



2008

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(2008) "Of Square Pegs and Round Holes: Towards a New Paradigm of Database Protection," *Indian Journal of Law and Technology*. Vol. 4: Iss. 1, Article 3.

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OF SQUARE PEGS AND ROUND HOLES: TOWARDS A NEW PARADIGM OF DATABASE PROTECTION

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ABSTRACT

This article looks at the question of the applicability of copyright law to the protection of databases. It features a detailed discussion of the EU Database Directive, which is the only comparable legal framework for the protection of databases. It then discusses some problems that the EU Directive encounters vis-à-vis public interest concerns, and outline why the EU Directive is unable to strike the right balance, both in principle and in practice. Next, it briefly studies database protection law as it exists in the United States, Australia, Canada and finally India, following which the need for protection of databases in India is assessed. Finally, a basic alternative framework for the legal protection of databases is proposed, seeking to balance the interests of database generators and those of the public at large. The authors argue that databases should be protected with reference to principles of the law of unfair competition, which recognizes that a balance needs to be struck between the interests of owners and the public. The authors also suggest the registration of databases with a governmental authority (similar to the trademark registration process) so as to properly delineate the scope of commercial exploitation that the database owner intends. Further, an argument is made for compulsory licensing provisions.

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I. INTRODUCTION

“Increasingly, the central question is becoming who will have access to the information these machines must have in storage to guarantee that the right decisions are made.”

- Jean-Francois Lyotard¹

¹ JEAN-FRANCOIS LYOTARD, *THE POST-MODERN CONDITION: A REPORT ON KNOWLEDGE* 15 (Manchester University Press, 1984).

In his classic treatise *The Postmodern Condition*, Lyotard referred to the phenomenon of the transfer of decision-making from administrators to machines, and also of the concentration of information in the hands of a few. In a certain sense, his apocalyptic vision of capitalism and societal transformation has proved to be prophetic, and it is certainly an issue that ails the information society as it stands today.

Over the last decade or so, the growing importance of raw and applied information in commerce has made the protection of databases a contentious issue across the globe. We live in an 'information society', in which the importance of information is paramount. As Ilkka Rahmasto puts it,² in agricultural societies, land was most important; in industrial societies, labour and machines became important; and finally, in information societies, information has become the most important resource.³

What has put database protection on the policy agendas of most developed economies (and India's), has been the ease with which technology has allowed the profligate spread of databases (along with their information), and, ironically, a corresponding increase in unauthorised access to these databases. This spread of technology has also increased the ease with which data may be copied. If hard work was ever at any point a deterrent to copying a database, it has suffered a well-deserved rout through the spread of technology coupled with the ubiquitous use of technology for copying and replication. The United States Supreme Court declared over a decade ago that the facts or information within databases or compilations could not be the subject-matter of copyright.⁴ Three essential approaches to improve the protection of information have emerged in the past half-century or so, the first based on an absorption of 'low authorship' productions, as it were; the second being a Nordic *sui generis* model based on a copyright model that prevented the wholesale appropriation of data; and finally, a tort-misappropriation model.⁵

² ILKKA RAHMASTO, *INTELLECTUAL PROPERTY RIGHTS, EXTERNAL EFFECTS, AND ANTI-TRUST LAW: LEVERAGING IPRs IN THE COMMUNICATIONS INDUSTRY* 50 (Oxford University Press, 2003).

³ *Id.*

⁴ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991).

⁵ J.H. Reichman, *Database Protection in a Globalised Economy*, *REVUE INTERNATIONALE DE DROIT ECONOMIQUE* - 2/3 (t. XVI) (2002), available at http://www.cairn.info/article_p.php?ID_REVUE=RIDE&ID_NUMPU (last visited Nov. 29, 2007).

The European Union, in its efforts to harmonize and provide greater protection for intellectual property in data, passed the EU Database Directive,⁶ which allowed the information within a database to be protected under a new *sui generis* right. At a theoretical level, it would be pertinent to look at the reasons for copyright in general versus the copyrighting of databases in particular (in the form of a *sui generis* regime). The underlying rationale of copyright law in general has been to promote the making of creative works. While the idea behind copyright law is to provide an incentive to persons to produce creative works by granting them a monopoly over their product, the idea behind granting a *sui generis* protection to databases is more akin to a 'real' property right (in the Lockean sense). So, we find that the rationale behind database protection is that information is treated as 'property *per se*', as opposed to copyright in general, where it is limited to 'property with a purpose'.⁷ Under traditional copyright law, the right in intellectual property was purposive in nature, meaning that the association of the term 'property' with cultural production was merely a fiction to grant protection to works produced by members of society.

The implication of the above discussion leads us to the ultimate question: what, then, is the best way to protect databases? It is evident that the reason behind the protection of a certain interest will significantly affect the manner in which that interest is protected. The idea is that that the notion of originality derives its sustenance from the question of human input.⁸ It is from this fundamental thought, despite varying interpretations, that we notice the sense of 'fictionalised property'. It is a reward for input. This is quite separate from treating databases as 'property *per se*'. Copyright and database rights "may have concepts in common but, if so, that is only because those concepts happen to fit, not because a database is a species of copyright."⁹ Further, if we understand the distinction between 'fictionalised property', in the realm of copyright, and 'property *per se*', in the realm of database protection, it might lead us to the

⁶ Council Directive 96/9, March 11, 1996 O.J. (L 77) 20 (EC), available at <http://europa.eu.int/ISPO/infosoc/legreg/docs/969ec.html> (last visited Aug. 15, 2007) [hereinafter *EU Database Directive*].

⁷ That purpose being to promote greater works to be produced for the benefit of the public.

⁸ Hasan A. Deveci, *Databases: Is Sui Generis a Better Bet than Copyright?*, 12 INT'L J.L. & INFO. TECH. 178, 182 (2004).

⁹ *British Horseracing Board v William Hill*, [2001] RPC 31, §23.

notion that the use of copyright law to protect databases was merely a case of square pegs and round holes (and only as long as the pegs were small enough to fit in the holes).

It seems that if the law vests a right in a person, then it must be in the form of either a property interest or a personal interest, as in the case of a tort.¹⁰ Then, the fundamental jurisprudential judgment must be to choose between a 'property rule' and a 'liability rule', as in that of misappropriation or unfair competition.¹¹

II. THE EU DATABASE DIRECTIVE

The European Union placed itself at the vanguard of the move towards the legal protection of databases with the issuance of the *Directive on the Legal Protection of Databases*,¹² which not only included guidelines for the legal protection of databases, but also enjoined European countries to pass municipal legislation implementing its provisions.¹³

In 1988, the European Commission's *Green Paper on Copyright and the Challenge of Technology: Copyright Issues Requiring Immediate Attention* realised the need for legislation to protect computer databases.¹⁴ Subsequent to the *Feist* case,¹⁵ the EC made a proposal for such protection which was then crystallised into the EU Database Directive,¹⁶ which came into force on January 1, 1998.

¹⁰ Raymond T. Nimmer and Patricia A. Krauthaus, *Information as Property – Databases and Commercial Property*, 1 INT'L J. L. & INFO. TECH. 3, 6 (1993).

¹¹ J.H. Reichman and Paul Uhler, *Database Protection at the Crossroads: Recent Developments and Their Impact on Science and Technology*, 14 BERKELEY TECH. L.J. 793 (1999). See Guido Calabresi and A. Douglas Melamed, *Property Rules, Liability Rules and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972) (discussing the idea of property rules/entitlements and liability).

¹² *EU Database Directive*, *supra* note 6.

¹³ *Id.* art. 16.

¹⁴ W.K Khong, *National and International Developments on Copyright and Rights in Databases*, 6 MALAYSIAN J. LIB. & INFO. SCIENCE 71, 72 (2001).

¹⁵ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991).

¹⁶ *EU Database Directive*, *supra* note 6.

The EU Directive defines a database as “a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.”¹⁷ Consequently, the Directive covers compilations of data in both traditional ‘hard copy databases’ and ‘electronic databases’.¹⁸ However, the Directive limits this protection by providing that it would not apply to “computer programs used in the making or operation of databases accessible by electronic means”.¹⁹ Such exclusion makes it clear that the protection under this Directive only focuses on the database’s structure and the contents contained therein.

The EU Database Directive provides for a dual (or two-tier) system for database protection, comprising:

- Copyright protection for the structure of the database (covering creative databases); and
- *Sui generis* protection for the contents of the database (covering non-creative databases).²⁰

These two systems stand independently of each other.

A. Copyright protection under the Directive

The copyright provisions in the Directive have been placed in Chapter 2. The Directive explicitly notes that “the copyright protection of databases provided for by this Directive shall not extend to their contents and shall be without prejudice to any rights subsisting in those contents themselves.”²¹ By virtue of this provision, the EU tried to harmonize the scope of copyright protection granted to databases with *sui generis* protection for their contents.

¹⁷ *EU Database Directive*, *supra* note 6, art. 1.2.

¹⁸ *Id.* art. 1.1.

¹⁹ *Id.* art. 1.3.

²⁰ See Yijun Tian, *Reform of Existing Database Legislation and Future Database Legislation Strategies: Towards a Better Balance in the Database Law*, 31 RUTGERS COMPUTER & TECH. L.J. 347 (1998).

²¹ *EU Database Directive*, *supra* note 6, art 3.2.

The Directive also provides for a common standard of originality. Article 3.1 provides that protection must be afforded to databases if they, “by reason of the selection or arrangement of contents, constitute the author’s own intellectual creation.”²² This standard is very similar to the standard of originality set up by the United States Supreme Court in the *Feist case*.²³ This standard of originality,²⁴ as will be discussed later, is much higher than the ‘sweat of the brow’ standard followed in most other common law jurisdictions.²⁵ Consequently, creative originality has become the sole rule by which a database will be entitled to the protection of the copyright provisions of the Directive.²⁶

The Directive provides for a set of ‘restricted acts’ and ‘exceptions to restricted acts’.²⁷ The restricted acts are similar to those under traditional copyright law, and include reproduction, adaptation, distribution, communication and display or performance to the public.²⁸ The exceptions that have been provided under Article 6.1 of the Directive include mandatory exceptions, which allow lawful users to engage in any restricted act “which is necessary for the purposes of access to the contents of the database and normal use of the contents.” Article 15 of the Directive explicitly provides that any contractual provision contrary to the exception mentioned in Article 6.1 shall be ‘null and void’.²⁹ The Directive further provides for certain non-mandatory exceptions, which are:

²² *EU Database Directive*, *supra* note 6, art 3.1.

²³ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991).

²⁴ *Id.* at 350.

²⁵ *Supra* note 19, at 356.

²⁶ *EU Database Directive*, *supra* note 6, art 3.1. Article 3.1 of the Directive provides that “in accordance with this Directive, databases which, by reason of the selection or arrangement of their contents, constitute the author’s own intellectual creation shall be protected as such by copyright. No other criteria shall be applied to determine their eligibility for that protection.” Some commentators have pointed out that “the Directive requires a ‘modicum of creativity’ and leaves to the Member State Legislatures and the European Court of Justice, the further development of the creativity standards.” *Id.* See Julie Wald, *Legislating the Golden Rule: Achieving Comparable Protection under the European Union Database Directive*, 25 *FORDHAM INT’L. L.J.* 987, 1007 (2002).

²⁷ *EU Database Directive*, *supra* note 6, art 6.

²⁸ *Id.* art. 5.

²⁹ *Id.* art. 15.

- Reproduction for private purposes of a non-electronic database;
- Illustration for teaching or scientific research;
- Use for the purposes of public security or an administrative or judicial procedure; and
- Other traditional exceptions authorised under national law.³⁰

In addition, the Directive also provides a general limitation for the application of all the above exemptions (both mandatory and non-mandatory). It provides that the application of these exemptions should not “unreasonably prejudice the right holder’s legitimate interests or conflict with normal exploitation of the database.”³¹ Even though these exceptions are in existence, as Tian notes,³² they are narrower than the exceptions under traditional copyright, as the exceptions with relation to criticism, comment, news reporting and personal use in case of electronic databases are missing.³³

The period of protection provided within the Copyright portion of the Directive is similar to a traditional copyright, which extends to a period of 70 years beyond the death of the author.³⁴

B. *Sui Generis* protection under the Directive

Chapter 3 of the EU Directive contains a property model of database protection which is analogous to, yet quite separate from, copyright protection.³⁵ It treats a database as property, in respect of which the owner has some exclusive rights and the right to assign, transfer or license those rights.³⁶ Databases, as has already been mentioned, are defined broadly as “a collection of independent

³⁰ *EU Database Directive*, *supra* note 6, art 6.2(a)-(d).

³¹ *Id.* art. 6.2(d)(1).

³² Yijun Tian, *supra* note 20, at 368.

³³ *Id.*

³⁴ *EU Database Directive*, *supra* note 6, art 2(c). This article limits the scope of the Directive with respect to the term of the Copyright Protection.

³⁵ *EU Database Directive*, *supra* note 6, art. 13. See also Mark J. Davison, *Sui Generis or Too Generous?*, 21 UNIV. NEW SOUTH WALES L.J. 735 (1998).

³⁶ *EU Database Directive*, *supra* note 6, art 7.1.

works, data or other materials arranged in a systematic or methodical way and accessible by electronic or other means.”³⁷ The maker of the database, who has made a substantial investment in the obtaining, verification, or presentation of contents, is given two exclusive rights in respect of that database. These are the rights of ‘extraction’ and ‘re-utilization’.³⁸ Article 7(1) provides that the exclusive rights of ‘extraction’ and ‘re-utilization’ are available to a database maker who shows that “there has been qualitatively and/or quantitatively a substantial investment in the obtaining, verification and presentation of the contents.” This is essentially the crux of the *sui generis* right; it does away with any standard of creativity. Originality is no longer a legal concern for the protection of the database. It is sufficient that a quantitatively adducible ‘substantial investment’ has been made.³⁹ It is here that we can infer that the status of the information contained in the database is of ‘property *per se*’, as opposed to ‘property with a purpose’.⁴⁰

‘Extraction’ under the Directive is defined as “the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form.”⁴¹ ‘Re-utilization’ is defined as “any form of making available to the public all or a substantial part of the contents of a database by the distribution of the copies, by renting, by online or other forms of transmission.”⁴² The right of re-utilization covers making the database available to the public in any form, either by way of an electronic copy or by hard copy. The right of extraction is analogous to the right of reproduction under copyright law. The Directive, however, goes further and provides that even temporary transfer to another medium will be an infringement.⁴³

Article 7.5 provides that the database owner can even prevent the repeated and systematic extraction and/or re-utilization of *insubstantial parts* of the database, provided the extraction and/or re-utilization conflicts with the normal

³⁷ *EU Database Directive*, *supra* note 6, art 1.2.

³⁸ *Id.* art 7.1.

³⁹ *Id.*

⁴⁰ *See generally supra* note 2.

⁴¹ *EU Database Directive*, *supra* note 6, art. 7.2(a).

⁴² *Id.* art 7.2(b).

⁴³ *Id.*

exploitation of the database and/or unreasonably prejudices the legitimate interests of the owner.⁴⁴

The Directive, in effect, confers perpetual protection over the entire contents of the database, at least as long as the database is updated. Therefore, we find that although under the Directive, the period of protection is limited to 15 years,⁴⁵ Article 10 goes on to say that “[T]he right provided for in Article 7 shall run from the date of the completion of the making of the database. It shall expire fifteen years from the first of January of the year following the completion of the database.” Now, if this provision were to be read in conjunction with Article 7, it would mean that any change in the database (whether qualitative or quantitative) made by substantial investment would lead to the commencement of a new term. In effect, this would grant perpetual protection to databases. This is especially significant in the case of dynamic databases.⁴⁶ Furthermore, this would also mean that protection would exist for those contents of the database that were collected more than 15 years before the newest term of protection.

The exceptions that have been provided under the Directive in relation to the *sui generis* provisions are meagre, especially in light of what we have discussed above regarding the duration of copyright. The provisions regarding the exceptions are vague and provide little indication as to how they are to be interpreted.⁴⁷ Let us take an example; Article 9(b) of the Directive allows for states to provide for the extraction of a substantial part of the contents of the database “for the purpose of illustration for teaching and scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be attained.”⁴⁸ What is interesting is that the scope of protection is defined relatively clearly, but the exceptions are optional for implementing countries, and the scope thereof has been left unclear.⁴⁹

⁴⁴ *EU Database Directive*, *supra* note 6, art. 7.5.

⁴⁵ *Id.* art. 10.

⁴⁶ Dynamic Databases are those databases whose contents are constantly updated. So, if a change in a dynamic database amounts to substantial investment, the protection will be renewed on a constant basis.

⁴⁷ See Davison, *supra* note 35.

⁴⁸ *EU Database Directive*, *supra* note 6, art 9(b).

⁴⁹ Deveci, *supra* note 8, at 201.

A general critique of the *sui generis* model of database rights is that it generates a monopoly and could lead to the abuse of market position. In the Directive, the fundamental problem is that it allows the abuse of market position for the reason that “investors in database production can always deny third parties the right to use pre-existing data in value adding application.”⁵⁰ That, then, inherently limits the scope of derivative works, unlike in copyright law,⁵¹ even though the Directive includes a provision that the right granted thereunder cannot be used to facilitate the abuse of a dominant market position. Joanna Wu notes that there is a tension between competition principles and the *sui generis* right.⁵² Furthermore, as Reichman puts it, this has potentially snuffed out the idea of a public domain that itself was the justification for granting interests in intangibles, as it were, from the start.⁵³ Reichman and Samuelson also point out that the most controversial objects of protection, that is raw data or facts, have also, paradoxically, received the maximum protection for any sort of intellectual property.⁵⁴

III. THE DIRECTIVE BEFORE THE COURTS

Before the definitive judgment of the European Court in *British Horseracing Board v. William Hill Organisation Ltd.*,⁵⁵ the interpretation of the EU Database Directive came up before various domestic Courts in the EU. This section will examine the cases that came up in Germany, the Netherlands and Britain.

A. Germany

The first case that came up in Germany regarding the interpretation of the Directive was *Tele-Info-CD*,⁵⁶ where Tele-Info-CD, which was a subsidiary of

⁵⁰ J.H. Reichman and Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 VAND. L. REV. 51, 81 (2001).

⁵¹ *Id.*

⁵² Xuqiong (Joanna) Wu, *E.C. Database Directive*, 17 BERKELEY TECH. L.J. 571, 585-586 (1994).

⁵³ Reichman, *supra* note 5.

⁵⁴ J.H. Reichman and Pamela Samuelson, *supra* note 50, at 94.

⁵⁵ *British Horseracing Board Ltd v William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415 (ECJ).

⁵⁶ *Re Unauthorised Reproduction of Telephone Directories on CD-Rom Case*, I ZR 99/66 [2000] ECC 433 (ECJ).

Deutsche Telecom (DT), scanned and copied the telephone listings of DT and published them on a CD-ROM. The German Federal Court held in an earlier order that the listings amounted to mere technical organisation, which was dictated by matters of efficiency and expediency. As such, the listings were not covered by the law of copyright. In the meantime, the Directive came into force in Germany, and the Court went on to hold that the listings were covered under the Directive by virtue of there being substantial investment⁵⁷ since the contents were arranged systematically,⁵⁸ and were capable of being accessed individually, as they were arranged alphabetically.⁵⁹

Another case that came up in Germany concerned the repeated extraction of an insubstantial part of the database. In the *StepStone case*,⁶⁰ there were two competing online job agencies. The StepStone website allowed users to search jobs industry-wise as well as geographically. OFIR put out their own job vacancies. However, they also created deep links from their website into StepStone's website. OFIR did not dispute that StepStone's website was a database, but argued that since StepStone's database was accessible to the public, OFIR had an implied licence to deep link, and that additional platforms providing access to StepStone's website were, in fact, beneficial to StepStone.⁶¹ The Cologne County Court held that deep linking, which bypassed StepStone's homepage, amounted to a repeated and systematic use of insubstantial parts of the database, thereby infringing StepStone's rights.⁶²

B. The Netherlands and the Spin-Off Doctrine

In order to protect its database, the database maker must show that it has made "qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents."⁶³ So the question that

⁵⁷ Re Unauthorised Reproduction of Telephone Directories on CD-Rom Case, I ZR 99/66 [2000] ECC 433 (ECJ), ¶ 36.

⁵⁸ *Id.*, ¶ 42.

⁵⁹ *Id.*

⁶⁰ StepStone v. OFIR.

⁶¹ Hasan A. Deveci, *supra* note 8, at 203.

⁶² *Id.*

⁶³ *Id.*

arose in the Dutch Courts was whether ‘spin-off’ databases are also entitled to protection under the EU Directive. A ‘spin-off’ database is essentially one which is the ‘by-product’ of another main activity of the producer of the database.⁶⁴ The initial discussions over the ‘spin-off’ theory took place in the course of legislative proceedings in the Dutch Parliament during the adoption of the EU Database Directive.⁶⁵

Dutch Courts were divided over this issue. In two cases, *Denda v. KPN*⁶⁶ and *KPN v. KSO*,⁶⁷ the Courts held that ‘spin-off’ databases were entitled to protection primarily on the ground that the Directive does not make a distinction between primary and secondary exploitation of databases. They said that it would not make a difference whether or not the investment was made if protection was not granted to the database.⁶⁸

However, in *De Telegraaf v. NOS*,⁶⁹ De Telegraaf had copied programme listings from NOS which the latter claimed were protected under the *sui generis* right, so as to publish its own TV guide. The Dutch Competition Authority found that there was no substantial investment in the making of television programmes by the Dutch public and commercial broadcasting organisations. Programme schedules, according to the Competition Authority, were by-products of the programme scheduling process. Therefore, the broadcasters could not invoke database protection under the *sui generis* right, since there was no substantial investment. The case was also being argued before the civil Courts. The Court of Appeal of The Hague, applying the ‘spin-off’ theory, held that the “broadcasters, whose primary task is to make radio and television programmes, cannot accomplish this task without collecting the data on the programmes and redacting the programme lists” and, therefore, “the mere editing/redacting of the programmes does not show a (specific) substantial investment in time,

⁶⁴ Estelle Derclaye, *Database Sui Generis Right: Should We Adopt the Spin-off Theory?*, 26(9) EUR. INTELL. PROP. REV. 402 (2004).

⁶⁵ *Id.*

⁶⁶ *Denda v. KPN/PTT Telecom*, [2001] AMI 69.

⁶⁷ *Kanttekening bij KPN v. XSO*, [2000] 4 Informatierecht/AMI 71.

⁶⁸ *Supra* note 52, at 404, as cited in S. Gijrath and B. Gorissen, *Applying the Database Act to Online Information Services: A Trial and Error Exercise*, [2000-01] CW 26.

⁶⁹ *De Telegraaf v. NOS/HMG*, (1999) 1 AMI 12.

money or otherwise.”⁷⁰ The Court of Appeal, on this point, specifically referred to the Ministry of Justice’s statement in support of its findings. In the *Kranten.com* case,⁷¹ the Court held that a list of newspaper article headings on a website does not represent a substantial investment. The publishers’ investment is directed towards the gathering of reports and articles to fill the newspapers. The headlines are invented and do not reflect a qualitative investment. In other words, the Court did not expressly adopt the ‘spin-off’ theory, but it can be concluded from the judgment that the selection of articles and the drafting of the list of titles to be placed on the websites were a side issue of the business, i.e. publishing printed newspapers.⁷²

Clearly, the implication of the above discussion is that the EU Directive, in substance, is fundamentally vague.⁷³ Indeed, the Database Directive itself does not make any reference to primary or secondary uses of databases.⁷⁴

C. Britain and the European Court of Justice

The leading case that has come up for the interpretation of the EU Database Directive is *British Horse Racing Board v. William Hill Organisation Ltd.*,⁷⁵ which was one of four cases that were referred to the European Court of Justice (ECJ), and then sent back to their respective jurisdictions for final consideration. The aforementioned case affirmed the judgment of the ECJ in *BHB v. William Hill Organisation Ltd.*⁷⁶

The facts of the case are simple. The British Horse Racing Board (BHB) was the regulatory authority for horse racing in England and, in pursuance of its

⁷⁰ *De Telegraaf v. NOS/HMG*, [2001] AMI 73.

⁷¹ *National Newspapers v. Eureka Internetdiensten V.O.F. and Others*, [2000] AMI 205.

⁷² *Supra* note 52, at 405.

⁷³ Xuqiong (Joanna) Wu, *supra* note 52, at 581.

⁷⁴ *Supra* text accompanying notes 54 and 55. See P. Bernt Hugenholtz, *Program Schedules, Event Data and Telephone Subscriber Listings under the Database Directive: The ‘Spin-Off’ Doctrine in the Netherlands and elsewhere in Europe* (paper presented at Fordham University School of Law Eleventh Annual Conference on International IP Law & Policy New York, 14-25 April 2003), available at <http://www.ivir.nl/publications/hugenholtz/spinofffordham.html> (last visited Sep. 29, 2007).

⁷⁵ [2005] EWCA Civ 863.

⁷⁶ (C203/02) [2004] ECR I-10415 (ECJ).

activities, it compiled an extensive database of information on horseracing, which it gathered over a period of time. The BHB also checked whether the horses and the riders met the eligibility requirements to be able to compete in a race. BHB was, therefore, the sole source of the information and the only one to know and confirm the final list of participants in a race. This information was put into a database and was used by a wide variety of users such as racehorse owners, trainers, riders, radio or television journalists and bookmakers. In this case, data was supplied through two channels. First data was made available to a joint venture company between Weatherby's and the Press Association, which forwarded the data to its subscribers in an electronic form called the 'declaration feed'. Following this, one of the subscribers supplied the data to its own subscribers in the form of a so-called 'raw data feed'. These two channels were necessary for punters to place bets. Among the bookmakers was William Hill. William Hill used the raw data feed for its horseracing, bet-making business.

BHB alleged infringement of its *sui generis* database right by William Hill and filed a suit against William Hill in the English High Court, which was decreed. Laddie, J. found that William Hill had violated Articles 7.1 and 7.5 of the EU Database Directive.⁷⁷ On appeal to the Court of Appeals, the decision was referred to the ECJ. The ECJ accurately noted the reason for the introduction of the Directive, saying that the idea behind it was to promote the creation of storage and processing systems for already existing materials, and not for the creation of the data itself.⁷⁸

Now, protection for databases is only provided if the maker can show that it has made a quantitatively or qualitatively substantial investment in "obtaining, verifying or presenting" the contents of its database.⁷⁹ The Court provided the following guidelines in the interpretation of Article 7.1 of the Directive:⁸⁰

1. "Investment in obtaining" does not mean creating. It does not include resources used for the creation of independent materials. It means investment in *collecting* the information.

⁷⁷ British Horseracing Board v. William Hill, CA (Civ.Div) [2002] ECC 24.

⁷⁸ *Supra* note 65, at 42; *EU Database Directive*, *supra* note 6, Recital 9-10-12.

⁷⁹ *EU Database Directive*, *supra* note 6, art 7.1.

⁸⁰ BHB v. William Hill Organisation Ltd., (C203/02) [2004] ECR I-10415, 34 -36 (ECJ).

2. Investment in the “presentation of the contents of the database” deals with the resources used for the purpose of giving the database its function of processing information, establishing a systematic or methodical arrangement of the materials contained in the database and organising their individual accessibility. Once again, it does not deal with investment in the creation of the materials contained in the database. This could also take into consideration investments linked with the method used to allow the database to fulfill its main function: the organisation of a set of information to facilitate its access.⁸¹
3. Investment in “verification” covers those resources used to ensure the reliability of the information contained in the database⁸² and to monitor its accuracy. It does not cover resources used for the methodical or systematic arrangement of the materials and the organisation of their individual accessibility. Certification or registration is considered as creation nonetheless, and they are not taken into account.

The Court held that one only needs to fulfill one of the above conditions to secure the right under Article 7.1 of the Directive.⁸³ With regard to the *BHB* case, the Court held that investment in drawing up the list of the horses and their riders did not constitute investment in the obtaining and the verification of the contents of the database.⁸⁴ We can see that by distinguishing between obtaining and creating data, the ECJ has relied on the underlying arguments of the ‘spin-off’ doctrine, even though the judgment does not explicitly refer to it.⁸⁵

However, the ECJ reiterated in all four cases that the fact of the maker of the database being the same as the creator of the materials within that database does not *prima facie* exclude the database from protection.⁸⁶ So, what needs to

⁸¹ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415, 37 (ECJ).

⁸² *Id.* at 34.

⁸³ *Id.*

⁸⁴ *Id.* at 42.

⁸⁵ Mark J. Davison and P. Bernt Hugenholtz, *Football Fixtures, Horseraces and Spin Offs: The ECJ Domesticates the Database Right*, 27(3) EUR INTEL. PROP. REV. 113, 114-118 (2005).

⁸⁶ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415, 46 (ECJ).

be shown by the claimant in such a case is that substantial investment was made in the obtaining, verification *or* the presentation of the contents of the database, independent of the resources used in creating the information in the database.⁸⁷ One possible way to get around this situation is for the maker of the contents to create a subsidiary company, license the information exclusively to the subsidiary, and then let the licensee create the database.⁸⁸

With regard to the meaning of ‘substantial investment’, the ECJ only notes (in the *BHB* case, for example) that the investment required with regard to the obtaining, verification and presentation of the contents of the database was minimal (as opposed to the investment required to create the data).⁸⁹

With regard to the ‘substantial part’ requirement necessary to constitute infringement,⁹⁰ consistent with the approach in traditional copyright law, the ECJ judgment laid down that “it must be considered whether the human, technical and financial efforts put in by the maker of the database in obtaining, verifying and presenting those data constitute a substantial investment.”⁹¹ Under copyright law, the requirement of originality determines the scope of the right and the scope of infringement. Only if there is copying of what is ‘original’ will there be infringement.⁹² Therefore, the Court found that there would have been no infringement, as there was no substantial investment in the obtaining, verification and presentation of the contents of the database.⁹³

Lastly, with respect to indirect infringement, the Court held that a third party could also commit infringement, but with the qualification that it would not cover cases regarding mere consultation.⁹⁴ According to Davison and Hugenholtz, “the best interpretation that can be placed on this part of the judgment is that once a database maker makes its database available to the

⁸⁷ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415 (ECJ).

⁸⁸ See Davison and Hugenholtz, *supra* note 85, at 116.

⁸⁹ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415, 47 (ECJ).

⁹⁰ See *EU Database Directive*, *supra* note 6, art 7.

⁹¹ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415, 76 (ECJ).

⁹² Davison and Hugenholtz, *supra* note 85, at 116.

⁹³ *Id.*

⁹⁴ *BHB v. William Hill Organisation Ltd.*, (C203/02) [2004] ECR I-10415, 57 (ECJ).

public, it is implicitly consenting to the viewing of the database by any person and that consent will cover any temporary copies made for that purpose.”⁹⁵

One of the most trenchant criticisms levelled against the ECJ's interpretation of the Directive is that it renders the Directive worthless, since the ECJ distinguished between ‘creating’ and ‘obtaining’, and preferred protection only to the latter.⁹⁶ Therefore, the possibility of the *sui generis* right being used for protection, especially in view of the weak law of passing-off, would be rather low.⁹⁷ Indeed, one scholar has called the judgment “Europe’s *Feist*”.⁹⁸ In relation to the Court of Appeals’ interpretation of the ECJ judgment,⁹⁹ where the Court mentions that it is the official stamp of approval that changes the nature of data from a mere collection of independent existing materials, it means that any ‘official’ database would not be entitled to the protection of the EU Database Directive.¹⁰⁰

Furthermore, the line between ‘verification’ and ‘creation’ is still blurred and difficult to locate, though one possible solution may be in noting the time of registration, where verification done after the date of registration will not fall within the scope of the *sui generis* right.¹⁰¹ Davison and Hugenholtz raise two further questions regarding the decision of the ECJ:¹⁰² first, that the Court did not answer the argument raised by William Hill, which was basically that infringement would only occur if they had copied the ‘databaseness’ of the database of William Hill, as it already found that the contents taken were not substantial;¹⁰³ and second, that the Court failed to lay down any guidelines

⁹⁵ Davison and Hugenholtz, *supra* note 85, at 117.

⁹⁶ See *supra* text accompanying notes 79-81.

⁹⁷ Robert Clark, *Database Protection in Europe: Recent Developments and a Modest Proposal*, 7 DATA SCIENCE JOURNAL (2007), available at http://www.jstage.jst.go.jp/article/dsj/6/0/OD12/_pdf (last visited Sep. 31, 2007).

⁹⁸ Stephen Kon, *BHB/William Hill: Europe’s Feist*, 28(1) EUR. INTELL. PROP. REV. 60-66 (2006) (discussing, in part, the similarity between the decision of the ECJ and that of the US Supreme Court in *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991)).

⁹⁹ [2005] EWCA Civ 863.

¹⁰⁰ Kon, *supra* note 98, at 65.

¹⁰¹ Antoine Masson, *Creation of Database or Creation of Data: Crucial Choices in the Matter of Database Protection*, 28(5) EUR. INTELL. PROP. REV. 261-267 (2006).

¹⁰² Davison and Hugenholtz, *supra* note 85, at 117.

¹⁰³ *Id.*

with respect to the term for protection of ‘dynamic databases’, which could end up being perpetual.¹⁰⁴

Even so, it is possible that the ECJ realised that the scope of the protection that the Directive grants is extensive and unnecessary, and therefore whittled down the scope of its conferment of rights.

IV. DATABASE/COMPILATION PROTECTION IN OTHER JURISDICTIONS

Other jurisdictions have not yet legislated any special laws in relation to database rights, whether *sui generis* in nature or otherwise. We can, therefore, briefly review the protection afforded to databases under ordinary copyright law in three important jurisdictions, i.e. the United States, Canada and Australia, before turning to the Indian position in conclusion.

A. The United States

The landmark case in relation to database protection in the US is *Feist Publications v. Rural Telephone Service Co.*,¹⁰⁵ where the United States Supreme Court held that the telephone listings of Rural Telephone did have the requisite level of originality required for copyright protection. The Court overruled the ‘sweat of the brow’ doctrine of originality, replacing it with the ‘modicum of creativity’ standard.¹⁰⁶ The Court further said that copyright law only covered the expression of facts and not the facts themselves, the latter being

¹⁰⁴ Davison and Hugenholtz, *supra* note 85, at 117.

¹⁰⁵ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991).

¹⁰⁶ The Court believed this doctrine ‘flouted basic copyright principles’ and failed to satisfy the basic constitutional requirement of originality. Further, the Court stated that “[t]hroughout history, copyright law has ‘recognized a greater need to disseminate factual works than works of fiction or fantasy.’... But ‘sweat of the brow’ Courts took a contrary view, they handed out proprietary interests in facts and declared that authors are absolutely precluded from saving time and effort by relying upon the facts contained in prior works. In truth, ‘it is just such wasted effort that the proscription against the copyright of ideas and facts’... [is] designed to prevent.” *Feist Publications v. Rural Telephone Service Co.*, 499 US 340, 354 (1991).

unconstitutional.¹⁰⁷ The copyright in a factual compilation, according to the Court, was 'thin'.¹⁰⁸

Over the years, the Supreme Court, while finding many databases copyrightable¹⁰⁹ due to the low level of creativity required, would hold that there was no infringement as the defendants did not copy the selection or arrangement of information in the database.¹¹⁰

Therefore, under copyright law, it is extremely difficult, if not impossible, to protect the information in a database. The other route that might be taken in the US (albeit one that has remained unused) is the law of unfair competition. The evolution of unfair competition concretised into a property-based model in *International News Service v. Associated Press*.¹¹¹ The misappropriation doctrine may recognise a property right in the product of one's investment, labour and skill and prevent others from taking that product in a manner that constitutes 'free-riding'.¹¹² However, this doctrine has been severely limited by *National Basketball Association v. Motorola*,¹¹³ which laid down that information could be only be misappropriated if it was 'time-sensitive'. The US has, so far, made many unsuccessful attempts to legislate on database protection through the *sui generis* route, through a tort/misappropriation model and through a modified competition law model.¹¹⁴

¹⁰⁷ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340, 471 (1991).

¹⁰⁸ *Id.* at 349.

¹⁰⁹ See *Kregos v. Associated Press*, 937 F. 2d. 700 (2nd Cir, 1991); *CCC Info. Serv. v. MacLean Hunter Mkt. Reports Inc.*, 44 F. 3d. 61 (2nd Cir, 1994). *Per contra*, see *Matthew Bender & Co. v. West Publishing*, 158 F. 3d. 674 (2nd Cir, 1998).

¹¹⁰ See *Key Publications Inc. v. Chinatown Today Publishing Enterprises Inc.*, 945 F. 2d. 509 (2nd Cir, 1991).

¹¹¹ 248 US 215 (1919).

¹¹² Margreth Barrett, *INTELLECTUAL PROPERTY: CASES AND MATERIALS* 966 (West Publishing, 2003).

¹¹³ *NBA v. Motorola, Inc.*, 105 F. 3d. 841 (2nd Cir, 1997).

¹¹⁴ For a general discussion on these developments, see Philip J. Cardinale, *Sui Generis Database Protection: Second Thoughts in the European Union and What it Means for the United States*, 6 CHI-KENT J. INTELL. PROP. 157 (1996); Lisa Barr, *Database Protection Bill*, 8 DEPAUL-LCA J. ART. & ENT. L. 372 (1997-1998); Jonathan Band, *The Database Debate in the 108th Congress: The Saga Continues*, 27(6) EUR. INTELL. PROP. REV. 205-212 (2005); Charles McManis, *Database Protection in the Digital Age*, 7 ROGER WILLIAMS UNIV. L. REV. 7 (2001-2002).

B. Canada

In Canada, a database enjoys protection as a compilation under copyright law. There were a number of contradictory cases¹¹⁵ that came up before the Court, some which took up the ‘sweat of the brow’ standard,¹¹⁶ some which picked up the *Feist*-like ‘modicum of creativity’ standard¹¹⁷ and others which stood somewhere in between.¹¹⁸

The *CCH case*,¹¹⁹ decided by the Supreme Court of Canada, is now the final word on the law on originality. While there are varying interpretations of the judgment with reference to the level of originality required,¹²⁰ the Court emphatically rules that facts are not copyrightable¹²¹ which, in essence, means that the position with relation to the copyrightability of facts remains the same as in the US. So, protecting databases in Canada is also a very tough task under the current legal regime.

C. Australia

Conversely, in Australia, the standard followed still belongs to the ‘sweat of the brow’ lineage, which means that facts are copyrightable under the Australian copyright regime. The leading case in this regard is *Telstra*,¹²² which was decided by the Federal Court of Australia and later upheld by the High Court of Australia.¹²³ In *Telstra*, the Australian Courts emphatically rejected the *Feist* standard of creativity and opted for the ‘sweat of the brow’ approach. This was based on two reasons: first, that unlike the US, where the Constitution and the Copyright Act of 1976 required originality, Australian copyright law

¹¹⁵ For a discussion of these cases and the leading CCH Case, see Carys J. Craig, *Resisting Sweat and Refusing Feist: Rethinking Originality After CCH*, 40 UNIV. BOSTON COLLEGE L. REV. 69 (2007).

¹¹⁶ See *British Columbia Jockey Club v. Standen*, 22 DLR (4th) 467; *U & R Tax Services v. H & R Block Canada Inc.*, (1995), 67 CPR (3d) 257.

¹¹⁷ See *Tele-Direct (Publications) Inc. v. American Business Information Inc.*, [1998] 2 FC 22.

¹¹⁸ See *Caron v. Assoc. des Pompiers de Monreal Inc.*, (1992), 42 CPR (3d) 292.

¹¹⁹ *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2004] 1 SCR 339.

¹²⁰ For an outstanding discussion of the case, see Craig, *supra* note 115.

¹²¹ *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2004] 1 SCR 339, 355.

¹²² *Telstra Corp Ltd v. Desktop Marketing Systems Pty. Ltd.*, [2001] FCA 612 [Fed Ct (Aus)].

¹²³ *DtMS Ltd. v. Telstra Corp.*, [2002] FCAFC 112.

required no intellectual effort; and second, that the Court noted that the 'originality' requirement was very low, leading to difficulties in applying the standard.¹²⁴ Hence, we can conclude that databases and the information contained within them are still the subject of copyright law in Australia.

D. India

India does not have any separate legislation on the protection of databases. Databases are covered under the Copyright Act, 1956, under the heading of 'literary works'. Furthermore, India followed the common law doctrine of 'sweat of the brow', as was the case in *Burlington Home Shopping v. Rajneesh Chibber*.¹²⁵ However, in *Navin J. Desai v. Eastern Book Company*,¹²⁶ the Court found that there should be a 'modicum of creativity' involved in a compilation, and therefore denied protection to case-notes published in Law Reports. In another turn, in *Infoseek Solutions v. Kerala Law Times*,¹²⁷ the Kerala High Court disagreed with the judgment of the Delhi High Court, keeping in line with the sweat of the brow standard.¹²⁸ This dispute now appears to have been settled by the recent Supreme Court decision in *Eastern Book Company v. D.B. Modak*,¹²⁹ which effectively endorses the Canadian Supreme Court's decision in *CCH*. This case dealt with the copyright status of legal reports, with special reference to headnotes, footnotes, editorial notes, and other enhancements to the text of court judgments. The Supreme Court followed the Canadian decision in striking a balance between the extremes of 'sweat of the brow' and 'modicum of creativity', holding that creativity is not required to render a work original. What is required is an exercise of skill and judgment, which is seen as a balance between creativity and the mere expenditure of labour and capital.¹³⁰

¹²⁴ See Jacqueline Lipton, *Balancing Private Rights and Public Policies: Reconceptualizing Property in Databases*, 18 BERKELEY TECH. L.J. 773 (2000). For a general discussion about the need for the 'sweat of the brow' requirement in Australia, see Sandra Gosnell, *Database Protection Down Under: Would a Sweaty Australia be Better off with a Northerly Change?*, 26 UNIV. NEW SOUTH WALES L.J. 639 (2003).

¹²⁵ 1995 PTC (15) 278.

¹²⁶ 2002 PTC (25) 641 (Del) (DB).

¹²⁷ AIR 2007 Ker. 1.

¹²⁸ Shamnad Basheer, *Database Protection in India*, available at http://spicyipindia.blogspot.com/2005_11_01_archive.html. (last visited Sep. 31, 2007).

¹²⁹ 2008 (1) SCC 1

¹³⁰ See also Shamnad Basheer, *Are Indian Court Judgments Copyrightable?*, available at <http://spicyipindia.blogspot.com/2008/01/are-indian-court-judgments.html> (last visited Aug. 14, 2008).

Furthermore, the Court emphasized that the protection was extended to those elements that required the exercise of skill and judgment, such as headnotes, editorial notes, and comments such as ‘partly dissenting’, ‘concurring’, etc. It did not extend to clerical corrections, syntax corrections, and other work deemed to be merely clerical. This decision will be important in determining the extent of database protection in India. Indeed, if the Supreme Court’s endorsement of the *CCH* decision is taken to its logical conclusion, the protection of databases will be a difficult task. However, the applicability of the decision to databases is not yet clear.

V. A PROPOSAL

The questions that need to be answered are, simply, who or what one wants to protect and for what reasons.¹³¹ To put it differently, the idea is to identify a pressing need to protect a certain interest in a certain way. Database legislation should be in pursuance of an institutional framework that seeks to entrench the notions of competition, fair use and other related public interests, while rewarding investment of database generators. We can summarise certain arguments that have been made regarding a change from *status quo* under different regimes. The underlying idea behind all these arguments is that the proprietary interests in databases must be balanced against the free flow of information. That is to say, the benefits to society in the absence of database rights must be less than those available in the presence of a regime of database protection.¹³² One argument that is certainly made in ‘modicum of creativity’ jurisdictions is that the protection awarded to databases is too little, as the US Supreme Court (in *Feist*) pointed out that facts are not copyrightable.¹³³ Although no empirical evidence has been put forth to show that databases, in fact, need protection, proponents argue that providing databases with protection will encourage investment in such databases.¹³⁴ Even so, others argue that the lack of empirical evidence of an existing market failure in relation to databases

¹³¹ See generally Lipton, *Supra* note 124.

¹³² McManis, *supra* note 114, at 26.

¹³³ *Feist Publications v. Rural Telephone Service Co.*, 499 US 340 (1991).

¹³⁴ See Lipton, *supra* note 124.

makes it difficult to ascertain the need for the regulation of database rights.¹³⁵ Interesting counter-arguments that have been made try to prove that databases are sufficiently protected under the law of misappropriation, reverse passing-off, technological protection measures and contracts. In common law jurisdictions, where the 'sweat of the brow' standard still applies, the argument against the *status quo* has tried to show that this originality standard provides protection that is too strong.¹³⁶

It is argued by some that empirical evidence suggests that the EU is dragging its feet with regard to modifying the *sui generis* right,¹³⁷ as the positive economic impact of the Database Directive remains unproved.¹³⁸ Further, it is argued that a *sui generis* right, combined with unfair competition law, technological protection measures and restrictive licensing, will lead to market domination, resulting in distortions in the market.¹³⁹ Reichman and Uhler argue that it makes the creation of secondary markets, with respect to the information contained in the database, prohibitive in terms of costs.¹⁴⁰ The scientific community fears that the cost of scientific research would surge upward.¹⁴¹

It is also interesting to note some of the prerequisites of the protection of information as proposed by Wendy Gordon;¹⁴² These are that the incentive to invest should be defended when: (1) the costs of developing an information product are high; (2) the costs of copying are low; (3) copying yields a substantially identical product; (4) which a copyist can price cheaply, not having substantial research and development costs to recoup; and (5) when consumers,

¹³⁵ J.H. Reichman, *supra* note 5.

¹³⁶ See Paula Baron, *Back To the Future: Learning from the Past in the Database Debate*, 62 OHIO ST. L.J. 879 (2001).

¹³⁷ Cardinale, *supra* note 113 (discussing Financial Times Columnist James Boyle's criticisms of the Database Directive).

¹³⁸ *DG Internal Market and Services Working Paper: First Evaluation of Directive 96/9/EC on the Legal Protection of Databases*, Commission of the European Communities, Brussels 24 -26 (December 12, 2005), available at http://europa.eu.int/comm/internal_market/copyright/prot-databases/prot-databases_en.htm.

¹³⁹ McManis, *supra* note 114, at 25.

¹⁴⁰ See J.H. Reichman and Paul Uhler, *supra* note 11.

¹⁴¹ *Id. cf.* Andrew Lawler, *Database Access Fight Heats Up*, 27 SCIENCE 1074 (1996).

¹⁴² J.H. Reichman and Pamela Samuelson, *supra* note 60.

believing the two products are substantially identical, decide to purchase the cheaper one, thereby inducing market failure because the first-comer is unable to recoup its expenses; and (6) such a market failure could have been averted by a period of protection that would allow the first-comer to recoup its expenses and justify its investment in developing the information product.¹⁴³

India's position has been elucidated in a study conducted by WIPO in 2002.¹⁴⁴ Interestingly, the study notes that 80% of the data generation in India is by government agencies.¹⁴⁵ This is possible due to the myriad functions and activities performed by an erstwhile socialist state. Much of the scientific data produced in India also comes from government-run institutions as, till recently, most specialist research institutes in various fields were run by the government. However, this is set to change, especially following the information technology boom in India and increasing private R&D in pharmaceuticals and genetics. The study notes that most private database companies are in favour of database protection.¹⁴⁶ Although the study elucidates the extremely strong protection that databases already receive under copyright law, the Information Technology Act, 2000, and the proposed change to the Copyright Act, introducing protection of technological protection measures, the study also boldly proposes the adoption of the EU Database Directive as a model for protection.¹⁴⁷ In this context, it is in India's interest to have a balanced legislation protecting databases and replacing the existing system of protection.

What we propose in this context is a law that takes certain elements from trademark law and the law of unfair competition. The idea of taking these specific elements, as will be made clear, is to ensure that the form of protection in databases relates more to a liability rule rather than to a property rule and, in that sense, it will try to get around the problem of square pegs and round holes.

¹⁴³ *Id.*

¹⁴⁴ *A Study On The Impact Of Protection Of Unoriginal Databases On Developing Countries: Indian Experience*, WIPO SCCR/7/5, available at http://www.wipo.int/edocs/mdocs/copyright/en/sccr_7/sccr_7_5.pdf. (last visited Nov. 29, 2007).

¹⁴⁵ *Id.* at 8.

¹⁴⁶ *Supra* note 142, at 15.

¹⁴⁷ *Id.* at 29.

The idea is first (and in concomitance with Lipton)¹⁴⁸ that database protection should be limited only to those databases which are intended to be put to commercial use. It is possible that questions may arise relating to mixed uses of a database, i.e. when the purpose of the database is both scientific and commercial. In such cases, protection should be afforded, for at the end of the day, the purpose is commercial, even if only partially.

Second, to enforce the factum of commercial use, the law should mandate that the database is actually put to commercial use in a specific period of time. The effect of non-commercialisation of the database should result in the database being denied protection under law. Lipton, however, considers and denotes her model as a proprietary system.¹⁴⁹ The ill-effects of a proprietary system may not be reflected in legislation, as the dismissal of an 'in-effect proprietary' model pays little heed to the way judges construe legislation. That is to say, the conferment of property-type rights in databases changes the whole basis of protection. What that does, in effect, is direct judges to construe law so as to protect property where the scope and strength of protection is necessarily greater than where one imposes liability rules. The notion of information as property is inherently problematic.¹⁵⁰ Subliminal and sub-legislative directions can influence decisions greatly by providing them the necessary justification for increasing the strength of protection, if the basis of protection were proprietary. In fact, Lipton says that her model is an 'addition' to intellectual property law, in the sense that it comes into play only where other forms of intellectual property protection fail. This may very well be plausible in the US, where, after the *Feist* decision, the protection granted to databases is thin. However, in common law countries, where protection is already very strong, the need is to properly streamline intellectual property policy which may (and we propose that our suggested model does) *supplant* the current law, and does not supplement or complement the existing law.

This, then, leads us to the question of limiting the scope of protection. In relation to infringing conduct, the law should prohibit only that use of the

¹⁴⁸ See Lipton, *supra* note 124.

¹⁴⁹ *Id.* at 832.

¹⁵⁰ See generally Alfred C. Yen, *Western Frontier and the Feudal Society?: Metaphors and Perceptions of Cyberspace*, 17 BERKELEY TECH. L. J. 1207 (2002).

database that will contribute to a decrease in the potential market share of the database, that is to say, that infringing use must be commercial use. Therefore, two conditions should be satisfied in relation to infringing conduct: first, that the infringing conduct must be commercial; and second, that such commercial use must have a potential adverse effect on the market share of the existing claimant database. The idea behind the first condition is to balance and bring into consideration the interests of the scientific and educational communities. The idea behind the second is to ensure the interests of value-adding and downstream commercial users. Obviously, the second condition should be exempted for copying the databases of information providers *per se*. Information providers limit their services to data generation only. But again, if such providers should prove to enter into downstream uses themselves, then we revert to the original conditions of infringing conduct, or possibly deny the database protection altogether in relation to that downstream use as a stricter measure. Therefore, this specifically relies on the model of unfair competition. It is interesting to note that there are three reasons why the EU did not adopt the unfair competition model.¹⁵¹ First, that a model that is based on unfair competition does not create transferable economic interests.¹⁵² Second, that it only applies to a competitor and not a user otherwise considered.¹⁵³ Third, unfair competition laws are not uniform across the EU.¹⁵⁴

In the case of sole-source information generators and other cases where raw data is very difficult to get, there should necessarily be a compulsory licensing provision. This is necessary to ensure that abusive and oppressive licensing terms are not evolved by such information providers. The grounds could be similar to those provided under patent law.

The third idea is to create a register of databases, similar to that proposed by Lipton¹⁵⁵ and Mazumder,¹⁵⁶ that is managed by a registration body. Two

¹⁵¹ Stephen M. Maurer, *Across Two Worlds: Database Protection in the US and Europe* 28 (paper prepared for Industry Canada's Conference on Intellectual Property and Innovation in the Knowledge-Based Economy, May 23-24, 2001) as cited in Xuqiong (Joanna) Wu, *supra* note 52, at 575.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ See Lipton, *supra* note 124.

¹⁵⁶ Anirban Mazumder, *Information, Copyright and the Future*, 29(5) EUR. INTELL. PROP. REV. 180, 186 (2007).

things need to be clarified here: first, the nature and functions of the registration body, and second, the incidents of the registration. The purpose of this will become clear after the following explanation. The registration body or, alternatively, a Registrar, can possibly be of the same nature as that of the Registrar of Companies under the Companies Act, 1956.¹⁵⁷ The function of the Registrar in this context is to ensure that the database so registered is not a database copied from another one (therefore denying the protection of the database law to those who have copied the data) and to administer compulsory licensing terms. In terms of registration, the owner will have to specify the class under which he wants to register his database at the time of registration, as is done in the case of trademarks. The class can be dependent on the intended commercial use of the database. The class ought to be specific, and the owner should be able to register his database in more than one class, provided the regulator has the power to strike down the registration in a particular class if the owner does not exploit it within a reasonable time. This is to prevent owners from uselessly and frivolously registering claims for intended commercial use. The effect of registration would be such that after registration, the owner would be protected against unauthorised copying which would result in any loss of actual or potential market share. This is provided the database using the copied information falls within the same class. Therefore, at the time of registration, owners will have to be careful and register the database in all classes in which they propose to exploit the data. This requirement is necessary to limit the scope, to prevent abuse of a dominant position and to encourage innovation in secondary markets. The data in the protected database can be used by secondary market players, where the use does not affect the actual or potential market of the database owner, provided the owner has not registered his database in that class as well. In fact, the ECJ has held that the abuse of a dominant position may arise where copyright is used to prevent the development of a new, value-added product for a secondary market, not offered by the right holders themselves.¹⁵⁸ Secondary market players will also be able to demonstrate that a

¹⁵⁷ Registrars of Companies (ROC) are defined in Section 2(40) of the Companies' Act, 1956 as "a Registrar, or an Additional, a Joint, a Deputy or an Assistant Registrar, having the duty of registering companies under this Act."

¹⁵⁸ Daryl Lim Tze Wei, *Regulating Access to Databases Through Antitrust Law: A Missing Perspective in the Database Debate*, 31 STANFORD TECH. L. REV. 7 (2006)

value-added product is being provided via their activities. Like in the *IMS case*,¹⁵⁹ such grounds involve that:

- The product protected by copyright must be indispensable to compete in the secondary market;
- The refusal to license copyright must prevent the emergence of a new product for which there is a potential consumer demand;
- The refusal must not be justified by objective considerations; and
- It must be likely to eliminate all competition in the secondary market.¹⁶⁰

VI. CONCLUSION

Any responsible database protection measure must take into account the customary practices of scientists and knowledge-sharing.¹⁶¹ Such practices are intrinsic to the continuance of our information society. Indeed, in an information society, information is both consumed as well produced by such communities. Also, in an age of digital technology, there are two reasons why digital technology will contribute to a revolution in value-added uses of databases. First, digital technology has the potential to disaggregate the value-added functions of databases,¹⁶² and second, that digital technologies can bring to the fore completely different kinds of functions altogether.¹⁶³ A combination of the need to protect and the need to preserve, as it were, questions our fundamental assumptions about the notion of property and the requirement for protection of data.

India's status as a new information economy seems to necessitate database regulation. Our participation in an international framework for such protection

¹⁵⁹ *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, (Case C-418/01) [2004] ECR I-5039.

¹⁶⁰ *Ibid*, at 38.

¹⁶¹ J.H. Reichman and Paul Uhler, *supra* note 11.

¹⁶² J.H. Reichman and Pamela Samuelson, *supra* note 50, at 125.

¹⁶³ *Id.* at 125.

cannot be limited to simply being a consumer of models that are in force in other jurisdictions. India must take into account the pitfalls that accompany enacting similar proposals. As already noted, the WIPO study proposes that India adopt a similar regime to the *sui generis* regime adopted in the European Union.¹⁶⁴ As a matter of information policy, it is necessary for the government to involve discussions from various stakeholders. We hope that the model that we have suggested might provide one of many starting points for discussion. Importantly, policy makers and legislators must realise that intellectual property reform does not always mean addition, but may sometimes mean substitution, even if that substitution lessens the protection already available. Indeed, as Lawrence Lessig notes,

“Overregulation stifles creativity. It smothers innovation. It gives dinosaurs a veto over the future. It wastes the extraordinary opportunity for a democratic creativity that digital technology enables.”

¹⁶⁴ See *supra* text accompanying notes 141 onwards.