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Regulating Access to Databases Through Antitrust Law: A Missing Perspective in the Database Debate

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INTRODUCTION

¶1 Antitrust law has an important but understated role in the debate over the regulation of access to information contained in databases. Databases may broadly be understood to include a collection of independent works or data arranged in a systematic or methodical way that may be individually accessed via both electronic and nonelectronic means; they may cover vastly diverse subject matter, from telephone directories to television programs.¹ In the decade since the European Union adopted its Database Directive (the “Directive”)², signatories to the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs)³ have had strong cause to consider its implications on database protection. Under TRIPs, member states are obligated to protect compilations of data only if they constitute “intellectual creations” by reason of the selection and arrangement of their contents, rather than to the unoriginal data itself.⁴

¶2 This follows the U.S. position as laid down in by the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Services Co.*⁵ Recognizing the potential access bottlenecks caused by conferring protection based on the “sweat of the brow” approach, the Court rejected the proposition that investment and effort alone entitled database owners to control access to factual databases. Instead, it

* President’s Graduate Fellow, National University of Singapore and Research Scholar, Intellectual Property Academy of Singapore. An earlier version of this paper was presented at the Roundtable Conference on “The Case for and Against Database Rights” jointly organized by Fordham University Law School, the IP Academy of Singapore, Queen Mary IP Research Institute, and the IP Research Institute of Australia (22 November 2004, Singapore). I am grateful to Dr. Robert Ian McEwin, Associate Professor Ng Loy Wee Loon, and Mr. Sun Haochen for reviewing an earlier draft at short notice. I also deeply appreciate the kind invitation of Emeritus Professor Gerald Dworkin and Professor Hugh Hansen to contribute to this important debate, as well as the helpful feedback given during the conference, which has been incorporated into this paper. Any errors, mistakes and omissions remain mine. The author welcomes constructive comments and thoughts, and may be reached at lawdaryl@gmail.com This article is dedicated to those teaching Intellectual Property and Technology law at the National University of Singapore.

¹ Estelle Derclaye, *What is a Database?*, 5 J. WORLD INTELL. PROP. 981 (2002).

² Council Directive 96/9, 1996 O.J. (L 77) 20 (EC) [hereinafter “Directive”], available at http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31996L0009 (last visited Oct. 25, 2006).

³ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 33 I.L.M. 81 [hereinafter “TRIPs”], available at http://www.wto.org/english/tratop_e/trips_e/t_agm2_e.htm (last visited Oct. 16, 2006).

⁴ *Id.*, art. 10.2. See also World Intellectual Property Organization Copyright Treaty, art. 5, Dec. 20, 1996, 36 I.L.M. 65 [hereinafter “WIPO Copyright Treaty”], available at <http://www.wipo.int/documents/en/diplconf/distrib/94dc.htm> (last visited October 16, 2006).

⁵ *Feist Publ’ns, Inc. v. Rural Tel. Servs. Co.*, 499 U.S. 340 (1991).

ruled that databases may be protected through copyright, which required the owner to expend sufficient skill and judgment in the selection and arrangement of the contents.⁶ The Court reasoned that because facts were not subjectively created, but objectively discovered, copyright protection could not subsist in mere facts, no matter how great an investment had been made in their compilation. Since reutilization of data is allowed, the alternative forms of expression to other authors are limitless. Thus in *Feist*, the U.S. Supreme Court attempted to balance user rights by conferring a limited right to the creative expression original to the author of a work through the copyright regime. Singapore has gone one step further by expressly limiting protection in factual compilations to “the selection or arrangement of its contents which constitutes an intellectual creation.”⁷

¶3

However, TRIPs merely sets the minimum standard required for protection; member states are free to provide for stronger intellectual property rights (IPRs).⁸ The European Union has moved toward extending protection toward the unoriginal data in databases through broadening its criteria to include those that are protected based on the sufficiency of the investment of labor and resources expended in their creation: the *sui generis* database right.⁹ Under this right, a database owner can prevent extraction and reutilization of the whole or a substantial part, evaluated qualitatively and/or quantitatively, of the content of that database.¹⁰ In certain cases they may also prevent the systematic extraction and/or reutilization of insubstantial parts.¹¹ Commentators have noted that this, in effect, extends protection over the realm of factual information traditionally denied protection by copyright law.¹²

¶4

This extension raises a danger that database owners may impede the use of information in derivative markets or by rivals in the same market to produce competing products, since they may be conferred a de facto monopoly on the information. In this regard, the Directive attempts to ensure a degree of balance by:

- Allowing insubstantial extractions from, and reuse of, the contents of databases made available to the public;¹³
- Deeming public lending not an act of extraction or reutilization;¹⁴
- Permitting member states to enact "fair use" exceptions;¹⁵
- Extinguishing the database maker's right to control resale after the first sale;¹⁶
- Subjecting database rights to the laws on restrictive practices and unfair competition of the Member States;¹⁷ and

⁶ *Id.* at 345 (“The sine qua non of copyright is originality. To qualify for copyright protection, a work must be original to the author. Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.”).

⁷ Copyright Act §7A(2) (2006) (Sing.) [hereinafter “Singapore Copyright Act”], available at <http://statutes.agc.gov.sg/> (view “Legislation Beginning with ‘C’” and click on “Copyright Act”) (last visited Oct. 25, 2006). For a prophetic foreshadowing of this development in Singapore see Ng-Loy Wee Loon, *Copyright Protection for Traditional Compilations of Facts and Computerised Databases—Is Sweat Copyrightable?*, SING. J. LEGAL STUD. 96 (1995).

⁸ Directive, *supra* note 2, article 1(1).

⁹ *Id.*, art. 7(1) (“Member states shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database”).

¹⁰ *Id.*

¹¹ *Id.* art. 3.

¹² Hasan A. Deveci, *Databases: Is Sui Generis A Stronger Bet than Copyright?*, 12 INT’L J.L. & INFO. TECH. 178 (2004).

¹³ Directive, *supra*, note 2, art. 8.

¹⁴ *Id.*, art. 7(2)(b).

¹⁵ *Id.*, art. 9.

¹⁶ *Id.*, arts. 5(c), 7(2)(b).

¹⁷ *Id.* art. 13.

- Mandating a triennial review of the *sui generis* regime to determine whether anticompetitive effects require the establishment of a compulsory licensing scheme.¹⁸

¶5 Despite pockets of strong resistance within Europe over the extension of IPRs over factual compilations, the Directive was passed and duly implemented by member states.¹⁹ Yet, the effect of this radical extension of IP protection has permeated throughout Europe and beyond. An increasing number of non-E.U. states seeking to exploit and protect their goods in the Common Market have concluded bilateral agreements based on reciprocity in protection,²⁰ causing an expansion of database rights through a “ripple” effect across the global economy.²¹

¶6 There is growing consensus that database legislation threatens the “access-incentive” balance in a way that is inimical to workings of the intellectual property (IP) regime.²² This imbalance is exacerbated by the fact that many databases are sole-source databases that cannot be easily replicated by existing or potential competitors. As more data gets concentrated in the hands of a few rights owners, users would face increasing difficulty in accessing this information. To this effect, an overwhelming amount of serious academic debate has focused on the desirability of database rights.²³

¶7 It is not the goal of this Paper to address the issue of whether database rights are desirable. Rather, it starts from the premise that a trend toward “TRIPs-plus” rights in databases, whatever its form, is inevitable. The reason is a simple, but compelling one: business needs shape the law. Moves in favor of expanding the scope of property rights are largely derived from a perceived need to efficiently trade with relevant information assets.²⁴ Vast and sweeping developments in the fields of computers, telecommunications, and information technologies have stimulated the formation of a new global market of electronic information services and products, in which databases are principal components. They are valuable sources of information and essential for research in nearly all fields of study, forming a lucrative market for multinational companies of considerable influence. However, databases frequently require substantial investment in the form of creative effort, time, labor and money. Their creators are naturally concerned about their ability to prevent others from illegitimately exploiting their works. In turn, this protection depends on the scope of monopoly that database creators enjoy as a species of IP. No serious commentator can deny that this creates tremendous pressure on national legislatures to extend stronger protection towards database rights.²⁵

¹⁸ *Id.* art. 16(3).

¹⁹ NAUTA DUTILH, THE IMPLEMENTATION AND APPLICATION OF DIRECTIVE 96/9/EC ON THE LEGAL PROTECTION OF DATABASES 5 (2001), available at http://europa.eu.int/comm/internal_market/copyright/docs/databases/etd2001b53001e72_en.pdf (report commissioned by the European Commission to gauge the progress of Member States in implementing the Directive) (last visited Oct. 25, 2006).

²⁰ Directive, *supra* note 2, recital 56. (“[T]he right to prevent unauthorized extraction and/or re-utilization in respect of a database should apply to databases whose makers are nationals or habitual residents of third countries . . . only if such third countries offer comparable protection to databases produced by nationals of a Member State . . .”).

²¹ See BART BEUVING, FRODO FERRO, MICHEL VAN WISSEN, & ALEXANDER ODLE, INTERNATIONAL ASSOCIATION FOR THE PROTECTION OF INTELLECTUAL PROPERTY, DATABASE PROTECTION AT NATIONAL AND INTERNATIONAL LEVEL 9, available at www.aippi.nl/publicaties2/Q182definitief.pdf (noting the need for reciprocity with non-E.U. entities such as America.) Some commentators have argued that the European Union would be vulnerable to a challenge that the reciprocity provision of its Database Directive violates the national treatment norm of the TRIPs Agreement. See Charles R. McManis, *Taking TRIPs on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technology*, 41 VILL. L. REV. 207, 258-62 (1996).

²² William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989) (“Copyright protection . . . trades off the costs of limiting access to a work against the benefits of providing incentives to create the work in the first place. Striking the correct balance between access and incentives is the central problem in copyright law.”). See also J.H. Reichman & Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 VAND. L. REV. 51 (1997); P. Bernt Hugenholtz, *Abuse of Database Right: Sole-Source Information Banks under the E.U. Database Directive*, in ANITRUST, PATENTS AND COPYRIGHT: E.U. AND U.S. PERSPECTIVES 203-219 (François Lévêque and Howard Shelanski eds. 2005), available at <http://www.ivir.nl/publications/hugenholtz/abuseofdatabasecopyright.html> (last visited Oct. 25, 2006); J.H. Reichman, *Commodification of Scientific Data and the Assault on the Worldwide Public Interest in Research and Development* (January 28, 1996) (unpublished manuscript) (on file with author).

²³ For a useful summary of the debate in Europe and the United States to date, see Deveci, *supra* note 12.

²⁴ Jessica Litman, *Information Privacy/Information Property*, 52 STAN. L. REV. 1283, 1295-97 (2000).

²⁵ The attitude of national legislatures toward IPRs are perhaps best summed up in the famous words of Judge Peterson: “[T]here remains the rough practical test that what is worth copying is *prima facie* worth protecting.” Univ. of London Press Ltd v.

¶8

The principal goal of this Paper is to argue that antitrust law provides a useful tool for maintaining the “access-incentive” balance, whatever the model of database protection selected. It does this in three stages. Part I briefly examines the rationale for stronger rights in databases and the impact this has on the “access-incentive” balance. Part II examines how various jurisdictions have attempted to address this issue under copyright, the Database Directive, and misappropriation theory. It concludes that none of the models satisfactorily ensures proper access rights to later innovators and users.²⁶ Part III proposes that antitrust law not only addresses access problems directly, it better reflects commercial expectations by ensuring that owners get the reward due to them through the conferment of a right that reflects the scope of the exclusive rights granted under IP law. At the same time, antitrust law ensures that later innovators and consumers are able to access information contained in databases to the extent allowed by IP law. By factoring in considerations such as monopoly power and market position, antitrust law is better positioned to determine the level of intervention needed to ensure proper access based on the effect the denial of access has on the market. Further, by regulating the *exercise* of database rights rather than its *grant*, antitrust law avoids being snared by the sharply polarized debate blockading business efficacy. It gives database owners the strong protection they need against free riders while ensuring that consumer access and commercially viable alternatives and derivatives may be offered beyond the legitimate scope of their exclusive rights. Because finding the right balance is a difficult judgment to make, it is crucial that regulators understand that however useful antitrust law may be, the regulation of database rights, like other IPRs, is a matter requiring the highest caution: too heavy a regulation may lead to the stifling of innovation and the cessation of otherwise socially beneficial enterprises.

I. THE CASE FOR DATABASE RIGHTS

¶9

The case for database rights has been well developed. Society gains little by making information freely available to all, for by so doing, it reduces the quantity and quality of information produced. By reducing the monetary value attached to a socially productive behaviour like basic research, the economic incentives to engage in such activities are diminished. Risk-averse investors are reluctant to invest where free-riding competitors could too easily duplicate publicly available databases without making any corresponding investments of their own.²⁷ By offering the same contents at prices lower than those of the original compilers, whose costs are inevitably higher, the “parasitical” second comers could drive the former out of business and thus depress the market for innovative future compilations.

¶10

When data is digitized, it becomes more valuable to society. However, it is also susceptible to market failure. Recent technological developments have eroded the natural lead time that database developers have enjoyed, since anyone who obtains a copy of the compilation can quickly reproduce its contents.²⁸ This results in a suboptimal level of investment in research and development that the law has attempted to address through stronger database protection. To the extent that the law protecting investment in databases increases their production, it serves to enhance society's problem-solving abilities through a comprehensive compilation of information. It also increases productivity, advances education and training, and facilitates the creation of a better informed citizenry through the ease of informational access.²⁹ This means that there is a good case for some form of database

Univ. Tutorial Press Ltd., (1916) 2 Ch. 601, 610 (Eng).

²⁶ WILLIAM CORNISH & DAVID LLEWELLYN, *INTELLECTUAL PROPERTY: PATENTS, COPYRIGHT, TRADEMARKS & ALLIED RIGHTS* 788 (2003) (“As regards databases there is no compelling economic evidence which demands any one solution to the balance of incentive-based protection against freedom of access in information.”).

²⁷ Reichman & Samuelson, *supra* note 22, at 69.

²⁸ Jacqueline Lipton, *A Framework for Information Law and Policy*, 82 OR. L. REV. 695, 770 n.329 (2003). See also Wesley L. Austin, *A Thoughtful and Practical Analysis of Database Protection under Copyright Law, and a Critique of Sui Generis Protection*, 3 J. TECH. L. & POLY 3, 63-64 (discussing “free-rider” problem of near-effortless copying of an electronic database by a second comer, in light of facts of *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996)).

²⁹ G.M. Hunsucker, *The European Database Directive: Regional Stepping Stone to an International Model?*, 7 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 697, 776 (1997).

rights in this digital age. Indeed, even most conservative scholars support the essence of rights in the noncreative aspects of factual databases, differing only on the question of the scope of rights that should be conferred.³⁰

¶11 At the same time, it should be remembered that:

Industrial and commercial developments in competitive economies have always turned in large measure upon the borrowing of ideas. [Exclusive] rights should therefore be restricted to cases where the borrowing is unacceptably parasitic. It should not be allowed to become a blocking mechanism lurking in every crevice of endeavour. [Database] rights protect large compilations of data and indeed large collections of copyright works, such as digitised versions of the contents of a library. In this there is a serious danger that a major source of information may fall into a monopolist's hands. The monopoly element may arise because there is a single producer of the information, (as with . . . the production of official statistics), or because there is a single holder of sources.³¹

II. INTERNAL REGULATION

A. Copyright

¶12 As noted earlier, the Supreme Court in *Feist* decided to reign in the expansion of IPRs by refusing protection to the “sweat of the brow” under copyright. Recently, Australia diverged sharply from *Feist*. In *Telstra Corporation Ltd. V. Desktop Marketing Systems Pty. Ltd.*,³² the Federal Court of Australia had to consider whether there was copyright in the white page and yellow page directories and the headings books. The court stressed the importance of protecting the effort invested into the production of works, opining that it would be wrong to ignore the effort of collecting those facts which are the reason for the work's very existence. As Judge Finkelstein put it:

There are policy reasons both for and against the result in *Feist* On the one hand, the ability to prevent others from appropriating information in a compilation of facts will severely limit the ability of later authors to build upon earlier works. This may impair progress in both the sciences and the arts On the other hand, there are those who argue that the abandonment of the “sweat of the brow” theory has threatened the progress of information. The argument is that the collection of factual materials is essential to the economy. Databases provide a wealth of information to business people, professionals, scientists and consumers. If copyright protection is not given, the investment of the time and money that is required to produce these compilations will not be forthcoming.³³

¶13 Therefore, Australian copyright law seems to embrace a two-category approach to database protection similar in substance, though not form, to the European model. While there is an attraction in extending copyright to cover investments in databases in the same manner as it was extended to cover the once unfamiliar domain of software,³⁴ reliance on copyright is unsatisfactory for several reasons.

The first problem is the length of protection in copyright. The duration of protection under U.S., Singapore, and Australian copyright law is the life of the author plus 70 years.³⁵ This results in legal

³⁰ L. Ray Patterson, *Copyright Overextended: A Preliminary Inquiry into the Need for a Federal Statute of Unfair Competition*, 17 U. DAYTON. L. REV. 385, 409 (1992) (asserting that factual collections should be afforded protection for a limited time, against competitors only, not encompassing the contents of the work, and “subject to forfeiture for predatory pricing”); Malla Pollack, *The Right to Know?: Delimiting Database Protection at the Juncture of the Commerce Clause, the Intellectual Property Clause, and the First Amendment*, 17 CARDOZO ARTS & ENT. L.J. 47, 123-24 (1999) (advocating statutory protection that would protect only databases at risk of market failure); Reichman & Samuelson, *supra* note 22, at 137-51 (suggesting unfair competition and modified liability approaches to database protection).

³¹ CORNISH & LLEWELLYN, *supra* note 26, at 789.

³² *Telstra Corp. v. Desktop Marketing Sys. Pty. Ltd.* (2001) 51 I.P.R. 257 (interpreting the Australian Copyright Act of 1968).

³³ *Id.* at 279-80.

³⁴ *See, e.g.*, *Apple Computer Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1247-48 (3d Cir. 1983) (landmark ruling that computer program, in both source code and object code forms, was “literary work” protected by copyright).

³⁵ 17 U.S.C. § 302 (2000); Singapore Copyright Act, *supra* note 7, § 28(2); Australian Copyright Act 1968 § 33, *available at*

protection for databases that is long and “thick,” because it is *not* limited to mere expression and includes facts as well. Important information may well be tied up in proprietary rights for too long, since copyright makes no distinction between time-sensitive databases, and those that are exhaustive and have changed little over time.³⁶ Copyright fails to meaningfully address the economics of databases, particularly the interest in promoting an optimal degree of maintenance, since the entire duration of protection is granted upfront. Databases rely primarily on their comprehensiveness and accuracy to make them attractive in the market.³⁷ Consumers would be less willing to use a database without some degree of confidence that the contents are accurate. The degree to which databases are updated and their contents verified as accurate is thus vital.³⁸ Therefore copyright gives strong rights at the point of grant without ensuring that the quid pro quo of comprehensive and accurate updates are provided by database owners in return for their protection.

¶14 Secondly, the tests employed in determining subsistence of copyright are notoriously difficult to apply. Copyright protects expressions, not their underlying ideas.³⁹ Just how far back one can push in separating the expression from the ideas underlying a work is not easy to answer.⁴⁰ In this regard, there is a risk of protection extending to the contents of such compilations that are given copyright protection. As one commentator noted:

The use of copyright to fill in gaps left by an absence of unfair competition law can of course be dangerous. Copyright operates on a property basis, confers lengthy protection and, aside from the limited defences such as fair dealing or fair use type defences that might be available, generally cares not whether the defendant's use is fair or unfair. Any intellectual property protection for factual databases inevitably cuts close to the bone. Free access to scientific and research data, especially where the data has been gathered by public bodies, can be seen as a vital cog of the freedom of information principle that is essential to scientific, industrial research and educational interests.⁴¹

¶15 A copyright-based solution for database protection would be overly protective, compromise accessibility of fundamental information, and impede technological progress. And certainly, accessibility to scientific and technological research information contained in databases is not guaranteed under “fair use” provisions of copyright law. Yet at the same time, applying the copyright regime to databases can lead to underprotection of certain databases and overprotection of others. The result is that the scope of legal protection is unclear, increasing the costs of determining and enforcing rights. These costs would be passed on to users, with the likely result that informal protection through contracts or the use of technology will be employed by rational business people seeking to safeguard their investments. A final, fundamental objection is that Article 10.2 of TRIPs explicitly denies protection to noncreative aspects of factual compilations.⁴² Therefore, even to extend copyright to cover databases in their entirety would be nothing less than revolutionary.

<http://www.comlaw.gov.au> (click on “Commonly viewed legislation” in left sidebar, then click on “Copyright Act 1968,” select the “current” version, and choose Word or PDF format from icons in lower left corner) (last visited October 25, 2006).

³⁶ It has been suggested that a better alternative lies in giving substantially stronger protection for a shorter period of time. See Susanna Leong, *Legal Protection of Factual Compilations and Databases*, 5 J. WORLD INTELL. PROP. 1047, 1057 (2002).

³⁷ Christian Koboldt, *The E.U. Directive on the Legal Protection of Databases and the Incentives to Update: An Economic Analysis*, 17 INT'L REV. L. & ECON. 127, 127-28 (1997) (noting that a database designed to provide easy access to “all available information” on a given subject may lose its entire practical value if it is not updated “continuously”).

³⁸ *Id.*

³⁹ WIPO Copyright Treaty, *supra* note 4, art. 2 (“Copyright protection extends to expression and not ideas, procedures, methods of operation or mathematical concepts as such.”).

⁴⁰ See, e.g., *Nichols v. Universal Pictures Corp*, 45 F.2d 119, 121 (2d Cir. 1930) (Hand, J.) (observing of the expression/idea dichotomy that “[n]obody has ever been able to fix that boundary, and nobody ever can”); *LB (Plastics) Ltd. v. Swish Prod. Ltd.*, (1979) R.P.C. 551, 629. In the latter case, Lord Hailsham, after remarking that there is no copyright in ideas, observed that “it all depends on what you mean by ‘ideas.’”

⁴¹ See George Wei, *Telephone Directories and Databases: The Policy at the Helm of Copyright Law and a Tale of Two Cities*, 3 INTELL. PROP. Q. 316, 330 (2004).

⁴² TRIPs, *supra* note 3, art. 10.2. This creates some confusion, since Article 1.1 allows member states to adopt more extensive protection than the minimum established by TRIPs. See *id.* art. 1.1.

B. An Alternative in Unfair Competition?

¶16 Judging by the strength of the apparent convictions driving the various versions of the Collections of Information Antipiracy Bills⁴³ and the latest Database and Collections of Information Misappropriation Act⁴⁴ in the United States, it might be easy to think that a solution may be found in opting for the unfair competition model where access is regulated through unfair competition under the doctrine of misappropriation. This doctrine was laid down in *International News Service v. Associated Press*,⁴⁵ and subsequently developed in *National Basketball Association v. Motorola Inc.*⁴⁶ Essentially, it states that where a plaintiff incurs cost in acquiring time-sensitive information, the plaintiff may prevent a direct competitor from accessing this information where such access would reduce the incentive to produce the information or the overall quality of the plaintiff's product or service.⁴⁷

¶17 The immediate attraction with this model is that no data is tied up in property rights, avoiding many of the problems in the European and Australian approaches. However, the problem with unfair competition is that it is unclear where and how a delineation of acts deemed to be "unfair" ought to be drawn. If the owner has no right in the absence of unfair direct competition, the protection is pitifully narrow. Users who would otherwise have to pay an equitable license fee would now be able to access the information without allowing the database owner to recoup its investment. However, if a database maker has the right to exclude both indirect competitors as well as downstream users, then it is difficult to see how the unfair competition model will ensure freer access when the potential scope of the exclusion is the same as the Directive's proprietary model. Further, as commentators have rightly suggested, mere personal rights in database protection are commercially emasculating, and are not adequate as economic incentives for undertakings in the database industry.⁴⁸

¶18 Moreover, the vagaries of unfair competition detract from the general trend toward harmonization of IPRs regionally and globally. This difficulty was one reason why the European Union rejected the unfair competition model in favor of a *sui generis* database right.⁴⁹ Important differences exist in the procedural requirements and substantive tests even between developed nations at in their IP laws. However, in order for any meaningful international trade to take place, these differences must be bridged by common principles. Early development of copyright, patent, and trademark law in England set the mold that was largely adopted throughout the common law countries of the world, and later through treaties and conventions formed the basis for international harmonization of IP law.⁵⁰ Historically, IP conventions such as Berne and TRIPs give clear evidence of such aspirations in the field of IP. More recently, the WIPO has attempted global patent reform to harmonize substantive requirements of patent law.⁵¹ Business efficacy therefore militates against adopting this model of unfair competition.

¶19 Thus emerges a sobering but critical observation. IP law, while well suited to determine the scope and duration of exclusionary rights at the point of grant, is at best a blunt instrument in regulating access and curbing potential anticompetitive effects that block access *ex post*. It gives too

⁴³ See Database Investment and Intellectual Property Antipiracy Bill of 1996, H.R. 3531, 104th Cong. (1996). See also Collections of Information Antipiracy Bill of 1997, H.R. 2652, 105th Cong. (1997); Collections of Information Bill, H.R. 354, 106th Cong. (1999).

⁴⁴ H.R. 3261, 108th Cong. (2003).

⁴⁵ *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 259 (1918).

⁴⁶ *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 845 (2d Cir. 1997).

⁴⁷ See *id.* at 852 (describing scope of "hot-news" *INS*-like claims" for misappropriation of information).

⁴⁸ Leong, *supra* note 38, at 1066.

⁴⁹ CORNISH & LLEWELLYN, *supra* note 26, at 786. ("The *sui generis* right has its place in the Database Directive because there is no harmonized law of unfair competition as between the EC States by which undue misappropriation of information could be attacked.")

⁵⁰ DAVID I. BAINBRIDGE, *INTELLECTUAL PROPERTY* 199 (2002) ("[I]here are many similarities and most of the basic principles are common.")

⁵¹ World Intell. Prop. Org. [WIPO], *Suggestions for the Further Development of Internal Patent Law*, Standing Committee on the Law of Patents, ¶ 1, SCP/4/2 (Sept. 25 2000) (prepared by the International Bureau).

much protection to the aberrant owner, and offers too little to efficient newcomers and the public. IPRs are fixed in length and scope and nonderogable save in the case of an invalid grant or a judicial finding of noninfringement, and incorporate scant consideration of the economic impact of granting access or upholding the refusal to grant access. Further, the role of IP law lies in shielding would-be infringers from liability rather than compelling a positive sharing of access to information. This is particularly important when independent access is difficult or impossible, such as when information is coded or protected by anticircumvention measures. The rational mind, recognizing the inadequacy of endogenous regulation, looks outward for a more satisfactory solution.

C. The Database Directive

¶20 It has been said that the Directive adequately balances the public's need for information access with the need for production incentives within the European Community.⁵² While it may be fairly said that the Directive has done commendably well in attempting to make a very difficult balance work, problems with the Directive soon become apparent on closer scrutiny.

1. Non-Substantial Extraction and Re-Utilization

¶21 The Directive's first flaw lies in the stifling of derivative innovation.⁵³ Under the Directive, any extraction from a database must be not be "substantial," and "reutilization" of data is not allowed.⁵⁴ This therefore limits the amount of information downstream customers, consumers, or rivals may extract. Where the owner's database contains information not easily replicated, this gives it considerable monopoly power to exclude or exploit those seeking access to that information. The database owner may charge high access prices or limit output. It may also engage in elimination of rivals or exclude potential rivals in the primary markets for data or secondary markets where the data is used derivatively. Conduct like this harms the competitive process, reduces social welfare, and should not be extended beyond the level of appropriability justified by the database right.⁵⁵

¶22 An argument may be raised that factual data is open to the public, and therefore not subject to the tyranny of the database owner. The database owner who overprices its product also risks price competition from those who create identical databases, since third parties always remain free to generate their own databases, since the facts are free.⁵⁶ The law cannot allow others to simply copy the information or arrangement from the first compilation or it would be tantamount to sanctioning them to free ride of the owner's effort and investment. Those who desire the facts must therefore find and arrange the same facts for themselves,⁵⁷ or seek a license from the incumbent owner. If the database owner tries to extract an inordinate license fee, it will risk price competition and market displacement from more efficient second-comers.

¶23 In practice however, this justification ignores the economic realities of the database industry. Commercially successful database industries are often those with few or single sources. Entrants would therefore have to duplicate the initial effort by collecting data independently. This task is at the very least an onerous one, or else monopoly profits would have encouraged more entrants in the long run. Start-up costs are relatively high, the prospects for market-sharing have seldom been realized, much valuable data is unavailable from public sources, and the existence of one complex database seems empirically to constitute a barrier to entry that is seldom overcome. Where data is not

⁵² Neeta Thakur, Database Protection in the European Union and the United States: The European Database Directive as an Optimum Global Model, 1 INTELL. PROP. Q. 101, 102 (2001).

⁵³ Hugenholtz, *supra* note 22.

⁵⁴ C.D. Freedman, *Should Canada Enact A New Sui Generis Database Right?* 13 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 35, 92-94, (2002).

⁵⁵ See Richard A. Posner, *The Social Costs of Monopoly and Regulation*, 83 J. POL. ECON. 807 (1975); JEAN TIROLE, THE THEORY OF INDUSTRIAL ORGANIZATION 65, 65-92, 169-201 (1990).

⁵⁶ Gregory M. Hunsaker, *The European Database Directive: Regional Stepping Stone to an International Model?*, 7 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 697, 747 (1997).

⁵⁷ For a detailed discussion, see George Wei, *Telephone Directories and Databases: The Policy at the Helm of Copyright Law and a Tale of Two Cities*, 3 INTELL. PROP. Q. 316, 337 (2004).

legally available for second comers to exploit, there is no opportunity to avoid the originator's exclusive rights to prevent extraction or reuse of existing data. Moreover, even if the entrant has the potential to successfully reproduce the database, the reduced expected profits from a duopoly or oligopoly might not justify entering with the burden of such a potentially high fixed cost in the first place. Users and potential competitors of a sole-source database owner can find it nearly impossible to avoid infringing the owner's database right. This can result in a near-absolute monopoly in the primary database market as well as a corresponding downstream monopoly in derivative information products or services. The potential for such distortions in the competitive process to harm consumer welfare is considerable.

¶24 This powerful right to prevent extraction conferred on database makers is subjected to only a small and pitifully weak set of public-interest limitations. Again in theory, any lawful user of the database may extract or reutilize insubstantial parts of its contents.⁵⁸ However, commentators are worried that large amounts of information could be locked away from society and may only be accessible through payment of prohibitive fees.⁵⁹ Beyond the privilege of using insubstantial parts of a database for any purpose, lawful users may also extract the contents of nonelectronic databases for their private purposes. However, they may not extract the contents of electronic databases *even for purely private purposes*.⁶⁰ Accordingly, even paying users would need a separate or additional license authorizing "the permanent or temporary transfer of all or a substantial part of the contents" to another medium.⁶¹ The Directive stipulates that Member States may allow these same users to extract data from either electronic or nonelectronic databases for the limited purpose of "illustration for teaching or scientific research," provided that their purpose is noncommercial and that they credit the source.⁶² Yet, any extraction or reutilization of a substantial part of an electronic database for educational or scientific purposes other than "illustration" will almost certainly run foul of the general provision prohibiting "acts which conflict with a normal exploitation of [the] database or which unreasonably prejudice the legitimate interests of the maker of the database."⁶³

2. Indefinite Duration of Protection

¶25 The second flaw with the Directive stems from the indefinite duration of protection it gives database owners. The term of protection of the database right is fifteen years from the date of completion or from the date it was first made available to the public,⁶⁴ and renewable if there are sufficient alterations to the database for another term.⁶⁵ The provision for a new fifteen-year term of protection based on any substantial qualitative or quantitative change to the contents of the database creates the potential for a database right to last forever.⁶⁶

¶26 This "rolling" database right creates three problems. First, although it is far from clear what constitutes sufficient further investment to justify extension of the term, it seems to be an easy threshold to cross. The Directive suggests that even "verification of the contents of the database"⁶⁷ would be enough to trigger a new term of protection.⁶⁸ Thus, most electronic databases will be updated often enough to attract semi-permanent protection. This runs counter to the core idea of IP protection, where a limited license of monopoly power is conferred by the State in return for

⁵⁸ Directive, *supra* note 2, at art. 8.

⁵⁹ Jacqueline Lipton, *Information Property: Rights and Responsibilities*, 56 FLA. L. REV. 135, 147 (2004).

⁶⁰ Directive, *supra* note 2, art. 3.

⁶¹ *Id.* art. 7.

⁶² *Id.* art. 6.

⁶³ *Id.* art. 7.

⁶⁴ *Id.* art. 10.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.* recital 55.

contribution to the existing pool of knowledge in society.⁶⁹ Second, while a relatively large number of database cases have been decided in various jurisdictions, most assume that subject matter which constitutes a database is self-evident. This suggests that it may be relatively easy for a diverse variety of subject matter to qualify as a database.⁷⁰ The corollary to easy qualification is a potential for pervasive interference by database owners over the market for information contained in their databases. Cases have shown how easy it is to infringe the database right. In *British Horseracing Bd. Ltd. v. William Hill Org. Ltd.*, the court held that indirect extraction and re-utilization of a *dynamic* database amounted to infringement.⁷¹ With its broad definition of databases and low threshold for protection, the Directive may in effect grant a perpetual monopoly over increasing swaths of public domain information. Third, the Directive does not indicate whether extensions to term relate only to the added material, or to the database as a whole.⁷² If protection is accorded only to newly added material, it creates an administratively onerous task for the court. Quite apart from the difficulties of tracing the infringing material to the database, the court must also ascertain whether each alleged breach concerns the new material or the old. Commentators have noted that the Directive casts a net that is too broad, too unchecked by institutional balancing mechanisms, and too uncertain in many of its provisions. Indeed, some have taken the extreme view that the situation is dire enough that the Directive should be repealed in its entirety as soon as possible.⁷³

¶27 An earlier version of the Directive contained a provision on compulsory licensing that would have come into force if the information could not be obtained freely from other sources. This reflected the concerns of a monopolization of information expressed during the Directive's drafting.⁷⁴ These provisions were deleted from the final Directive. All that is left of the compulsory licensing scheme originally envisaged is Recital 47, which cautions that:

[I]n the interests of competition between suppliers of information products and services, protection by the *sui generis* right must not be afforded in such a way as to facilitate abuses of a dominant position, in particular as regards the creation and distribution of new products and services which have an intellectual, documentary, technical, economic or commercial added value.⁷⁵

¶28 However, even allowing for the compulsory licensing provision, the ills of database rights are not satisfactorily addressed. Compulsory licensing is a blunt instrument that forces access without carefully calibrating the extent of access needed and the amount of compensation sufficient to protect the right holder's interests and investments. Further, it puts courts in a position of constant supervision and interferes deeply with business decisions, including *ex ante* incentives to invest in databases.

¶29 Instead of a compulsory licensing provision, E.U. legislators decided to ensure proper access to databases through two provisions. First, Article 13 expressly subjects all rights granted under the Directive to the laws on restrictive practices and unfair competition of the Member States.⁷⁶ Second, Article 16 of the Directive provides for a monitoring rule obliging the Commission to examine the application of the *sui generis* right, and "whether the application of this right has led to abuse of a dominant position or to other interference with free competition which would justify appropriate

⁶⁹ Mark A. Lemley, *Property, Intellectual Property and Free Riding*, 83 TEX. L. REV. 1031 (2005).

⁷⁰ See, e.g., Case C-338/02, *Fixtures Marketing Ltd. v. Svenska Spel AB*, 2004 E.C.R. I-10497 (suggesting that databases should be construed widely).

⁷¹ Case C-203/02, *British Horseracing Bd. Ltd. v. William Hill Org. Ltd.*, 2004 ECJ CELEX LEXIS 598 (Nov. 9, 2004).

⁷² CORNISH & LLEWELLYN, *supra* note 26, at 789.

⁷³ Stephen M. Maurer et al., *Europe's Database Experiment*, 294 SCI. 789, 790 (2001).

⁷⁴ *Commission Proposal for a Council Directive on the Legal Protection of Databases*, art. 8, COM (92) 24 final (May 13, 1992), available at http://ec.europa.eu/prelex/detail_dossier_real.cfm?CL=en&DosId=20478 (last visited Nov. 6, 2006). See also Guido Westkamp, *Balancing Database Sui Generis Right Protection with European Monopoly Control Under Article 82* (2001) E.C., 22 EUR. COMPETITION L. REV. 13, 14.

⁷⁵ Directive, *supra* note 2, recital 47.

⁷⁶ *Id.* art. 13.

measures being taken, including the establishment of non-voluntary licensing arrangements.”⁷⁷ It is to a study of the interaction between antitrust law and database rights that we now turn.

III. ANTITRUST LAW

¶30 Many legal systems today monitor the exercise of IPRs within the framework of antitrust law, even though they are already internally regulated through IP legislation.⁷⁸ Cases involving the abuse of database rights as such have not been considered within the context of antitrust laws of Australia, the United States and Singapore as of yet. However, the European Court of Justice (ECJ) has had the opportunity to consider databases protected by copyright, and provides a useful canvas for discussion. Although there are some differences in the antitrust laws of the United States, Australia, Singapore, and the European Union, the underlying principles are sufficiently similar for meaningful comparative study and cross-application.

A. Theoretical Foundations at the Interface of Database Rights and Antitrust law

¶31 There is a degree of consensus on the idea that IP and antitrust laws have distinct and complementary roles.⁷⁹ IP laws function *ex ante* to determine the threshold for granting IPRs as well as the scope and duration that the IPRs may be exploited. Through statutory and common law defenses, IP law also attempts to protect the public’s *noncommercial* interests. For example, fair dealing allows insubstantial use of copyrighted material for the purposes of private research, current affairs reporting and criticism.⁸⁰ Similarly, disclosure and compulsory licensing provisions for nonworking of patents ensure that the public benefits from the grant of a limited economic patents monopoly.⁸¹ In contrast, antitrust law functions *ex post* to regulate the exercise of IPRs following the grant. It protects the public’s *commercial* interests by ensuring that IPR owners do exercise their rights to the extent granted for the specific subject matter so that market competition is not distorted and consumer welfare is not harmed.⁸²

¶32 In the context of databases, a database owner may, by virtue of its dominant market position, have the power to unilaterally block rivals’ access to information and compete using exclusionary rights conferred by database legislation. For example, were the owner of telephone listings in *Feist* conferred rights over those listings, it could foreclose derivative markets for creating an online database containing the medical history based on extraction of data in those telephone listings. If such conduct were found to be anticompetitive, the court would likely grant a compulsory license requiring the owner to grant access to makers of the medical database. In this regard, cases involving such unilateral refusals to deal cut to the heart of the database owner’s right to prevent others from using his or her IP: an obligation to license conflicts directly with the rights granted to an IP owner by IP laws. Thus, as a general rule there is no obligation under antitrust law either to use or license protected works.⁸³ Despite this, commentators have acknowledged that antitrust law has an important complementary role to play beside endogenous regulatory mechanisms that IP law might provide in regulating access to database content.⁸⁴

⁷⁷ *Id.* art. 16.

⁷⁸ See ORG. FOR ECON. COOPERATION AND DEV., OECD REPORT ON COMPETITION POLICY AND INTELLECTUAL PROPERTY RIGHTS 6 (1989).

⁷⁹ While IP and competition laws have similar goals, there is often tension in the means that they go about achieving these goals. See MARK LEMLEY ET AL., SOFTWARE AND INTERNET LAW 545 (2000).

⁸⁰ CORNISH & LLEWELLYN, *supra* note 26, at 434-36.

⁸¹ *Id.* at 291-94.

⁸² Of course, it may be argued that defenses and exceptions in IP law also protect dynamic competition by fostering innovation and therefore promote the public’s commercial interests. But the assertion here is simply that competition law plays a complementary role to IP law in ensuring the access-incentive balance through its greater focus on the commercial aspects of market conduct.

⁸³ Case 238/87, *AB Volvo v. Erik Veng (UK) Ltd.*, 1988 E.C.R. 6211, 4 C.M.L.R. 122.

⁸⁴ CORNISH & LLEWELLYN, *supra* note 26, at 789. (“Beyond this [endogenous regulatory mechanism] lie the corrective measures which may be taken against abuse of dominant position under Art. 8[2] of the Rome Treaty. The *Magill* case authorises

It is useful to begin the discussion by considering the archetypal scenarios involving abuse of database rights with regard to access:

Scenario 1: The complainant (X) argues that A's refusal to grant access to A's database prevents X from entering the market, and that this reduces consumer choice, protects A's downstream activities deriving from the database right from competition and thus keeps prices for the downstream product too high. It further argues that the cost of X establishing its own database as an alternative to A's database would be prohibitive and would cancel out the potential advantages it is able to offer consumers. A argues that there are intrinsic advantages in keeping both the upstream and downstream activities in house because of economies of scale. The so-called benefits X claims to be able to deliver to customers if only it could gain access to A's upstream database belong to A as a reward for having built up the database in the first place. Competition and consumer interests are adequately protected by the fact that A faces actual or potential competition from firms who supply alternative "bundles" of upstream and downstream products to consumers.⁸⁵

Scenario 2: X argues as above. However, X seeks to produce a rival database for the same market as A. A argues that refusing access to rivals in horizontal markets constitutes a legitimate exercise of the specific subject matter of its database rights.⁸⁶

Within each scenario, plaintiffs seeking access have canvassed two arguments, one based on leveraging, and the other based on the essential facilities doctrine (EFD). These arguments are as follows:

Argument 1 (Leveraging): A, by refusing access to the database is leveraging its monopoly power into a downstream market for derivative products.⁸⁷ This argument also refers to leveraging power from one product to another, as in tying cases. A maintains its monopoly power while preventing rivals from offering new products in downstream markets which depend on the incumbent's proprietary information. Alternatively, A may have competed successfully to gain dominance, but has since stagnated in its efforts to innovate and is using its monopoly power to prevent more efficient competition from appearing. In either case, leverage tactics have three characteristics in common. First, the effort to maximize monopoly returns makes them exploitative in nature. Second, they restrict the competitive process by preventing rivals and customers from gaining access, and are therefore exclusionary. Third, the restrictive impact of the conduct is felt at a point removed from the source of power. Such conduct may be prohibited under antitrust laws where there is lack of a legitimate justification.

Argument 2 (Essential Facilities Doctrine): The second, more potent, argument is that the database constitutes an essential facility. A therefore owns a facility that cannot plausibly be duplicated, and participates in a competitive downstream market that requires access to the facility. By denying access to the facility, A either eliminates downstream competition or imposes significant costs on competitors.⁸⁸ This sort of monopolization does not require any anticompetitive "conduct" in the affirmative sense. The EFD eschews the investment rationale for protecting monopoly power

the imposition of compulsory licenses where, exceptionally, it is found that intellectual property is being licensed only on unacceptable terms. This power could prove to be of some significance in relation to database right, where the owner refuses any license at all or offers terms so extravagant as to have the same effect.⁸⁹)

⁸⁵ KRISTY MIDDLETON, BARRY RODGER & ANGUS MACCULLOCH, *CASES AND MATERIALS ON UK AND EC COMPETITION LAW* 353 (2003).

⁸⁶ *See, e.g.*, Case C-418/01, *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, 2004 E.C.R. I-5039.

⁸⁷ *See, e.g.*, *United States v. Griffith*, 334 U.S. 100 (1948); *Commercial Solvents v. Comm'n*, 1974 E.C.R. 223.

⁸⁸ *See, e.g.*, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985); *B&I Line, P.L.C. v. Sealink Harbours, Ltd.*, 5 C.M.L.R. 255 (1992); *Sea Containers v. Stena Sealink*, 1994 O.J. (L 15) 8.

in databases and imposes a positive obligation to share IP with rivals. The typical paradigm for market essential facilities is a “bottleneck” through which rivals must be allowed to pass lest competition be foreclosed.⁸⁹

B. Regulating Abuse of Database Rights: Lessons from Europe

¶35 Antitrust law articulates the concerns inherent in the Directive and provides an additional check by imposing special responsibilities on database owners who are granted a dominant position and are able to damage effective competition in markets by preventing access to markets or driving out existing competition. Article 82 of the Treaty of Rome (EC Treaty)⁹⁰ prohibits abuse of a dominant position through unilateral anticompetitive behavior, and may be invoked in cases of unilateral refusals to license IP, alleged tying arrangements, and anticompetitive IP enforcement actions, where this affects trade between Member States.⁹¹

¶36 The leading cases in Europe are *Radio Telefis Eireann and Independent Television Publications Ltd. v. Commission of the European Communities*⁹² (*Magill*) and *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*⁹³ (*IMS Health*). It is worth noting from the onset that while both cases were brought on the premise of copyright, in reality they dealt with access issues more properly framed within database rights.⁹⁴ *Magill* and *IMS Health* are important and interesting cases to consider for several reasons. *Magill* is a Scenario 1 case involving two vertically related parties, where the downstream firm seeks data unique to the upstream incumbent. In contrast, *IMS Health* is a Scenario 2 case, involving a rival seeking horizontal entry to serve the incumbent’s customer base. In both cases, claims of leveraging and essential facilities were considered, either implicitly or explicitly, with opposite conclusions reached in each case.⁹⁵

⁸⁹ For a useful summary of the EFD, see Sergio Baches Opi, *The Application of the Essential Facilities Doctrine to Intellectual Property Licensing in the European Union and the United States: Are Intellectual Property Rights Still Sacrosanct?*, 11 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 409 (2001).

⁹⁰ Art. 230.

⁹¹ Article 82 provides:

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

- (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- (b) limiting production, markets or technical development to the prejudice of consumers;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

For the purpose of comparison locally, Article 82 may be compared to Section 46 of the Singapore Competition Act 2004 (Cap 46) which provides:

- (1) Subject to section 48, any conduct on the part of one or more undertakings which amounts to the abuse of a dominant position in any market in Singapore is prohibited.
- (2) For the purposes of subsection (1), conduct may, in particular, constitute such an abuse if it consists in —
 - (a) predatory behaviour towards competitors;
 - (b) limiting production, markets or technical development to the prejudice of consumers;
 - (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; or
 - (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of the contracts.
- (3) In this section, “dominant position” means a dominant position within Singapore or elsewhere.

⁹² Case C-241/91, *Radio Telefis Eireann & Indep. Television Publ’ns Ltd. v. Comm’n*, 1995 E.C.R. I-743.

⁹³ Case C-418/01, *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, 2004 E.C.R. I-5039.

⁹⁴ The Directive had not yet been implemented at the time of hearing for both cases. See Donna M. Gitter, *The Conflict in the European Community Between Competition Law and Intellectual Property Rights: A Call for Legislative Clarification of the Essential Facilities Doctrine*, 40 AM. BUS. L.J. 217 (2003).

⁹⁵ Case C-7/97, *Oscar Bronner GmbH & Co. KG v. Mediaprint*, 1998 E.C.R. I-7791, ¶ 35 (opinion of Advocate General Jacobs) (“The Court has not as yet referred in its case-law to the essential facilities doctrine. Nevertheless it has ruled in a number of cases concerning refusal to supply goods or services.”). See also Valentine Korah, *The Interface Between Intellectual Property And*

1. *Magill*

¶37 *Magill* TV Guides sought to publish a weekly guide to all television programming on the channels then broadcasting in Ireland. At that time, there were three companies broadcasting in the Irish market, and each published its own weekly guide. The broadcasting companies claimed copyright in their respective weekly guides, and sued *Magill* for copyright infringement. However, *Magill* asserted that the broadcasting companies had violated Article 82 by refusing to grant it a license under their copyright. The Commission found a violation under Article 82(b), because the refusal to license prevented the introduction of a new product for which there was consumer demand. The court agreed, holding that in special circumstances, the three television stations were required to license the copyright in their listings to *Magill*. It referred to the special circumstances of the case, but did not specify precisely the facts that were exceptional. It stated that:

- The television stations were the only sources of the basic information,⁹⁶ their refusal to supply this information prevented the appearance of a new product that the stations did not offer and for which there was potential consumer demand;⁹⁷
- There was no justification for the refusal⁹⁸; and
- The stations reserved to themselves the secondary market of weekly TV guides, by excluding all competition on that market.⁹⁹

¶38 *Magill* therefore established that a refusal to license IPRs could, in certain circumstances, violate Article 82, as well as empowered the Commission to impose compulsory licensing as a remedy for a violation of Article 82. The ECJ decided that the policy of maintaining effective competition in secondary markets can in exceptional circumstances trump the policy of encouraging innovation and investment in technological progress. *Magill* recognized that in a two-market situation, antitrust law needs to intervene to protect against leveraging that forecloses the downstream competition to other competitors. However, *Magill* arguably presents a more extreme version of a Scenario 1 type situation. Not only did the defendant use its copyright to block entry by a downstream entrant, it did not and could not provide the consolidated TV guides that customers wanted. At the same time, it clearly held an essential resource required to produce that guide.

2. *IMS Health*

¶39 In *IMS Health*, the court had the opportunity to refine the “special circumstances” test. IMS, the largest supplier in the world of information on sales and prescription of pharmaceutical products, divided the German territory into 1860 “bricks.” It claimed intellectual property rights in the 1860-brick structure pursuant to a provision in German copyright law transposing the Directive. Until 1999, IMS was the only firm providing regional data in Germany. Then two firms, NDC and AzyX, entered the market and tried to base the information they supplied on different geographic zones, but discussions with customers showed that this would not be marketable because it would not correspond to the territorial divisions already in use. The new entrants then started using IMS's brick system until they were sued successfully for infringement of copyright. Without conceding their infringement, NDC and AzyX brought a complaint before the Commission contending that, notwithstanding its intellectual property protection, IMS must grant its competitors a compulsory license for this database. Invoking the EFD, IMS's competitors argued that IMS abused its dominant market position by refusing, without objective justification, to license a facility that is essential for the supply of services.¹⁰⁰ IMS countered that such an interpretation of the EFD would render IP

Antitrust: The European Experience, 69 ANTITRUST L.J. 801 (2002).

⁹⁶ *Radio Telefis Eireann*, 1995 E.C.R. I-743 at ¶ 53.

⁹⁷ *Id.* at ¶ 54.

⁹⁸ *Id.* at ¶ 55.

⁹⁹ *Id.*

¹⁰⁰ Commission Decision 01/165, Relating to a Proceeding Pursuant to Article 82 of the EC Treaty (Case COMP D3/38.044, *NDC Health/IMS Health: Interim measures*), 2002 O.J. (L 59) 18, ¶¶ 18-19, 25, available at <http://eur-lex.europa.eu/en/repert/0830.htm> (locate entry “32002D0165,” then select “html” or “pdf” format).

protection granted under national law ineffective, thereby deterring investment and innovation. In refusing access to IMS's database, the court laid down four concurrent conditions required to find that the refusal by a copyright holder in a dominant position is abusive:

- 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.¹⁰¹

C. *Balancing Incentives and Access*

¶40 It is often said that intellectual property law and competition are at odds. One confers a monopoly and the other seeks to prevent it. Such allegations are not without truth. National legislatures have recognized the need to ensure creators of intellectual goods appropriate rewards of their efforts as an incentive to foster future innovation by the owner, and others seeking the prize of temporary monopoly profits. In addition, intellectual property law contains a finely tuned mechanism to ensure that future innovation by rivals and later innovators are not impeded by a barrage of exceptions and limitations in scope and duration of rights. The astute reader would notice that this sophisticated mechanism may work splendidly *ex ante* to the grant of the right, but its ability to referee access *ex post* is limited. It makes no distinction between the fresh entrant who has yet to appropriate its due returns and the incumbent feasting off persistent monopoly rewards. Nor in granting access does it look to who desires it and what effect that might have on the right owner. In particular, it makes no distinction between downstream rivals and those in the primary market where the intellectual property itself is situated. It is proposed that antitrust law meets both by taking into account the monopoly power of the database owner, as well as its position relative to those seeking access.

1. *Requirement of Dominance*

¶41 Antitrust law has built-in safeguards that must be satisfied before it intervenes in the exploitation of database rights. The threshold requirement is that the owner must be found to occupy a dominant position in a particular market. The exercise of exclusive rights by database owners, even those owning sole-source databases, does not indicate dominance.¹⁰² In accordance with the policy considerations underlying grants of copyright and patent protection, database owners are allowed to appropriate the revenues stemming from their investment or creation, and refusing access should be deemed legal when they purport to protect the owner's lawful return. Prohibiting property owners from "reap[ing] where they have sown"¹⁰³ negates their property rights and incurs the kind of cost that competition policy seeks to avoid. The courts have limited "prohibited conduct" to activity that departs from normal practices expected from firms in that particular industry.¹⁰⁴ Courts may also consider whether a dominant firm's practices limit competition to no greater extent than is necessary to vindicate legitimate interests.

¶42 To justify interference, there must be a further finding that there are so few substitutes for the protected product or technology that the owner has the power, in a relevant product market, to be

¹⁰¹ Case C-418/01, *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, 2004 E.C.R. I-5039 at ¶¶ 38, 52.

¹⁰² *Radio Telefis Eireann*, 1995 E.C.R. I-743 at ¶ 46 ("So far as dominant position is concerned, it is to be remembered at the outset that mere ownership of an intellectual property right cannot confer such a position.")

¹⁰³ WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 13 (2003).

¹⁰⁴ Case 85/76, *Hoffman-La Roche v. Comm'n*, 1979 E.C.R. 461, 3 C.M.L.R. 211 at ¶ 91 (defining "abuse" by referring to methods "different from those which condition normal competition"). *But cf.* STEVEN D. ANDERMAN, *EC COMPETITION LAW AND INTELLECTUAL PROPERTY RIGHTS: THE REGULATION OF INNOVATION* 184 (1998) (noting that "normal" competition is assessed by reference to competition policy concerns, not by reference to customary commercial practice).

able to prevent effective competition from being maintained in that market.¹⁰⁵ In general, high market share is a key initial indicator of dominance,¹⁰⁶ although regulators are likely to look more broadly to the ability of the allegedly dominant firm to control prices in the face of pressure from competitors and to erect barriers to entry. Both issues turn on determining what constitutes the relevant market. Generally, the court treats IP product markets as being narrowly defined in terms of consumer demand, even though the database owner may have every sound commercial reason to include supply-side considerations as well.¹⁰⁷ For example, in *Volvo*,¹⁰⁸ the issue arose whether the market for spare parts was separate from the market for new cars. It may have made perfect sense for car firms to view it as one market so that they could keep their car prices low to compete and take their profits in the after-sales maintenance market. However, the court distinguished between the individual purchasers of cars who might welcome the “package deal,” and those interested only in repairs.¹⁰⁹ This suggests that, as long as there is one specific group of consumers that demands a product that can be met by some other substitute product, it should qualify as a separate market. By narrowly defining the particular market in this manner, competition policy recognizes the real potential of database rights impeding competition in the position of dominance held by the database owner. This places a special responsibility on the owner to act in a way that does not impede effective competition to the prejudice of consumers.¹¹⁰ At the same time, competition policy sets out guidelines demarcating exceptional circumstances when antitrust law would interfere with the exploitation of database rights.

¶43 Antitrust law will also consider the degree of protection the information deserves in granting access. Like the owners of factual information in *Magill*, database owners can impede effective competition and discourage innovation via add-on products. One need only think of the tremendous impediment to progress that Celera, as one of the main owners of information relating to the decoded human genome, could cause if it were to act as the defendants in *Magill* did in preventing the appearance of revolutionary life-saving pharmaceutical products. While the information in *Magill* required little resource and investment to obtain, the opposite is true of the information in *IMS Health*. There, the court recognized that to order compulsory licensing simply because IMS's creation has emerged as the strong preference of the pharmaceutical industry due to its legitimate business practices would in fact punish IMS for its own success.¹¹¹ The court also noted that IMS had expended much money and effort in developing its database, and might not have done so had it not expected to exclude its rivals. Seen in this way, the justification for protecting IMS's rights in its database is clearly distinguishable from the copyright in television listings at issue in *Magill*, where enforcement of compulsory licensing for television listings would not likely impact the production and release of program listings. Indeed, the broadcasters would have the same incentive to produce and disseminate programs regardless of whether or not they were protected from competition in the television guide market.

2. Distinction Between Primary and Derivative Markets

¶44 Antitrust law also makes a distinction between the primary market where the IPR is exercised and the secondary derivative market that exceeds the scope of interference to market competition allowed by IP law. Where parties are competitors that exist at a horizontal level as in *IMS Health*, antitrust law is more willing to allow market forces to play out the result undisturbed. IMS enjoyed

¹⁰⁵ Case 27/76, *United Brands v. Comm'n*, 1978 E.C.R. 207, ¶¶ 1, 2.

¹⁰⁶ Case 85/76, *Hoffman-La Roche v. Comm'n*, 1979 E.C.R. 461 ¶ 5.

¹⁰⁷ See Case 22/78, *Hugin v. Comm'n*, 1979 E.C.R. 1869.

¹⁰⁸ Case 238/87, *AB Volvo v. Erik Veng (UK) Ltd.*, 1988 E.C.R. 6211, ¶¶ 5-9 (opinion of Advocate General Mischo).

¹⁰⁹ *Id.* at ¶¶ 8-9.

¹¹⁰ H.H. Paul Lugard, *ECJ Upholds Magill: It Sounds Nice in Theory, But How Does It Work in Practice?*, 6 EUR. BUS. L. REV. 231, 233 (1995) (stating that the *Magill* doctrine “is only to be reckoned with” in cases “where the creator of factual information is also the only source of that information (and such information happens to be protected under national copyright law),” and citing databases as one example).

¹¹¹ Case C-418/01, *IMS Health GmbH & Co OHG v. NDC Health GmbH & Co KG*, 2004 E.C.R. I-5039.

no separate market for the brick structure and derived its primary benefit from excluding others from using this system to organize pharmaceutical sales data. To impinge on its exercise of those rights in a horizontal context would be to eviscerate them completely, for there can be no more fundamental exercise of rights in telephone listings than in the telephone listing markets itself. Therefore, access to primary markets, even where it concerns an essential facility, is allowed only in the most stringent cases, where the essential facility cannot be duplicated by any entity.¹¹² Even so, the compensation paid must adequately reflect that risk involved in the investment.¹¹³

¶45

In contrast to the deferential approach taken in primary markets, courts will rule more heavily in preventing downstream abuse. This approach has been justified on the grounds that the return and incentives from control over exclusive exploitation in secondary markets is sharply distinct from exploitation in the primary market.¹¹⁴ In exploiting its database rights in the primary market, the owner has already been rewarded according to any fair expectations it might have under the database legislation. Therefore, where the dominant undertaking acted in a secondary downstream market to reinforce its dominance in the primary market, it is still abusive, even if it occurred in the secondary market.¹¹⁵ This safeguard ensuring access for derivative markets is particularly important in the case of databases. In the absence of any equivalent to the idea-expression doctrine offered under the Directive, investors in effect obtain proprietary rights in data through the exclusive database right. Many databases are specialized single source databases, with few or no viable alternative sources to that information. It is therefore important that equitable access be granted to competitors and consumers where the exercise of the right threat prejudices the greater public interest in technological development and economic efficiency. Even then, as *Magill* shows, regulators will still consider the ease of obtaining a substitute and examine whether the database owner is preventing the appearance of a new product for which there is a real potential consumer demand.

¶46

It has been recently said that rivals seeking access to duplicate the owner's database as in *IMS Health* should be allowed to do so.¹¹⁶ The argument goes that since providing a substitute is not feasible given the fact that the database has become a de facto standard, access should be given in the interests of fostering competition for its own sake. This will ensure that even if dynamic efficiency is not fostered through innovation, at least allocative efficiency will be achieved through price competition. Such notions reveal a lack of understanding of the subtleties of the interface between the two regimes, and should be decisively rejected. Making inroads into the primary market potentially voids the basis of intellectual property protection. Courts in the United States and European Union have both recognized the IP owner's right to exploit its property to the full extent of its relevant market, barring a clear showing that it is an essential facility. Of course, no case to date has gone so far as to deem IP rights in themselves to be essential facilities. Indeed, to do so would border on usurping the legislation's role in changing the scope of IP law. Further, granting access discounts the competition and business decision that occurred ex ante to forming the standard. On the former, the incumbent may well have been the most efficient competitor that triumphed in a

¹¹² As the Court in *Oscar Bronner* held:

[I]n order for refusal of access to amount to an abuse, it must be extremely difficult not merely for the undertaking demanding access but for any other undertaking to compete. Thus, if the cost of duplicating the facility alone is the barrier to entry, it must be such as to deter any prudent undertaking from entering the market. In that regard it seems to me that it will be necessary to consider all the circumstances, including the extent to which the dominant undertaking, having regard to the degree of amortisation of its investment and the cost of upkeep, must pass on investment or maintenance costs in the prices charged on the related market

Case C-7/97, *Oscar Bronner GmbH & Co. KG v. Mediaprint*, 1998 E.C.R. I-7791, ¶ 66 (opinion of Advocate General Jacobs).

¹¹³ *Id.* ¶ 64 (noting that, where "competition can be achieved only by requiring a dominant undertaking to supply the product or service or allow access to the facility," the undertaking "must be fully compensated by allowing it to allocate an appropriate proportion of its investment costs to the supply and to make an appropriate return on its investment having regard to the level of risk involved.")

¹¹⁴ *Westkamp*, *supra* note 74.

¹¹⁵ Case C-62/86, *AKZO v. Comm'n*, 1993 E.C.R. II-389.

¹¹⁶ Josef Drexler, *IMS Health and Trinko—Antitrust Placebo for Consumers Instead of Sound Economics in Refusal to Deal Cases*, 35 *INTERN. REV. OF INTELL. PROP. & COMPETITION L.* 788 (2004).

market structure that tends toward monopoly. To this, the rebuttal is that the incumbent may have simply entered a “thin” market and prevailed simply by being the first comer, rather than winning by skill or efficiency. Accordingly, competition policy still has a legitimate interest in ensuring that later innovators can enter and provide consumers with a superior product. However, it is difficult to see how superior a product can be, if it requires access to facilitate heavy duplication of the incumbent’s technology. Further, the incumbent may well have decided not to invest in the first place had it known that the returns on its investments would be eroded by the law granting compulsory access to rivals, leaving consumers without the benefit of *any* product.

D. Limitations in Application of Antitrust law

¶47 While it is tolerably clear that antitrust law has an important role in ensuring the “access-incentive” balance in the exploitation of database, it is equally important courts and regulators are aware of its limitations.

¶48 Database rights are essentially rights conferred in recognition of labor and investment, rather than creativity or innovation. The cost and resources required to construct a commercially viable database severely limits the number of possible players, and a finding of dominance often makes vulnerable to a conclusion that the defendant holds a de facto monopoly in downstream markets.¹¹⁷ This may be evinced in *Magill*, where the court held that dominance was established because the defendant not only owned relevant IP, but also enjoyed a de facto monopoly in the TV listings market.¹¹⁸ Similarly, the European Competition Commission alleged that the 1860-brick structure at issue in *IMS Health* was an industrial standard, and therefore subject to application of the EFD. A narrow definition of a product market will likely eliminate all possible substitutes, resulting in databases being deemed as a “sole-source” or conferring a de facto monopoly.¹¹⁹

¶49 The problem with this argument justifying intervention is that the relevant market is established with regard to factual information the defendant owns, and the derivative market is the market where this information is exploited. Dominance is effortlessly established, without regard for the availability to the market effect of such a refusal. For example, a broadcaster may have a 10% market share in TV programs, but by defining the relevant market with respect to its TV listings, it would have a 100% market share over an “essential facility.”¹²⁰ This shoddy analysis puts the cart before the horse and should be decisively rejected. A related, but more complicated, problem is that the market where database rights may be exploited has been legislatively determined through specific provisions evoked in its grant. It is common for IP rights owners to exploit related markets, as commonly seen in movie and video game industries, where blockbuster movies are made into video games and vice versa.¹²¹ In this sense, the relevant market for IP law may encompass several antitrust law markets.¹²² An example of where IPRs should not extend to derivative markets arises in situations like the *Volvo* case, involving refusals to supply spare parts to independent repairers or decisions to stop producing spare parts.¹²³ In these cases, a plaintiff seeks to extend its design rights to a derivative market of automobile maintenance where it has not been granted exclusive rights. However, it is hard to see how that same reasoning is applicable to *Magill*, where the defendant sought to extend its copyright to the derivative market that *was* protected by copyright. Considering this fact apart from the other

¹¹⁷ See ANDERMAN, *supra* note 104, at 247.

¹¹⁸ Case C-241/91, *Radio Telefis Eireann & Indep. Television Publ'ns Ltd. v. Comm'n*, 1995 E.C.R. I-743.

¹¹⁹ *Id.* ¶ 45 (“For IPO, the concept of “factual monopoly” appears to be an artificial construct whereby the Commission seeks to justify the use of competition law in order to change the specific subject-matter of copyright.”).

¹²⁰ See Westkamp, *supra* note 74, at 16 (“Dominance can effortlessly be established since here it is the third party who would determine to which information access is required.”).

¹²¹ This argument was put forward by the defendant in the *Magill* case. *Radio Telefis Eireann*, 1995 E.C.R. I-743 at ¶ 35 (“[C]opyright owners ordinarily and naturally exercise their copyright in order to restrict competition with their own product by other products made using their copyright material, *even on a derived market.*”) (emphasis added).

¹²² *In re Indep. Serv. Orgs. Antitrust Litig.*, 85 F. Supp. 2d 1130, 1151 (D. Kan. 2000) (“In particular, the Court agrees that a single patent may implicate multiple antitrust markets.”).

¹²³ Case 238/87, *AB Volvo v. Erik Veng (U.K.) Ltd.*, 1988 E.C.R. 6211.

incriminating factors, there was no justification for antitrust law intervention based on the defendant extending its monopoly power to an adjacent market unprotected by IPRs. The refusal to authorize reproduction of works protected by copyright did not go beyond that of merely securing the exclusive reproduction right, and yet was condemned as anticompetitive.¹²⁴

¶50 One commentator suggests that this can be explained thus: when an IP-protected product reaches the status of an industrial standard, *whether because of its legal monopoly or not*, it falls within the scope of Article 82.¹²⁵ This view finds support in *Magill* heard at first instance. The court held that where there was consumer demand in an ancillary market, this went beyond the “essential function” of copyright. The defendant’s refusal to authorize third parties to publish its weekly listings was not justified by the specific needs of preserving copyright. Thus, all circumstances involving a refusal to license others, even where there is no extraneous abusive conduct other than the refusal to license will be relevant for a finding of anticompetitiveness.

¶51 The problem here is that mere exploitation of an industrial standard without regard for rivals has never been itself viewed as abusive under European law.¹²⁶ A firm that has achieved a market standard by virtue of its investment in R&D and IP protection is normally entitled to continue to compete by exercising its exclusionary rights even in “aftermarkets.” To find a refusal to supply or license abusive, something more must be shown by the competition authorities to allow the imputation of an abusive motive to the IP owner’s conduct other than a refusal to supply or license as such.

¶52 Ultimately, application of antitrust law to IP cases where owners have a prima facie right to unilaterally refuse license is a complex matter. By encroaching on the lawful prerogatives conferred by database legislation, antitrust law may ultimately undermine its in-built system of rewards, and threaten investment and innovation. Database rights, like other IPRs, have internal regulatory mechanism preventing abuse. These include limitations in scope, length, and subject matter of exploitation, through defenses and exceptions. While there is nothing within the EFD or leveraging that inherently derails innovation, overbroad application can lead to perverse results. For example, the economic logic underlying claims that a dominant database owner can use its power in one market to leverage into another and then charge monopoly prices has been cast into doubt.¹²⁷ The reasonable conclusion is that it is ordinarily impossible to obtain “two monopolies for the price of one,” but that in certain circumstances market imperfections may give a dominant owner an incentive to transfer its power to another market. The logical problem with the leverage story is that the upstream monopolist’s price was already computed on the premise that the downstream market is competitive. Consumer demand is based on the price for the whole.¹²⁸

¶53 Further, as *Magill* shows, if one regards the idea of essentiality loosely enough, there seems little reason to distinguish EFD analysis from that of conventional leveraging cases. Indeed, there is a danger that courts may apply the EFD in a leveraging context without extensive consideration of the extent to which the dominant firms hold a dominant position in the downstream market. If niche markets are selected as relevant, many facilities will be found to be essential.¹²⁹ In part, this may reflect a preference for many essential facilities, the defendant was less an innovator and more the

¹²⁴ R. Reindl, *The Magic of Magill: TV Program Guides as a Limit of Copyright Law?*, 1 INT’L REV. OF INTELL. PROP. & COMPETITION L. 60 (1993).

¹²⁵ Steven D. Anderman, Address at Clasf Conference, Does the *Microsoft* Case Offer a New Paradigm for the “Exceptional Circumstances Test” and Compulsory Copyright Licenses Under EC Competition Law? (Sept. 9, 2004).

¹²⁶ Ronald Myrick, *Will Intellectual Property on Technology Still Be Viable in a Unitary Market?*, EURO. INTELL. PROP. REV. 298 (1992).

¹²⁷ See ROBERT BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1993); Louis Kaplow, *Extension of Monopoly: Power Through Leverage*, 85 COLUM. L. REV. 515, 543-45 (1985).

¹²⁸ See HERBERT HOVENKAMP, MARK D. JANIS & MARK A. LEMLEY, *IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY* § 20.2c (2003).

¹²⁹ Advocate General Jacobs warned against a wide concept of essential facilities for reducing the incentive to the original investment, to duplicating it and requiring regulation over the price to be paid for access. See Case C-7/97, *Oscar Bronner GmbH & Co. KG v. Mediaprint*, 1998 E.C.R. I-7791, ¶ 64. See also Guido Westkamp, *supra* note 74 at 21 (“It appears doubtful that the essential facilities doctrine can be applied to information at all.”).

lucky beneficiary of having entered a “thin” market first. The problem with this view is that it ignores the fact that secondary market rivals may also be potential primary market rivals. After all, market definition is more a legal construct than a reflection of bright line distinctions on a production chain. Hence, U.S. courts have been reluctant to adopt this omnibus approach and have often downplayed the use of EFD to the extent of denying its existence, except in the lower courts.¹³⁰

¶54

This makes good sense. The EFD differs from leveraging in two important respects. First, the source of the monopoly power is scrutinized much more carefully than a simple monopoly. Not only do the courts ensure that there is some justification for keeping the monopoly intact, they must also satisfy themselves that there is no reasonable way for competition to be accommodated without access. As a counterbalance to the stricter first requirement, the courts appear to relax the second requirement of abusive conduct. Leveraging appears to require some degree of exclusionary conduct stemming from the monopoly power. A defendant may avoid liability by pleading the benefits of vertical integration. In contrast, a defendant in EFD cases may incur liability simply based on refusals to cooperate. This may take the form of charging license royalties that render effective access impossible.¹³¹ Some recognition of this approach was given in *Oscar Bronner*, where it was stressed that the requirement should be imposed “only in cases in which the dominant undertaking has a genuine stranglehold on the related market,” not where control of the essential facility merely gives the undertaking a competitive advantage.¹³² Second, the EFD departs from its leveraging cousin in terms of remedies. Leveraging remedies begin with identifying the unwarranted advantage in the secondary market to find the corollary remedy. The EFD presumes the remedy: reasonable and nondiscriminatory access, without regard to the specific injury incurred by the complaining party in the second market. This requires some form of judicial supervision over the terms of access, which makes it administratively unattractive.¹³³ Many prominent scholars have argued that the EFD should be abolished outright. Others who favor its continued existence nonetheless concede that it is properly applied only in rare cases.¹³⁴

¶55

Whether or not the database owner is using its IPRs as an instrument to abuse its dominant position can be a difficult question to determine. While the courts have often reiterated that it is the abuse of dominance, rather than dominance itself, that is prohibited, this understates the difficulty for an undertaking to determine how far it can exploit its IPRs in the aggressive markets they operate in. The problem is that the database owner may not think of the market strategy in terms of antitrust law and may have regarded exploitation in the secondary market as important currency to invest. Arguments that stronger rights to promote investment in databases result in anticompetitive conduct tread on dangerous ground. Promoting investment is not only the goal of database law; it is important to competition as well. Discouraging investment, even investment by monopolists, may not promote competition, and instead leaves society saddled with the problems of monopoly without beneficial new products. This is not to say that database rights can never be anticompetitive. However, the cost of errors in punishing investments promoting technological change is rather high. Even ambiguity regarding the legal rules risks deterring effort in creating new databases. Regulators should therefore be cautious about condemning the exploitation of database rights unless they are confident that the conduct in question truly harms effective competition. If the database industry is to accept regulation by antitrust law, then it must prove itself to be capable of more sophisticated regulation.

¹³⁰ *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, L.L.P.*, 540 U.S. 398, 399, 411 (2004) (“The Court’s conclusion would not change even if it considered to be established law the “essential facilities” doctrine crafted by some lower courts . . . [W]e have never recognized such a doctrine . . . and we find no need either to recognize it or to repudiate it here.”).

¹³¹ *United States v. Western Elec. Co.*, 846 F.2d 1422, 1428 (1990).

¹³² *Oscar Bronner*, 1998 E.C.R. I-7791, at ¶ 40.

¹³³ *Id.* at ¶ 69 (finding that accepting Bronner’s contention would lead to intervention that “would not only be unworkable but would also be anti-competitive in the longer term and indeed would scarcely be compatible with a free market economy”).

¹³⁴ Philip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841. *See also* HOVENKAMP, *supra* note 128, at ¶ 7.7 (“The so-called essential facilities doctrine is one of the most troublesome, incoherent and unmanageable of bases for . . . liability. The antitrust world would almost certainly be a better place if it were jettisoned.”).

¶56 It is worth noting that the Competition Commission of Singapore has recently released its Guidelines on the Treatment of Intellectual Property Rights.¹³⁵ These Guidelines chart the manner in which Singapore's newly enacted competition law will be enforced. Without an existing body of case law to guide copyright owners potentially affected by the competition regime, undertakings must carefully scrutinize the wording to determine the boundaries of liability. A core observation is that the Guidelines expressly state the Commission's willingness to treat IPRs as "essential facilities" as long as it can show that there are no "potential substitutes" and that the facility is "indispensable to the exercise of the activity in question."¹³⁶ As in the European Union, controversy will likely arise in Singapore when applying the EFD to rights in databases. This is because those seeking to adjudicate concepts such as "indispensability" and "potential substitutes" may find themselves facing diametrically opposed positions based on sound and established economic theory. By expressly recognizing its applicability to IPRs in general and copyright in particular, the Commission seems to mirror the approach in the recent landmark cases.¹³⁷ It also marks a sharp divergence in earlier E.U. cases, as well as the U.S. position on the essential facilities doctrine. In any case, the Guidelines suggest that the EFD will therefore likely stand as a prominent feature on the Singapore landscape at the interface between copyright and competition law. The issues that have plagued the courts in the European Union and United States are likely to promise interesting times for Singapore as well.

CONCLUSION

¶57 The legal issues raised with respect to the protection of factual compilations are not new, but the speed and complexity of today's business and legal environment make regulation a more daunting task than ever. It is undeniable that if investment in databases is to be encouraged, there must be assurance of sufficient legal protection. It is therefore tempting to respond by instituting an excessively broad and powerful legal monopoly. However, the danger in this is that society trades a chronic state of underprotection for overprotection.

¶58 Data structures are building blocks in the most important scientific and technological pursuits today, and the high social costs resulting from abuse of database rights could adversely affect development strategies. While one may concede that protecting the database industry from market-destructive appropriations constitutes a socially desirable goal, it is equally important to achieve that goal in a manner that preserves the balancing principles inherent in existing IP regimes, which promote both competition and investments in new products and services. Society therefore has reason to guard against database owners who abuse rights conferred by database legislation to deny the public access to information or to prevent competitors from offering a new product derived from information contained in the database.

¶59 Various endogenous means of regulation have been explored and contrasted with antitrust law, and it seems that the latter offers an alternative better reflecting commercial expectations. There is much to be said for shifting the pressure of ensuring access regulation from the stage of the grant of database rights to that of its exercise. The assurance of stronger upfront rights to protect investment would encourage the database entrepreneurship, while ensuring robust action against the errant few who abuse their rights to prevent effective competition. Further, in defining the boundaries between permitted and prohibited conduct, antitrust laws have developed a strong framework of rules to regulating access to information contained in databases, while preserving the incentive to invest in a rapidly growing database industry. However, regulators need to be aware of the limitations of

¹³⁵ COMPETITION COMMISSION OF SINGAPORE, GUIDELINE ON THE TREATMENT OF INTELLECTUAL PROPERTY RIGHTS 2005, available at <http://www.ccs.gov.sg/NR/rdonlyres/A67B68FC-DB6F-415B-9DF1-5A97FC6855A9/6714/CCSGuidelineonIPR20051228websitefinal2.pdf> (last visited Nov. 2006).

¹³⁶ *Id.* ¶ 4.7.

¹³⁷ See *Comm'n v. Microsoft*, Case T-201/04 (2004); *Attheraces v. British Horseracing Bd.*, [2005] EWHC 3015. This will also be discussed in an upcoming paper, tentatively entitled *Copyright Under Siege: An Economic Analysis of the Essential Facilities Doctrine and the Compulsory Licensing of Copyrighted Works*, 2006 SERCI Annual Congress, 29-30 June 2006, in Singapore.

applying antitrust law to a regime delicately tuned with preexisting endogenous checks, as well as the effects of their application on innovation by those spurred on by the assurance of monopoly profits.

¶60

Legislators in the United States, Australia, and Singapore must soon decide the way forward in database protection. If protection is given on a reciprocity basis, the pressure to conform will be significant in order for local database makers to penetrate foreign markets. The modest aim of this paper does *not* go to the extent of suggesting that antitrust law provides a panacea for the access ills of database rights. Indeed, other voices have risen in academia suggesting developing alternative approaches to internal regulation from a principled extension of the protection of computer programs, trade secrets, and even contract law.¹³⁸ Rather, this paper simply suggests that antitrust law provides a viable means of easing access concerns whatever form database protection takes. Ultimately, these rights must promote national competitiveness in an increasingly uncertain global economic landscape. In this regard, a model that incorporates competition policy considerations is an essential first step to the maintenance of an industrial policy that is both sound and sustainable.

¹³⁸ See, e.g., Wei, *supra* note 41, at 350.