Database Protection in Theory and Practice: Three Recent Cases

By Charles C. Huse

Database developers seeking to protect the data they have compiled face a challenge: facts cannot be copyrighted. An arrangement of facts, such as a database, can be copyrighted, but only if it "features an original selection or arrangement" that "possesses at least some minimal degree of creativity." Even then, the copyright in a database only applies to the original selection or arrangement and does not extend to the underlying facts. Thus, others are free to extract facts from the database. If necessary, the entire database may be copied to get the information it contains; such copying is allowed as long as it is done only to extract data for subsequent fair use. Although these principles are well established, companies continue to invoke copyright law to prevent competitors from copying their databases. Three recent cases involving electronic databases show that this tactic, while popular, is ineffective.

The Supreme Court rejected copyright protection for "sweat of the brow" in Feist. The Court allowed Feist to copy data from Rural's telephone books to create a single directory covering multiple calling areas. While Feist involved paper telephone directories, its holding extends to the copying of electronic databases. The increasing prevalence of electronic databases, combined with the near-zero cost of copying provided by digital technology, ensures that disputes over copying only will become more frequent. Still, these cases are not strong examples of the need for new legislation that would provide sui generis database protection. In-

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instead, they illustrate the factual variations that are possible in database disputes, and warn against simplistic analyses of database copying.

Part I of this Note describes the case law establishing that copyright protection does not extend to data and also describes state law doctrines that might offer protection for certain databases. Part II examines the economic arguments for and against sui generis database protection. Part III summarizes the three recent electronic database cases. Part IV discusses how state law doctrines might apply to these cases, while Part V discusses whether the databases in these cases deserve protection in light of the economic arguments in Part II. This Note concludes that, while a free-rider problem exists, it is not always relevant to database disputes. Therefore, any proposed sui generis database protection should be narrowly tailored to apply only to acts of copying that threaten to chill database development.

I. LEGAL BACKGROUND

This Part first discusses two key cases denying copyright protection to databases. *Feist* requires creativity in arrangement or selection for a database to merit copyright protection. *Sega* allows a database to be copied, even if it qualifies for copyright protection, to make fair use of raw data within the database. Next, this Part discusses other legal doctrines that might be used to protect databases, including licensing, trespass to chattels, and misappropriation.

A. Copyright

1. *Feist* Requires Minimal Creativity

In *Feist*, the Supreme Court held that, while individual facts cannot be copyrighted, a compilation of facts such as a database may be copyrighted if the compilation shows "even a slight amount" of creativity. The copyright only applies to the creative elements of the compilation, not to the underlying facts. Another party can lift the facts from the copyrighted database and use them in a separate database, as long as the new database is arranged differently. This rule reflects the policy that copyright is meant "to promote the Progress of Science and useful Arts," rather than to re-
ward hard work. As a result, data compiled through "sweat of the brow" is not protected.

In *Feist*, the defendant ("Feist") took listings from a series of phone books compiled by Rural Telephone Service ("Rural") to create a single directory covering a much wider area than standard phone books. Both Feist and Rural distributed their listings for free and competed for yellow pages advertising. Rural sued, claiming that Feist had infringed Rural's copyright on the local phone listings. The Court rejected Rural's claim. The raw data contained in the listings lacked copyright protection, since facts cannot be copyrighted. The selection and arrangement of the listings also lacked copyright protection, since they did not involve any creativity. Specifically, the selection included all phone numbers in a particular area and the arrangement was merely alphabetical. Feist therefore was able to take advantage of Rural's hard work in compiling the data without having to compensate Rural.

2. *Sega Allows Fair Use Intermediate Copying*

Even a work with the necessary creativity to qualify for copyright protection can be copied, so long as the resulting use of the copied data is fair use. In *Sega*, a video game developer ("Accolade") copied Sega video games in order to reverse-engineer a lock-out code needed to make games compatible with the Sega Genesis game console. Sega only provided the code to licensed developers, and Accolade was unwilling to accept Sega's onerous licensing terms. The purely functional lock-out code was not protected by copyright, and Accolade made no other use of the copied programs. Accolade simply incorporated the code into its own video games so that they would run on the Genesis console. This type of copying, in which the entire program is copied but no protected elements are used in the final product, is called intermediate copying.

The Ninth Circuit held that Accolade's intermediate copying was a prima facie copyright violation, even though the end product did not violate the copyright. But the copying still was permitted if it qualified as fair use, as defined by the four-factor balancing test in 17 U.S.C. § 107.

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7. *Feist*, 499 U.S. at 342-44.
8. *Id.* at 344-45.
9. *Id.* at 361-63.
11. *Id.* at 1514.
12. *Id.* at 1522-23.
13. *Id.* at 1519-20.
14. *Id.* at 1520.
The court concluded that Accolade satisfied this test. The court began by analyzing the first factor, the purpose and character of the use, and the fourth factor, the market impact of the use. The purpose and character of Accolade’s actions weighed strongly in favor of fair use: its “legitimate, essentially nonexploitative” copying resulted in the creation of a new video game, precisely the kind of “growth in creative expression . . . that the Copyright Act was intended to promote.” Market impact also favored fair use: Accolade had created a new game with unique characteristics, and the success of that game depended on these characteristics, which were not copied. Also, gamers typically buy more than one game. Therefore, “[t]here is no basis for assuming that Accolade’s [game] has significantly affected the market for Sega’s [game].” The court next analyzed the second factor, the nature of the copyrighted work, and the third factor, the amount copied. The nature of copyrighted work further supported the argument for fair use: the presence of unprotected elements in Sega’s program gave it less protection than a more “traditional literary work.” The fact that Accolade copied the entire program weighed little against fair use since Accolade only used the lock-out code. Taken together, the four factors strongly favored fair use; therefore, Accolade’s copying was allowed.

B. Other Means of Database Protection

1. Licensing: ProCD

Database developers seeking to protect their data from copying allowed by *Feist* and *Sega* can use licensing to restrict copying. In *ProCD, Inc. v. Zeidenberg*, the Seventh Circuit held that a database vendor could sell a database under licensing terms that prohibited the user from copying the raw data, even though copyright law allowed copying. The court upheld a shrinkwrap license containing restrictions on the defendant purchaser’s use of ProCD’s compilation of several thousand telephone direc-

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15. 17 U.S.C. § 107 (2000) (“[F]actors to be considered shall include (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.”).
16. *Sega*, 977 F.2d at 1523.
17. *Id.*
18. *Id.* at 1526.
19. *Id.* at 1526-27.
20. 86 F.3d 1447 (7th Cir. 1996).
tories. The defendant ignored the restrictions and used the data to create a web-based directory in head-to-head competition with ProCD, thus violating a valid contract.\textsuperscript{21}

However, the protection offered by licensing is not particularly robust. First, licenses only bind the contracting parties, whereas copyright is good against the world. Once a single licensee makes restricted data available to others in violation of the license, third parties who then copy the data may use it as they please. The ease of digital copying makes this scenario likely.

Second, the leading copyright commentator has strongly criticized ProCD's holding that licenses extending beyond the rights granted by copyright law are not preempted by copyright law,\textsuperscript{22} and other circuits might decline to follow the holding, particularly in cases involving fair use. Preemption applies when a state law claim regarding material "within the subject matter of copyright" involves "legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright."\textsuperscript{23} In ProCD, the Seventh Circuit held that a contractual obligation cannot create an exclusive right "within the general scope of copyright" because the obligation is good only against the licensee and not against the world.\textsuperscript{24} Therefore, licensing terms prohibiting copying that copyright law would allow are not preempted. This distinction between the licensee and the wider world is specious with regards to shrinkwrap and clickwrap licenses, since the only way for someone in the wider world to use the product is to become a licensee.\textsuperscript{25} Further, this logic would prevent licensees from using data in ways prohibited by the license that otherwise would be fair use. The defendant in ProCD did not have a viable fair use claim: he copied ProCD's entire database; his use of the copied data was neither creative nor transformative; and his head-to-head competition with ProCD threatened the market for the original database. However, by the logic of ProCD, Sega would have come out differently if Sega had merely

\begin{thebibliography}{9}
\bibitem{21} Id. at 1449-50.
\bibitem{22} See 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 3.04[B][3][a] (2004).
\bibitem{23} 17 U.S.C. § 301(a) (2000).
\bibitem{24} ProCD, 86 F.3d at 1454 ("A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create 'exclusive rights.'").
\bibitem{25} See Jane C. Ginsburg, Copyright, Common Law, and Sui Generis Protection of Databases in the United States and Abroad, 66 U. CIN. L. REV. 151, 167 (1997) [hereinafter Ginsburg, Sui Generis Protection] ("The classic distinction between a contract right \textit{inter partes} and a property right \textit{erga omnes} dissolves when all users must become the information provider's co-contractants.").
\end{thebibliography}
shrink-wrapped its game with a license banning reverse-engineering. Courts confronted with this situation might refuse to follow ProCD and instead reject the license as preempted by copyright law.

Third, licenses that extend beyond the rights offered by copyright law risk being rejected as copyright misuse. In Lasercomb, the Fourth Circuit held that a license requiring the licensee not to make competing products constituted misuse. Plaintiff Lasercomb sold copies of a software program to defendant Holiday Steel ("Holiday") under a license that not only barred Holiday from making more copies but also forbade Holiday from independently developing similar programs. Holiday never signed and returned the license, so it was not bound by it. Nevertheless, Lasercomb proceeded with the transaction. Holiday hacked the Lasercomb program's anti-copying protections, made more copies for its own use, and then created and marketed a new program that basically was a copy of Lasercomb's program. Holiday pleaded misuse as a defense to the resulting copyright infringement lawsuit. The Fourth Circuit accepted this defense, defining copyright misuse as "the use of the [copyright] to secure an exclusive right or limited monopoly not granted by the [Copyright] Office and which it is contrary to public policy to grant." License terms such as Lasercomb's ban on competition violate public policy because they threaten to deny the public the innovative efforts of the licensees. Since Lasercomb had tried to use its copyright to stifle innovation, the court rejected its infringement claim. The court further held that misuse did not have to rise to the level of an antitrust violation and that the defendants need not have been parties to the license to invoke the misuse defense.

26. See 1 Nimmer & Nimmer, supra note 22, § 3.04[B][3][a], at 3-34.8(1). Not only are Sony and Feist nullified under [ProCD's] approach, but so is virtually every other Supreme Court (and inferior court) decision ever to rule in a defendant's favor. Consider, for example, those circuit courts that have validated reverse engineering of software when undertaken for proper purposes. Merely by prohibiting that conduct under a shrinkwrap license, the nominally "fair use" is constricted out of existence.

27. Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970 (4th Cir. 1990); see also Practice Mgmt. Info. Corp. v. AMA, 121 F.3d 516 (9th Cir. 1997) (finding an agreement requiring the licensee not to do business with the licensor's competitors to be copyright misuse).

28. Lasercomb, 911 F.2d at 971-72.

29. Id. at 977 (applying the language of Morton Salt Co. v. G.S. Suppiger, 314 U.S. 488, 492 (1942), as regards patent misuse, to copyright misuse) (alterations in original).

30. Id. at 978.

31. Id. at 978-79.
2. Trespass to Chattels: eBay

Online providers of data can try to protect their data from pervasive unauthorized copying through the state law doctrine of trespass to chattels. Trespass to chattels "lies where an intentional interference with the possession of personal property has proximately caused injury."\(^\text{32}\) The injury must be "to the chattel or to the plaintiff's rights in it."\(^\text{33}\) In *eBay, Inc. v. Bidder's Edge, Inc.*, eBay invoked this doctrine to prevent a "spider program" written by Bidder's Edge from repeatedly "crawling" eBay's website.\(^\text{34}\) Spider programs automatically copy data posted on targeted web pages, a process referred to as "crawling the web."\(^\text{35}\) The Bidder's Edge spider was responsible for approximately 1% of the activity on eBay's servers, amounting to over 100,000 hits per day.\(^\text{36}\)

The district court held that trespass to chattels could be applied to use of a computer system if "(1) [a] defendant intentionally and without authorization interfered with plaintiff's possessory interest in the computer system; and (2) [the] defendant's unauthorized use proximately resulted in damage to plaintiff."\(^\text{37}\) Bidder's Edge's activities satisfied the first element: although eBay had refused to grant Bidder's Edge a license to crawl its website, had demanded that Bidder's Edge halt its crawling, and had tried to block the spider program, Bidder's Edge continued to crawl the site.\(^\text{38}\) The court held that this web crawling also satisfied the second element: even though the spider program's 1% usage of eBay's servers did not cause any disruptions of service, it did deny eBay the use of that portion of its processing bandwidth.\(^\text{39}\) Further, allowing such copying would prompt other potential competitors to crawl eBay's website, "potentially to the point of denying effective access to eBay's customers."\(^\text{40}\) This threat of irreparable harm justified granting eBay an injunction.\(^\text{41}\)

The breadth of the holding in *eBay* has been limited by *Intel Corp. v. Hamidi*.\(^\text{42}\) Intel brought a trespass to chattels claim to prevent a former In-

\(^{32}\) Thrifty-Tel v. Bezenek, 54 Cal. Rptr. 2d 468, 473 (Ct. App. 1996).
\(^{33}\) Intel Corp. v. Hamidi, 71 P.3d 296, 302 (Cal. 2003).
\(^{34}\) 100 F. Supp. 2d 1058 (N.D. Cal. 2000).
\(^{36}\) *eBay*, 100 F. Supp. 2d at 1063.
\(^{37}\) Id. at 1069-70.
\(^{38}\) Id. at 1062-63, 1070.
\(^{39}\) Id. at 1071.
\(^{40}\) Id.
\(^{41}\) Id. at 1071-72.
\(^{42}\) 71 P.3d 296 (Cal. 2003).
teland engineer from sending unsolicited e-mails criticizing Intel's employment practice to current employees. Hamidi sent these e-mails six times over nearly two years, sending as many as 35,000 messages at a time.\(^{43}\) The California Supreme Court noted that while eBay and other precedents involved "some interference with the efficient functioning of its computer system,"\(^{44}\) Intel's claim did not. Intel offered no evidence that the e-mails disrupted its servers. Further, Intel had not established any threat of similar mass mailings by others if Hamidi were not enjoined from sending e-mails.\(^{45}\) Therefore, the court denied Intel's request for an injunction.\(^{46}\)

As with restrictive licensing terms, a trespass to chattels claim could be challenged under copyright preemption. The eBay court held that eBay's claim was not preempted because "[t]he right to exclude others from using physical personal property" is an extra element not present in a copyright infringement claim.\(^{47}\) This language seems overly broad: since websites almost always are hosted on privately owned servers, preemption could never apply to most online copying. Even copying that would be allowed under copyright law as fair use could be subject to a trespass to chattels claim, since accessing a website hosted on a privately owned server would satisfy the extra element of "using physical personal property." However, the eBay court's consideration of the danger of similar copying by other potential competitors as a factor for determining liability suggests that activity amounting to trespass to chattels usually would not qualify as fair use. The threat of widespread similar copying also is considered as part of the fourth element of fair use, market impact, and weighs against a finding of fair use.\(^{48}\)

3. Misappropriation: INS and Motorola

The tort of misappropriation has been used to prevent copying of raw facts in situations where the information was time-sensitive. In International News Service v. Associated Press,\(^{49}\) the Supreme Court barred INS from copying news collected by AP until AP-affiliated newspapers were able to publish the news in question. Prior to this ruling, INS would copy news from AP-affiliated papers on the East Coast and wire it to INS-affiliated papers on the West Coast. West Coast INS affiliates thus were

\(^{43}\) Id. at 301.
\(^{44}\) Id. at 304.
\(^{45}\) Id. at 306.
\(^{46}\) Id. at 311.
\(^{49}\) 248 U.S. 215 (1918).
able to publish news collected by the AP at the same time as or even possibly before their AP-affiliated rivals. The Court conceded that the news was not copyrighted; rather, "it [was] the history of the day." Still, even though the AP had no formal property interest in the news it collected, the Court found that copying of that news by INS was "unfair competition": "the process amounts to an unauthorized interference with the normal operation of complainant’s legitimate business precisely at the point where the profit is to be reaped." Read broadly, this passage implies that free-riding done to compete directly with the original compiler of data is unfair competition by definition. However, the Court then held that copying by INS was not permanently barred, but instead was postponed "only to the extent necessary to prevent that competitor from reaping the fruits of complainant’s efforts and expenditure." Presumably, this holding meant that INS was free to copy news collected by the AP once all AP-associated papers had a chance to go to press.

The INS holding did not survive the abolition of federal substantive common law in *Erie Railroad v. Tompkins*. Misappropriation still is available as a state law claim, however. In *NBA v. Motorola, Inc.*, the Second Circuit recognized misappropriation as a valid cause of action under New York law, although it rejected the NBA’s claim. The NBA sought an injunction against Motorola for selling pagers that provided up-to-date scores for ongoing basketball games. Motorola collected the scores through its own network of employees who watched or listened to broadcasts of the games. The court noted that sports scores were facts that were not protected by copyright, but held that a misappropriation claim still would stand if the following elements were met:

(i) a plaintiff generates or gathers information at a cost;
(ii) the information is time-sensitive;
(iii) a defendant’s use of the information constitutes free riding on the plaintiff’s efforts;
(iv) the defendant is in direct competition with a product or service offered by the plaintiffs; and
(iv) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the

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50. *Id.* at 234.
51. *Id.* at 240.
52. *Id.* at 241.
53. 304 U.S. 64 (1938).
54. 105 F.3d 841 (2d Cir. 1997).
55. *Id.* at 844.
56. *Id.* at 847.
product or service that its existence or quality would be substantially threatened.\textsuperscript{57}

Thus defined, misappropriation avoids preemption by federal copyright law under 17 U.S.C. § 301 because it contains extra elements compared to a copyright claim: time-sensitive value; free-riding; and an existential threat to the plaintiff.\textsuperscript{58}

These extra elements limit the utility of misappropriation claims to information providers. The court rejected the NBA’s claim on the grounds that Motorola’s product did not threaten the NBA’s core businesses of putting on and broadcasting basketball games, and that Motorola did not free-ride, but rather expended its own resources to collect the scores.\textsuperscript{59} In other words, elements (iii) and (v) were missing. Thus, a misappropriation claim only will succeed when a defendant copies from a plaintiff to create a product that directly competes with the plaintiff’s product. The requirement that information be “highly time-sensitive”\textsuperscript{60} also limits the applicability of this doctrine. The court did not elaborate on the meaning of this phrase. However, to qualify as an extra element not present in a copyright claim, “highly time-sensitive” must refer to a much narrower duration than simply the length of time during which information remains valuable or useful.

\section*{II. THE ECONOMICS OF DATABASE PROTECTION}

Proponents of sui generis database protection fear that the above state law doctrines provide insufficient protection to database developers.\textsuperscript{61} This Part outlines the economic theories used by proponents and opponents of database protection. These theories draw a distinction between copying that is done to compete directly with the original database and copying done to create value-added products that do not compete directly with the original database. Finally, this Part summarizes two concerns of opponents to database protection: that certain types of databases do not

\begin{itemize}
\item \textsuperscript{57} Id. at 845.
\item \textsuperscript{58} Id. at 853. The court’s designation of free-riding as an extra element conflicts with \textit{Feist}’s explicit allowance of free-riding. \textit{Cf.} \textit{Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.,} 499 U.S. 340, 349-50 (1991).
\item \textsuperscript{59} \textit{NBA,} 105 F.3d at 854.
\item \textsuperscript{60} Id. at 852.
\item \textsuperscript{61} For an argument that sui generis protection is appropriate because state law doctrines are too effective, see Ginsburg, \textit{Sui Generis Protection, supra} note 25, at 152 (“\[E\]xtra-copyright protection may be so effective that sui generis regulation may afford a desirable readjustment of the balance between incentives to produce initial compilations, and access to create new, and especially derivative, information products.”).
\end{itemize}
deserve protection and that empirical evidence in support of database protection is lacking.

The strongest argument for database protection is the prevention of copying by a competitor seeking to compete head-to-head with the original compiler. Compiling a database is an expensive, time-consuming proposition; copying a database is cheap, particularly when digital technology can automate the copying. The copyist therefore does not share the original compiler’s development costs and can undercut the original compiler’s price. The original compiler must match this lower price to remain competitive, and may not be able to recoup its development costs as a result. Knowing that this outcome is possible, companies may not bother to compile databases in the first place, thus denying the public the benefit of useful products. “The risk of market failure inherent in this state of chronic under-protection tends to keep the production of information goods at suboptimal levels.”

More contentious is the question of whether database protection should extend to “value-added” goods. Some value-added goods still compete with the original product: they add value by offering additional features compared to the original, but still serve as substitutes for the original. Other value-added goods, however, do not compete with the original. These goods may complement the database—for example, by providing an improved search engine that makes the original database more useful—or may be independent of the original database, perhaps using the raw data for an application unforeseen by the original compiler. Part of the value of these goods comes from the original compilations of facts, but the creation of these goods does not threaten the market

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64. For example, Feist’s single large directory added value by providing phone numbers from many of Rural’s listings in a single source. Feist’s directory still competed directly with Rural’s listings for yellow pages advertising.

65. Tyson & Sherry, supra note 62, § 6.7.

66. Reichmann & Samuelson, supra note 63, at 124.
for the original compilations. Instead, the markets for these goods are separate from the markets for the original compilations.

Tyson and Sherry argue that database property rights should extend to value-added products. They argue that a second-comer desiring to create a value-added product can license the rights from the original database compiler. The original compiler will be motivated to license the rights on reasonable terms, knowing that the second-comer could always recompile the relevant data. Indeed, the original compiler often will desire to promote value-added products, since these products may create more demand for the original database. Tyson and Sherry reject calls for compulsory reasonable licensing of database rights for value-added products: they view such licenses as a form of price control that also would threaten to overwhelm the courts with disputes about the definition of what is "reasonable."

Critics of database protection proposals do not share Tyson and Sherry's faith in free-market licensing negotiations. First, licensing negotiations involve high transaction costs, particularly when the second-comer faces a thicket of multiple rights that must be secured. Second, companies are less likely to grant licenses than Tyson and Sherry anticipate; they may prefer to deny licenses to would-be second-comers and instead keep the ancillary markets for value-added products to themselves. A property right over value-added goods could promote "reverse misappropriation," whereby the original compiler denies the second-comer a license and then creates a product based on the second-comer's idea. Third, even when companies are willing to license their database rights, licensing still involves economic waste. The belief that parties simply can negotiate around an assigned property right is an example of what Scotchmer describes as the fallacy that "intellectual property has benefits without costs." Scotchmer rejects the view that "intellectual property re-

68. Id. § 6.7.
69. Id. § 6.8.
70. See Wendy J. Gordon, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 YALE L.J. 1533, 1556-57 (1993) ("Because of transaction costs, the possibility of transferring rights through the market would not help substantially.").
71. See Stephen M. Maurer & Suzanne Scotchmer, Database Protection: Is It Broke and Should We Fix It?, 284 SCIENCE 1129, 1130 (1999) (describing how "[s]ome bio-technology databases would have to negotiate more than 100 separate contracts").
72. See Samuelson Letter, supra note 62, § II.
73. Suzanne Scotchmer, Intellectual Property—When Is It the Best Incentive Mechanism for S&T Data and Information, in THE ROLE OF SCIENTIFIC AND TECHNICAL
wards inventors, and doesn’t hurt users provided it is licensed,” claiming instead that “even if licensed, intellectual property still creates deadweight loss.” 74 Specifically, the need to license the original database drives up the cost of the value-added product, thereby excluding some potential users.

Scotchmer’s criticism reflects the view that monopolies are inherently harmful and only should be tolerated when necessary. 75 Under this view, monopoly protection should not extend to databases that would be created even without protection. 76 For example, a database property right should not cover value-added products that do not compete with the original product: since these products do not threaten the market for the original product, the original compiler is able to earn its anticipated returns. Therefore, copying done to create these products does not chill further compilation of data since the original compiler would have collected the original data regardless. No monopoly is necessary to ensure creation of the original database. As a second example, a database property right is not appropriate for data collected by a government contractor. 77 Even Tyson and Sherry concede that such data should be “made available on a nonexclusive basis to all users.” 78 Free-riding poses no threat to the collection of data if its collection is ordered by the government.

Proponents of database protection face not only the above theoretical critiques, but also a lack of empirical data supporting their arguments. The U.S. database industry seems healthy and consumers do not lack information products. Proponents must argue, based on “economic logic,” 79 that the industry would be even healthier and information products would be even more widely available if database protection was enacted. Critics reply that “economic logic” alone, in the absence of empirical evidence, is


74. Id. at 16.
75. See also James Boyle, A Natural Experiment, FIN. TIMES, Nov. 22, 2004 (“Monopolies are an evil, but they must sometimes be accepted when they are necessary to the production of some good, some particular social goal.”), http://news.ft.com/cms/s/4cd4941e-3cab-11d9-bb7b-00000e2511c8.html.
76. Boyle complains that much of the litigation under the European Database Directive has been over databases that “would have been created anyway—telephone numbers, television schedules, concert times. . . . These databases are inevitably generated by the operation of the business in question and cannot be independently compiled by a competitor. The database right simply serves to limit competition in the provision of the information.” Id.
77. This principle is applied to WIREdata in Part V.
an inadequate basis for changing the law. The alleged benefits of database protection should be observable by comparing the database industries in the European Union, which enacted its Database Directive in 1996, with those in the United States, which does not offer database protection. An analysis by Maurer shows that a one-time spike in the number of available European databases followed adoption of the E.U. Database Directive. The United States, on the other hand, has enjoyed steady growth in the number of available databases, without offering protection.

Arguments against sui generis database protection seem to have the upper hand. Marybeth Peters, the U.S. Register of Copyrights, who is closely involved in congressional negotiations over intellectual property legislation, recently commented, “I don’t think you’ll ever see database protection.” The following three recent cases demonstrate that not all database disputes show the need for database protection. Disputes can be considerably more complex than simple free-riding that prevents database compilers from recouping their original investments.

III. CASE REPORTS

Three recent cases illustrate possible scenarios for database disputes. This Part describes the facts and holdings of these cases. Following parts discuss whether protection might have been available under the state law doctrines described in Part I and whether protection should be available according to the economic logic explored in Part II. The analysis concludes that none of these cases presents a pressing need for legislation to provide sui generis database protection.

A. Assessment Techs. of Wis., L.L.C., v. WIREdata, Inc.

Plaintiff Assessment Technologies ("AT") sold a database program ("Market Drive") that three Wisconsin municipalities used to store and process property-tax data. The data were collected and entered into the

80. See Boyle, supra note 75 (“Extensions of rights can help or hurt, but without economic evidence beforehand and review afterwards, we will never know.”); Samuelson Letter, supra note 62, para. 2 (“Congress would be remiss in relying on abstract “economic logic” alone as a basis for action . . . .”).
81. See supra note 4.
83. Id.
85. 350 F.3d 640 (7th Cir. 2003).
database by tax assessors employed by the municipalities, not by AT. AT's role was limited to the design of the database, which comprised 456 fields grouped into thirty-four separate tables. AT claimed a copyright in this arrangement, which it designed specifically to meet the needs of tax assessors, and sold Market Drive under a license that possibly prohibited releasing raw data stored in the database.

WIREdata asked the municipalities to provide it with the data stored in Market Drive, for use in real estate listings. Wisconsin's open records law required the municipalities to provide the requested data, but contained an exception for copyrighted material. The municipalities refused WIREdata's requests out of fear that supplying the data would violate AT's copyright. WIREdata sued the municipalities in state court to force them to disclose the data. AT responded by suing WIREdata in federal court for copyright infringement. The district court granted a permanent injunction against WIREdata; WIREdata appealed.

The Seventh Circuit rejected AT's copyright infringement claim. Judge Posner, writing for the court, first concluded that the organization of data in Market Drive was sufficiently original to be copyrightable. Market Drive's unique and complex organization, with 456 fields split among thirty-four tables, showed at least minimal creativity, unlike the simple alphabetical telephone listings in *Feist*. The court nevertheless held that WIREdata was entitled to extract the desired real estate data from Market Drive, since AT's copyright did not extend to the raw data. Judge Posner described several methods for extracting the data without violating AT's copyright. The municipalities could transfer the data from Market Drive into a separate file using tools in either the program itself or in Microsoft Access, a database program run in conjunction with Market Drive. If this process was too time-consuming or expensive for the municipalities, WIREdata could hire its own programmers to perform the extraction. Even if AT modified Market Drive to make extracting the raw data impossible without also copying the database, WIREdata would be entitled to

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86. *Id.* at 642-43.
87. *Id.* at 646 ("AT points to the terms of its license agreements with the municipalities, which though ambiguous might be interpreted to forbid the licensees to release the raw data . . . .").
89. *WIREdata*, 350 F.3d at 642.
90. *Id.* at 643.
91. *Id.*
93. *WIREdata*, 350 F.3d at 643-44.
make an intermediate copy of Market Drive to access the data, according to Sega.  

The court rejected AT's argument that its licenses with the municipalities prohibited WIREdata's requested copying. WIREdata was not a party to the licenses and thus was not bound by them. Also, the claim at issue was for copyright violation, not for breach of or interference with contract. Therefore, AT's argument that, under ProCD, it could contract beyond the limited rights of copyright was irrelevant to its claim that WIREdata violated its copyright. Furthermore, the court suggested that since the municipalities, and not AT, collected the contested data, AT's attempt to limit access to the data might be copyright misuse.  

Because the data at issue was not copyrighted, and because its extraction from Market Drive either would not infringe AT's copyright or would qualify as fair use, the Seventh Circuit reversed the district court's judgment with instructions to vacate the injunction and dismiss the claim. Judge Posner minced no words on the merits of AT's claim: "It would be appalling if [it] succeeded."

B. Nautical Solutions Mktg., Inc. v. Boats.com

Boats.com owned and operated a website, Yachtworld.com, that listed yachts for sale. Each listing showed pictures and a description provided by the yacht broker who posted the listing. The descriptions used industry-standard headings such as "electrical," "accommodations," "galley," and "sails and rigging." Yachtworld.com's listings had a distinctive look-and-feel: pictures of the yachts always appeared to the left of the description, the basic facts were shown in bullet-points, and a blue wave appeared on the left side of the screen.

Nautical Solutions ("Nautical") offered a competing website, Yachtbroker.com. Nautical generated listings by using a spider program to make temporary copies of Boats.com's listings. Nautical extracted the descriptions and pictures from the temporary copies, discarded the copies, and

94. Id. at 645 (citing Sega Enters. v. Accolade, Inc., 977 F.2d 1510, 1520-28 (9th Cir. 1992)).
95. Id. at 646.
96. Id. at 646-47.
97. Id. at 642.
99. Id. at *2-*3.
100. Id. at *5 n.7.
101. Id. at *7 n.9.
102. Id. at *6.
then used the extracted information to create its own listings.\textsuperscript{103} Nautical also offered a “valet service” in which, with a broker’s permission, it copied descriptions and pictures from the broker’s listings on other websites, such as Yachtworld.com, and pasted this information into Yachtbroker.com.\textsuperscript{104} Yachtbroker.com’s appearance differed from that of Yachtworld.com: the pictures were to the right of the facts, the facts were in a table, and no blue wave was shown.\textsuperscript{105}

Nautical sought a declaratory judgment of noninfringement after Boats.com accused Nautical of violating its copyright in the Yachtworld.com website. The district court found that neither the valet service nor the spider program had infringed Boats.com’s copyright and granted Nautical declaratory relief.\textsuperscript{106} With regards to the valet service, the court noted that Boats.com did not hold the copyrights in the individual pictures and descriptions; the brokers who created the listings did.\textsuperscript{107} Boats.com was not entitled to a copyright over the organization of the descriptions, since its use of industry-standard headings lacked creativity. Boats.com was entitled to a copyright over the website’s distinctive look-and-feel, but Nautical had not violated this copyright: Nautical’s website had its own unique look-and-feel. The valet service had only copied pictures and descriptions for which Boats.com had no viable copyright claim.\textsuperscript{108}

Unlike the valet service, the spider program copied the entire website, with its protected look-and-feel. The court cited Sega to justify this copying as allowable intermediate copying, since the spider program only extracted unprotected facts from the copied site.\textsuperscript{109} The court performed a cursory, incomplete fair use analysis to justify its holding. It found no evidence of harm to the “potential market value for or value of Yachtworld.com,”\textsuperscript{110} and stressed that the “amount and substantiality of the por-

\begin{itemize}
  \item \textsuperscript{103} Id. at *3-*4.
  \item \textsuperscript{104} Id. at *5.
  \item \textsuperscript{105} Id. at *6.
  \item \textsuperscript{106} Id. at *13.
  \item \textsuperscript{107} Id. at *9.
  \item \textsuperscript{108} Id. at *9-*11.
  \item \textsuperscript{109} Id. at *9.
  \item \textsuperscript{110} Id. at *8. This finding of no market harm ignored the fact that Nautical competed directly with Boats.com. The court seems to have incorrectly placed the burden on Boats.com to show evidence of harm to Yachtworld.com’s potential market value. Since fair use is an affirmative defense, the burden should have been on Nautical to show that its copying does not threaten Yachtworld.com’s potential market value. See Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 590 (1994). The market value of the website is a function of the number of users. Since Boats.com and Nautical compete for users, Nautical most likely cannot meet this burden.
\end{itemize}
tion used" was minimal, since Nautical's final product was free of infringing material. Having briefly considered only two of the four fair use factors, the court declared the spider program's copying to be fair use.

C. **MyWebGrocer, L.L.C. v. HomeTown Info, Inc.**

MyWebGrocer and its competitor, HomeTown, both designed and operated websites for grocery stores. MyWebGrocer contracted with D'Agostino Supermarkets to develop and maintain D'Agostino's website for two years. In the course of this work, MyWebGrocer created roughly 18,000 product descriptions (for example, "Gerber 1st Foods – Bananas 2.5 oz"). D'Agostino informed MyWebGrocer that it would not renew the contract and instead contracted with HomeTown to operate a new website. D'Agostino provided HomeTown with the product descriptions created by MyWebGrocer; HomeTown used the descriptions verbatim in the new site. These descriptions differed from descriptions HomeTown previously had displayed on websites that it operated for other grocery stores. For example, other HomeTown websites described the above bananas as simply "GERB BANANAS."

MyWebGrocer sued HomeTown, alleging that HomeTown had infringed its copyright over the product descriptions. HomeTown counterclaimed, seeking a declaratory judgment that MyWebGrocer's copyright was invalid. The district court denied MyWebGrocer's request for a preliminary injunction, holding that the product descriptions were not creative enough to be copyrighted. MyWebGrocer appealed.

The Second Circuit affirmed the district court's denial of a preliminary injunction, but on different grounds: it rejected the lower court's invalidation of MyWebGrocer's copyright, but held that MyWebGrocer had not proved a likelihood of success on the merits. The court left the issue of whether the product descriptions met copyright's "minimal degree of creativity" test to be decided on remand by the trier of fact. In particular, the court stressed that the descriptions used by HomeTown in its earlier websites differed from MyWebGrocer's descriptions. Even though the facts contained in the product descriptions were not protected, "[a] trier might

112. *Id.* at *7-*8.
113. 375 F.3d 190 (2d Cir. 2004).
114. *Id.* at 191, 195.
115. *Id.* at 195.
116. *Id.* at 192.
117. *Id.* at 193 (quoting Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 345 (1991)).
conclude that MyWeb[Grocer] made creative choices about what to include or exclude in its product descriptions," thus allowing for a finding of infringement. However, the court held that this outcome was not sufficiently likely to merit a preliminary injunction.

IV. POSSIBLE STATE LAW CLAIMS IN THE INSTANT CASES

When discussing database protection, the arrangement and selection of archived data must be distinguished from the data itself. Under the *Feist* minimal creativity standard, even short descriptions of grocery items might merit protection as original arrangements of facts. Such generous protection for arrangements of facts may be reassuring to database designers, but it offers no help to those who compile data. Copyright protection also is available when data is selected with a degree of creativity. However, frequently the goal of data compilation is to be comprehensive; by definition, comprehensive data sets lack creativity in their selection. Data gatherers thus often face a free-rider problem, as described in Part II. Second-comers can simply copy their data, free riding off of their hard work.

Data gatherers can try to prevent free-riding through state law doctrines such as licensing, trespass to chattels, and misappropriation, as described in Part I.B. The following sections consider how these doctrines apply to the attempts to protect raw data in the three cases summarized in Part III. Licensing could address the plaintiff's concerns in *MyWebGrocer*, but not in *WIREdata*, where the licensing terms amounted to copyright misuse. Trespass to chattels potentially could apply to the spider program in *Boats.com*. However, none of the cases presents a viable misappropriation claim.

A. Licensing: *MyWebGrocer* and *WIREdata*

Data gatherers can use licensing to restrict copying by database users. Intelligent contracting can allow data gatherers to recoup their development costs, assuming any potential copier is a party to the contract. However, contracts are useless when the copier is a third party. Also, overly aggressive licensing terms can lead to a finding of copyright misuse.

118. *Id.*
119. *Id.* at 194.
120. *Feist*, 499 U.S. at 350.
MyWebGrocer illustrates the need for intelligent contracting. MyWebGrocer developed the disputed product descriptions as part of a two-year contract under which the company created and maintained a website for D'Agostino Supermarkets. Both parties could have foreseen that the contract might not be renewed, leading to a conflict over continued use of the product descriptions. MyWebGrocer could have negotiated for exclusive control of the descriptions in the event of nonrenewal. Alternately, MyWebGrocer could have charged D’Agostino a nonrefundable fee for the development of the product descriptions, in addition to the charge for operating the website. Nonrefundable engineering (NRE) charges are a standard feature in contracts for technical goods and services. Either option would have ensured that MyWebGrocer could recoup its development costs and would have avoided an arcane dispute over whether the product descriptions involved a modicum of creativity.

In WIREdata, on the other hand, AT could not have used a properly crafted contract to avoid its conflict with WIREdata, because WIREdata was not a party to AT’s contract with the Wisconsin municipalities. Furthermore, AT’s attempt to control data that it did not collect and in which it had no legitimate interest probably constituted copyright misuse. Judge Posner suggested this possibility, but declined to “run this hare to the ground,” since the issue of misuse was not relevant to his holding. The issue is easily resolved, however. In Lasercomb the Fourth Circuit defined copyright misuse as “the use of the [copyright] to secure an exclusive right or limited monopoly not granted by the [Copyright] Office and which it is contrary to public policy to grant.” AT’s copyright applied only to the arrangement of the Market Drive database, not to the data stored therein. AT’s attempt to prevent disclosure of the data was an attempt to use its copyright on the database “to secure an exclusive right . . . not granted” by copyright law. This attempt was against public policy because, if successful, it would have stifled competition in the market for real estate listing services by restricting access to information needed to create the listings. Thus, AT’s license satisfies the Lasercomb requirements for misuse.

Even a well-crafted contract without over-reaching terms is only useful for preventing free-riding by the other parties to the contact. In situations involving a lack of privity, parties seeking to protect their data must

123. Assessment Techs. of Wis., L.L.C. v. WIREdata, Inc., 350 F.3d 640, 647 (7th Cir. 2003).
turn to tort claims. The following sections discuss two possible claims: trespass to chattels and misappropriation.

B. Trespass to Chattels: Boats.com

Trespass to chattels may be a viable claim in cases involving automated online copying, such as Boats.com.\textsuperscript{125} Whether Boats.com might have had a successful trespass to chattels claim depends on whether the facts of the case are more analogous to those of eBay or Hamidi.\textsuperscript{126} Both Nautical and Bidder’s Edge used spider programs to copy data from other websites for use on their own sites. However, it is not clear whether Nautical’s copying was of the same magnitude as that of Bidder’s Edge.\textsuperscript{127} If Nautical constantly crawled the Boats.com website in a manner analogous to the constant crawling of eBay by Bidder’s Edge, then Boats.com would have a claim. But if Nautical only crawled the website occasionally, and completed its crawling quickly, then the situation would be more analogous to the occasional e-mails in Hamidi, and a trespass claim likely would fail. In the latter case, even similar periodic crawling of the Boats.com site by other potential competitors might not threaten the site’s operation, and therefore would not satisfy eBay’s requirement for an injunction. Considerable gray area exists between these two possible extremes, for which the result of a trespass to chattels claim would be uncertain.

C. Misappropriation

The narrow five-element definition of misappropriation would prevent misappropriation from applying to the instant cases.\textsuperscript{128} In Boats.com, the disputed yacht listings were generated by yacht brokers using the Yacht-world.com website, and not by the website itself. Therefore the first element, information gathering by the plaintiff, is absent. Also, the listings do not seem “highly time-sensitive,”\textsuperscript{129} in contrast to sports scores and stories on a news wire. Listings do have some time-sensitivity: they are valuable until the yachts in question are sold. While the exact meaning of “highly”

\textsuperscript{125} The ruling states without explanation that the district court dismissed a claim under state trespass law. Nautical Solutions Mktg., Inc. v. Boats.com, No. 8:02-cv-760-T-23TGW, 2004 U.S. Dist. LEXIS 6304, at *2 n.1 (M.D. Fla. Apr. 1, 2004).
\textsuperscript{126} See supra Part I.B.2.
\textsuperscript{127} The record contains no evidence that Nautical’s crawling disrupted service on Boats.com’s website. However, disruption of service is not required to establish trespass to chattels. See eBay, Inc. v. Bidder’s Edge, Inc., 100 F. Supp. 2d 1058, 1071 (N.D. Cal. 2000).
\textsuperscript{128} See supra Part I.B.3.
\textsuperscript{129} Nat’l Basketball Ass’n v. Motorola, Inc., 105 F.3d 841, 852 (2d Cir. 1997).
is not clear, the time frame in Boats.com is much longer than in INS or Motorola. Therefore, the second element probably also is missing.

The MyWebGrocer plaintiff would not be any more successful with a misappropriation claim. Descriptions of groceries are even less time-sensitive than yacht listings: their value is constant for as long as the relevant groceries are sold. Further, HomeTown's copying of MyWebGrocer's descriptions is not a threat to the latter's existence, since the copying occurred only after MyWebGrocer's initial contract with the supermarket had expired. The duration of this contract, for which MyWebGrocer bargained freely, should have been sufficient to allow it to recoup its investment. Thus, the second and fifth elements of a misappropriation claim are missing.

A misappropriation claim by AT would be the weakest out of all three cases. AT did not compile the disputed data, the real estate data was not highly time-sensitive, AT was not in direct competition with WIREdata, and WIREdata's use of the property data would not affect the market for AT's database. Thus, all five required elements are missing. This claim would be as "appalling" as AT's copyright claim.

V. DO THESE PLAINTIFFS DESERVE PROTECTION?

The above Part discusses how various legal doctrines apply to the instant cases. A more fundamental question is whether, in light of the economic arguments discussed in Part II, the disputed data deserve protection. The answer in WIREdata is clearly no. The tax assessment data that WIREdata sought to copy was collected by subcontractors working for Wisconsin municipalities. Even Tyson and Sherry argue that data collected by government subcontractors should be "made publicly available on a nonexclusive basis."\(^\text{130}\) Further, WIREdata would not be free-riding on AT's work, since AT did not compile the data. Finally, WIREdata's and AT's products did not directly compete: AT made databases for storing and analyzing tax data, while WIREdata created real estate listings. Thus, there is no reason to award AT a property right in data stored in the Market Drive database.

Boats.com presents a closer case than WIREdata, but ultimately does not demonstrate the need for a property right in data. The websites in Boats.com competed directly with each other. However, the data that Nautical copied was compiled by yacht brokers using the Boats.com website, not by Boats.com. Therefore, Nautical did not free-ride off of any data.

\(^{130}\) Tyson & Sherry, supra note 62, § 4.2.
collection by Boats.com. Boats.com did have costs related to setting up, operating, and marketing its website. Nautical, however, had similar costs: it had to maintain and market its website in order for people to see the listings it copied. Nautical’s copying did not allow it to undercut Boats.com on pricing, and only threatened Boats.com’s existence to the extent that any competitor would.

Of the three instant cases, MyWebGrocer presents the strongest case for database protection. MyWebGrocer and HomeTown competed directly to operate grocery store websites. MyWebGrocer created the copied product descriptions itself; therefore, HomeTown was free-riding. However, HomeTown only was able to compete after the original two-year contract expired. As discussed above, the contract should have allowed MyWebGrocer to recover its development costs. Therefore, HomeTown’s copying should not diminish the willingness of MyWebGrocer or other website operators to offer their services. Instead, the result in this case will encourage these operators to contract more carefully in the future. Thus, this case also does not demonstrate a need for a property right in compiled data.

VI. CONCLUSION

The current lack of protection for data creates a free-rider problem. But the three recent cases evaluated in this Note show that the free-rider problem is not always an issue in database disputes: only in MyWebGrocer did the party claiming infringement actually compile the disputed data, and in that case the issue could have been resolved through more intelligent contracting. Instead, these cases illustrate the complexities that can arise in database disputes, and warn against viewing such disputes through a single lens. Any proposed sui generis database protection should be narrowly tailored to provide protection only in cases that threaten to chill database development, thus ensuring that parties such as the plaintiff in WIREdata cannot get away with “appalling” claims.