdict in deciding the copyrightability of a work. In the U.S., "the courts have held that there must be at least a 'modest' or 'minimal' quantum of creative effort... The doctrine of \textit{de minimis non curat lex} pervades all types of subject matter." The Japanese copyright law does not seem to differ from the U.S. law at least in principle. The case about the copyrightability of the gold coins serves as a good example in which the court held that making slight changes in preexist-

Bessatsu Jurisuto (Feb. 1987) 162. What the court held here was since there is no copyright in songs (meaning the traditional monotonous tones and melodies which the reciter used to tell the stories), the reproduction of that recording does not constitute an infringement of copyright. So the real issue was the degree or quantum of creativity not the requirement of novelty beyond it. Since the traditional tones or melodies were in public domain, the mere or trivial improvisational variation does not amount to the creativity. \textit{Id.}, at 163. It should be also noted that under the old Copyright Act, the performer's neighboring right or sound recording itself was not protected.

28) \textit{See}, \textit{e.g.}, \textit{ACA, Chosakukenho Handobuku} (Copyright Law Handbook) 7 (1986) reads:

The degree of originality (that is required for works to be copyrightable) is not as much as a novelty to the extent that there should be no similar works before. Rather if not copied or imitated (from the previous works), even the same or similar works can be copyrightable.

29) \textit{Supra} note 11, at 126, 127.

30) \textit{See also}, Judgement of Tokyo District Court, 1969 No. 9353, 11 October 1972, 289 \textit{Hanrei Taimuzu} 377, 378, simply saying "creation is what is not copied."

31) W. Patry, \textit{supra} note 19, at 23, 24.

32) It should be reminded that the result of the cases in \textit{supra} note 22 and 27 can be explained on the basis of lack of minimum level of originality.

33) Judgement of Osaka Court, 21 December 1970, \textit{recited} from Karjalar et al, \textit{supra} note 14, at 629, 630. It summarizes the fact:

\textit{(P)etitioner designed and sold gold and silver coins based on a large, well known coin of the 16th century. Petitioner substituted the style from a 17th century coin for the form of the characters indicating the face amount of the coin and substituted common but more distinct tree figures at various places on the coin.}

\textit{Compare} this case \textit{with} L. Batlin & Son v. Snyder 536 F. 2d 486 (2d Cir. 1976)
ing coin did not result in a work of artistic craftsmanship.\(^{33}\)
More distinctive or relevant point for later discussion is, however, that no commentator or a court sought creativity in the sweat of the brow but only in human mental activity.\(^{34}\)

**III. Databases Protected Under Copyright Law**

The 1986 amendment added little else to protect computer databases, aside from the confirmation that they can be protected as compilations under the copyright law. Before the amendment Article 12(1) covered the works of compilations generally:

"Compilations" which, by reason of the selection or arrangement of their contents, constitute intellectual creations shall be protected as independent works.\(^{35}\)

It is generally accepted that the term "contents" in Article 12(1) does include materials such as facts or data which by themselves do not merit the protection of copyright.\(^{36}\)
It is clear from the statute that mere collections of facts or data are not protected but there should be creativity in the selection or arrangement in compilations of facts or data. The amendments approached the database with this traditional criterion in works of compilations. The wording of Article 12-2(1) as amended to protect databases\(^{37}\) closely follows that of Article 12(1):

Databases which, by reason of the selection or systematic organization of information they contain, constitutes intellectual creations shall be protected as independent works.\(^{38}\)

\(^{34}\) See, e.g., Yamamoto, *supra* note 7, at 32-35.

\(^{35}\) Act, Art. 12(1). There are two types of compilations, one of which consists of independently copyrightable works and the other consisting of non-copyrightable materials. Same rules are applicable to both types except individual works in the former type are protected independently and separately from a compilation. See, Art. 12(2) and Art. 12-2(2). This article will focus on the latter type.

\(^{36}\) Handa *et al*, *supra* note 1, at 95.

\(^{37}\) The amendment defines "databases" in Article 2:

"Databases" means a collection of information consisting of essays, numbers, diagrams, and the like that is systematically organized so that it can be searched by an electronic computer.

\(^{38}\) Act, Art. 12-2(1)
It is not difficult to infer that the inclusion of Article 12-2 was intended to clarify that databases are works of authorship which are comparable to works of compilations.\textsuperscript{3} The copyright approach, which is not unique in Japan rather majority in a number of countries, inevitably invites some frustrating problems. Before proceeding directly to these problems, however, it is necessary to make clear the meaning and requisite level of creativity in a work of compilation since it is the main cause of the problems. Besides it should not be ignored that some databases meet the requirement of creativity as compilations and deserve discussions as such.

Under the old Act the Grand Court of Judicature decided a case about the copyrightability of the court diary \textsuperscript{40}. The court diary which the plaintiff published was a kind of blank diary pocket book with quick references for trial lawyers. With blank calendar columns for each day where the memo can be written down, it contained various information such as stamp duties, fees, formula for the computation of price of the litigation. The court upheld the copyright of it because:

\begin{itemize}
  \item [i] If there is an expression of creative thought or mental effort of the author, it is proper to state that copyright can be upheld in that work.\textsuperscript{41}
\end{itemize}

The judgement, however, never elaborated on its discussion how this court diary meet the criterion of creativity. One commentator observed that even though the court diary had a very low level of creativity in the selection and arrangement of the information, the verbatim copying by the defendant led the court to this conclusion to achieve fair result in this particular case.\textsuperscript{42}

It would be too hasty or erroneous to try to draw any concrete guideline for the requisite level of creativity in works of compilation from the above case and the more recent

\textsuperscript{39} Thus the amendment inserts after the term “compilations” in Article 12(1) the phrases “excluding those falling under databases.”
\textsuperscript{41} Id.
\textsuperscript{42} Masao Miyake, Shotei Nikki(Court Diary), 91 Bessatsu Jurisuto (Feb. 1987) 46, 47.
\textsuperscript{43} Supra note 26 and accompanying text. In this case also, the court did not elaborate on where to find creativity in the selection and arrangement of yellow pages of telephone directory. Compare these two cases with the case supra note 22 and accompanying text.
case\(^{33}\) about the copyrightability of yellow pages of telephone directory both of which seem to indicate that the level of creativity required for works of compilations is not high. What is clear is the Japanese court never abandoned its loyal adherence to the principle of "creativity," meaning human mental activity not the sweat of the brow, at least expressly. Nevertheless it is noteworthy that where the court found it necessary to reach fair conclusion, it did not ask much in "creativity." The following two cases,\(^{44}\) decided by the same panel of judges at the Tokyo District Court on the same day, about the same English glossary provide more applicable examples to show the requirement of creativity and the scope of protection in works of compilations.

The plaintiff in these two cases authored a book "Essential Glossary of American Language." It contained about 3,000 standard American English words, idioms, and common phrases in alphabetical order of English headings. Each heading had, among other things,\(^{45}\) sample sentences which were selected by the plaintiff from Newsweek, Time, the New York Times published between 1946 and 1954 and English novels. The court upheld the copyright in the plaintiff's glossary finding creativity in, among other things, choosing sample sentences from a wide variety of sources, while acknowledging that each of the sample sentences itself is not copyrightable.\(^{46}\)

The defendant in case No. 480 published an English glossary "Dictionary of Essential Current English" consisting of four parts. One parts of it was similar to the plaintiff's work in that it contained about 6,500 words and phrases frequently used in the mass media, collected under headings in alphabetical order and followed by Japanese translations, other English expressions, sample sentences, and other explanatory notes. The court found the infringement not based on the overall organization or format arranging its contents but based on the similarity of the sample sentences: \(^{47}\)

It is apparent that the defendant copied [in his glossary] the large portion of the sample sentences.

\(^{44}\) Judgement of Tokyo District Court, 1975 No. 480, 14 May 1984, 525 Hanrei Taimuzu 323 (finding the infringement) and Judgement of Tokyo District Court, 1977 No. 2028, 14 May 1984, 525 Hanrei Taimuzu 332 (denying the infringement).

\(^{45}\) It also contained Japanese translations, other expressions, notes and other explanatory materials.

\(^{46}\) Id., at 324 and 332.

\(^{47}\) Id., at 326, 327 and 333.
es from [the plaintiff's book] verbatim or with slight alterations. [We] cannot deny copyright infringement\(^48\) [in this copying.]

On the other hand, the defendant's works in case No. 2028 were quite different from those of the plaintiff's or defendant's in case No. 480. They were several editions of common English-Japanese dictionaries containing tens or hundreds of thousands of English headings. The court denied the infringement\(^49\) because:

The number of similar or same sample sentences contained [in the defendant's dictionary] is very few. Moreover [we] cannot find any similarity in the selection and arrangement of materials between the plaintiff's and defendant's works.\(^50\)

One major problem that arises from the copyright approach to databases can be summarized as follows:

[A] good electronic database is exactly one which is not "original" in the copyright sense.... [W]hile an electronic databases may cost millions to set up, the work involved in its mode of compilation may often be hopelessly mechanical and unoriginal. In majority cases, the economic or other value of a database will have nothing to do with the originality of its mode of compilation, stored data, ... [but] the manhours of tedious work behind the transfer of the data into electronic form.\(^51\) \(^52\)

---

\(^{48}\) *Id.*

\(^{49}\) *Id.*, at 334.

\(^{50}\) *Id.*


\(^{52}\) The first case which hit the headlines of Japanese newspapers was typical of this problem. In 1971, a database containing the names and addresses of some 100,000 subscribers of *Nikkei Business*, a Japanese economic journal published by Nikkei-McGraw-Hill, Inc. in Japan was copied by someone while it was under the custody of a computer operating center for feedback and the copy was sold to Japan Reader's Digest. This case was solely approached by the Criminal Law. Kaneko, *Kodo Joho Shakai ni okeru Databesu no Hoteki Hogo* (Protection of the Database in High Informational Society : Application of Copyright Law and its Limit), 343 NBL.(15 December 1985) 6, 7. For more general study about the protection of information by the criminal law, see, Nakayama, *[Illegal Obtaining of Information and Criminal Punishment]* (1984) 35 : 10 *Jiyu to Seigi* 4.
One solution was suggested in Report by the Subcommittee 7 of the ACA's Copyright Council. It seeks creativity from the entire process of database production. It divides the process into four stages and concludes that if there is creativity at any stage, the resulting database can be protected as a work. This suggestion, however, does not seem to give any practical solution to the problem. Rather it ignores the real issues in the databases. In fact, the more valuable the database is, the less or no selection process is taken. Moreover by focusing on the organization and processing of the database, it failed to distinguish between the database itself and the underlying software.

After a few years since the amendments, it still remains to see how the Japanese court will solve this problem under the present Copyright Act. It is unlikely, however, the court would rigidly stick to the statutory requirement of creativity ignoring the ever growing social needs. It should be recalled here that in the cases about the copyrightability of the court diary and yellow pages of telephone directory, the court just stated the basic principle but never elaborated on how that particular work meet that principle.

53) The four stages are as follows:

1. In the process of collecting and selecting data, (the creator of the database) collects data according to the collection plan, and actually selects information which will be stored in the database according to the standard of the selection.
2. In order to organize and integrate information already collected and selected, (the creator) makes the format which decides the index, structure and mode of data, and provides the system which does, e.g., index data.
3. In order to organize and integrate information according to the system provided, (the creator) will make confirmation of the trustworthiness of information, supplementation of lacking information, and adjustment to achieve consistency and unification among information.
4. After the above job (is finished), the information is stored and the database, as an expression of the collection of information, is completed.


54) Id.

55) See e.g., Metaxas, supra note 51, at 229:

It is true that a certain selection and arrangement does take place... However, this task is undertaken by the software of the database, which should be protected separately and without any impact on the protection of the database as such.
What the court did there was to reach fair conclusion by controlling the scope of protection.

About the scope of the protection of the database, Report states that copying any part or aggregation of information that has commercial value [i.e., which by itself can be considered a work] will be an infringement, let alone copying all of the database. This substantial criterion is comparable to the standard expressed in the previous cases about works of compilations. In those cases, the court held that substantial copying of sample sentences constitutes copyright infringement while acknowledging that each of sample sentences itself is not copyrightable. On the other hand the court allowed limited copying of sample sentences. Thus normal use of computer databases, i.e., retrieving small portions of the information contained in it would not be covered by copyright law but by the contract between the copyright owner and the individual user of the database.

III. Alternatives

A. Unfair Competition

During the stalemate of the copyright approach to the database, Japan strived to solve the more general problem of the protection of the trade secret resulting in the amendment of the Unfair Competition Prevention Act ("UCPA") in June 22, 1990. Before the amendment, the scope of the application of the UCPA was very limited. It was not designed to control or prevent unfair competition generally. It only focused on deception about the trademark or trade dress and the dissemination of false facts about the competitor. Moreover, there was a judgement which stated that intellectual property is not the object of the protection under UCPA. Therefore, the protection of the database against any type of copying under UCPA was not regarded feasible. As the comprehensive study about the amendment is not pertinent here, the only relevant aspect to the protection of the database will be discussed as follows.

Under the amendment the trade secret is defined as:

---

57) UCPA, Art. 1.i-vi.
58) Judgement of Tokyo High Court, 1980 No. 689, 28 April 1982, 1057 Hanrei Jihó 43, 47(denying the protection of typeface under UCPA).
[Production method, sales method, or any useful information about the technology or the trade, which is not known to the public and treated as secret by the owner...]

Thus it follows from the statute that to be protected as trade secret under UCPA, it needs (1) to be [commercially] useful information (2) which is not known to the public (3) and treated as secret by the owner. While the more precise and concrete interpretation of the above words awaits scholarly comments and precedents, it is clear the requirements for trade secret to be protected under UCPA are far less rigid than the database under the copyright law. At least it does not require any kind or level of creativity. Therefore, some databases which might fall outside of the protection of copyright law because of the lack of creativity such as lists of clients or subscribers would be protected.

About what constitutes an infringement of trade secret, the amendment provides three types; (1) obtaining trade secret by illegal means such as theft, fraud or duress (2) [illegal] use or disclosure of trade secret (3) obtaining trade secret from an infringer in bad faith or gross negligence. The term “illegal” will be construed as “without the consent of the owner” generally. The amendment, however, does not say anything about taking how much of trade secret would constitute infringement. Along with this, the question what types of databases are protected as trade secret under the UCPA needs more discussion and will be eventually decided case by case.

About the remedies, the UCPA awards to the owner of trade secret damages, restrictive or preventive injunction. Besides the infringer is criminally liable.

B. Contract

Another useful legal means to provide the protection to databases where the copyright

60) UCPA, Art. 1(3)
62) This kind of infringement would be committed by an employee or a licensee.
63) UCPA Art. 1(3) i-vi.
64) UCPA Art. 1-2.
65) UCPA Art. 1(3).
66) UCPA Art. 5iii.
law does not reach is contract. As already discussed, according to the suggestion by Report, retrieving or copying a small portion of a database which in itself has no commercial value will not be protected under the copyright law. In Japan this kind of use is normally covered by contract for providing database service through on-line system between the owner and the user. Among the provisions of the contract which will be determined by the parties, it is general practice to provide a clause which prevents downloading by the user. Therefore what is generally allowed to the user by the on-line database service is limited to calling up relevant portion of a database onto the screen.

Another issue which might be presented by the on-line database service is "shrink wrap" licence, aiming at the third party who might want to take advantage of the vacuum not covered by copyright or contract. In the area of computer programs, it is widely used in Japan while the validity of which still awaits the judgement of the court.

IV. Conclusion

One commentator, after reviewing the 1986 amendments, raised the question "why the new provisions were adopted at all." In fact it is almost impossible what the amendments added to the pre-existing law to protect databases. Nevertheless the legislative history which can be traced almost solely by the Interim and Final Report reveals some interesting aspect of Japan's response to this particular problem. That is, unlike the U.S. approach, they never tried to delineate copyrightable elements in a compilation or a database. It may be because they were keenly aware of the fact that the aggregation becomes at some stage different from its consisting individual elements not just in quantity but also in quality even without anything more. Given the trend the standar-

68) Id.
69) Nakayama, supra note 59, at 185.
70) Karjal, supra note 4, at 270.
71) 17 U.S.C. sec. 103(b) provides:

The copyright in a compilation... extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material....
dization is needed in the format or scheme of arrangement, to which creativity might be attributable, when it comes to a database, Japanese approach seems to be more practical at least at this point. However it is also true that Japan is another example to show the inadequacy of copyright in protecting databases when it sticks to creativity which is essential element in traditional copyright law.