FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

EXPERIAN INFORMATION SOLUTIONS, INC.,

Plaintiff-Appellant,

V.

No. 16-16987

D.C. No. 2:13-cv-00618-SPL

NATIONWIDE MARKETING SERVICES INCORPORATED,

Defendant-Appellee.

OPINION

Appeal from the United States District Court for the District of Arizona Steven Paul Logan, District Judge, Presiding

Argued and Submitted December 6, 2017 San Francisco, California

Filed June 27, 2018

Before: Mary M. Schroeder and William A. Fletcher, Circuit Judges, and Sara Lee Ellis,* District Judge.

Opinion by Judge Schroeder

^{*} The Honorable Sara Lee Ellis, United States District Judge for the Northern District of Illinois, sitting by designation.

SUMMARY**

Copyright

The panel affirmed in part and reversed in part the district court's summary judgment in favor of the defendant in a copyright case.

Plaintiff Experian Information Systems, Inc., compiled the ConsumerView Database, which contains more than 250 million records, each pertaining to an individual consumer. The database includes compiled pairings of names and addresses.

Affirming in part, the panel held that the name and address pairings were copyrightable as compilations but were entitled only to limited protection under the copyright laws. The panel held that Experian failed to show that its copyright was infringed because it did not establish a bodily appropriation of its work.

Reversing the district court's grant of summary judgment on a state law trade secret claim, the panel held that, if proper safeguards were maintained, then Experian's lists could be protected as trade secrets under Arizona law. The panel concluded that there were triable issues of fact as to the defendant's knowledge of misappropriation. The panel remanded for further proceedings on the trade secret claim.

^{**} This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

COUNSEL

Robert Unikel (argued), Arnold & Porter Kaye Scholer LLP, Chicago, Illinois; Max Gavron, Oscar Ramallo, and Rhonda R. Trotter, Arnold & Porter Kaye Scholer LLP, Los Angeles, California; for Plaintiff-Appellant.

Mark A. Fuller (argued) and Christopher W. Thompson, Gallagher & Kennedy P.A., Phoenix, Arizona, for Defendant-Appellee.

Marcella Ballard, Venable LLP, New York, New York; Emilio W. Cividanes, Venable LLP, Washington, D.C.; for Amicus Curiae The Direct Marketing Association Inc., D/B/A The Data & Marketing Association.

OPINION

SCHROEDER, Circuit Judge:

The novel federal question in this appeal is whether lists of names with addresses are copyrightable when they are the product of a sophisticated process to ensure accuracy and utility. In other words, whether such lists are more like a telephone book, that the Supreme Court has held lacks any creative spark, or more like Joyce's Ulysses that changed the course of 20th century literature. The answer, it turns out, lies somewhere in between, but closer to a telephone book. The name and address pairings are only entitled to limited protection under the copyright laws. If proper safeguards are maintained, the lists may also be protected as trade secrets. We hold in this case that the Plaintiff, Experian Information Solutions, Inc., ("Experian"), established that its lists were

copyrightable but failed to establish that its copyright had been infringed. We therefore affirm the District Court's summary judgment in favor of the Defendant, Nationwide Marketing Services, Inc., ("Natimark"), on the copyright infringement claim, but reverse the state law trade secret claim and remand it for further proceedings.

Factual and Procedural Background

Experian is in the business of compiling databases and licensing portions of them to companies for use in their marketing campaigns. Since 1998, it has compiled what is now known as the ConsumerView Database ("CVD") that has a copyright registration for the "selection, coordination, arrangement and compilation of data " The CVD contains more than 250 million records, each pertaining to an individual consumer, and includes hundreds of "fields," each denoting a particular attribute of the consumer, such as age, earnings, or purchase habits, as well as behavior predictions. This litigation concerns compiled pairings of names and addresses. These represent one of the most lucrative components of the CVD, because mail marketers pay substantial amounts for licenses to utilize Experian's name and address pairings. The value, according to Experian, results from the process by which Experian determines the accuracy of its pairings and the utility of the selection of the pairings it includes in the CVD for its marketing clients.

Experian obtains its name and address data from a variety of sources, such as catalogue purchase data, cable company records, real estate deeds, and warranty cards signed by consumers at retail stores. For its database, Experian picks from roughly 2,200 public and proprietary sources that it believes have reliable, value-adding data. In determining

whether to include a new source in its database, Experian runs the source through tests to measure the potential new data's quality and to identify the differences between the new source's data and existing data in the CVD. Experian's employees review the test results and do not add any data to the CVD until they approve the source. Even if a source is validated, however, not all name and address data are added to the CVD. Experian excludes name and address pairings it believes are not valuable to its clients. Excluded are business. addresses and addresses of individuals in prison and the very elderly.

Experian also resolves conflicts between data sources. Such conflicts are resolved utilizing thousands of "business rules" or algorithms to analyze data from each source and determine which name and address pairing should be included in the CVD. The data must be kept current, and the business rules are regularly updated on the basis of client feedback. Experian estimates that it expends more than \$10 million annually to compile and update the CVD.

Experian is not alone in the database compiling industry. There are at least four other major compilers. respective methodologies also yield lists, but according to Experian, the lists have material differences in content.

Defendant Natimark is a smaller and more recent addition to the consumer database compilation industry. It is located in Phoenix, Arizona. In 2011 it acquired a database, the National Consumer List ("NCL") in order to resell the data. The NCL has data for approximately 200 million consumers.

The seeds of this litigation were sown in April 2012 when a data broker acting on behalf of Natimark attempted to sell Experian a data compilation of children's birthdays, coupled with the name and address pairings of their parents. When Experian tested the name and address pairings in the sample the data broker provided, and compared them with Experian's own CVD pairings, Experian found a match rate of more than 97%, leading it to suspect that the data had been stolen. Experian's expert later compared Natimark's pairings with Experian's and found similar match rates of approximately 94%. Also suggesting stolen data was the price Natimark paid for the data which, according to Experian, was unusually low and unaccompanied by a customary written agreement with industry-standard restrictions on maintenance and use.

After confronting Natimark with its conclusion that the data had been copied, Experian filed this action in March 2013 in the U.S. District Court for the District of Arizona claiming copyright infringement. When the District Court ruled that the allegedly-infringed pairings were copyrightable, Experian added a claim for trade secret misappropriation, and argued that the pairings were trade secrets that had been stolen. The District Court granted summary judgment for Natimark, holding that Experian did not have a valid copyright or trade secret in its compilation of names and addresses. The court held that the compilation of pairings lacked sufficient creativity or originality to merit copyright protection. It similarly held that the pairings of names and addresses could not constitute trade secrets and, even if they could, Experian had not established a triable issue with respect to its claim that Natimark knew or had reason to know that the pairings were either secret or stolen.

Experian filed a timely appeal with respect to both the copyright and trade secret claims.

Discussion

I. Copyright infringement claim

A. Copyrightability of the pairings as compilations

The boundaries of copyright protection are by now wellsettled. Facts are not copyrightable and original works are. See Feist Publ'ns, Inc. v. Rural Tel. Serv., Co., 499 U.S. 340, 344–45 (1991) (Feist). In between, however, are to be found a variety of works, including lists, compilations, directories, and guides that include facts, but demonstrate varying degrees of creativity in their selection, arrangement, or coordination. This case is about the area in between.

Our Constitution provides the basis for copyright protection, and authorizes Congress to "secur[e] for limited [t]imes to [a]uthors . . . the exclusive [r]ight to their respective [w]ritings." U.S. Const. art. I, § 8, cl. 8. Under this authority, Congress enacted the Copyright Act to protect "original works of authorship." 17 U.S.C. § 102(a). The term "original" indicates "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." Feist, 499 U.S. at 345 (citing 1 M. Nimmer & D. Nimmer, Copyright §§ 2.01[A], [B] (1990)). Originality is thus not an exacting standard, since it requires only minimal creativity. "[I]t does not require that facts be presented in an innovative or surprising way." Id. at 362.

Facts are not copyrightable, because they lack any degree of creativity. This is so whether facts stand alone or as part of a compilation. *Id.* at 350; see also 17 U.S.C. §§ 101–03. Facts exist and are not created. Thus, there is a distinction between creating a work and discovering a fact. As the Supreme Court put it in *Feist*, "[t]he first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence." 499 U.S. at 347.

Even though facts themselves are not copyrightable, the Copyright Act recognizes that collections or compilations of facts may possess the originality necessary for copyright protection. 17 U.S.C. §§ 101-03; see also Feist, 499 U.S. at 348. A "compilation" is defined under the Copyright Act as "[1] a work formed by the collection and assembling of preexisting materials or of data [2] that are selected, coordinated, or arranged in such a way that [3] the resulting work as a whole constitutes an original work of authorship." 17 U.S.C. § 101; see also Feist, 499 U.S. at 357. Copyright Act makes clear, however, that when a collection of facts is copyrightable, the underlying facts themselves are not protected. Copyright protection "extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material." 17 U.S.C. § 103(b). The Supreme Court stated this principle in Feist as follows: "[C]hoices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws." 499 U.S. at 348 (citations omitted).

The Supreme Court authoritatively set the boundaries in *Feist* when it held that a telephone book fell below the creative limit. *Id.* at 362. The Court held that a telephone company's alphabetical list of the names, addresses, and telephone numbers of its subscribers in a directory was not

copyrightable. Id. at 361-62. There was no creativity in the selection or arrangement of the listings, because the telephone company's subscribers were persons desiring telephone service in the company's service area. *Id.* at 362. When the subscribers filled out an application, the company issued them a telephone number. *Id*. The company therefore did not select its subscribers or the data listed in its telephone book. *Id.* In preparing the directory, the company simply took the data that its subscribers provided to it and listed the subscribers alphabetically by surname. *Id.*

The Supreme Court in Feist went on to recognize that a little creativity in the selection or arrangement of facts would make a big difference. The compilation of facts could be copyrightable if the company "selected, coordinated, or arranged these uncopyrightable facts in an original way." Id. The company's mere replication of the names, addresses, and telephone numbers that each subscriber provided was not enough. It lacked "the modicum of creativity necessary to transform mere selection into copyrightable expression." Id. The arrangement of names did not help, because the company did "nothing more than list [its] subscribers in alphabetical order," which is an "age-old practice, firmly rooted in tradition and so commonplace that it has come to be expected as a matter of course." *Id.* at 363.

The Court also recognized that hard work is not necessarily creative, and so the investment of time and effort in a project does not necessarily make it copyrightable. Feist rejected the "sweat of the brow" or "industrious collection" doctrine, which the Court described as the notion that the Copyright Act should "hand[] out proprietary interests in facts" simply because some authors spend considerable time and effort compiling facts in their works. Id. at 352-60.

Instead, the Supreme Court held that whether a factual compilation is an original work depends upon "the manner in which the collected facts have been selected, coordinated, and arranged." *Id.* at 358. The selection or arrangement need not be novel; rather, the selection or arrangement need only be made independently and "display some minimal level of creativity." *Id.*

After *Feist*, there has been a considerable amount of federal litigation concerning when compilations of facts are copyrightable. Such litigation, not surprisingly, has served to illustrate that not a great deal of creativity in selection or arrangement is required. We briefly review the principal circuit court decisions.

Our Court has decided two significant cases since *Feist*. In *CDN Inc. v. Kapes*, 197 F.3d 1256, 1257, 1262 (9th Cir. 1999), we held that published lists of wholesale prices for collectible coins contained sufficient originality to sustain copyright protection. This was because the prices were not facts, but were estimates based on empirical research. They were "wholly the product of [CDN's] creativity." *CDN*, 197 F.3d at 1260. They were therefore "not mere listings of actual prices paid; rather, they [were] CDN's best estimate of the fair value of [each] coin." *Id.* For that reason, the lists were copyrightable.

More recently, we decided *Bikram's Yoga College of India, L.P. v. Evolation Yoga, LLC*, 803 F.3d 1032 (9th Cir. 2015) (*Bikram's Yoga*). There, we considered a book containing depictions of a sequence of yoga poses and breathing exercises. The sequence itself was not copyrightable, because it was an idea or process under the Copyright Act. *Bikram's Yoga*, 803 F.3d at 1042, 1044; *see*

also 17 U.S.C. § 102(b) ("In no case does copyright protection for an original work of authorship extend to any idea...[or] process,...regardless of the form in which it is described, explained, illustrated, or embodied in such work."). The depiction of the sequence in the book, however, was protected by copyright, because the depiction was the expression of the idea, i.e., the words and pictures that described the sequence. Bikram's Yoga, 803 F.3d at 1038–39. The book was thus entitled to copyright protection. Id.

Other circuit decisions have more directly considered compilations of factual or other non-copyrightable elements. The Second Circuit has addressed the copyrightability of compilations in two cases in which it found fairly minimal creativity sufficient for protection. In Key Publications, Inc. v. Chinatown Today Publishing Enterprises, Inc., 945 F.2d 509, 511 (2d Cir. 1991), the court considered a directory intended for the New York City Chinese-American community. The directory consisted of business names, addresses, and phone numbers, which were arranged into separate descriptive categories. Key Publ'ns, 945 F.2d at 512-13. The court held this was a sufficiently creative factual compilation to warrant copyright protection. Similar to Experian in this case, the compiler in Key Publications excluded information that she thought would not be useful for her customers. Id. at 513. She excluded businesses that would not remain open long, including "certain insurance brokers, take-out restaurants, and traditional Chinese medical practitioners." Id. The court held that this process of exclusion "indicate[d] thought and creativity in the selection of businesses," and that the work was copyrightable. Id.

In Kregos v. Associated Press, 937 F.2d 700, 702 (2d Cir. 1991), the Second Circuit dealt with a form or chart that conveyed information about the past performances of the opposing baseball pitchers scheduled to start each day's game. The form was protected because, similar to Experian's compilation, there were no other pitching forms that were identical or nearly identical to the plaintiff's. The form included nine items of 937 F.2d at 705. information about each pitcher's past performance, grouped into three categories. *Id.* at 702. The protection was for the form itself, not for the daily factual statistics it contained. Id. The court also cautioned that any relief would be extremely limited because the plaintiff could prevail only against those who used forms that exactly copied his selection of information. Id. at 709-10. Nevertheless, the statistical compilation was entitled to some protection.

The Second Circuit reached a different result when considering publications of judicial opinions. In Matthew Bender & Co. v. West Publishing Co., 158 F.3d 674, 677 (2d Cir. 1998), the court held that West's publications of judicial opinions did not merit copyright protection. Although West claimed it had demonstrated sufficient creativity in several respects, including its arrangement of information about parties, courts, and dates of decisions and its addition of certain information concerning counsel, the court concluded that West's selection and arrangement were "obvious, typical, and lack[ed] even minimal creativity." Matthew Bender & Co., 158 F.3d at 677. Creativity was lacking because industry conventions, such as those in the legal profession, made the choices obvious. Such conventions, the court stated, "so dictate selection that any person composing a compilation of the type at issue would necessarily select the same categories of information," and that "creativity inheres in making nonobvious choices from among more than a few options." *Id.* at 677, 682. In this case, Experian's choices are not obvious, as illustrated by Experian's evidence that the content in its database differs materially from the content in other compilations of consumer data.

Closer to our case are two Eleventh Circuit decisions involving directories. Warren Publishing, Inc. v. Microdos Data Corp., 115 F.3d 1509, 1511-12 (11th Cir. 1997) (en banc), involved a compilation of information about cable system operators. The information was printed in a directory that included "the name, address, and telephone number of the cable system operator, the number of subscribers, the channels offered, the price of service, and the types of equipment used." Warren Publ'g, 115 F.3d at 1512. The compiler used whatever information the cable companies provided in response to the compiler's request for Id. at 1519. The compilation was not information. copyrightable under Feist because there was no selectivity; unlike in this case, the compiler included the "entire relevant universe known to it" in the directory. Id. at 1518, 1520.

In BellSouth Advertising & Publishing Corp. v. Donnelley Information Publishing, Inc., 999 F.2d 1436, 1439, 1442 (11th Cir. 1993) (en banc) (BellSouth), the Eleventh Circuit similarly held that the plaintiff's Miami yellow page business directory was not sufficiently original to merit copyright protection because the contents involved no more creativity than the telephone book in Feist. Unlike this case, the listed businesses in BellSouth chose whether to be listed and the information to be included. 999 F.2d at 1441.

A Fifth Circuit case involved a process of data selection similar to the one in this case. The underlying information

conveyed was factual, but the manner of selecting and displaying the information involved originality. *Mason v. Montgomery Data, Inc.*, 967 F.2d 135, 141–42 (5th Cir. 1992). In *Mason*, the plaintiff selected real estate ownership information and displayed it on maps. *Id.* at 136. The court held that this was sufficiently creative in selection to warrant copyright protection, because the compiler made "choices… independently… to select information from numerous and sometimes conflicting sources," including from factual public records, and combined that information to make "an effective pictorial expression of those locations." *Id.* at 136 n.3, 140, 141. The same is true here.

From this survey of circuit decisions since Feist, we draw three general principles. First, although facts are not entitled to copyright protection, factual compilations are entitled to some protection as long as there is creativity in the selection, arrangement, or coordination of the facts. Feist, 499 U.S. at 358; Warren Publ'g, 115 F.3d at 1515; Mason, 967 F.2d at Second, the creativity that suffices to establish copyright protection in factual compilations is minimal. Feist, 499 U.S. at 348; Key Publ'ns, 945 F.2d at 512–13. For illustration, the compilation of business names, addresses, and phone numbers of interest to the New York City Chinese-American community was sufficiently creative to warrant copyright protection of a directory in Key Publications. 945 F.2d at 512–13; see also Kregos, 937 F.2d at 701–02. Third, such compilations of factual information receive only limited protection. 17 U.S.C. § 103(b); Feist, 499 U.S. at 359; Kregos, 937 F.2d at 702, 709. This means that a compiler may freely use the facts contained in a compilation when preparing a competing work, as long as the competing work does not exhibit the same selection or arrangement. See Feist, 499 U.S. at 349; see also Kregos, 937 F.2d at 702, 709.

Applying these principles to this case leads to the conclusion that Experian's lists are entitled to limited protection. Experian's selection process in culling data from multiple sources and selecting the appropriate pairing of addresses with names before entering them in the database involves a process of at least minimal creativity. The listings are compiled by first collecting and comparing multiple sources, and then sorting conflicting information through the creation of business rules that Experian created to select from among the conflicts. As the Fifth Circuit said in Mason, selection is sufficiently creative when the compiler makes "choices . . . independently . . . to select information from numerous and sometimes conflicting sources." 967 F.2d at Experian's process more than meets that standard. Much like the compilers in Mason and Key Publications, Experian's employees choose from multiple and sometimes conflicting sources, and they use their judgment in selecting which names and addresses to include in the database. See Mason, 967 F.2d at 141; Key Publ'ns, 945 F.2d at 512–13.

Experian's employees, like the compiler in *Key Publications*, also exclude information they deem irrelevant to the interests of Experian's marketing clients, information such as business addresses, and the names and addresses of the very elderly and incarcerated. *See* 945 F.2d at 513. Such exclusions indicate some "thought and creativity in the selection" of names and addresses to include in the database, *id.*, which indicates the "modicum of creativity necessary to transform mere selection into copyrightable expression." *Feist*, 499 U.S. at 362. The name and address pairings in Experian's database are also materially different from those in other databases. With respect to the baseball pitching form in *Kregos*, the Second Circuit observed that "[t]here is no prior form that is identical . . . nor one from which [it] varies

in only a trivial degree." 937 F.2d at 705. The same observation can be made here.

Natimark asserts that Experian's selectivity cannot be creative, because it is no more than a lengthy process to discover facts, which are not copyrightable. Natimark attempts to match Experian's process to the Supreme Court's discussion in *Feist* of "industrious collection," i.e., the hard work that a compiler exerts in gathering facts that lacks creativity to warrant copyright protection. 499 U.S. at 352–53.

Experian's methods, however, do not entail simple replication of the data that Experian receives, as was the situation in Feist. 499 U.S. at 362; see also Warren Publ'g, 115 F.3d at 1517-20; BellSouth, 999 F.2d at 1441. In all those cases, the directory compilers were simply fed the data. See Feist, 499 U.S. at 362 ("In preparing its white pages, [the telephone company] simply t[ook] the data provided by its subscribers and list[ed] it alphabetically by surname."); Warren Publ'g, 115 F.3d at 1519–20 (holding that directory of cable operator information was not copyrightable when the selection was not the compiler's "own, but rather that of the cable operators"); BellSouth, 999 F.2d at 1438, 1441 (involving a yellow pages directory containing information entirely provided by others). Experian does not include the "entire relevant universe known to it," as in Warren Publishing. 115 F.3d at 1518. Rather, Experian's selection process produces different, and at least according to Experian. more reliable data than the other four largest database compilers in the United States.

On the basis of our review of the decisions in this and other circuits, we must conclude that the name and address pairings in this case are copyrightable as compilations under post-*Feist* standards.

That does not end the copyright claim inquiry, however. To establish copyright infringement, the plaintiff must prove not only ownership of a valid copyright, but copying by the alleged infringer of constituent elements of the protected work. *Feist*, 499 U.S. at 361; *Unicolors, Inc. v. Urban Outfitters, Inc.*, 853 F.3d 980, 984 (9th Cir. 2017). We therefore must consider whether Experian has shown that Natimark infringed, i.e., copied the material. Although this issue was not reached by the District Court as it found the material was not copyrightable, we may affirm the District Court on any ground supported by the record. *See, e.g., Cosmetic Ideas, Inc. v. IAC/Interactivecorp*, 606 F.3d 612, 615 (9th Cir. 2010) (citation omitted).

B. Whether Experian established infringement

Even though the factual compilation at issue here is entitled to some protection, "the scope of protection in fact-based works" is severely limited. *Feist*, 499 U.S. at 350; *see also BellSouth*, 999 F.2d at 1445. The facts themselves can be copied at will. As the Supreme Court said in *Feist*, "This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science." 499 U.S. at 350. The Sixth Circuit said it well, "Given that the copyright protection of a factual compilation is 'thin,' a competitor's taking the bulk of the factual material from a preexisting compilation without infringement of the author's copyright is not surprising." *BellSouth*, 999 F.2d at 1445 (quoting *Feist*, 499 U.S. at 349).

For this reason, we have repeatedly recognized in this circuit that when dealing with factual compilations, infringement cannot be based on a showing that only a part of the work has been copied. In the context of factual compilations, we have held that infringement should not be found in the absence of "bodily appropriation of expression," or "unauthorized use of substantially the entire item." *Harper House, Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 205 (9th Cir. 1989) (citations omitted). As we said in *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1446 (9th Cir. 1994), "Under *Harper House* . . . there can be no infringement unless the works are virtually identical." It is not enough to compare the allegedly infringing compilation with only a portion of the copyrighted work.

The bodily appropriation principle is consistent with our more general rule that to establish that a work has been copied, the two works must be compared side-by-side. See Antonick v. Elec. Arts, Inc., 841 F.3d 1062, 1066 (9th Cir. 2016); Seiler v. Lucasfilm, Ltd., 808 F.2d 1316, 1319 (9th Cir. 1986). In Antonick, neither the copyrighted work nor the alleged infringing work was introduced into evidence, so no side-by-side comparison was possible. 841 F.3d at 1066. We held that the plaintiff had not established infringement. This was because, without such a comparison, it could not be determined whether the two works were substantially similar. Id. In Seiler, we reached a similar result, saying that the plaintiff could not show infringement because "[t]here [could] be no proof of . . . copyright infringement unless [the plaintiff's] works [were] juxtaposed with [the defendant's] and their contents compared." 808 F.3d at 1319.

In this case, the Experian database that was allegedly infringed was one updated through September 2011. Neither

that entire database nor Natimark's entire, allegedly infringing database was introduced into evidence, and perhaps as a practical matter could not have been. Nevertheless, there must be sufficient evidence of content to make a fair comparison. *See Data E. USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 207 (9th Cir. 1988).

Experian contends that it has established a triable issue as to copying by offering the opinion of an expert that the match rate between Experian files and the allegedly infringing Natimark files is higher than the match rate between the files of Experian and one of its legitimate licensees. Experian asks us to hold that it has presented circumstantial evidence of copying sufficient to send the case to a jury. It fails to cite any authority from this circuit or elsewhere permitting infringement to be established on the basis of circumstantial evidence, and in the absence of any direct comparisons.

We need not reach this issue, however, as we may affirm the District Court on any ground supported by the record. *See Cosmetic Ideas*, 606 F.3d at 615 (citation omitted). It is undisputed that Natimark's database was materially smaller than Experian's. While Experian's database at the relevant time included approximately 250 million pairings, Natimark's database contained name and address pairings for only 200 million consumers. Even assuming Natimark's pairings were exact copies of their counterparts in the Experian database, the match rate would only be 80% and insufficient to establish a bodily appropriation of Experian's work.

Decisions of our sister circuits bear this out. For example, the Eighth Circuit found that a ratio of 74% of the same items in both the copyrighted work and the infringing work was insufficient to establish infringement of a factual compilation

under Feist. See Schoolhouse, Inc. v. Anderson, 275 F.3d 726, 729–30 (8th Cir. 2002). Similarly, the Sixth Circuit held that a match rate of 61% of the same items found in both a copyrighted and an infringing work was also insufficient to establish infringement. See Ross, Brovins & Oehmke, P.C. v. Lexis Nexis Grp., 463 F.3d 478, 483 (6th Cir. 2006). The court said that a 61% match rate between the two compilations could "hardly be considered the 'same' selection." Id. (citation omitted). If we are to afford "thin" protection to Experian's factual compilation, as the Supreme Court has directed under Feist, 499 U.S. at 349, we must find substantial verbatim copying in the infringing work. See Apple Comput., 35 F.3d at 1446; Key Publ'ns, 945 F.2d at 514. An 80% match rate between two compilations of names and addresses in databases is insufficient to establish bodily appropriation.

Because Experian has not introduced the version of its database that it claimed was copied, it cannot establish infringement. Even if Experian could establish a triable issue as to copying by comparing later versions of its database with the alleged infringing database, however, the undisputed evidence shows that Experian could not establish bodily appropriation of expression. It can at best show a match rate of 80%. Experian therefore cannot establish infringement. For that reason, we must affirm the District Court's grant of summary judgment to Natimark on the copyright claim.

II. Trade secret claim

The District Court granted Natimark summary judgment on the state law trade secret claim as well, holding that Experian did not have a valid trade secret in its compilation of names and addresses because the names and addresses were public knowledge and Experian did not explain how it derived economic value from its compilation. The court also held that even if there were a valid trade secret, there were no triable issues of fact as to whether Natimark knew or had reason to know that the data were either secret or stolen when Natimark acquired the data.

Arizona has adopted the Uniform Trade Secret Act, which defines a trade secret as information that "[d]erives independent economic value" from not being known or readily ascertainable by the plaintiff's competitors and is the subject of reasonable efforts to maintain secrecy. A.R.S. § 44-401(4). A trade secret does not consist of "matters of public knowledge." Calisi v. Unified Fin. Servs., LLC, 302 P.3d 628, 631 (Ariz. Ct. App. 2013) (citing Enter. Leasing Co. v. Ehmke, 3 P.3d 1064, 1069 (Ariz. Ct. App. The subject matter of trade secrets "must be sufficiently novel, unique, or original that it is not readily ascertainable to competitors." Id. (citing Ehmke, 3 P.3d at 1069). Arizona courts have considered customer lists and have held that a trade secret cannot ordinarily consist of matters of public knowledge. See id. at 632 ("[T]o be protected as [a] trade secret, [a] customer list must be more than a listing of firms or individuals which could be compiled from directories or other generally available sources.") (citations and internal quotation marks omitted). Nonetheless, if a business spends considerable effort and resources in developing its trade secret, the trade secret may be protected. *Id.* (citations omitted).

Although the subject matter of Experian's compilation may be gathered from generally available sources that are matters of public knowledge, Experian spends a considerable amount of money and effort in developing the compilation,

and its compilation may therefore be protected under Arizona law. See id. Experian has at least shown triable issues that its database has economic value as a secret not readily ascertainable by its competitors, and that its database differs materially from other major compilers. See A.R.S. § 44-401(4). According to Experian, the name and address information is the most important of the data fields and is the foundation of its database because of the data's reliability and accuracy. And Experian asserts that it receives its business due to the high accuracy of its name and address pairings. As the Arizona Court of Appeals has recognized, "[v]alue will be inferred if the owner can show that the information confers upon it an economic advantage over others in the industry." Ehmke, 3 P.3d at 1070 (citation omitted). Experian contends it maintains the secrecy of its database as well. Even though it licenses the use of the database to others, it enters strict security agreements with licensees to maintain the database's secrecy. Experian has made a prima facie showing that its compilation of name and address pairings is a trade secret.

Under Arizona law, misappropriation means either acquisition or use of a trade secret with knowledge of misappropriation. Misappropriation is defined as either:

- (a) Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means [OR]
- (b) Disclosure or use of a trade secret of another without express or implied consent by a person who either:

- (i) Used improper means to acquire knowledge of the trade secret.
- (ii) At the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was derived from or through a person who had utilized improper means to acquire it, was acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use or was derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use.
- (iii) Before a material change of his position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

A.R.S. § 44-401(2).

Experian asserts that the District Court erred in holding that there were no triable issues of fact as to whether Natimark knew or had reason to know when it acquired the data that the data were obtained through improper means. Experian also argues that the District Court erred in focusing solely on Natimark's knowledge with respect to its acquisition of a trade secret, as opposed to use, in granting Natimark summary judgment.

The evidence of Natimark's knowledge in this case is sufficient to survive summary judgment. Experian has established triable issues of fact as to whether Natimark knew or had reason to know that it acquired and used a trade secret that was obtained through improper means. *See id.* In

JustMed, Inc. v. Byce, 600 F.3d 1118, 1129–30 (9th Cir. 2010), we considered a similar provision of Idaho law, and recognized that improper acquisition and improper use of protected works are independent bases for trade secret liability.

Here, evidence of the low price that Natimark paid for the data goes to whether Natimark had constructive knowledge that the data it obtained were acquired through improper means. According to Experian, Natimark paid less than 1% of the market rate for a one-time license to obtain actual ownership of data, and this would indicate knowledge. See Syntex Ophthalmics, Inc. v. Novicky, No. 80 C 6257, 1982 WL 63797, at *2, *11 (N.D. Ill. May 6, 1982) (holding \$20,000 payment for technology that cost \$1 million to develop demonstrated constructive knowledge for trade secret claim). Natimark's obtaining ownership of data through an invoice, which Experian argues is unusual in the industry, as opposed to obtaining limited use rights in the data through a written agreement, is further evidence of constructive knowledge. Experian also submitted evidence of Natimark's President's prior experience that should have put him on notice of an improper acquisition. Experian therefore submitted sufficient evidence to withstand summary judgment on the issue of whether Natimark knew or had reason to know that it acquired and used a trade secret that was obtained through improper means. See A.R.S. § 44-The District Court erred in granting summary judgment to Natimark on the trade secret claim.

Conclusion

The District Court correctly granted Natimark summary judgment on Experian's copyright claim. Experian's name

and address pairings are factual compilations entitled to only thin copyright protection. Experian failed to establish infringement. The District Court erred in granting Natimark summary judgment on the trade secret claim, because there are triable issues of fact as to Natimark's knowledge of misappropriation. We reverse and remand for further proceedings on that claim.

AFFIRMED in part and REVERSED in part and REMANDED.