In The Supreme Court of the United States

GOOGLE LLC,

Petitioner,

v.

ORACLE AMERICA, INC.,

Respondent.

On Writ Of Certiorari To The United States Court Of Appeals For The Federal Circuit

BRIEF AMICUS CURIAE
OF MICHAEL RISCH
IN SUPPORT OF PETITIONER

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STATEMENT OF INTEREST OF AMICUS CURIAE

Amicus is a member of this Court's bar, a professor who teaches and writes about copyright law (in particular, the application of copyright to computer software), and an attorney who has represented companies that both create and reuse software. He is interested in copyright law developing in a way that continues to encourage creativity and investment in software while also allowing for later authors to reuse functional elements.¹

SUMMARY OF ARGUMENT

The first question presented to this Court is not simply "[w]hether copyright protection extends to a software interface," but whether protection extends to a software interface in the context of an infringement inquiry. Considering context will allow the Court to properly determine the scope of protection, without having to determine whether Oracle's Java declarations might be copyrightable standing alone. The Court should find Google's particular use of the declarations

¹ *Amicus* has no financial interest in the outcome of this case, other than ownership of several mutual and index funds that may or may not hold stock in either or both of the parties. No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amicus* made a monetary contribution to its preparation or submission. The parties have consented to the filing of this brief.

non-infringing without addressing metaphysical questions about copyrightability in other contexts.

Both lower courts erred by ignoring the context in which the scope of protection was considered. The District Court allowed the jury to decide an infringement claim that included both functional and expressive elements, instead of filtering the functional elements out as the Copyright Act requires. The Federal Circuit accordingly considered the copyrightability of the Java declarations outside the context of infringement as well. This framing aligned the parties in a zero-sum game: either Oracle's Java declarations are copyrightable for all purposes or they are not, with no attention to how the claimed work was used by the defendant in this case.

But there is a better way to answer Question 1—one that aligns with copyright law—simultaneously recognizing that copyright protects whole works and that copyright might still have a limited scope. The statute is clear: whether a complete work is copyrightable is a question about whether the work receives any protection at all. But the copyrightability of an entire work does not answer the question of whether any particular portion of it, if used by another, is infringing. That analysis requires determining whether the defendant has taken too much expression and not ideas, systems, methods of operation, or the like. And such a determination cannot be made outside of the infringement analysis. Any functionally required aspects—including any expression necessary to practice the idea—

should be removed from the comparison. What remains should then be compared.

The advantage of this approach is that it recognizes that while entire software programs may be copyrightable in some contexts, their pieces might not be infringed in others. There need be no zero-sum game, but only a recognition that the scope of copyright depends, as it always has, on the accused's use of the copyrighted work.

As applied to this case, the declarations for the various Java commands are part of the entire copyrighted work: the Java source code. In that context, Oracle might sue someone who copied the entire codebase in a competing program. In contrast, whether the interface declarations could form a copyrightable work when separated from the rest of the codebase is more complex and hotly debated. For example, Oracle could have published this work in a book because source code is considered a literary work. In such a case, a reasonable argument might be made that a copied book containing only the declarations infringes.

But Google did not publish a book, and this Court need not decide the complex question of whether portions of functional works are entitled to a separate copyright. The question is not whether Oracle could have obtained a copyright registration on the software interface declarations. Instead, the Court should decide whether protection extends to the proffered use by Petitioner Google in creating a system intended to accept and compile commands identical to the ones used in the Java programming language.

Here, the answer is far less complex: when Google's work is compared with Oracle's, any similarities due to the functional constraints of implementing the same programming language must be ignored. Even if Oracle showed creativity in selecting package and variable names beyond those dictated by the ideas they reflect, that creativity would not entitle it to a backdoor patent, assertable against anyone who wishes to create a compiler or interpreter that accepts the same computer language. Such a compiler would necessarily use identical commands and parameters. In that context, the use of the names and variables must be excluded from the comparison under a variety of doctrines argued by Google and *amici*. This is true even if some expression were copied along with ideas.

After filtering the declarations out, the jury would have had nothing to compare against Oracle's work, and this case should have been decided on summary judgment or as a matter of law at trial. The infringement inquiry fails.

In sum, the Court need not decide whether any part of Oracle's code is copyrightable standing alone. It should only determine that the scope of its copyright in the Java source code cannot extend to infringement through the reuse of declaring functions necessary to create a compiler or interpreter that accepts the same commands and parameter names to allow programmers to use the Java programming language. When

properly viewed, this case is no different from *Bateman* v. *Mnemonics*, *Inc.*, 79 F.3d 1532, 1547 (11th Cir. 1996), which similarly determined that command interfaces necessary to make a compatible operating system should be filtered out without reaching the question of copyrightability.

ARGUMENT

The district and appellate courts, and just about the entire commentariat, have focused on the wrong issue. The battle is framed as one of *copyrightability*, when the true battle is one of *infringement*. This distinction makes a difference, because a work may be copyrightable in one context even if copying parts of it may not constitute infringement in others. When the work is largely made up of uncopyrightable elements, then the corpus of the work may be protected even if its pieces might not be infringed if reused. When the work is made up of many levels of abstraction, from the exact expression on one end to the idea of the work on the other, courts may find the corpus of the work copyrightable, even if the non-literal elements that were reused are not infringing.

Courts have long been aware of this conflict and have developed methods to handle it. Whether they call the test "abstraction, filtration, and comparison" or "analytic dissection," the various circuits have addressed the complexity of contextual protection and infringement.

Except here. The abstraction and filtration procedures were never applied. The court asked the jury if Google's interface declarations looked like Oracle's interface declarations and the jury answered yes, of course, because that was the entire point—using the same declarations was the only way for Google to allow developers to use the same programming language with Google's new compiler. Only after the jury's infringement verdict did the District Court hold that the method declarations were uncopyrightable in isolation. Proper filtration would have resulted in summary judgment or judgment as a matter of law because the jury would have had nothing left to compare.

This brief presents a better option for resolving this case. It argues three points. First, the statute, this Court, and the appellate courts have long recognized that when only part of a work is copied, protectability questions are best handled during the infringement analysis. Second, the courts did not do that here, leaving the case—if unchecked—in a posture that urges the Court to make an unnecessary decision about the untethered copyrightability of a constituent portion of a larger copyrighted work. Third, by following the proper infringement theory, the Court may avoid this unnecessary choice and recognize that the scope of Oracle's copyrighted work, whatever it may be, cannot extend to reused method declarations necessary to implement the same computer programming language. Google cannot be liable for infringement even if it necessarily copied some expression to make a compatible compiler.

These three steps make clear that the first question presented must only be answered within the context of infringement. Ruling that courts should consider the scope of protection in the context of infringement rather than in isolation will send a message that the courts should be following Supreme Court precedent to remove unprotected elements of works prior to comparison. Oracle was not entitled to the protection of these software interfaces in this context, because their use should have been filtered out in the infringement inquiry.

- I. Copyrightability of Portion of a Work Must Not Be Considered in Isolation; Infringement Analysis Is the Better Course
 - A. Copyrightability Applies to Whole Works Only; the Statute Limits Copyrightability and Exclusive Rights to the "Work"

While the Copyright Act gives scant guidance about determining infringement, it does provide some guidance about the nature of a work—even if it never defines "work." For example, the definition of "created" makes clear that works are unitary wholes. Works are created when fixed, and when works are fixed in pieces over time, the then-existing fixation constitutes the work. 17 U.S.C. § 101. When there are multiple versions, each version is a work. *Id.* "Joint works" are created when the work of two or more authors are intertwined into a single, unseparable whole. *Id.* A

"copy" is the tangible medium in which the (entire) work is fixed. *Id*.

The scope of copyright and exclusive rights key off these definitions. So "[c]opyright protection subsists . . . in original works of authorship. . . ." 17 U.S.C. § 102(a) (emphasis added). And the limitation on functionality and methods of operation, and so forth, limits "protection for an original work of authorship. . . ." 17 U.S.C. § 102(b) (emphasis added). Protection for compilations and derivative works is also framed in terms of scope. Both compilation and derivative work copyrights protect the entire work, even if that protection does not extend to certain portions of the work. 17 U.S.C. § 103. None of these definitions contemplates the copyrightability, fixation, or other protection for portions of works. Copyright subsists in complete works.

This holistic focus on the "work" extends to infringement analysis. The exclusive rights provided in the statute limit others from copying, performing, and distributing *the work*. 17 U.S.C. §§ 106, 501 (emphasis added). Of course, sometimes less than the entire work is copied or performed, but that is why the courts developed the doctrine of "substantial similarity" to determine whether enough of the entire work had been copied to constitute actionable infringement.

In short, the Copyright Act does not contemplate separate copyrightability determinations of portions of works. Instead, the work as a whole is either copyrightable or not.

B. Unless the Entire Work Is Copied, "Uncopyrightable" Scope Limitations Should Be Considered Only During Infringement Analysis

In all three instances in which this Court has rendered an opinion on whether copyright protection extends to a portion of a work, it has reached its decision by comparing the accused work with the copyright claimant's work, and not by issuing a declaration of uncopyrightability.²

The first such opportunity was in *Perris v. Hex*amer, in which the defendant created a map of Philadelphia using the same symbols and legend as the plaintiff's map of New York. 99 U.S. 674 (1879). The Court ruled that the copied signs and key, though "arbitrary," were not within the scope of infringement even though the map was copyrightable: "Scarcely any map is published on which certain arbitrary signs, explained by a key printed at some convenient place for reference, are not used ... and yet we think it has never been supposed that a simple copyright of the map gave the publisher an exclusive right to the use upon other maps of the particular signs and key. . . . " Id. at 676. The Court ruled: "The defendant has not copied their maps. All he has done at any time has been to use to some extent their system of arbitrary signs and their key." *Id.* (emphasis added). The Court very

² Harper & Row, Publishers, Inc. v. Nation Enterprises, 471 U.S. 539 (1985), involved similar analysis, but in the context of fair use analysis. Lotus Development Corp. v. Borland Intern., Inc., 516 U.S. 233 (1996), was affirmed by an equally divided vote.

early made clear that reuse of functional aspects was simply not infringing.

A year later, the Court decided its more famous case, *Baker v. Selden*, in which the Court came to the same conclusion that useful aspects of a copyrighted accounting book were reusable. 101 U.S. 99 (1880). Despite today's conventional wisdom, the Court never held that the accounting book was uncopyrightable; it instead confirmed the rule that entire works are copyrighted: "Now, whilst no one has a right to print or publish his book, or any material part thereof. . . ." 101 U.S. at 104.

Instead, the Court explained that the scope of the copyright is limited when the portion copied is not sufficiently protectable to be infringed.

The copyright of a book on book-keeping cannot secure the exclusive right to make, sell, and use account-books prepared upon the plan set forth in such book. . . . And, of course, in using the art, the ruled lines and headings of accounts *must necessarily be used* as incident to it.

Id. (emphasis added). None of the Court's discussion, dicta or otherwise, found Selden's work uncopyrightable. Instead, the opinion examined whether the defendant's use of particular elements (the idea of the bookkeeping method and the expression of the particular forms incident to the method) infringes any exclusive right. The answer, of course, was no.

More than 100 years later, in *Feist*, the Court repeated this analysis. *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991). There, the Court considered Feist Publications' reuse of white pages telephone listings. Even as it concluded that the alphabetized selection and coordination of names and addresses did not rise above the *de minimis* level of originality, the Court recognized that these listings were only a part of a complete, copyrighted work that included other aspects, such as yellow pages:

Not all copying, however, is copyright infringement. To establish infringement, two elements must be proven: (1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original. The first element is not at issue here; Feist appears to concede that Rural's directory, considered as a whole, is subject to a valid copyright because it contains some foreword text, as well as original material in its yellow page advertisements.

499 U.S. at 361; *see also* 499 U.S. at 341 ("The mere fact that a work is copyrighted does not mean that every element of the work may be protected.").

Even in conclusion, the Court noted that the copyrightability analysis took place in the context of the broader copyrightable work: "We conclude that the names, towns, and telephone numbers copied by Feist were not original to Rural and therefore were not protected by the copyright in Rural's combined white and

yellow pages directory." 499 U.S. at 363 (emphasis added).

The discussion in *Feist* makes clear that the copyrightability question is part of the infringement question when less than a bodily copy is at issue: "'[C]opyright does not prevent subsequent users from copying from a prior author's work those constituent elements that are not original—for example . . . facts, or materials in the public domain—as long as *such use* does not unfairly appropriate the author's original contributions." 499 U.S. at 350, quoting Harper & Row, Publishers, Inc. v. Nation Enterprises, 471 U.S. 539, 547-48 (1985) (emphasis added). Here too, the Court framed the analysis in terms of later reuse of portions of the work, and whether such work constituted infringement. Indeed, it quoted the Harper & Row fair use case for this proposition, making clear that the question is not about copyrightability but about infringement.

Given the Court's finding about unprotected white pages, the Court (briefly) completed the extra required step, and compared the two works, while filtering out those elements that could not be asserted due to lack of originality: "Because Rural's white pages lack the requisite originality, *Feist's use of the listings cannot constitute infringement*." 499 U.S. at 364 (emphasis added). The Court considered Feist's reuse in the context of the infringement analysis and in the context of what information Feist used and why. Upon filtering out the names and addresses, nothing was left to compare.

These three cases illustrate the basic copyright principles at play for at least 140 years: copyright is granted to entire works only, and infringement compares the accused work to the copyrighted work while ignoring (or filtering) any material where reuse is permissible. Unless the entire work is uncopyrightable,³ any challenges to the work affect only the scope of copyright protection rather than its existence. *See* Mark A. Lemley & Mark P. McKenna, *Scope*, 57 WM. & MARY L. REV. 2197, 2226 (2016) (describing how limitations on scope are traditionally handled through infringement inquiry).

C. Properly Framing the Inquiry on Infringement Rather than Copyrightability Is Vital in Complex Cases Because It Shifts Focus to Why Reuse Was Necessary

When the entire work is copyrightable and the copying is bodily, non-literal, or contextual, then focusing on infringement is imperative to understand the scope of protection. To be sure, there will be cases in which the entire work is unoriginal, and simply finding the material uncopyrightable will be sufficient.⁴ But in

³ See, e.g., Meshwerks, Inc. v. Toyota Motor Sales USA, Inc., 528 F.3d 1258 (10th Cir. 2008) (finding wire models of cars to lack any originality separate from the cars).

⁴ Cf. Morrissey v. Procter & Gamble Co., 379 F.2d 675, 679 (1st Cir. 1967) (holding that two-paragraph contest instructions could not be asserted due to merger of idea and expression); Bikram's Yoga Coll. of India v. Evolation Yoga, 803 F.3d 1032, 1038 (9th Cir. 2015) (holding that entire yoga sequence was a

complex cases, where one party claims that a work is highly creative and expressive despite its functionality, focusing on the reasons and need for reuse are important as part of the infringement analysis. For example, as discussed below, in *Baker v. Selden*, defendant's copying the forms to implement a similar bookkeeping system would be considered differently than copying the forms as part of a copy of the entire book. The question is not whether these portions of a work could support a copyright registration, but whether the defendant's particular use exceeded what the statute allows.

Considering the alleged infringing use leaves room for the traditional defenses such as merger, *scènes á faire*, and method of operation, but applies those defenses (and any others) as part of a filtering inquiry that allows for consideration of levels of abstraction, technical specifications, copying of expression incident to ideas, and related considerations.

It is no surprise, then, that appellate courts have long developed ways to remove particular elements when comparing two works. Michael Risch, *Abstraction, Filtration, and Comparison in Patent Law*, 1 U. Penn J. Law & Innov. 37, 40-44 (2019) (detailing history of abstraction and filtration). Other than the basic

health-related process). Even in *Bikram's* however, the court noted that the real question was reuse of the idea from a bigger copyrighted work: "Here, we must similarly determine not the validity of a copyright but rather its scope. Does Choudhury's copyright protection for his 1979 book extend to the Sequence itself?" *Id.* (footnote omitted).

filtering statements in *Feist*, the Court has never adopted a particular filtering methodology. Examples of different types of filtering scenarios illustrate the infringement inquiry.

1. Bodily Appropriation

This is not a bodily appropriation case, but in such a case filtering might not make a difference. Bodily appropriation might have changed the outcome of either *Baker v. Selden* or *Feist*. In both cases, the Court implied that the entire book was entitled to some form of copyright, even if thin. As a result, questions about whether Selden described a bookkeeping method or Rural published factual information became mostly irrelevant. It makes no sense to argue that some of a work is unprotected if the entire copyrighted work is copied.

2. Non-literal Infringement

Non-literal copying allegations have always driven the infringement analysis, beginning in *Baker v. Selden*'s consideration of the reuse of ideas in different expression. In a famous opinion, Judge Learned Hand made clear that unprotected ideas should be excluded from any comparison:

But when the plagiarist does not take out a block *in situ*, but an abstract of the whole, decision is more troublesome. Upon any work, and especially upon a play, a great number of patterns of increasing generality will fit

equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his "ideas," to which, apart from their expression, his property is never extended.

Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930). Filtering was necessary, even though the entire play was copyrightable: "We assume that the plaintiff's play is altogether original. . . . Still, as we have already said, her copyright did not cover everything that might be drawn from her play; its content went to some extent into the public domain. We have to decide how much. . . ." *Id.* at 122.

After recognizing these levels of abstraction and filtering out the ideas, Judge Hand then compared the two works: "In the two plays at bar we think both as to incident and character, the defendant took no more—assuming that it took anything at all—than the law allowed." *Id.* at 121-22.

Other cases have followed the same pattern: consider the whole work's copyrightability, and then compare the accused work against the non-literal elements asserted to determine whether protectable expression, rather than ideas, have been copied. *See*, *e.g.*, *Computer Assocs. Int'l v. Altai*, *Inc.*, 982 F.2d 693 (2d Cir. 1992).

3. Noninfringing Reuse of Unprotectable Expression

Reuse of expression, which is at issue here, also requires filtration of any expression that is not within the scope of an exclusive right. With contextual reuse, the portion allegedly copied may be part of a larger copyrighted work, but its use still may be excluded from the infringement inquiry before comparing the works. This exclusion may come from use of ideas, use of ideas merged with expression, use of expression incident to an idea, *scènes á faire*, method of operation/functionality, or other uses of expression that—in the context of the reuse—simply cannot be infringement.

For example, in *Baker v. Selden*, the plaintiff alleged that the accounting forms were among the items copied in the new book. The Court did not explicitly rule that the forms were uncopyrightable; the Court ruled that if reuse of the ideas of the prior work results in the reuse of expression that cannot be avoided, such reuse is not infringing. *Baker v. Selden*, 101 U.S. 99, 104 (1880) ("And, of course, in using the art, the ruled lines and headings of accounts must necessarily be used as incident to it.").

Canonical cases in the lower courts have reached the same result. The appellate case on all fours with this one is *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532 (11th Cir. 1996). There, the defendant created a compatible operating system; it necessarily copied the command interface of the original. *Id.* at 1540. The court

explicitly followed *Feist*; there was no question that the entire work was copyrighted, so it turned to filtering out elements. *Id.* at 1543. The opinion made clear that filtration was not limited to non-literal copying, and that even literal copying could be filtered. *Id.* at 1545-46. Finally, the court ruled that the jury should have been instructed to filter out any use of the command interface necessary for compatibility, *even if the interface were copyrightable*. *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1547 (11th Cir. 1996) ("It is an incorrect statement of the law that interface specifications are not copyrightable as a matter of law. [Defendant] is correct, however, in arguing that the district court erred in not instructing the jury on the legal consequences of copying dictated by compatibility requirements.").⁵

In Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738 (9th Cir. 1971), the court considered the copying of jeweled bee broaches. There was no question but that the plaintiff's jewelry was copyrightable, id. at 740, though the plaintiff asserted the copyright against any other bee-shaped design. Rather than finding the pin uncopyrightable, the court ruled that—even if the accused pin was similar—the expression of the bee pin copyright could not be asserted in this context: "A finding that defendants 'copied' plaintiff's pin in this sense, however, would not necessarily justify judgment against them." Id. at 741. The court assumed

⁵ Unlike this case, *Bateman* involved more alleged copying than just the functional elements, such that judgment as a matter of law was precluded.

that there were similarities but excluded them from the comparison:

The difficulty, as we have noted, is that on this record the "idea" and its "expression" appear to be indistinguishable. There is no greater similarity between the pins of plaintiff and defendants than is inevitable from the use of jewel-encrusted bee forms in both. When the "idea" and its "expression" are thus inseparable, copying the "expression" will not be barred. . . .

Id. at 742. In short, the court did not rule that the plaintiff's work was uncopyrightable. It instead ruled that when comparing the defendant's broaches, any similarities of expression that merged with the idea of looking like a bee should be disregarded.

In Apple v. Microsoft, the court considered two similar desktop motifs for a computer graphical user interface. The Court never questioned the copyrightability of Apple's desktop, but when considering the same elements in Microsoft Windows, it considered the context. Apple Computer, Inc. v. Microsoft Corp., 35 F.3d 1435, 1442 (9th Cir. 1994). As with all the other cases described here, the Court framed the question in terms of comparison of works after filtering out unprotected elements: "Because only those elements of a work that are protectable and used without the author's permission can be compared when it comes to the ultimate question of illicit copying, we use analytic

⁶ Not to be confused with the software interfaces of this case.

dissection to determine the scope of copyright protection before works are considered 'as a whole.' " *Id.* at 1443.

The court then held that several items were outside the scope of infringing use. Any "windows, icons representing familiar objects from the office environment . . . , menus . . . , or objects that open and close" were essential to creating a desktop motif, and thus could not be asserted, *id.* at 1444, even though such elements formed part of Apple's copyrighted user interface. The same was true of visual depictions of window movement, because "environmental and ergonomic factors which limit the range of possible expression in GUIs, properly inform the scope of copyright protection." *Id.* at 1445. These elements must "be identified, or filtered, before the works can be considered as a whole." *Id.* at 1446.

Importantly, Apple argued that these expressive elements (among others) were literally copied. *Id.* at 1445 (noting that non-literal copying is *analogous* to Apple's claims). While Apple was potentially entitled to copyright protection from bodily appropriation for its entire user interface,⁷ the court repeatedly avoided that question, instead ruling that in the context of the defendants' use, the asserted elements could not be included as part of the copyright scope.

In Gates Rubber Co. v. Bando Chemical Industries, Ltd., 9 F.3d 823 (10th Cir. 1993), the court considered

⁷ The court did not reach the issue of copyrightability of the entire operating system work.

competing computer programs that included many similar expressive elements. The court cited *Feist* to make clear that copyrightability of the whole was not the issue, but that a comparison of protected elements should take place. *Id.* at 831. The court never questioned whether any of the elements might be protected as part of a copyright in the whole. Instead, it performed abstraction, filtration, and comparison of the works. *Id.* at 841.

As part of the filtering process, the court considered literal expression that had been allegedly copied, such as identical constants (invariable data used to perform calculations throughout the program), menus, sorting criteria, engineering calculations, and design modules. For all of these, the court remanded to the district court for a determination of whether, *in the context of these programs*, these elements could be reused, either because they were factual, functional, *scènes á faire*, or otherwise not within the scope of infringement.

The court did not require a ruling that these elements were, *standing alone*, uncopyrightable. If someone copied the plaintiff's program *in toto*, then the plaintiff might well have had a cause of action. Indeed, if plaintiff had published the source code as a novel and the defendant published a copied portion of the source code in a pamphlet, then that, too, might have been infringement. Rather, the important question was whether copyright law limited the assertion of the particular reused expression in the compatibility context.

D. Isolating the Copyright Inquiry Rather than Considering Infringement Leads to Confusion; Myopic Focus on Copyrightability Loses Context

While most cases properly frame the infringement inquiry, separating the copyrightability question from infringement causes confusion. When courts focus on copyrightability in a vacuum, it can cause the parties to dig their heels in more than copyright doctrine allows. A focus on copyright only allows plaintiffs to argue that their work hurdles Feist's de minimis creativity minimum even if that threshold is irrelevant to, say, scènes á faire or some other infringement consideration. See, e.g., Bateman, 79 F.3d at 1547 (noting complexity of determining copyrightability but discarding it for filtration analysis). Similarly, a copyrightability focus forces defendants to argue that the copyrighted work deserves no protection, when in fact it may be protected as part of the larger work or in a different context. In short, framing the question improperly causes courts to ask the wrong question and muddy the waters. Instead, it does not matter whether the material is copyrighted; all that matters is whether the defendant was allowed to use the portion it used.

Perhaps the highest profile case to improperly frame the question was *Lotus v. Borland*, a case of non-infringing reuse of a menu hierarchy. *Lotus Development Corp. v. Borland Intern., Inc.*, 49 F.3d 807 (1st Cir. 1995). Unsurprisingly, the case was hotly contested, and the Court granted certiorari, only to affirm by an equally divided vote. 516 U.S. 233 (1996).

But the Court might not have needed to intervene at all if the question had been properly framed. The district court there, as it did here, ruled that Borland had "infringed" by using the menu command hierarchy, but that the court needed to separately determine whether those commands were copyrightable. Lotus Development Corp. v. Borland Intern., Inc., 831 F. Supp. 202, 207 (D. Mass. 1993). The district court then found that the menu command structure as a whole was not dictated by functionality and thus was copyrightable, id. at 209, and that the hierarchical structure of the menu tree contained expression and was thus copyrightable. Id. at 211.

On appeal, of course, the First Circuit saw it differently, ruling that the entire menu structure was uncopyrightable as a method of operation. *Lotus Development Corp. v. Borland Intern., Inc.*, 49 F.3d 807, 815 (1st Cir. 1995). The court explicitly rejected the notion that it should apply the filtration methods used by every other circuit because Borland's use of the menus was literal rather than non-literal. *Id.* at 814-15.

But the rejection of filtration methods in favor of a naked copyrightablity inquiry was precisely why the courts had such a difficult time deciding *Lotus v. Borland*. Lotus had a reasonable argument that the menu organization was creative and not entirely functionally dictated. But that argument—which is only relevant if

⁸ To be clear, there were non-literal aspects in *Lotus v. Borland*. The macro "key reader" code (e.g., /fo means "file . . . open") was a non-literal use of Lotus's menu hierarchy.

you consider copyrightability in isolation—was beside the point. Instead, Borland's noninfringing reuse of the menus fell well within the bounds of material to be filtered out even if the menu structure contained some original, non-functional expression. None of the courts needed to decide whether the menu hierarchy was copyrightable. Instead, they only needed to decide whether, in the context of the reuse, the scope of protection extended to enforcement against Borland.

In a proper filtration analysis, the answer was much easier: menu command hierarchies are functional to the extent that they allow users to use the program, and they were *really* functional to the extent that Lotus's macro script system was based on the menus. Under *Baker v. Selden*, Borland was entitled to offer that same functionality to its own users, even if it meant using some nominal expression of Lotus. *Baker v. Selden*, 101 U.S. 99, 104 (1880) ("And, of course, in using the art, the ruled lines and headings of accounts must necessarily be used as incident to it.").

Judge Boudin, concurring, recognized that noninfringing reuse was the critical issue:

But if a better spreadsheet comes along, it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users and not by Lotus. . . . A different [than the majority's] approach would be to say that Borland's use is privileged because, in the context already described, it is not seeking to

appropriate the advances made by Lotus' menu; rather, having provided an arguably more attractive menu of its own, Borland is merely trying to give former Lotus users an option to exploit their own prior investment in learning or in macros. The difference is that such a privileged use approach would not automatically protect Borland if it had simply copied the Lotus menu (using different codes), contributed nothing of its own, and resold Lotus under the Borland label.

Lotus, 49 F.3d at 821. The filtration methods set forth by the Court and long applied by the circuits satisfy Judge Boudin's concerns. Had the district court properly framed the question, Lotus v. Borland would have been a much easier, minimally divisive decision.

II. When Viewed Through the Context of Infringement, Google's Use of the Software Interface Is Not Within the Scope of Oracle's Copyright Protection

This case bears eerie resemblance to *Lotus v. Borland* when it should have been treated like *Bateman v.*

⁹ Judge Boudin suggested that fair use was the closest analogue; this is obviously an option as well based on the jury's verdict but does not provide the type of certainty required to developers seeking compatibility. See also Michael Risch, How Can Whelan v. Jaslow and Lotus v. Borland Both Be Right? Reexamining the Economics of Computer Software Reuse, 17 J. MARSHALL J. COMPUTER & INFO. LAW 511, 523-24 (1999) (arguing that courts have many tools to act as gatekeepers to allow appropriate reuse of computer software).

Mnemonics; the Court has the opportunity to resolve this case holding that using a programming language software interface is noninfringing—without opining on the copyrightability of those declarations in isolation.

The first question presented is "[w]hether copyright protection extends to a software interface." But protection does not mean copyrightability, even if some (including some cases) colloquially use the two words interchangeably. Instead, the question is better read as whether copyright protection extends to a software interface in the context of infringement. The inability to assert infringement of a copyrighted work invariably limits its protection, whether in terms of scope or simply a lack of remedy.

A. The District Court Improperly Narrowed the Scope of the Work for Comparison

Rather than consider the entire work, and over Google's objection, ¹⁰ the district court limited the work to only a subset of the entire Java work. Final Charge to the Jury, JA87. Indeed, the court even had the jury consider the code and the documentation/comments separately. Special Verdict Form, JA92-93.

¹⁰ Google's Comments on the Court's April 25 Draft Special Verdict Form, Dist. Ct. Docket ("Doc.") 985, p. 3; Google's Corrected April 25 Copyright Brief, Doc. 993, p. 3-7.

While the district court did not limit the work to just the accused items, starting with less than the entire work started down the path of considering copyrightability in a vacuum.

B. The District and Appellate Courts Improperly Separated Copyrightability from the Infringement Inquiry

The district court did not consider Google's use of the interface declarations as part of the infringement inquiry. Instead, the court asked the jury to consider whether Google's declarations were similar to Oracle's declarations without first removing any functional aspects (or ruling as a matter of law). Final Charge to the Jury, JA80 (instructing jury that everything is protected). The infringement finding was a foregone conclusion at that point.

Several months later, despite citing but not applying filtration cases, the district court ruled that Oracle's APIs were not copyrightable. *Oracle America, Inc. v. Google Inc.*, 872 F. Supp. 2d 974, 1001 (N.D. Cal. 2012).

This framing set up a dichotomy in the Federal Circuit: "The central question before us is whether these elements of the Java platform are entitled to copyright protection. The district court concluded that they are not...." Oracle America, Inc. v. Google Inc., 750 F.3d 1339, 1353 (Fed. Cir. 2014). The Federal Circuit also addressed filtration, but instead ruled that

"concepts of merger and *scènes á faire* are affirmative defenses to claims of infringement." *Id.* at 1358.

Based on this framing, the Federal Circuit, unsurprisingly, maintained focus on copyrightability in isolation. Its opinion mirrored the *Lotus* district court ruling, finding sufficient creative expression for copyrightability. *Id.* at 1371 ("Whether Google's software is 'interoperable' . . . has no bearing on the threshold question of whether Oracle's software is copyrightable.").

C. Separating Copyrightability and Infringement Was both Improper and Unhelpful; Analyzing the Question in Terms of Filtered Infringement Allows for Straightforward Analysis

But the Federal Circuit missed the point by calling merger a defense rather than a copyrightability test;¹¹ this case is about Google's defense to copyright infringement, which makes merger and every other scope limitation relevant. By focusing on copyrightability rather than infringement, the Federal Circuit reached the wrong result. Further, the Federal Circuit's copyrightability finding coupled with the District Court's failure to perform any filtering left Google with

¹¹ It was also incorrect; in the Ninth Circuit, where a work's entire expression merges with its idea, then the entire work may be uncopyrightable. *Bikram's Yoga Coll. of India v. Evolation Yoga*, 803 F.3d 1032, 1038 (9th Cir. 2015).

an infringement judgment that completely sidestepped the two-step *Feist* test.

The better course to answer the first question presented is for the Court to perform the filtering that should have happened in the first place, but that both the District Court and the Federal Circuit expressly avoided. Considering how these software interfaces should be protected in the infringement context eases the Court's decision because the Court need not resolve the more complex question of whether software interfaces might be separately copyrightable in isolation.

D. In the Context of Google's Compatible Compiler, Reuse of the API Declarations Is Noninfringing; Even if Copyrightable Expression Were Used, It Is Incidental to Use of Ideas and Methods of Operation

Framing the case as an infringement question like *Feist* or *Baker v. Selden* shows that Google has not infringed Oracle's copyright in Java.

1. Java May Be Copyrightable as a Whole, but the Court Need Not Decide About the Declarations

The entire work at issue is Java; no court has questioned whether the larger program should be copyrightable. And this is really the only necessary copyrightability question.

Any further analysis about the protection of software interfaces belongs in the filtering analysis discussed in the next subsections. The Court need not determine the ultimate question of copyrightability of this portion of the entire work, and whether Oracle could have obtained a registration in the software interface declarations is irrelevant. In the nearly twenty-five years since *Lotus v. Borland*, courts have not needed to answer the copyrightability question, and they still don't. *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1547 (11th Cir. 1996) (refusing to hold that interface specification is uncopyrightable, but instead applying filtration infringement analysis).

2. Google's Use of Comment Free Declaring Code Was Necessary to Effectuate a Compiler that Used the Same Commands as Java

Google used the declarations as part of a functional work, and that context must be considered. Google did not publish a novel that identically copied the declarations as part of its story. Instead, it created a compiler that would accept commands from the Java programming language. That difference matters.

As many other briefs address, the *only* way for Google to create a compiler that accepts the Java programming language (and thus the programs written by independent developers) was to use the API declarations. Indeed, some declarations were not even owned by Oracle; many of the Java commands (and

their declarations) had been contributed to the programming language and dedicated to the public by others. Transcript of Proceedings held on 4/23/12, Doc. 987, p. 1138. This is how programming languages grow and evolve. From C, to C++, to C#, languages are never the same as they were when first written.

This case boils down to that question: can a company own a programming language through copyright? Oracle would say yes, but the entire history of compatible language compilers, compatible APIs, compatible video games and game systems, and other compatible software says no. Michael Risch, *How Can* Whelan v. Jaslow and Lotus v. Borland Both Be Right? Reexamining the Economics of Computer Software Reuse, 17 J. Marshall J. Computer & Info. Law 511, 539-44 (1999) (analyzing economics of switching costs, lock-in, de facto standards, and competitive need for compatibility).

3. Necessary Reuse Should Be Filtered Out; When the Use of the Declarations Is Filtered Out, Google Did Not Infringe as a Matter of Law

Reuse of software code is not infringement when only so much of the code as needed for interoperability is used. *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1547 (11th Cir. 1996) (failing to instruct jury that similarities due to interoperability were not infringing was error). This follows directly from the teachings of *Baker v. Selden*, which held that copyright must

countenance some amount of copied expression if that is the only way to allow the same ideas (and by modern mores, functions) to be expressed.

Implicit in Google's argument that the declarations merge with their idea is that the proper level of abstraction *for infringement* is the Java programming language, and not just any programming language as Oracle would argue and the Federal Circuit held. This is no doubt correct, just as Selden's idea was the specific bookkeeping system, not just any bookkeeping system.

Even if Oracle's argument were correct, that the idea of the work is simply a programming language (something more appropriate to test for a copyright registration), Android's reuse would still be filtered. Within any language, regular concepts will recur: integers, methods, math functions, file handling functions, and so forth. Oracle gave most of these functions standard names, like max and min. These standard elements would be filtered out by scènes á faire. Further, the particular way that Google used the declarations was to create a functional equivalent. This means that it applied the method of operation of any of Oracle's expressed choices in a programming language. This, too, is not protected—even if some expression went along with it—and must be filtered out during infringement.

The important doctrinal point is that the Court need not find the expression an uncopyrightable work to rule that the scope of the copyright protection does

not extend to asserting infringement liability for this particular type of reuse. In other words, the false dichotomy set up by the lower courts that copyrightability equals infringement and uncopyrightability equals noninfringement ignores the nuances of contextual use of copyrighted works. Whether or not a work is copyrightable, it may not be assertable in some cases. Indeed, there have been many such instances. See Eng'g Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335, 1346-47 (5th Cir. 1994) (filtering out input formats necessary for compatible engineering design products); Gates Rubber Co. v. Bando Chemical Industries, Ltd., 9 F.3d 823, 842-46 (10th Cir. 1993) (filtering out many literally copied software elements); Kregos v. Associated Press, 3 F.3d 656, 663 (2d Cir. 1993) (allowing copyright in baseball statistics form, but finding no infringement); Harper House, Inc. v. Thomas Nelson, *Inc.*, 889 F.2d 197, 208 (9th Cir. 1989) (many features should have been filtered from thinly copyrightable organizer).

Other than the technology, this case is no different from the others. A portion of a copyrighted work is reusable in certain contexts to allow expression of the ideas, methods of operation, and standard elements of the underlying work.

CONCLUSION

There is a reason nobody talks about *Bateman v. Mnemonics* today while *Lotus v. Borland* hotly debated, even though they were decided in the same year. They both reached the same (correct) outcome, but only *Bateman* applied the proper filtration approach, guiding future courts but generating little controversy. This Court should answer the only question that matters here: did Google infringe when it reused Oracle's software interface declarations when implementing a compatible program language compiler? The answer to that question must be no—the protection of Oracle's software interfaces cannot be extended to assert infringement in this context.

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¹² According to Westlaw, *Bateman* is cited in nearly 1/3 *more* cases than *Lotus* (about 240:170), but in only about *half as many* secondary sources (about 450:950).