# RECOMMENDED FOR PUBLICATION Pursuant to Sixth Circuit I.O.P. 32.1(b)

File Name: 20a0366p.06

## UNITED STATES COURT OF APPEALS

#### FOR THE SIXTH CIRCUIT

RJ CONTROL CONSULTANTS, INC.; PAUL E. ROGERS,  Plaintiffs-Appellants,  v.	No. 20-1009
MULTIJECT, LLC; RSW TECHNOLOGIES, LLC; JACK ELDER,	
Defendants-Appellees.	

Appeal from the United States District Court for the Eastern District of Michigan at Detroit. No. 2:16-cv-10728—Avern Cohn, District Judge.

Decided and Filed: November 23, 2020

Before: DAUGHTREY, DONALD, and READLER, Circuit Judges.

\_\_\_\_\_

#### COUNSEL

**ON BRIEF:** Eric D. Scheible, FRASCO CAPONIGRO WINEMAN SCHEIBLE HAUSER & LUTTMANN, PLLC, Troy, Michigan, for Appellants. Richard L. McDonnell, INTREPID LAW GROUP, PLC, Rochester, Michigan, for Appellees Multiject and Jack Elder. David C. Purdue, PURDUE LAW OFFICES, LLC, Toledo, Ohio, for Appellee RSW Technologies.

# OPINION

BERNICE BOUIE DONALD, Circuit Judge. This is a copyright dispute over the use of software code and technical drawings for an industrial control system related to plastic injection molding. The district court held that Plaintiff-Appellant RJ Control Consultants, Inc. and its sole shareholder, Paul Rogers, (collectively, "Plaintiffs") failed to establish copyright infringement

because the use of a design to manufacture a control system does not constitute copyright infringement. The district court accordingly granted summary judgment against Plaintiffs on their copyright infringement claim. The district court further granted summary judgment against Plaintiffs as to their Lanham Act claim, declined to exercise supplemental jurisdiction over the remaining state law claims, and denied as moot Plaintiffs' motion to compel discovery. Plaintiffs appeal the order denying reconsideration of the district court's grant of summary judgment as to the copyright claim as well as the denial of their motion to compel as moot.

I.

The district court characterized this as a "business dispute which soured a friendship." That friendship was between Plaintiff-Appellant Paul Rogers and Defendant-Appellee Jack Elder. Rogers was the principal and sole shareholder of RJ Control Consultants, Inc. ("RJ Control"), a Michigan company that creates industrial control systems. Elder is the sole owner of Defendant-Appellee Multiject, LLC ("Multiject"), a Michigan business which engineers and sells various industrial accessories related to plastic injection molding. Their friendship turned into a business relationship when Elder approached Rogers seeking Rogers's expertise and assistance in developing a control system for an injection molding machine.

In 2008, Rogers and Elder entered into an oral agreement whereby Rogers would develop a rotary turntable control system for Elder and Multiject. This turntable control system is the "brain" of the turntable, allowing the turntable to move and operate. RJ Control, through Rogers's work, updated the control system design in 2013, labeling the newest iteration as "Design 3." The parties dispute the invoicing for Design 3.1

In March of 2014, Elder asked Rogers for copies of Design 3's diagrams as well as the software source code "in case something happened" to Rogers. Rogers disclosed that information to Multiject, believing that Multiject and Elder would not improperly use or disclose the information to third parties. Three days after providing that information to Multiject, Elder informed Rogers and RJ Control that Elder and Multiject would no longer need Rogers's

<sup>&</sup>lt;sup>1</sup>In their briefing, the parties explain in detail the various contractual disputes raised in the district court. Because Rogers and RJ Control do not appeal the district court's dismissal of the state law claims—the only claims for which these facts are relevant—we do not address those facts here.

services and would instead use Defendant-Appellee RSW Technologies, LLC ("RSW") for the assembly and wiring of the control systems. Elder said that Multiject would like to continue working with Rogers as a technical consultant for the system design and that Multiject appreciated his expertise but that "this comes down to a business decision."

Multiject and RSW—RJ Control's replacement—had a long-standing business relationship with each other, and Multiject was already considering switching to RSW when it asked Rogers for the design diagrams. Elder claims that Multiject was increasingly concerned with Rogers's pricing, worrying that Rogers was charging Multiject too much relative to competitors, at least to the extent Rogers was performing manual labor rather than designing the systems. For that reason, Elder and Multiject decided to "switch out" RJ Control and Rogers for RSW, for purposes of manufacturing rotary tables.

On the same day that Elder informed Rogers that Multiject would be using RSW to assemble and wire the control systems, RSW sent Elder a quote that explicitly referenced the assembly and wiring of "RJ Table Control." Elder, Multiject, and RSW used Design 3—both the software code and the technical drawings—in the assembly and wiring of new control systems. RSW did not make any changes in the design when it used Design 3. RSW claims that it did not know Rogers and RJ Control had separately designed Design 3 and did not know there was dispute as to whether Elder properly paid Rogers for that work; that is to say, RSW believed Multiject had permission to build the control systems using the software and technical drawings.

On February 17, 2016—nearly two years after Rogers initially supplied the software code and technical drawings to Elder—Rogers obtained two Copyright Certificates of Registration: one for the "Control System Turn Table Software: Design 3" (i.e., the software code) and another for "Control System Turn Table Schematics: Design 3" (i.e., the technical drawings).

Nearly two weeks after receiving those copyrights, RJ Control brought suit against Multiject, Elder, and RSW. Over a year later, RJ Control filed an amended complaint, adding Rogers as a plaintiff. That amended complaint brought several federal and state law claims: (1) copyright infringement, (2) trademark infringement, (3) violation of the Michigan Consumer Protection Act, (4) breach of contract, (5) unjust enrichment, (6) conversion, and (7) tortious

interference with contract/business expectancy. RSW and Elder/Multiject separately brought motions for summary judgment on all claims. Before the district court ruled on those motions, Plaintiffs brought a motion to compel discovery responses. On November 8, 2018, the district court granted Defendants' motions for summary judgment. In doing so, the court dismissed the two federal claims (copyright and trademark infringement) with prejudice. The court dismissed the state law claims without prejudice, declining to exercise supplemental jurisdiction after the dismissal of the federal claims. Finally, the court denied as moot Plaintiffs' motion to compel. That same day, the district court entered its final judgment dismissing the case.

That was not, however, the end of the matter. Plaintiffs thereafter filed a motion for reconsideration of the dismissal of the copyright claim and denial as moot of their motion to compel. The district court denied that motion on January 18, 2019, but a week later set a hearing on the motion. Nearly two weeks later, the district court vacated its prior denial of the motion. At the hearing on February 11, 2019, the district court expressed interest in seeing the entire software code as it reconsidered its decision, also noting that the court may need an expert in making its determination regarding the software's copyrightability. Plaintiffs thereafter supplied the full code to the court. Ten months later, the district court denied the motion for reconsideration, finding that nothing in the papers supplied to the court—the full source code—revealed that the court erred in its original dismissal of the copyright-infringement claim. The district court provided no further explanation. Plaintiffs then brought this appeal.

II.

We review a district court's grant of summary judgment de novo. *Gillis v. Miller*, 845 F.3d 677, 683 (6th Cir. 2017).<sup>3</sup> Summary judgment is proper "if the movant shows that

<sup>&</sup>lt;sup>2</sup>The district judge, Avern Cohn, retired weeks after his denial of Plaintiffs' motion for reconsideration.

<sup>&</sup>lt;sup>3</sup>The notice of appeal itself is limited to appealing the denial of Plaintiffs' motion for reconsideration. Nonetheless, "where it can be reasonably inferred from the notice of appeal that the intent of the appellant was to appeal from the final judgment" rather than merely the denial of the motion for reconsideration, we may treat the appeal as an appeal from the final judgment, particularly where the appellee has not been misled. *Peabody Coal Co. v. Local Union Nos. 1734, 1508, & 1548, UMW*, 484 F.2d 78, 81 (6th Cir. 1973). Here, the appellees have not been misled, particularly considering that both parties have briefed the merits of the underlying motion for summary judgment rather than constraining themselves to the motion for reconsideration. *See also Boburka v. Adcock*, 979 F.2d 424, 426 (6th Cir. 1992).

there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of showing that no genuine issues of material fact exist. *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). The nonmoving party "must set forth specific facts showing that there is a genuine issue for trial," and in turn, the reviewing court must determine "whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250-52 (1986). In copyright infringement cases, "granting summary judgment, particularly in favor of a defendant, is a practice to be used sparingly." *Wickham v. Knoxville Int'l Energy Exposition, Inc.*, 739 F.2d 1094, 1097 (6th Cir. 1984).

III.

On appeal, Rogers and RJ control argue that the district court erred in granting summary judgment as to the copyright claim and in denying their motion to compel as moot. Considering first the copyright claim, they argue that Defendants' access to the copyright, combined with the substantial similarity between the control systems, at minimum raises a genuine dispute as to whether Defendants copied their works. They argue that the "useful article" exception does not apply where the alleged infringer *directly* copied the article, as they allege Defendants did here. Finally, RJ Control and Rogers argue that the district court erred in not considering the copying of the software code, instead analyzing only the copying of the technical drawings.

In their responses, Defendants address the two copyrighted works separately. First, considering the software copyright, they argue that "copyright protection does not extend to the control system software at issue because it embodies a procedure, a system[,] and a method of operating an injection molding machine" and that "[n]o[t] one of these is eligible for copyright protection." Thus, even if the district court did not specifically address the software code in its initial opinion granting summary judgment, Plaintiffs cannot claim copyright protection in the software code. Second, considering the technical drawings—which the district court did address at length—Defendants claim that the use of copyrighted technical drawings to produce a control system does not constitute copyright infringement of the technical drawings in the same way that making a recipe out of a copyrighted cookbook does not constitute copyright infringement of the

cookbook. Defendants submit that to the extent Plaintiffs seek to protect the *use* of the technical drawings to create something else, such as the control systems here, Plaintiffs should seek protection under patent law, not copyright law.

The Copyright Act protects "original works of authorship fixed in any tangible medium of expression." 17 U.S.C. § 102(a). The owner of the copyright has the exclusive right to reproduce the copyrighted work, to prepare derivative works, and to distribute copies of the works to the public. *Id.* § 106. However, "[t]he mere fact that a work is copyrighted does not mean that every element of the work may be protected." *Feist Publ'ns Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348 (1991). The statute limits that protection in two relevant ways. First, "[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such a work." 17 U.S.C. § 102(b). Second, as applied to rights in "pictorial, graphic, and sculptural work," the Copyright Act "does not afford, to the owner of copyright in a work that portrays a useful article as such, any greater or lesser rights with respect to the making, distribution, or display of the useful article so portrayed than those afforded to such works under the law . . . in effect on December 31, 1977." *Id.* § 113(b).

A copyright-infringement claim must establish: (1) ownership of a valid copyright, and (2) the fact "that the defendant copied protectable elements of the work." *Lexmark Int., Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 534 (6th Cir. 2004). The first element tests both originality and non-functionality which are "presumptively established by the copyright registration." *Id.* A plaintiff may provide "the certificate of a registration made before or within five years after first publication of the work" which "shall constitute prima facie evidence of the validity of the copyright and of the facts stated in the certificate." 17 U.S.C. § 410(c). Once the plaintiff produces that copyright certificate, the burden shifts to the defendant to explain why the

<sup>&</sup>lt;sup>4</sup>As relevant here, software codes may be entitled to copyright protection as "literary works" under 17 U.S.C. § 101. Lexmark Int'l Inc. v. Static Control Components, Inc., 387 F.3d 522, 533 (6th Cir. 2004) (citing H.R. Rep. No. 1476 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5667 ("The term 'literary works'... includes... computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves.")). Technical drawings are covered under "pictorial, graph, and sculptural works." 17 U.S.C. § 102(a)(5).

copyright is invalid. *Lexmark*, 387 F.3d at 334. RJ Control had two valid copyrights: one for the software (TXu 1-978-284, with an effective registration date of February 17, 2016) and one for the technical drawings (VAu 1-234-630, with an effective registration date of February 18, 2016). Defendants do not assert that the copyrights themselves are invalid but rather that Defendants' use of those drawings does not constitute prohibited copying.<sup>5</sup>

Because the validity of the copyrights is not contested, we consider the technical drawing and software code copyrights under the second prong. The second prong "tests whether any copying occurred (a factual matter) and whether the portions of the work copied were entitled to copyright protection (a legal matter)." *Lexmark*, 378 F.3d at 534.

#### A. Copying of the Technical Drawings

We first consider the copyright titled "Control System Turn Table Schematics: Design 3," i.e., the technical drawings. We hold that although physical copying may have occurred, the basis for RJ Control and Rogers's complaint—that the drawings were copied to reproduce the control system contained therein—sounds in patent law rather than copyright. Accordingly, we agree with the district court that the manufacture of the control system from the copyrighted technical drawing was not copyright infringement because the recreation of a control system by using a copyrighted technical drawing is not "copying" for purposes of the Copyright Act.

<sup>&</sup>lt;sup>5</sup>Courts consider "copyrightability" in both aspects of the infringement test. *Lexmark*, 387 F.3d at 538. Here, we address the copyrightability of the copyrights under the second prong to ensure our holding does not establish that technical drawings are *never* protected by copyright. They may be. However, as we hold today, any such copyright protection does not extend to the *use* of such drawings to construct the object or process contained within those drawings. Patent law provides the appropriate protection for such usage.

<sup>&</sup>lt;sup>6</sup>Plaintiffs assert that there is a fact issue regarding whether RSW physically reproduced the technical drawings. That may be true, but the question of whether the drawings were themselves reproduced—a separate question from whether the drawing was used to create the system portrayed in that drawing—was not clearly raised in Plaintiffs' amended complaint. No facts allude to the physical reproduction of the technical drawings, instead alleging only that Defendants *used* the "Copyright Information" to infringe on "one or more" of Plaintiffs' copyrights. Even to the extent this new theory of copyright infringement was raised in Plaintiffs' response to Defendants' motion for summary judgment, a plaintiff may not expand its claims to assert new theories, either in response to summary judgment or on appeal. *Bridgeport Music, Inc. v. WM Music Corp.*, 508 F.3d 394, 400 (6th Cir. 2007). Further, even if we were to consider such copyright infringement of the drawings based on the physical reproduction thereof, it is unclear what damages—if any—are attributable to that physical copying.

Unlike patent law, "a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself." Mazer v. Stein, 347 U.S. 201, 217 (1954); see also Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 703 (2d Cir. 1992) ("It is a fundamental principle of copyright law that a copyright does not protect an idea, but only the expression of the idea."). This distinction between ideas and expression is consistent with the distinction between patent and copyright law; copyright law protects an author's original expression but does not give the author the exclusive right to use the ideas expressed in that work. Such ideas may only be protected by obtaining a patent. See Nat'l Med. Care, Inc. v. Espiritu, 284 F. Supp. 2d 424, 435 (S.D. W. Va. 2003) (citing Baker v. Selden, 101 U.S. 99 (1879) ("Copyright law protects an author's original expression, but does not give the author the exclusive right to use the ideas expressed in the author's work. Baker, 101 U.S. at 102. An author may only obtain protection for the ideas expressed by obtaining a patent."). In Baker, the plaintiff held a copyright in a book which outlined a bookkeeping system, and the defendant created duplicates of forms used within that book. Baker, 101 U.S. at 100. The plaintiff claimed that the forms sold by the defendant infringed on the plaintiff's copyright in the book itself. The Supreme Court disagreed, holding that copyright protection extends to the particular expression of an art of work, but not to the use of the art of work described in the copyrighted material. Baker, 101 U.S. at 100.

The exclusive right to *use* the drawings to reconstruct any idea contained therein sounds in patent law rather than copyright. In contrast to patent law's protection of *use*, copyright protection does not "extend to any idea, procedure, process, [or] system . . . , regardless of the form in which it is described, explained, illustrated or embodied in such a work." 17 U.S.C. § 102(b); *see*, *e.g.*, *Victor Stanley*, *Inc.* v. *Creative Pipe*, *Inc.*, No. MJG-06-2662, 2011 WL 4596043, at \*3 (D. Md. Sept. 30, 2011) ("[T]o allow the act of manufacturing a non-architectural useful item by using a copyright protected drawing of that item to constitute copyright infringement would be to elevate the copyright to a patent.") *aff'd*, 499 F. App'x 971 (Fed. Cir. 2013); *see also* 1 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 2.18[A] ("Where the owner of a patent obtains the right to exclude others from using the invention, the rights granted to a copyright owner under [§] 106 of the Copyright Act do not include the right to prevent others from using the copyrighted work."). A copyright protects the author's expression but does not

give the author the exclusive right to use the ideas expressed in the author's work. An author may only obtain protection for the *ideas* expressed by obtaining a patent. *Baker*, 101 U.S. at 102. As Defendants note, the Copyright Act may protect a cookbook itself, but that copyright protection does not prevent an amateur chef from using the cookbook to prepare a recipe contained within that copyrighted book.

Both the congressional record and case law support the distinction between copyright and patent law as it pertains to technical drawings and copyright infringement claims made on the basis of using those drawings to create something else. The congressional record preceding the enactment of the Copyright Act notes that "[a] copyrighted technical drawing showing the construction of a machine, used to manufacture the machine" is not entitled to copyright protection to the extent the work "portray[s] a useful article." Staff of H.R. Comm. on the Judiciary, 87th Cong., Rep. of the Register of Copyrights on the General Revision of the U.S. Copyright Law (1961). "A 'useful article' is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information." 17 U.S.C. § 101.7

In construing this language, courts have routinely held that "the manufacture of a machine from a copyrighted technical drawing is clearly not copyright infringement." *Niemi v. Am. Axle Mfg. & Holding Inc.*, No. 05-74210, 2006 WL 2077590, at \*3 (E.D. Mich. July 24, 2006). Holding a "copyright in a pictorial representation of a useful article does not vest the owner of the picture with a derivative copyright in the useful article itself." *Gusler v. Fischer*, 580 F. Supp. 2d 309, 315 (S.D.N.Y. 2008) (quoting *Eliya, Inc. v. Kohl's Dept. Stores*, No. 06 Civ 195(GEL), 2006 WL 2645196, at \*9 (S.D.N.Y. Sept. 13, 2006)); *id.* ("[The plaintiff] holds a copyright in a technical drawing of a useful article, which does not preclude [the] [d]efendants' manufacturing . . . of the article itself."); *Espiritu*, 284 F. Supp. 2d at 433, 435–36 (finding that

<sup>&</sup>lt;sup>7</sup>At least one court has found that technical drawings themselves are not "useful articles" because they are created to "convey information" and, thus, are not themselves useful but rather depict useful articles. *See, e.g.*, *Oldcaste Precast, Inc. v. Granite Precasting & Concrete, Inc.*, No. C10-322, 2011 WL 813759, at \*5 (W.D. Wash. Mar. 2, 2011). The House Committee Report, however, uses the above example—excluding technical drawings from copyright protection—where they *portray* a useful article, not where they *themselves* are useful articles. The analysis, then, is on whether the depicted item is itself a useful article. The control system itself is a useful article in that it is the "brain" used to direct the plastic injection molding and is not designed merely to "convey information." 17 U.S.C. § 101.

copyright protection does not extend to structures built from technical drawings, even where the defendant stipulated to using unauthorized copies of the technical drawings).<sup>8</sup>

We thus agree with the district court that "the use of the Design 3 drawing to manufacture a control system is not an act of copyright infringement." The copyright protection extends to the drawing itself, affording Plaintiffs the exclusive right to prepare derivative works, distribute copies, and display the copyright. 17 U.S.C. § 106. Such protection, however, does not extend to the use of those drawings to create the useful article described in those drawings, as patent law—with its stricter standards requiring novelty—governs such use protection. *Mazer*, 347 U.S. at 217; *see Espiritu*, 284 F. Supp. 2d at 434–35. We thus affirm the district court to the extent the court found that there was no copyright infringement as to the technical drawings themselves.

### **B.** Software Copyright

We next consider the software copyright registered as "Control System Turn Table Software: Design 3." In its order granting summary judgment, the district court did not analyze the software code, looking instead solely to the copyrightability of the technical drawings. In a hearing on Plaintiffs' motion for reconsideration, however, the court expressed an understanding that it still needed to consider the copyrightability of the software code itself. R. 73, PageID #2556 ("[T]he problem with my Opinion is I didn't know what the [software] program was[,] and it's a question of what is the program, whether it's covered."). The district court questioned whether the court, without an expert, could make an appropriate judgment as to the copyrightability of a software program.

We begin again with the distinction between an unprotectible idea and a protectible expression, a distinction which poses "unique problems" when considering computer

<sup>&</sup>lt;sup>8</sup>Plaintiffs cite *Nino Homes* for the opposite conclusion: that "one may construct a house which is identical to a house depicted in copyrighted architectural plans, but one may not directly copy those plans and then use the infringing copy to construct the house." *Robert R. Jones Assoc., Inc. v. Nino Homes*, 858 F.2d 274, 280 (6th Cir. 1988). Courts have repeatedly, however, explicitly declined to extend these architecture cases to non-architectural technical drawings, largely because the two categories are covered separately under the Copyright Act. *See, e.g., Niemi*, 2006 WL 2077590, at \*4 (noting that the holding in *Nino Homes* is "limited to architectural works"); *see also Forest River, Inc. v. Heartland Recreational Vehicles LLC*, 753 F. Supp. 2d 753, 759 (N.D. Ind. 2010); *Niemi v. NHK Spring Co.*, No. 3:06-CV-1117, 2007 WL 2460348, at \*2 (N.D. Ohio Aug. 27, 2007).

programming. *Sega Enters.*, *Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1524 (9th Cir. 1992); *Mazer*, 347 U.S. at 217. The 1976 House Report on the Copyright Act applies the statutory limitation in § 102(b) directly to computer programs, noting that:

Some concern has been expressed lest copyright in computer programs should extend protection to the methodology or processes adopted by the programmer, rather than merely to the "writing" expressing his ideas. Section 102(b) is intended, among other things, to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of the copyright law.

Atari Games Corp. v. Nintendo of Am. Inc., 975 F.2d 832, 838–39 (Fed. Cir. 1992) (quoting H.R. Rep. No. 1476, 94th Cong., 2d Sess. 57 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5670).

In Lexmark, this Court considered this distinction with a software program and noted that "the task of separating expression from idea in this setting is a vexing one," describing the distinction between idea and expression as an "elusive boundary line." Lexmark, 387 F.3d at 535. To distinguish ideas from expression in the software context, courts have considered two doctrines: the doctrine of merger and "scenes a faire." Id. These doctrines are used to filter out "unprotectible elements." See Kohus, 328 F.3d at 856. "Where the expression is essential to the statement of the idea . . . the idea and expression are said to have merged. In these instances, copyright protection does not exist because granting protection to the expressive component of the work necessarily would extend protection to the work's uncopyrightable ideas as well." Lexmark, 387 F.3d at 535 (internal citations and quotation marks omitted). In other words, if the noncopyrightable and copyrightable elements are inextricably intertwined, the noncopyrightable aspect trumps the copyrightable one, rendering the entire work uncopyrightable. Murray Hill Publ'ns Inc. v. Twentieth Century Fox Film Corp., 361 F.3d 312, 318 n.2 (6th Cir. 2004) ("Of the two principles, that ideas are not protectible and that expressions are protectible, it is the former that is the stronger.").

Distinguishing between those ideas and expression in the context of software code requires a line-by-line understanding of the code, including what specific lines in that code are purely functional and whether those unprotectible lines are intertwined with any expressive lines.

See Lexmark, 387 F.3d at 535; Sega Enters., 977 F.2d at 1524. If there are "many possible ways of accomplishing a given task," then "the programmer's choice of program structure and design may be highly creative and idiosyncratic," thus pointing in favor of the software—or at least, that particular line—being a protectible expression. Sega Enters., 977 F.3d at 1254. On the other hand, such computer programs are, "in essence, utilitarian articles" and "[a]s such, they contain many logical, structural, and visual display elements that are dictated by the function to be performed, by considerations of efficiency, or by external factors such as compatibility requirements and industry demands." Id. Such utilitarian features of the program are not protected, and if they are intertwined with any copyrightable elements, the unprotected elements trump the protected elements. Lexmark, 387 F.3d at 535; Murray Hill, 361 F.3d at 318 n.2.

The "scenes a faire" doctrine similarly distinguishes between ideas and expression. Under this doctrine, certain stock or standard phrases or code lines that "necessarily follow from a common theme or setting" are not protected." Lexmark, 387 F.3d at 535 (citing Gates Rubber Co. v. Bando Chem. Indus. Ltd., 9 F.3d 823, 838 (10th Cir. 1993)). "In the computer software context, the doctrine means that the elements of a program dictated by practical realities—e.g., by hardware standards and mechanical specifications, software standards and compatibility requirements, computer manufacturer design standards, target industry practices, and standard computer programming practices—may not obtain protection." Id.; Sega Enters., 977 F.2d at 1524 ("To the extent that a work is functional or factual, it may be copied."). In considering the protectability of a particular copyright under this doctrine, courts may look at "external considerations" such as industry standard practices. Kohus, 328 F.3d at 856. Where the expression is standard or commonplace, then plaintiffs may not claim copyright protection of that software. Lexmark, 387 F.3d at 535–36 (citing Brown Bag Software v. Symantec Corp., 960 F.2d 1465, 1473 (9th Cir. 1992) (affirming district court's finding that "[p]laintiffs may not claim copyright protection of an . . . expression that is, if not standard, then commonplace in the computer software industry")).

In considering these two doctrines, the assistance of an expert is desirable, if not required. *See Kohus*, 328 F.3d at 856 (noting that expert testimony in that case would "likely be required" to discern expression from idea under the merger doctrine). Similarly, we are unable to

undertake any analysis under the *scenes a faire* doctrine without any expert testimony—much less without any briefing or argument—regarding standard industry practices regarding control systems and the relevant software. *See id.* at 857–58 (remanding where the "inquiry [into copyrightability] will almost certainly require expert testimony, because the drawings are technical in nature"). The district court here noted as much but nonetheless denied the motion for reconsideration before any such expert was hired or appointed. The technology here is complex, as are the questions necessary to establish whether that technology is properly protected under the Copyright Act. Which aspects or lines of the software code are functional? Which are expressive? Which are commonplace or standard in the industry? Which elements, if any, are inextricably intertwined? Without any record evidence—whether expert or not—to answer these material questions, there indeed remains a genuine factual dispute. Accordingly, we reverse the district court's grant of summary judgment as to the copyright-infringement claim regarding the software copyright, Copyright Registration Number TXu 1-978-284, and remand the matter to the district court for the taking of additional evidence.

Plaintiffs also appeal the district court's denial of their motion to compel discovery. The district court denied that motion as moot. We review denials of motions to compel discovery for an abuse of discretion. *Louzon v. Ford Motor Co.*, 718 F.3d 556, 560 (6th Cir. 2013). To the extent the discovery requests are relevant to the surviving claim, i.e. copyright infringement of the software, the district court's denial is vacated. The remaining requests, however—those relevant to the technical drawings and the state-law claims—are indeed moot and, as such, the district court's denial of those requests as moot is affirmed.

IV.

For the foregoing reasons, we **AFFIRM** the district court's grant of summary judgment with respect to the copyright infringement claim related to the technical drawings, **REVERSE** the district court's grant of summary judgment with respect to the copyright infringement claim related to the software code, and **VACATE IN PART** and **AFFIRM IN PART** the district court's denial of the motion to compel as moot. We **REMAND** for further proceedings consistent with this opinion.