Database Protection—The European Way*

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SUMMARY

In 1996, the European Union (EU) finally adopted the EU Database Directive (Directive). The Directive created a two-tier protection scheme for electronic and non-electronic databases. Member states are required to protect databases by copyright as intellectual creations, or to provide a novel *sui generis* right to prevent unauthorized extraction or re-utilization of the contents of a database. The difference between the two is that copyright infringement implies copying the structure, while the *sui generis* right infringement implies copying the contents themselves, irrespective of their copyrightability.

It is clear that the two-tier system of protection which the Directive introduces derives its significance from the new *sui generis* right, since most databases will not be eligible for copyright protection, no matter how low the standard of creativity or originality may be. However, it is quite possible that both copyright and the *sui generis* right will simultaneously apply. In that case, both rights will run and can be exploited independently. If one copies or distributes the contents of such a double protected database without the consent of the copyright owner, the copyright owner can, under the circumstances, instigate legal proceedings for copyright and *sui generis* right infringement.

It has yet to be seen, when considering the way in which member

* The *Journal* editors made every effort to verify the citations herein, but due to a language barrier with several of the primary sources, we relied on the integrity of the author.

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states have implemented the Directive and the way in which national courts apply domestic law, how the Directive has succeeded in harmonizing European Commission (EC) law with regard to the protection of databases.

I. PRELIMINARY OBSERVATIONS ON DATABASE PROTECTION

A. Balancing Particular and Public Interests

For decades, the question of what legal protection should be given to databases has figured prominently on the agenda of international and national governmental and nongovernmental bodies. This question is a consequence of the well known fact that the information industry as a whole has rapidly emerged and become one of the fastest growing sectors of the economies of the industrialized world.¹ This fact is particularly true for the database industry, a special branch of the information industry. Currently, the database industry has proved to be of vital support for governmental, educational, and commercial purposes. Since databases are prone to full scale misappropriation, a lack of adequate legal protection could have a range of damaging effects on everyday life. Databases are subject to misappropriation because the information contained within is highly vulnerable. Information, by its very nature, is ubiquitous, inexhaustible, and indivisible. As a consequence, the second use of some particular, new information does not diminish or exhaust it. Once disclosed to the public, information can generally be used, ignoring contractual or tortious liability, without charge and without the database provider's permission or any obligation to reimburse him for his investment. This fact holds equally true for the offline as well as the online market.

However impressive the developments in digital technology may be, the developments do not mean that analogous technology will soon disappear or will disappear at all. Indeed, it is commonly agreed

^{1.} For an overview of these developments, see Organization for Co-operation and Development, Computerized Information Services: Economic and Trade Issues in the Database Market (1992); Database Promotion Center Japan, Databases in Japan (1997).

that both digital and other technologies will coexist for some time to come.² One of the reasons given in the European context is that the protection of digital products and services and the corresponding hardware is still generally very capital intensive. Paradoxically, providing protection to one database provider creates a legal barrier for other potentially competing database providers attempting to enter the market. This barrier is particularly true in the case of sole source database producers. It becomes clear that the need for protection should be balanced against the need for competition. However, it is not only the particular interests of the database industry that are at stake. Equally involved is the public interest of the dissemination of culture and knowledge in today's society requiring free access to all types of information.³

The above state of affairs demands a coherent and firm strategy by the governmental and nongovernmental bodies in charge both on a national and an international level. It is essential to realize that the legal protection of databases should not be dealt with in isolation, but should be seen as part of the legal protection of intellectual property rights in the information society in general.⁴

^{2.} This became very clear during the International Publishers Association (IPA) Fourth International Copyright Symposium in Tokyo in 1998. In his keynote speech on coherence and continuity, Wulf von Lucius, among other things, Chair of the International Publishers Copyright Council (IPCC), stated: "After years of doomsday prophecies about the death of the book and the obsolescence of printed journals, today all experts—not only the publishers themselves—have no doubt, that there is a long and presumably prosperous future for folio publishing at least for many decades." Wulf von Lucius, Coherence and Continuity: Necessities for an Efficient Protection of Intellectual Creation in the Electronic Environment, in THE PUBLISHER IN THE CHANGING MARKETS 25 (1998); see also Fumiko Yonezawa, The Partnership between Publishers and Libraries from the Standpoint of an Author, a Reader and a Scientist—at the Dawn of the Electronic Age, in THE PUBLISHER IN THE CHANGING MARKETS 123, 124 (1998) (stating: "many people, even if they are computer literate, would regard books printed on paper as more human than letters on the screen: [j]udging from all these considerations, I am very sure that the culture of printed books will never be extinct").

^{3.} During the IPA Symposium, this proposition was militantly put forward by Annabelle Herd, Copyright Research Officer of the Australian Council of Libraries and Information Services (ACLIS). Annabelle Herd, By the Laws of Venice: Copyright and the Bond between Publishers and Libraries in the Digital Age, in THE PUBLISHER IN THE CHANGING MARKETS 126 (1998).

^{4.} For a European perspective, see Paul Waterschoot, An Overview of Recent Developments in Intellectual Property in the European Union 5 (Apr. 1997) (unpublished manuscript, on file with author). "The Information Society offers extensive opportunities for investors, rightholders, users and consumers. In order for it to develop properly, the Community has to provide an adequate regulatory framework." *Id.*

B. The Universe of Modes of Protection⁵

Considering that databases have not always fit within the existing legal systems and leaving aside contract law, there have been three ways in which to offer legal protection: copyright law, unfair competition law, and *sui generis* law. Not only have national legal systems recognized these three ways of protection, but recently, the legal protections have also received recognition in international law, such as by way of the NAFTA Treaty (chapter 17), the TRIPS Agreement (Article 10(2)), the draft World Intellectual Property Organization (WIPO) Database Treaty, and the Directive.

1. Copyright Law⁶

Although databases are seldom stored with exclusively literary or artistic works, most legal systems protect them as compilations of literary or artistic works under Article 2(5) BC, provided that there is creativity or originality involved in the selection or arrangement of their contents. Copyright protection considers the database *per se* for example, the selection and arrangement used in order to store its contents, or the structure, irrespective of the copyrightability of the contents. As simple as this formula may seem at first sight, it is now clear that copyright protection is unlikely to provide an adequate answer.

First, civil law jurisdictions and some common law jurisdictions, for example, the United Kingdom, tend to interpret the notion of creativity or originality differently. In civil law jurisdictions, creativity or originality refers to the personal mark of the author. In common law jurisdictions, a work of authorship may also be the result of the sole investment of skill and labor. From this point of view, all is suited to copyright protection if it has not been itself

^{5.} The text of the three following paragraphs concords in essence with F.W. Grosheide, Sui Generis Protection for Databases—the European Way: An Analysis (Apr. 1997) (unpublished manuscript, on file with author) (paper presented at the Fifth Annual Conference on International Intellectual Property Law and Policy, Fordham University School of Law, New York, New York, Apr. 3-4, 1997).

^{6.} For an overview of copyright protection, see André Lucas, *General Report—Databases and Copyright*, in PROCEEDINGS ALAI CONGRESS 332-47 (1989).

copied. However, it should be added that in some civil law jurisdictions a similar protection to that provided for under the skill and labor rule can also be obtained for compilations or collections of such mundane material as telephone books, television program listings, and street directories. But this extended thin copyright protection does not hold true in cases such as those in which the data is rearranged and restructured in another database after having been stolen. Furthermore, courts in different countries of the world have indeed demonstrated reservations concerning entrepreneurial copyright which is based on norms of competition rather than personal creativity or originality. The Dutch Supreme Court in Van Dale v. Romme reasserted the basic importance of personal expression as the touchstone of copyright. The U.S. Supreme Court, in Feist v. Rural Telephone, distanced the law of that country from other common law systems in the same way by requiring that databases qualify for creativity or originality if copyright protection is provided.8

The following two problematic aspects of copyright protection are also of importance. First, copyright protection is out of place because of the comprehensiveness of the database that gives it its special value. The more complete the database, the less likely it is to attract thick copyright protection because of a lack of creativity or originality.

Second, possibly the most fundamental question with respect to copyright protection concerns the copyrightability of the data *per se*, since what the database producers are really seeking is protection of the raw information. However, a generally accepted principle of copyright law dictates that data and information have free reign. It is only the form, compilation, or collection, in which the data or the information is presented that can be copyrighted. If the data itself is subject to copyright then its inclusion in a database will not affect the copyrightability of the database itself. If the data is not itself

^{7.} See Van Dale Lexicografie B.V./Rudolf Jan Romme, Nederlandse Jurisprudentie (NJ) 1991, in PROTECTING WORKS OF FACT 608 (E.J. Dommering & P.B. Hugenholtz eds., 1991).

^{8.} See Feist Publ'ns, Inc. v. Rural Tel. Serv. Co. Inc., 499 U.S. 340 (1991).

^{9.} See 17 U.S.C. § 102(b) (2000) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, process, system, method of operation, concept, principle, or discovery...").

protected by copyright, the only relevant copyright will be that which is inherent in the compilation or collection. The data does not itself acquire copyright protection by virtue of its inclusion in the compilation or collection and neither does the database.

The foregoing can be summarized in the following statement by Lucas, "If copyright is to meet all the expectations of database producers, it must be capable of protecting the greatest possible number of producers and providing a decisive weapon by which to combat all parasitive behavior. This dual result cannot be guaranteed." ¹⁰

2. Unfair Competition Law¹¹

Databases may be protected by way of unfair competition law. Here again civil law jurisdictions and common law jurisdictions differ substantially. In most civil law jurisdictions, statutes or case law recognize the unfair competition doctrine, which, under strict conditions, can provide for some sort of protection in the case of misappropriation of valuable data or information. The law in these jurisdictions emphasizes the misconduct of the one who appropriates contents from the database by placing him under a form of tortious liability. Whereas, unfair competition law in common law jurisdictions, usually called misappropriation law, refers in its narrowest sense to the common law which prevents one business from claiming its goods or services are those of another.¹²

Whether its basis is statute or case law, unfair competition protection is disadvantageous for the claimant because he has to prove the tortious act on the part of the defendant by more than mere proof that the data has been taken. As well, uncertainty exists with regards to the term of protection. A lack of an elaborate doctrine of unfair competition led common law jurisdictions to turn towards copyright protection for skill and labor.

^{10.} See Lucas, supra note 6, at 346.

^{11.} See PETER JOACHIM KAUFMANN, PASSING OFF AND MISAPPROPRIATION (VHC Weinheim 1986); Michael Spence, Passing Off and the Misappropriation of Valuable Intangibles, 112 L. Q. Rev. 1172, 473-98 (1986).

^{12.} See, e.g., William Rodolph Cornish, Intellectual Property 12-23 (4th ed. 1999).

Protection by way of unfair competition law has the disadvantage of a lack of harmonized law both within the EU and worldwide. Also Articles 1(2) and 10bis PC have not had a harmonizing effect. However, in 1995, the WIPO published the Model Provisions on Protection Against Unfair Competition. ¹³ Article 6 of this provision is dedicated to unfair competition with respect to secret information which may, under the circumstances, apply to databases. Perhaps, in the years to come, there will be more harmonization of unfair competition law.

3. Sui Generis Law

Databases may be protected by a sui generis regime which, in most instances has the nature of a neighboring right that can be annexed to a copyright. Such a special exclusive rights regime protects the investments of the database producers, but avoids the indicated weaknesses of copyright law and unfair competition law. Although a sui generis right of the indicated type establishes a right for the contents of the database instead of vesting an exclusive right in the structure of the database, it should be emphasized that such content protection only concerns these contents in as far as the contents are compiled in a particular database. The independent gathering of the same contents from other original sources is not prohibited. The exclusive right does not grant exclusivity to the gathered data, but only requires third parties to go through the process of gathering information independently. Further, introducing a sui generis rights regime is not feasible without adopting exceptions for certain uses.

One can appreciate that from a database producer's perspective, the indicated disadvantages demonstrate a lack of satisfactory protection on both a national and an international level.

13. See WIPO, Model Provision on Protection against Unfair Competition (Geneve 1995).

4. Appraisal

In addition to the above discussion, the following can be said from a conceptual point of view. Two approaches are possible with regard to legal protection of databases: (1) an exclusive rights approach, and (2) a tortious liability approach. The exclusive rights approach is not only incorporated in copyright law and *sui generis* law protection, but also in alternative, unappreciated models such as the information as property theory. Approaches in opposition to an exclusive rights and a tortious liability approach are approaches that deny any legal protection of information since information is considered a public good. See the considered a public good.

The exclusive rights approach and the unfair competition approach have different characteristics. The exclusive rights approach focuses on a definition of the protected interest. Its scope of protection is reflected in restricted acts and the remedies are related to infringement. The unfair competition approach, contrastingly, focuses on certain types of behavior. It is by its very nature bound to competition, whereas its remedies are related to damage.

In sum, models of protection may be placed in three categories: (1) advocation of information as property; (2) promotion of an exclusive rights approach, for example a copyright or a neighboring right in information; and (3) approaches such as unfair competition law or misappropriation law supporting a tortious liability regime. It is beyond the scope of this paper to reflect upon each of these models.

However, taking into account all the interests involved, in particular free competition and freedom of communication, it may be said that focusing on misconduct instead of any exclusive property right best satisfies the required balance of interests as it offers more flexibility.

^{14.} See, e.g., RAYMOND T. NIMMER, INFORMATION LAW (Warren Gorham Lamont ed., 1996).

^{15.} See Victor H. Bouganim, Database Protection—The Emergence of Dataright, available at http://dataright.haifa.ac.il (last modified June 1, 1999) (promoting and forecasting the emerging of an exclusive data right).

II. LEGISLATIVE HISTORY OF THE EU DATABASE DIRECTIVE 16

A. Background

Analysis of the legislative history of the EC Database Directive may be useful for a proper understanding of the European perspective. The EC first presented its views on database protection in the Green Paper on Copyright and the Challenge of Technology published in 1988.¹⁷ During a hearing with interested parties in 1990, the parties expressed a general preference for a copyright approach. As a consequence, in the EC's 1990 Follow-up to the Green Paper, there is no trace of a *sui generis* approach.¹⁸ This approach conformed with legal thought regarding the protection of databases in Europe at the time.¹⁹ Changes began after the aforementioned *Van Dale* and *Feist* cases. When the EC issued its first proposal for a Directive on the Legal Protection of Databases in 1992, the accompanying Explanatory Memorandum expressly referred to the *Feist* decision.²⁰

The EC stated that it foresaw that electronic databases which did not meet the test of originality would be excluded from copyright protection regardless of the skill, labor, effort, or financial investment expended in the creation of the electronic databases. To protect those databases, the EC proposed a new unfair extraction right as a special rule of unfair competition protection available for noncreative original databases against unauthorized acts of commercial usage,

^{16.} Directive 96/9 EC of the European Parliament and of the Council on the Legal Protection of Databases, Mar. 11, 1996, O.J. (L 77/20). Recital 11 mentions as one of the objectives of the Directive the creation of a balance in the level of investment in the database industry between the community and the world's largest database-producing countries. For a comprehensive criticism, see W.R. Cornish, 1996 European Community Directive on Database Protection, 21 COLUM.-VLA J. L. & ARTS 1 (1996); see also Grosheide, supra note 5.

^{17.} Commission of the European Communities Green Paper on Copyright and the Challenge of Technology, Copyright Issues Requiring Immediate Action, EUR. PARL. DOC. (COM (88) 172 final) 176 (1988).

^{18.} Commission of the European Communities, Follow-up to the Green Paper on Copyright and the Challenge of Technology, EUR. PARL. DOC. (COM (90)) 584 (1990).

^{19.} But see Jean Hughes & Elizabeth Weightman, EC Database Protection: Fine Tuning the Commission, 5 E.I.P.R. 147, 147-50 (1992).

^{20.} The Explanatory Memorandum also stated that the purpose of the Directive as proposed was to provide a harmonized and stable legal regime protecting databases manufactured within the Community, so that the internal market can function freely.

irrespective of the copyrightability of their contents. Article 2(5) of the original proposal reads: "Member States shall provide for a right for the maker of a database to prevent unauthorized extraction and reutilization, from the database, of its contents, in whole or in substantial part, for commercial purposes." This new right was to be granted for a term of ten years and was distinct from copyright and had different characteristics.

With special reference to the observations of the Economic and Social Committee, the European Parliament, and pursuant to Article 14(3) of the EEC Treaty, the EC presented its amended proposal in 1993.21 Explanatory The Memorandum (Memorandum) accompanying the amended proposal lists those modifications from the original incorporated into the amendment and the Parliament's recommendations which the EC had not adopted in a parallel manner. The Memorandum states that the amended proposal contains one major and five redactional modifications from the original. The major change relates to the new sui generis extraction right, described as an unauthorized extraction right, granted for a fifteen year term of protection. Recital 42 clarifies that the right applies not only to competition, but also to acts by the user which may harm the legitimate interests of the database producer. Article 7(3) illustrates that the new right is indeed a property right akin to an intellectual property right as it is transferable and subject to licensing. According to Gaster, the sui generis right is an economic right that "has nothing in common with unfair competition remedies because it does not sanction behavior a posteriori and because it provides for a term of protection."22

In another change, the EC dropped a formerly inserted noncumulation clause. Its updated form of the *sui generis* right adds an extra "layer of protection, which may cumulate with existing rights of intellectual property."²³

^{21.} Amended Proposal for a Council Directive on the Legal Protection of Databases, Eur. Parl. Doc. (COM (93) 464 final-SYN 393) 1 (1993).

^{22.} Jens L. Gaster, The EU Council of Minister's Common Position Concerning the Legal Protection of Databases: A First Comment, 6(7) ENT. L. REV. 258 (1995).

^{23.} P. Bernt Hugenholtz, *Implementing the European Database Directive*, in Intellectual Property and Information Law: Essays in Honor of Herman Cohen Jchoram 183-200 (Jan J.C. Kabel & Gerard J.H.W. Mom eds., 1998).

The Memorandum lists the redactional changes according to Chalton's summary, which can also serve as an overview of the original proposal, in the following manner.²⁴ First, the definition of the term database is amended to include collections of data, as well as collections of works or other materials. The definition is also broadened from applying solely to electronic databases to encompassing paper made databases. This broadening was apparently done to clarify that collections of numerical, statistical, or other information not aptly falling within the meaning of the phrase, works, or other materials are to be included as databases protected by the Directive. This expansion was also done to accord with the Article 10(2) TRIPS Agreement referring to databases whether in machine readable or other form. A similar approach is taken by Article 5 of the WIPO Copyright Treaty. Both the original and the amended proposal restrict the definition of a database to works and materials arranged, stored, and accessed in a systematic or methodical way, and the materials necessary for the operation of a database. The Directive cover recordings, extracts from does audiovisual. cinematographic, literary or musical works, or compilations of recordings of musical performances already protected under the Rome Convention. The computer programs used for a database to operate are also not protected as they are covered by the specific directive in that respect.²⁵

Second, the expression owner of the rights in a database is defined to mean the author of a database, or the natural or legal person to whom the author granted the right to prevent unauthorized extraction, or the maker of a database which is not eligible for protection by copyright. Third, the definitions of substantial and insubstantial change are amended and have become significantly different in relation to the protection of databases by the extraction right. Fourth,

^{24.} Simon Chalton, *The Amended Database Directive Proposal: A Commentary and Synopsis*, 3 E.I.P.R. 94, 94-102 (1994-1995). As has rightly been observed by Chalton, an obvious, but less substantial change introduced by the amended proposal is also the restructuring of the proposed Directive. Where the original proposal comprised a single series of articles relating to both copyright and the unfair extraction right, the amended proposal now separates these provisions by classifying and restructuring the articles of the proposed directive into chapters.

^{25.} Council Directive 91/250, May 14, 1991, 1990 O.J. (L 122) 42.

the new *sui generis* right is now described as a right against unauthorized extraction, thereby removing uncertainty in relation to the term unfair. The term unauthorized is not defined, but implies that authority may be given by the owner of the right in a database, either expressly or impliedly. This implication may also be provided by law, for example, the right granted by Article 7.1 to a lawful user of a database to perform any of the restricted acts listed in Article 6 which are necessary for the normal use of the database. Fifth, the terms for compulsory licensing of databases subject to the extraction right are expanded and elaborated upon.

B. Content Overview

It took the Community another two and one half years to reach the Common Position adopted by the Council and the Parliament on July 10, 1995 which formed the basis for the Directive. ²⁶ For the purpose of this Article, it is sufficient to focus the analysis on some of the key substantive law issues of the Directive. In doing so, it should be remembered that the Directive introduces a two-tier system for protecting databases involving both copyright law and sui generis law. However, some issues are dealt with from a general perspective, irrespective of the particular regime. It is worth noting that the provisions of each chapter of the Directive may be considered in light of the concurring recitals. Thus, recitals stating that copyright remains an appropriate form of exclusive right for authors creating databases should be taken into account when interpreting chapter 2. The same is true for Recitals 15 and 16 referring to the criteria by which a database should be eligible for copyright protection. To discover what, precisely, is meant by the term database in Article 1(2), one is bound to take into account a whole series of Recitals such

^{26.} O.J. (C 17) Jan. 22, 1996. In particular, a strong British coalition, led by the Confederation of British Industry and the Direct Marketing Association, lobbied against the 1992 Proposal. The UK lobbyists, representing the world's second largest database industry after that of the United States amongst others, took the leading argument. The argument stated that the two-tier system would drastically reduce the existing level of database protection under British copyright law and that the proposed term of ten years was insufficient to recoup their investment. It is said that the EU minimized conflicts with British and U.S. law by making significant amendments to the 1992 proposal.

as 13 and 14, electronic and non-electronic collections; 17, audiovisual recordings are included, but cinematographic, literary, or musical works as such are not included; 19, musical recordings on CD as a rule are not included; 20, operational materials; 22, CD-rom and CD. In a final example, the option for member states to make exceptions to the *sui generis* right as laid down in Article 9 may be interpreted in conformity with Recitals 50 and 51.

In addition, it is necessary to mention an important alteration to the previous drafts: the deletion of the compulsory license with regard to sole source databases. Such a license was made possible in those instances where the stored information could not at all or not without great practical or financial difficulties be created or gathered independently. The same was true for information made publicly available by a public agency.

Object and Scope of Protection

Under the heading Scope, Article 1 states that it concerns databases in any form. Article 1(2) adds that the description of a database includes databases that are individually accessed by electronic or other means. It is noteworthy that Article 1 applies equally under the copyright law regime as well as the sui generis law regime. Although it is not clear whether Article 1(1) has a specific meaning distinct from Article 1(2), both provisions indicate that the term database includes electronic databases as well as databases in paper form. Article 1(2) further defines a database as a collection of works, data, or other independent materials arranged in a systematic or methodical way. The reference to arranged in a systematic or methodical way sets a low standard. The reference to works and data or other materials clarifies that even information that does not qualify as works or data, for example, recordings of sound, are covered. 27 The database should have some organizing principle, only haphazard collections seem to be excluded. The keywords "collection" and "independent" indicate that there must be a combination of a number of separate data to qualify as a database. CD-roms or online services fall within this scope, while audio-visual materials are more difficult

^{27.} See Explanatory Memorandum, at 19.

to identify. Consequently, Recital 17 excludes from the definition a collection of moving images together constituting a film since these images are not independently accessible. The requirement that the database must be arranged in a systematic or methodical way presumably excludes from protection collections such as Aunt Céleste's china cabinet.²⁸ Finally, the requirement that the elements collected in the database must be individually accessible means that the database must be retrievable.

According to Recital 20, the protection also comprises the materials to operate or consult a database. However, Article 1(3) states that the protection of the database does not apply to computer programs used in the manufacture or operation of databases. Article 2 states that the Directive applies without prejudice to Community provisions relating to the protection of computer programs, to rental and lending rights, and refers to the Term Directive for the purposes of the period of the copyright protection.²⁹

2. Copyright Protection

The Directive adopts the civil law, *droit d'auteur*, approach to copyright by requiring in Article 3(1) intellectual creativity on behalf of what is termed the author of the database. The author may be a natural person or a legal entity. This definition conforms to Article 10(2) TRIPS for the protection of compilations. Because the EU adheres to the BC, the authors from other BC countries are also protected. In conformity with Article 2(5) of the BC, the investment of intellectual creativity should be expressed by reason of the selection or arrangement of the contents of a database. So, it begins with the systematic or methodical arrangement of the collection, followed by the selection or arrangement of the contents. It is generally accepted that what is actually protectable by copyright is that which has been previously mentioned as the structure of the database. Article 5, enumerating the restricted acts, refers to the

^{28.} See Explanatory Memorandum, at 41; A.A. Quaedvlieg, Onafhankelijk, geordend en toegankelijk: het object van het databankenrecht in de richtlijn, Informatierecht/AMI 2000/9, at 177-86.

^{29.} See EC Directive 93/98 of Oct. 29, 1993 (harmonizing the term of protection of copyright and certain related rights (seventy year post mortem auctoris for copyright)).

expression of the database. Article 4 links copyright ownership to authorship of a database. The rules governing ownership or authorship will not be harmonized.

Article 5 contains the restricted acts which the author of a database has the exclusive right to perform or to authorize third parties to perform. The list of those acts covers reproduction, adaptation, distribution, and public communication. Article 5(c), referring to any form of distribution, read in combination with Recital 31, makes it clear that this prerogative includes making databases available by means other than the distribution of copies. Cornish observed that as comprehensive as the list of restricted acts may be, it nevertheless provides "no particular answers to any of the precise issues now dominating discussion of digital servicing."30 So, when Article 5(a) speaks of temporary or permanent reproduction, it is unanswered how temporary a reproduction may be. According to Article 5(c), the first legitimate sale of a copy of a database in the Community shall lead to exhaustion within the Community, but it is unclear what rule will apply to initial marketing outside the Community.

Article 6, in conjunction with Article 15, stipulates that the lawful user of a database or of a copy thereof may perform, without the authorization of its author, all acts that constitute normal use of the contents of the database. Article 6 does not say what exactly qualifies as normal use.

Besides the above, Article 6 gives member states the option to include a limited list of exceptions in their national laws. This option does not apply, however, in two cases: (1) any exception for private use or home copying is only permitted for a database in non-electronic form, and (2) no exception may unreasonably prejudice the legitimate interests of the database author or conflict with normal exploitation of the database. This list reflects Article 9(2) BC.

30. See Cornish, supra note 16, at 6. Compare, Article 5(1) Council of the European Union, Common Position adopted by the Council on Sept. 14, 2000, with a view to the adoption of 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, Brussels 9512/1/00 Rev. 1.

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3. Sui Generis Protection

Recitals 40 and 41 clearly explain the rationale behind the *sui* generis right. The recitals state:

(40) Whereas the object of this *sui generis* right is to ensure protection of any investment in obtaining, verifying or presenting the contents of a database . . .; whereas such investment may consist of the implementation of financial resources and/or the expending of time, effort and energy; (41) Whereas the objective of the sui generis right is to give the maker of a database the option of preventing the unauthorized extraction and/or re-utilization of all or a substantial part of the contents of that database: whereas the maker of a database is the person who takes the initiative and the risk of investing; whereas this excludes subcontractors in particular from the definition of maker:

Article 7(1) sharpens the phrasing of the recitals by stating that the *sui generis* right protects a database which shows that there has been qualitatively and/or quantitatively a substantial investment. Similarly, the right prevents acts of extraction or reutilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of a database. In other words, the *sui generis* right protects the maker of a database against extraction and/or reutilization of the contents. The protection is of the substantive contents, rather than of the structure. The contents may consist of data protected by copyright, but also of all the mundane data such as telephone numbers and stock exchange information mentioned previously.

Conceptually, what kind of protection does the *sui generis* right introduce? It is true that the option of Article 7 refers to the object of protection but a neat description of that object is not provided in the respective provisions of that article. This absence seems to leave room for either an exclusive rights approach or an unfair competition approach. However, taking into account the Explanatory Memorandum and the Recitals of the Directive there is little doubt that the EC wanted to introduce a new kind of exclusive right. That is indeed the approach taken by all the member states when implementing the Directive.

The reference to the whole or a substantial part of the appropriated data measured qualitatively and/or quantitatively requires a judgment of the intrinsic value of the database. How to make this judgment is left open in the Directive. Presumably, it will be done in the same way that legal systems recognizing unfair competition law assess the unfairness of the incriminated behavior of the misappropriator. As Cornish has correctly observed, "the introduction of a preliminary threshold of sufficient investment before a database acquires any claim to protection surely identifies" it as a trade value important enough to warrant protection against misappropriation: a form, in other words, of unfair competition protection.³¹

According to Article 11, the beneficiaries of the *sui generis* right are the makers or their successors who are nationals of a member state or who have their habitual residence in the territory of the Community. Subcontractors are excluded from the definition. The Directive does envision reciprocal protection for non-EU databases, subject to the negotiation of future bilateral agreements. The term of protection is fifteen years. Article 10(3) stipulates that a new term of fifteen year protection can be obtained if the contents of the database, evaluated qualitatively or quantitatively, have substantially changed. Accumulations, successive additions, deletions, or alterations as well as the adding of new data will serve that aim. Substantial new investment is the overriding requirement. Recitals 53 and 54 make clear that the burden of proof concerning such renewal rests upon the maker of the database.

The maker of a database and/or the owner of the *sui generis* right in it acquires two prerogatives. The rights are described in Article 7(1)(a) and (b) as the authority to prevent acts of extraction and/or to prevent acts of re-utilization. As Recital 38 makes clear, the descriptions of extraction and re-utilization are intended to protect the maker of a database against the risk that the contents of his database may be copied and rearranged electronically without his authorization to produce a database of identical content but which does not infringe

31. See Cornish, supra note 16, at 8; see also G. Dworkin, Copyright, Patent or Protection for Computer Programs, 1 FORDHAM INT'L INTELL. PROP. L. & POL. 183 (1996) (stating the Directive is based upon "competition policy, rather than on the . . . romantic concepts of authorship embedded in . . . continental European [copyright]").

any copyright in the structure of his database.

Extraction covers any form of transfer, temporary or permanent, of all or a substantial part of the contents to another medium. The emphasis is on the taking, not the distribution. So this right includes on-screen display as well as the making of electronic or paper copies of some of the contents. As Kaye correctly observed, the extraction prerogative comes close to the access right favored by some observers to address the problems of copyright in a digital era.³² Reutilization covers any form of making available to the public all or a substantial part of the contents of a database the distribution of copies, by renting, by online, or by other forms of transmission. Here, the emphasis is clearly on acts of distribution and transmission. The first sale of a copy of a database within the Community by the rightholder or with his consent exhausts the right to control the resale of that copy within the Community.

There are two exceptions to the *sui generis* right: exceptions that limit the prerogatives of the maker of a database vis-à-vis the legitimate user thereof and exceptions for special purposes to which aim the member states will have an option. Article 8 in conjunction with Article 15 does not make clear who a lawful user may be, but it is obvious that such a user cannot be prevented by contract from extracting or reutilizing insubstantial parts of the contents of the database.³³ The types of exceptions that Article 9 allows can be labeled as fair use exceptions. These exceptions are: private use, particularly home copying from a nonelectronic database; use for illustration for teaching and scientific research, provided that the source is indicated and the purpose is noncommercial; and use for public security purposes or for administrative and/or judicial proceedings.

^{32.} L. Kaye, The Proposed EU Directive for the Legal Protection of Databases: A Cornerstone of the Information Society?, 17 E.I.P.R. 583, 585-86 (1995); see also S. Olswang; Accessright: An Evolutionary Path for Copyright into the Digital Era?, 17 E.I.P.R. 215 (1995).

^{33.} The heading of the article speaks of "legitimate users," the text of "lawful user." Here the same legislative technique was used as in the Computer Programs Directive. EC Directive of May 14, 1991 on the Legal Protection of Computer Programs, OIEC No. L. 122/42 (first the prerogatives of the author are described as broadly as possible, then by way of granting rights and making exemptions the regime is relaxed).

4. Relation between Copyright Protection and *Sui Generis* Right Protection

In sum, the Directive introduces a two-tier system for protecting databases. Copyright will protect the structure of the database; the contents of the database will be protected by the new sui generis right to prevent the unauthorized appropriation for the extraction or reuse of these contents. Subsisting rights in the materials incorporated in the database are respected. This respect means that for data which is copyright-protected, such as films, photographs, or newspaper articles, the Directive creates a double layer of protection. This data will continue to be copyright-protected and, in addition, will be protected by the new sui generis right. For the purposes of the term of the copyright protection, the Directive refers to the Term Directive equaling seventy years.³⁴ The term of the *sui generis* right protection is fifteen years from the time the database becomes available to the public. Directive remains close to the amended text of the first proposal from 1993. There are, however, two striking differences: the Directive applies to electronic databases as well as to paper databases; and the Directive does not contain provisions for compulsory licensing of the contents of databases which cannot be obtained from another source. Beneficiaries of the rights granted under the Directive are the authors of a database, copyright law, and the makers of a database or their successors, sui generis law, who have their habitual residence within the EU.

In addition, it should be noted that Article 16(3) provides for an assessment of the Directive to be carried out no later than 2001 and that the system of database protection will not be changed by the proposed new EC Copyright Harmonisation Directive.³⁵

III. FURTHER ANALYSIS OF THE EU DATABASE DIRECTIVE

As a consequence of the fact that the Directive does not harmonize substantive copyright law or *sui generis* law in the member states with regard to database protection at more than a

^{34.} EC Directive 93/98, supra note 29, at 82.

^{35.} See Common Position, supra note 30, at 82.

minimum level, most of the developments in this respect take place by way of national legislation and the courts. Both legislators and the courts, with the support of legal doctrine, have to come to terms with the host of open notions that the Directive introduces as well as with the regime it prescribes with regard to the scope of protection.

The following offers further analysis of both aspects: key notions, as well as the scope of protection.

A. Key Notions

Most of the key notions used in the Directive are either not well defined or not defined at all and consequently, having been implemented into national law, need interpretation by the national courts and ultimately by the European Court of Justice (ECJ). Since some national courts have been able to give their views on some of these key notions, it is worthwhile to take account of their findings. Below, attention will be given to the notions database, own intellectual creation, qualitative and quantitative investment, and lawful user.

1. Database

As already mentioned above, Article 1 restricts the scope of protection of the Directive to databases that comply with the definition of a database in that provision. However, as simple as that definition may appear at first, it does raise many questions with regard to its operation in practice. This situation is because the definition contains three open notions: collection of independent elements, systematic or methodical arrangement, and individual accessibility, which need to be given proper meaning by the courts. Furthermore, the definition of Article 1 must be applied in a manner in accord with Articles 3 and 7 which appear to delineate the notion of database from the perspective of the object of protection either under copyright law or under sui generis law. Finally, the definition of Article 1, even taken in conjunction with the delineation of Articles 3 and 7, leaves unanswered the question of what the legal status is of databases that do not meet the Directive's requirements for protection. It seems appropriate to give each of the three indicated questions some further attention.

First, attention needs to be given to the question of how to interpret the three open notions contained in Article 1. The notion of collection of independent elements, as stated above, presumably excludes from its application Aunt Céleste's china cabinet, but it does not give any guidance as to the nature and amount of elements required to constitute a database. As to the nature of the elements, particularly their content, it seems plausible that only informational content falls within these terms. Collections of stamps or butterflies are not protected. 36 Kaye correctly stated that, for example, "a 'page' on the World Wide Web on the Internet will be capable of being a 'database' as a collection of independent works—literary works (such as articles), graphic works (photos, diagrams, illustrations), video, sound and in some cases, computer software."³⁷ However, Cornish is equally correct in observing that "if legal attributes are conferred on databases alone, then it becomes necessary to decide whether one is concerned only with electronic storage, and an attempt has to be made to define the minimum content which will suffice to bring the legal principles into play."38

With regard to the adjective independent *communis opinio* seems to exist in so far as this adjective requires any element to have an intrinsic information grade, for example, not depending on its being a part of a database.³⁹ Chalton, in accordance with Recital 17, gives the example of frames in a cinematographic film or chapters in a book which cannot count as a database, being dependent on one another as part of the film or the book, while a collection of short stories falls within the definition of a database.⁴⁰ Chalton convincingly suggests

^{36.} Compare M. Leistner, De Rechtsschutz von Databanken im deutschen und europäischen Recht 45 (MPJ München 2000), with Malte Grützmacher, Urheber-, Leistungs- und Sui-generisschutz von Databanken, Eine Untersuchung des europäischen und britischen Rechts 168 (Baden Baden 1999).

^{37.} See Kaye, supra note 32, at 584.

^{38.} See W.R. Cornish, Protection of and vis-à-vis databases—General Report, ALAI-Congress—Amsterdam 1996, 435-42 (1997).

^{39.} Idem P.B. Hugenholtz, De databankrichtlijn eindelijk aanvaard: een zeer kritisch commentaar, Computerrecht 1996/4, 132. But see Queadvlieg, supra note 28, at 82 (arguing that collections of physical objects may also fall under the definition); see also Idem Mireille Buydens, Le projet de loi transposant en droit Belge la directive européenne des bases de données, in 4 AUTEURS & MEDIA 335-50 (1997).

^{40.} Simon Chalton, The Copyright and Rights in Databases Regulations 1997: Some Outstanding Issues on Implementation of the Database Directive, 20 E.I.P.R. 178, 178-82

that "the qualities of dependence, or alternatively independence, should be judged from consideration of the items in a collection from the standpoint of their mutual dependence within the collection, rather than consideration of each item without reference to the entity of the collection, but the issue is not clear."

Also the notion systematic or methodical arrangement causes some problems. Quaedvlieg correctly states that this notion forms the link between the other two notions: independent elements and individual accessibility. Consequently, although the requirement for systematic or methodical arrangement may be rather low, it is essential that systematic or methodical arrangement allows the individual parts to be located and separated without searching the content of the whole database. Indexes or lists of data as well as arrangements in alphabetical or chronological order will be included. In sum, any functional structure seems to suffice. 43

Another problem follows from the obvious relationship between the discussed notion of Article 1 and the requirement for copyright protection: the database should reflect selection or arrangement. Indeed, the more functional the selection or arrangement, the less room for copyright protection of the database.

A final problem concerns the legal status of databases that do not meet the standards of protection set under the Directive. Can they still be protected by copyright law or by unfair competition law? According to the view taken by the British and Dutch legislator and doctrine, the answer is yes. ⁴⁴ Therefore, in fact, there are three layers of protection: (1) copyright law protection for original databases, (2) *sui generis* law protection for databases that reflect substantial

^{(1998);} see also HUGH LADDIE, THE MODERN LAW OF COPYRIGHT AND DESIGNS (2000). Compare S.A. Klos, Databankieren in een Lawyer's Paradise, IER 1, 1-81, (2000), with André Lucas, Droit d'auteur et nummérique 55-56 (Litec Paris 1998).

^{41.} See Chalton, supra note 40, at 179.

^{42.} See Quaedvlieg, supra note 28, at 182.

^{43.} Included also, it seems, are protected anthologies of poetry and the like, left out of the picture by Quaedvlieg. *See id.* at 182 (since they supposedly only reflect the taste and preference of the author).

^{44.} See LADDIE, supra note 40, at 1065-66; see also Hof Den Haag, MEDIAFORUM, Dec. 21, 2000, at 90-95 (De Telegraaf v. NVM); H. Cohen Jehoram, Kroniek van het recht van de intellectuele eigendom, NJB 478 (1999) (stating that non-personal writings protection is contrary to the system of the Directive).

investment, and (3) thin copyright or unfair competition law protection for nonoriginal databases which do no more than reflect a substantial investment.

2. Own Intellectual Creation

The notion of own intellectual creation serves as a criterion for the determination of the object of protection under copyright law. No database is copyrightable if its structure does not reflect the own intellectual creation of its author. It is said that this notion, which in its terminology differs from expressions like originality, personal stamp, and the like mainly used to indicate the threshold of the protection, is taken from the French *Pachot* case. Regardless, it is a fact that the same notion figures in Article 1(3) Directive 91/250 on the legal protection of computer programs. In its rather recent assessment of this Directive, the EC states the following:

The Community criterion refers to "the author's own intellectual creation". Six Member States have not explicitly implemented this requirement. Of these Denmark, Finland, Luxembourg, the Netherlands and Sweden apparently consider that it is an implied requirement of their legislation to take account of the wording of the Directive. This principle does not appear so far to have been called into question by interested parties. However, the Commission had to take issue with the UK implementation because the latter Member State traditionally only requires skill and labour and permits copyright to protect computer generated works. The commission has noted that as a result of the adoption of Directive 96/9/EC on the legal protection of databases the UK now provides for a legal definition of originality for the purposes of a literary work consisting of a database.

^{45.} See Cass.ass.plén. Mar. 7, 1986, JCP 86, II, 20631.

^{46.} 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 COM (2000) 199 final (Apr. 10, 2000). It may be argued that the *sui generis* right leaves some room for databases resulting from artificial intelligence.

Obviously, it is the EC's view that the Computer Programs Directive, with regard to the interpretation of the notion of own intellectual creation, follows the civil law approach which means that this notion concurs with the originality or personal stamp reflecting a creative effort. Now that the Directive, to which the Report expressly refers, uses the same notion, the same may be true for the latter Directive.

It was merely to remain in harmony with this approach that the Dutch legislator, when implementing the Database Directive, provided in Article 10(4) DCA that databases in the sense of the Directive no longer receive the formerly available thin copyright protection for nonpersonal writings.⁴⁷

Additionally, there is reported French case law with regard to the notion of own intellectual creation. It is of note that the French courts seem to stick to the criterion *apport intellectuel* formerly introduced by the French Supreme Court in the *Pachot* case. ⁴⁸ In particular, the decision of the Paris Court of Appeal holds that legally prescribed announcements regarding public markets do not constitute a database since the publisher did not choose the announcements or display them in an original manner. ⁴⁹

3. Qualitative or Quantitative Substantial Investment

According to Article 7(1), the *sui generis* protection only applies if the producer of a database made a qualitatively or quantitatively substantial investment. According to Gaster, this limited application illustrates that the *sui generis* right solely protects the investment, for example, sweat of the brow. ⁵⁰ Recitals 39 and 40 also seem to

^{47.} Michael Lehman, *The European Database Directive and Its Implementation into German Law*, IIC 776, 776-93 (1998) (stating "[t]his specification of a Europe-wide 'standard of originality' also serves to harmonize copyright in the EU since certain countries will be obliged to raise their requirements for protection, such as Holland and the United Kingdom, white others will generally have to be lowered, such as in Germany"); *see also* Matthias Leistner, *Der neue Rechtsschutz der Datenbankherstellers*, GRUR Int. 819, 819-39 (1999); Fernand de Visscher & Benoit Michaux, PRÉCIS DU DROIT D'AUTEUR EN DES DROITS VAISINS 237-38 (Bruylant Bruxelles 2000).

^{48.} See Trib. com. Nanterre, 9° ch., Jan. 27, 1998; Expertises 1998, at 157; JCPE 1998, at 850, n. 32; Trib. GI Lyon, 10° ch., Dec. 28, 1998, RIDA 1999/3, at 325.

^{49.} CA Paris, 4° ch., June 18, 1999; Expertises 1999, at 390; RIDA 2000/1, at 316.

^{50.} See also Cornish, supra note 16.

express this view. Recital 39 clarifies that the new right is intended to ensure a return on investment for the collecting and storing of data in a database. Recital 40 states that the investment can consist of the provision of financial resources as well as the expending of time, effort, and energy. From a conceptual point of view, it may be more accurate to say that the investment as incorporated in a database is protected.⁵¹

When it comes to substantiating the amount of investment required in order to obtain *sui generis* protection, the Directive offers little guidance. Indeed, it seems to be presumable that in order to keep in line with the previously existing thin copyright protection in some European countries, a relatively low investment threshold may suffice. But assuming a more or less abstract statutory definition is not possible, setting the terms is up to the courts. Recently, some national courts in the EU member states were asked to address the issue of what constitutes a substantial investment. In doing so, the courts are also faced with another factor indicated in Article 7(1), that the substantial investment must be made in either the obtaining, verification, or presentation of the contents of the database.

In Germany, one court recognized an investment that evidences a long-term entrepreneurial activity, a prominent place in the respective market, and a solid reputation in the particular trade as a qualitative substantial investment. ⁵² At least one German commentator seems to interpret this decision in light of Article 7 and in conjunction with 87a Sec. 1 GCA as requiring more than a small-change investment in order to obtain *sui generis* protection for a particular database. ⁵³ With regard to the quantitative aspect of investing in a database, the courts seem to accept a lower amount. In that sense, the Berlin Court of First Instance decided this way in 1999. ⁵⁴ In the same year, the German Supreme Court was asked to determine whether the investment made by Deutsche Telecom in the making of a CD-Rom telephone guide could be considered substantial. That this inquiry

^{51.} Comp. H.M.H. Speyart, *De databankrichtlijn en haar gevolgen voor Nederland (II)*, INFORMATIERECHT/AMI 172 (1996).

^{52.} LG Frankfurt/M, Feb. 19, 1997, CR 1997, at 740 f.

^{53.} See Leistner, supra note 47, at 829-30.

^{54.} LG Berlin, CR 1999, at 388 f.

was the case, however, was so apparent to the German Supreme Court that its decision is not at all helpful in order to find a *de minimis* indication for what renders an investment substantial.⁵⁵ A similar decision is reported from the French Commercial Court of Paris with regard to France Télécom.⁵⁶ The First Instance Court of Paris ruled that a database containing data involving participants in art exhibitions is protected since the producer of such a database invested human capital in labor contracts and financial effort in collecting information.⁵⁷ A recent British decision takes the same approach. In the British *Horseracing Board v. Hill*, the court decided a database containing horseracing information costing a staff of eighty-four million pounds per year to maintain could be considered protected under the database right introduced by the UK Database Regulations of 1997.⁵⁸

However, the Paris Court of Appeal in the earlier mentioned decision held that the publication of legally prescribed announcements, by storing them in a database, could not be considered an investment at all since the publication in itself was meant to be a lucrative and profitable activity.⁵⁹

The Dutch courts were also asked to pronounce judgment concerning the substantial nature of the investment. The most interesting Dutch cases concern the question of whether a spin-off database, a database which is produced based on an investment that is not primarily directed towards the establishment of the database but to something else, may qualify as being protected. According to the legislator and some case law, the answer should be in the negative. In a case concerning listings of television programs issued by the Dutch public commercial and broadcasting organizations, the Dutch Competition Authority (NMA) seems to doubt that compiling those

^{55.} BGH May 6, 1999 (I ZR 199/96) [Tele-Info-CD] S. 16f to which M. Leistner, *The Legal Protection of Telephone Directories Relating to the New Database Maker's Right*, 31 IIC 950-67 (2000).

^{56.} Trib. com. Paris, 15 ch., June 18, 1995, D. 2000, at 105; RIDA 1999/12, n.1403 (France Télécom).

^{57.} Trib. GI Paris, 3e ch., June 22, 1999, PIBD 1999, II, at 494.

^{58.} See www.courtservice.gov.uk (last visited Feb. 19, 2002).

^{59.} See supra note 49.

^{60.} See supra note 44.

listings requires substantial investment: they are considered simple by-products of the regular activity of program making. ⁶¹ The Court of Appeal of the Hague took the same approach *expressis verbis* by denying that such a substantial investment was made. ⁶²

The NMA also took the same approach with regard to the CD-telephone guide by the Dutch telecom organization KPN.⁶³ However, the Court of Appeal of Arnhem had already taken another view with regard to the paper made version of the telephone guide.⁶⁴ The court denied the spin-off argument, considering that the then not yet implemented Directive did not distinguish between the primary and secondary exploitation of databases. The spin-off argument also failed in a case before the President of the Court of First Instance of the Hague, again with regard to the CD-telephone guide by KPN.⁶⁵ The reversed judgment, however, was delivered by the Court of Appeal of the Hague with regard to the computerized version of an analog database containing housing information collected by the Dutch association of real estate brokers.⁶⁶

4. Lawful User

A notion of particular interest which the Directive introduces is that of the lawful user. The lawful user, generally speaking, is authorized by way of exceptions and limitations to the restricted acts to perform some indicated types of use concerning databases.

With regard to databases protected by copyright law, Article 6 allows the lawful user of a database, or a copy thereof, to perform any of the restricted acts mentioned in Article 5 without authorization from the author as far as this action is necessary for access to and normal use of the content of the database. Some other indicated

^{61.} NMA Sept. 10, 1998, Mediaforum 1998/10, at 304; AMI 1999/1, at 12 (Telegraaf v. NOS/HMG).

^{62.} Hof Den Haag Jan. 30, 2001 (Telegraaf v. NOS c.s.).

^{63.} NMA/OPTA, Dec. 14, 1998 (KPN v. Denda).

 $^{64.\,}$ Hof Arnhem Apr. 15, 1997, MEDIAFORUM 1997/5, at B 72 (Denda c.s. v. KPN/PTT Telecom).

^{65.} Pres. Rb. Den Haag Jan. 14, 2000, Mediaforum 2000/2, at 64; AMI 2000/4, p. 71 (KPN v. XSO).

^{66.} Hof Den Haag, *supra* note 44. In the same sense Rb. Almelo, Dec. 6, 2000 (KPN/Denda).

exceptions or limitations can be provided by the member states on an optional basis. Article 6 mentions, for example, illustrations for teaching or scientific research, but in conformity with certain conditions. In accordance with Article 9(3) BC these exceptions and limitations to the restricted acts are made subject to the double condition of neither unreasonably prejudicing the copyright owner's legitimate interest nor conflicting with normal exploitation of the database.

Article 8 is applicable to the authorized acts by the lawful user of a database protected by the sui generis right. Interestingly enough, this article carries the title Rights and Obligations of Lawful Users. Taking account of the fact that the title of Article 9 refers to the Exceptions to the Sui Generis Right, it seems that the lawful user with regard to the sui generis right disposes of a legally guaranteed position in its own right. Article 8 provides that the lawful user may not be prevented from extracting or re-utilizing, for any purpose, insubstantial parts of the content of a database that was made publicly available. The lawful user may be restricted by contract in its use to only a part of a database. Again the lawfulness of the use is subject to the condition of neither unreasonably prejudicing the right-holder's legitimate interests nor conflicting with the normal exploitation of the database. The same applies with regard to infringing the copyright or the related rights concerning the content of a database. In addition, Article 9 provides that the member states have the option to introduce into their national legislation optional exceptions to the sui generis right, with regard to a public database, allowing extraction and reutilization of a substantial part of the database content for specific purposes, for example, extraction for private purposes of the content of a nonelectronic database. Once a lawful user is granted or acquires lawful user's authorizations under Article 6(1) or under Article 8, these authorizations, according to Article 15, cannot be contractually restricted.

So, it appears that the lawful user's position with respect to copyright and the *sui generis* right is broadly similar, but not identical. For copyright law, the lawful user still needs the express or implied authorization of the right owners to the content of a database although he is authorized by the database producer. On the contrary, the *sui generis* right does not apparently effect third party rights in

the content of a database. As has been correctly observed by Chalton, "(t)he overlapping rights and exceptions which are not in similar terms may result in the complete exclusion of access to a database which contains elements subject to differing rights and exceptions applying to the database as a whole."

A related question is whether the right owners subject to the Directive can restrict the use of a database notwithstanding the permitted acts and exceptions applicable to protected databases. The likely answer is that this restriction can indeed be done by contractual arrangement, provided that the agreement with the user is neither contrary to Article 6(1) and Article 8 nor contradicts principles of European Community law as constructed in the ECJ's *Magill* case.⁶⁸

European Community law may also come into play if any access is denied or bound to unreasonable conditions in the case of sole source databases. Following the ECJ's authentic interpretation of its own Magill decision in the Bronner v. Mediaprint case, the refusal by the owner of an intellectual property right to grant a license on reasonable terms to a competing publisher who wants to use the data for the marketing of a new product which the right owner is not and, in the near future, will not market, is not in and of itself contrary to European Community law, but may be so if the circumstances provide evidence of an abuse of a dominant position. Indeed, according to European Community law, the Directive must be applied in conformity with this decision. Consequently, in a Dutch

^{67.} Simon Chalton, *The Effect of the EC Database Directive on United Kingdom Copyright Law in Relation to Databases: A Comparison*, E.I.P.R. 278-88 (1997).

^{68.} See ECJ Apr. 6, 1995, C-241/91 P and C-242/91 P, 1-743 (RTE/ITP v. EC Commission). According to Kaye, *supra* note 32, at 587, it follows from Article 16(3) that the Commission is bound to prepare a report every three years on, *inter alia*, whether compulsory licensing is needed because of any abuse of a dominant position resulting from the way in which the *sui generis* right is applied. However, the text is not conclusive on this point. Some anti-monopolizing support may be found in the Decisions of Dec. 12, 1988 and Apr. 6, 1995 in the *Magill* case (The European Commission Decision of Dec. 21, 1988 (O.J. 1989 L 78/13); The judgment of the Court of First Instance of July 10, 1991 (F.C.R. 1991, II, 485-575); The European Court of Justice, Apr. 6, 1995, C-241/91 P and C-242/91 P.). In its decision of 1995, the European Court of Justice rules among other things that an information monopolist may not invoke its copyright to prohibit a competitor to serve a new market that is not and will not be served by the right owner. Indeed, according to EU law, the Directive must be applied in conformity with this decision.

^{69.} See ECJ Nov. 26, 1998 (Bronner v. Mediaprint).

case also concerning television listings, NMA ordered the Dutch public broadcasting organization to grant a daily journal a reasonable license in order to get access to this data.⁷⁰

Even more explicit are the UK Database Regulations of 1997, in which Schedule 2 provides for licensing schemes for databases, including a provision for the prevention of unreasonable discrimination between licensees and for compulsory licenses in certain circumstances.⁷¹

It seems, therefore, that the lawful user is a rather key notion in the Directive. However, as important as this notion may be, neither the recitals nor the articles of the Directive provide for a definition. It goes without saying that this leaves much room for national courts to follow their own interpretations, though an unequivocal interpretation is critical in light of the interests at stake. Following the analysis by Vanovermeire of the several interpretations of the notion of lawful user that have been put forward, three categories can be distinguished: (1) lawful user refers to any user relying upon exceptions provided by law or contract. This approach follows the traditional concept of copyright law and considers the lawful user to be anyone acting within the limits of statute or contract: (2) lawful user refers to a license only. This approach follows from a rather strict interpretation of the preparatory documents and the text of the Directive: (3) lawful user is any user who lawfully acquires a database. This approach concurs with the notion of the lawful user applied by the Computer Program Directive and holds that a lawful acquisition of the database is required before any lawful use can exist.72

Taking into account that most commentators take the view that the lawful user notion should be interpreted in a way which is similar to

^{70.} *Cf.* Hugenholtz, *supra* note 23, at 192. With regard to a comparison of EC and U.S. law in this respect, see A. Kamperman Sanders, Data and Database Protection & Infonomics—Effects on Business and on Cultural and Personal Information Flow 15-16 (2000) (unpublished manuscript, on file with author).

^{71.} See also Hof Den Haag, supra note 62; Hank J. Davison, Proposed U.S. Database Legislation: A Comparison with the U.K. Database Regulations, E.I.P.R. 279-84 (1996).

^{72.} See Vinciane Vanovermeire, The Concept of the Lawful User in the Database Directive 63-81, IIC 2000/1.

the interpretation of that same notion in the Computer Programs Directive and the EC reports in its recent review of the implementation and effects of the latter Directive. In its report, the EC, coming to terms with the indicated notion also in relation to those other qualifications used in Article 5, shares "the view of some commentators that 'lawful acquirer' did in fact mean a purchaser, licensee, renter or a person authorized to use the program on behalf of one of the above." In addition, the report reads as follows:

This argument also draws from Articles 6 and 8 of the database Directive (Directive 96/9/EC) which use the term 'lawful user' and which were modeled along the lines of Article 5(1) of the computer programs Directive. In the view of the Commission, what was intended by Article 5(1) and recital 18 was that it should not be possible to prevent by contract a 'lawful acquirer' of a program doing any of the restricted acts that were required for the use of the program in accordance with its intended purpose or for correcting errors. It is, however, possible for a contract to include specific provisions that 'control' the restricted acts which may be carried out by the user of the computer program.⁷⁵

It seems safe to take this interpretation as the correct one. This approach means that a person who steals or is given a stolen database fixed on a CD-Rom cannot be considered to be a lawful user since he falls outside the scope of the interpretation. However, this option leaves another question unanswered: Is this person bound by contractual regimes beyond statutory law, laid upon the lawful user or is this person only bound by such statutory provisions? If the latter is the case, this question means that someone using a stolen database may be better off under the circumstances from a user perspective

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^{73.} Amongst them, see Jens L. Gaster, *La protection juridique des bases de données à la lumière de la discussion, in* LIBERTÉS, DROITS ET RÉSAUX DANS LA SOCIÉTÉ DE L'INFORMATION 38-39 (Doutrelepont, Van Binst & Wilkin eds., 1996); Buydens, *supra* note 39, at 335, 342; Chalton, *supra* note 40 (some outstanding issues on implementation of the Database Directive, 1998 E.I.P.R. 178, 179-80); Hugenholtz, *supra* note 23, at 183; Th. Dreier, Die Harmonisering des Rechtsschutzes von Databanken in der EG. GRUR Int. 1992, at 739, 743.

^{74.} See REPORT, supra note 46, at 12.

^{75.} Id.

than the lawful user. ⁷⁶ According to the Dutch legislator, the same is true for the purchaser of a database. ⁷⁷

B. Scope of Protection

1. Reciprocity and Exhaustion

Unlike most international intellectual property legal instruments, the Directive does not adhere to the principle of national treatment. Instead, Article 11(3) contains a reciprocity clause granting foreign database producers protection only if the EC includes an agreement extending the *sui generis* protection to their countries. The rationale behind this clause is that such an agreement will be concluded only if a foreign country's domestic law offers a protection for databases that is similar to that of the EU.⁷⁸ Taking account of the fact that under the *Feist* regime most databases will not qualify for copyright protection and in view of the fact that specific database protection is lacking, this raises the question of what the U.S. legislature should do in order to ensure that U.S. databases will receive *sui generis* protection under EU law.

In order to answer this question, something should be said with regard to the present position of U.S. law in this respect. The *Feist* decision seems to exclude not only copyright law protection as an available form of protection for databases of fact. This statement is equally true for any quasi-property right approach. By taking proper account of the constitutional powers of the U.S. legislature, the *Feist* decision forces database legislation to be based upon the Commerce Clause instead of the Intellectual Property Clause.

^{76.} Cf. Hugenholtz, supra note 23, at 191.

^{77.} See Judich Krikke, Losbladige IE 164.

^{78.} It is of note here that the EU, in this respect, takes an approach that was previously taken by the United States with regard to the protection of chips. *See* I. LLOYD, INFORMATION TECHNOLOGY LAW 390 (2d ed. 1997).

^{79.} See Sanders, supra note 70; B.J. Lenselink, Monopolisering van informatie in de Verenigde Staten? Het nieuwe Amerikaanse wetsvoorstel tot bescherming van databanken, in PRIVAATRECHT EN GROS 267-75 (Intersentia Antwerpen/Groningen 1999).

^{80.} See U.S. CONST. art. I, § 8, cl. 8; U.S. CONST. art. I § 8, cl. 3; Yochai Benkler, Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information, 15 BERKELEY TECH. L.J. 535, 545 (2000); J. Conley et al., Database Protection in a Digital World: Why the United States Should Decline to

Consequently, the several legislative initiatives that were taken by U.S. lawmakers over the past six years or so seem to reflect an unfair competition approach, rather than an exclusive rights approach.

The first legislative attempt made resulted in the Database Investment and Intellectual Property Antipiracy Act of 1996. This legislative project, although a rough copy of the Directive and going beyond the directive regarding its scope of protection, has never been followed by a corresponding bill to be introduced in the Senate. The next legislative attempt, H.R. 2652, was superseded by H.R. 354, the Collections of Information Antipiracy Act, which is codified as public law number 105-304. This bill is based upon the concept of misappropriation. It prohibits the extraction of all or a substantial part of the information from a database for reutilization in commerce, as well as extraction that would cause harm to the database producer's primary or related market.

The protection of databases was also addressed by two other legislative projects. The first project envisioned the incorporation of the U.S. Database Bill in the Digital Millennium Copyright Act (DMCA), and clearly reflected a copyright-related approach. When the final text of the DMCA was passed, however, the part concerning database protection was left out. The last attempt was H.R. 1858, the Consumer and Investor Access to Information Act. Bill only concerns direct competitors, providing them with protection against misappropriation in a limited range of subject matters excluding information such as stock exchange data or score results from sports matches. H.R. 1858 restricts protection to slavish copying by the duplication of extracted information. Compared with H.R. 354, H.R. 1858 seems to be more limited in its scope of protection. On the other hand, H.R. 1858 uses a broader definition of what constitutes a

Follow the European Model, 9 INFO. & COMM. TECH. L. 27 (2000).

^{81.} See H.R. 3531, 104th Cong. (1996).

^{82.} See H.R. 2652, 105th Cong. (1997) (codified as amended at Pub. L. No. 105-292 (1998)). The bill was passed by the House of Representatives on May 19, 1998 and was received in the Senate on May 20, 1998 for further consultation. H.R. 354, 106th Cong. (1999). There are two versions of this bill (IH and RM).

^{83.} See Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, 112 Stat. 2860 (enacted H.R. 2281 (1998)). Initially, Title V of the draft was dedicated to database protection.

^{84.} See H.R. 1858, 106th Cong. (1999); H.R. REP. No. 106-350, pt. 1 (1999).

database, encompassing discrete sections of databases that contain multiple discrete items. Furthermore, H.R. 1858 lacks a period of protection as a consequence of which only antitrust measures may be implied to confine the unauthorized sale or distribution of a duplicable database. It can be seen that when comparing H.R. 354 to H.R. 1858, the former sticks more to an exclusive rights approach, the latter more to an unfair competition approach.

As observed by Kamperman Sanders, although H.R. 354 is different in approach to the exclusive rights approach of the Directive, it seems to be the only likely candidate to provide an adequate equivalent protection to that of the directive. "The fact that the Antipiracy Bill may be less monopolizing than the sui generis database right due to theoretical restraints and practical application of unfair competition law," Kamperman Sanders writes, "as well as the more elaborate limitations and exceptions the misappropriation right is something which the European Union should take in its stride, especially since the EC Database Directive is up for reassessment in 2001."

However, Kamperman Sanders is correct in saying that it is difficult to see whether H.R. 354 is based on anything other than unfair competition market failure theory, then it must still be seen whether this form of protection will be accepted by the EU as the required appropriate protection equivalent to that of the EU's *sui generis* right. The apparent differences between the exclusive rights and the unfair competition types of protection indicated above must be taken into consideration.

^{85.} See CONG. REC. E1055 (daily ed. May 20, 1999) (describing the example of a restaurant directory organized according to the type of food on the menu. The part of this directory which gives information on Italian restaurants could also in itself constitute a database). A similar approach is taken by a Dutch court in a case with regard to a guide providing specific information on various types of businesses. Pres. Rb. Almelo, Dec. 28, 2000 Presscorp. v. Goldnet.

^{86.} See Sanders, supra note 70, at 13; see also Hugenholtz, supra note 23, at 193 (taking account of a press release in Agence Europe, Mar. 25, 1998, stating that the so-called Brittan Plan for the creation of a common market between the EU and the United States suggests that the United States would qualify for a special bilateral agreement if legislation securing a comparable level of protection to database producers were adopted by Congress).

2. Exhaustion

Article 5(c) and Article 7(2b) provide that the first time a copy of a database made by the right holder, or with his consent, is sold in the community, this sale will exhaust resale control rights over that copy within the community because public lending is not an act of extraction or re-utilization. Obviously, with these provisions, the Directive introduces community exhaustion, making it possible to shield the European common market from outside influences.

This community exhaustion rule concurs with the *acquis communautaire* already enacted in the EC regulation of trademarks and computer programs and figures in the adopted Common Position (Article 4(1)). In the *Silhouette* case, the ECJ accepted community exhaustion as the rule of law.⁸⁷ However, this rule has come under heavy attack in international fora such as the WTO.

IV. IMPLEMENTATION OF THE EU DATABASE DIRECTIVE

Member states of the EU were obliged to implement the Directive by January 1, 1998. With the exception of Ireland, all did so more or less in time. State However, though directives do not have direct effect, failure to implement them in time only has a limited effect on the applicability of a non-implemented directive. The national courts are bound to apply domestic law in conformity with a directive as of its effective date; otherwise, mandatory domestic law or legitimate expectations are affected.

Taking into account the way in which member states implemented the Directive illustrates that harmonization of the law has only been partly attained, due to the different approaches member states have taken in the course of implementation. It suffices here to refer to the preceding sections of this paper.⁸⁹

^{87.} See Silhouette, 1998 ECJ CELEXLEXIS 3830 (EJC July 16, 1998).

^{88.} See ECJ Jan. 11, 2001, C-370 199, European Comm'n v. Ireland, 01/01 E.C.R.1 (2001).

^{89.} For a more comprehensive account of the state of affairs with regard to statutory law in Austria, Belgium, France, Germany, Italy, the Netherlands, the Nordic countries, Spain, and the United Kingdom, see Hugenholtz's, *supra* note 23.

In addition, it should be observed that since 1996, it has become clear that national courts tend to interpret the many open notions of the Directive and those notions in their domestic legislation somewhat differently. This variation, too, is detrimental to the intended harmonization of database law in the EC. Since Article 16(3) provides that the Commission should prepare its first triennial report in 2001, it remains to be seen what its findings will be with respect to the application of the Directive in the community.