#### 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 OF AMICI CURIAE NINE PROFESSORS AND SCHOLARS OF INTELLECTUAL PROPERTY LAW IN SUPPORT OF RESPONDENT

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#### I. Interest of Amicus Curiae<sup>1</sup>

The *amici curiae* are nine professors and scholars of intellectual property law identified in Appendix A. *Amici* teach and research copyright law and other related areas of the law and/or have served in the highest positions of authority with respect to the development and administration of copyright law in the United States. *Amici* have no stake in the outcome of this case other than their interest in ensuring that copyright law develops in a manner that respects its Constitutional and statutory basis and ensures that creativity and innovation continue to flourish.

#### II. Summary of Argument

Congress has addressed the protection of computer software through the Copyright Act, including the code at issue in this appeal. In its 1980 amendments to the Copyright Act, Congress adopted the recommendations of the National Commission on New Technological Uses of Copyrighted Works (CONTU) and recognized computer programs as "literary works" enjoying the full extent of protection under the statute. Even at that relatively early stage in the development of the computer software industry, Congress considered versions of many of the arguments and issues present in this litigation, including

<sup>1.</sup> Pursuant to the Supreme Court Rule 37.6, *amici curiae* state that no party's counsel authored this brief in whole or in part; no party or party's counsel contributed money that was intended to fund preparing or submitting this brief; and no person other than the amici curiae or their counsel, contributed money that was intended to fund preparing or submitting this brief. All parties have consented to the filing of this brief.

whether computer code should be protected as a literary work, the degree to which computer programs can be considered "functional" or necessary "machine-controlled elements" (as opposed to expressive works protectable under the Copyright Act), and the interests of protecting and incentivizing innovation. After careful analysis and debate, CONTU recommended to Congress, and Congress legislated, that computer programs are protected under the Copyright Act with no qualifications that would differentiate software from any other type of literary work under the statute.

Since 1980, software development has grown exponentially, and its application continues to expand into new industries. Congress has amended the Copyright Act to address issues raised by technological advances in particular industries, by enacting, for example, the Computer Software Rental Amendments Act in 1990, the Digital Millennium Copyright Act in 1998, and the Music Modernization Act in 2018. Congress has not, however, amended the Copyright Act to decrease the scope of protection for computer programs or altered the statutory standard for fair use. Because the statutory protections for computer software remain the same as for all other creative works, adopting Google's position would amount to a judicially created, software-specific amendment. It would also result in singling-out the protections afforded to computer programs, which contradicts the plain text of the Copyright Act.

Fundamentally, fair use does not apply here. Google chose to use Oracle's copyrighted code verbatim for a purely commercial purpose in connection with its Android platform, which became an enormous success. Because

Google's use of Oracle's code was a purely commercial and non-transformative use of the copyrighted work, it cannot be considered fair use.

Instead, not finding a licensing option agreeable to its business objectives (despite Oracle making a variety available) and refusing to make the implementation of its programs compatible with the Java virtual machine or other Java programs, Google made a business decision to copy and use Oracle's code without a license. Although Google argues it "had" to use Oracle's Application Programming Interfaces (APIs), it has conceded that development of its own APIs was possible from a commercial and technical standpoint. Google found the development of its own APIs unattractive because of the resulting delay. It simply made a business decision to take a shortcut.

Google and its *amici* try to characterize this as "efficient infringement," or "permission-less innovation." Yet its conduct is entirely contrary to the goals of copyright law as expressed in the Copyright Act or the Constitution. As a result, there is no reason to incorporate these considerations into fair use. It is clear that purposeful copying to avoid business inconvenience is not fair use, either in the statute as enacted or as interpreted by courts. Although Google casts its theory as "software-specific," there is no reason why infringing parties could not regularly use it to justify copying any kind of protectable expression. Thus, to expand the fair use doctrine in the way Google advocates would set a dangerous precedent not limited to the software industry.

Google's position is not only contrary to the statute—it would actively discourage innovation by original authors with knowledge that their work can be exploited without due compensation. It also would discourage intermediary business models built around generating, promoting, monetizing, and publishing original works of authorship, *e.g.*, publishing houses. This is not what the Constitution had in mind.

#### III. Argument

- a. Historical Review of Copyright Protection for Software
  - 1. Congress Chose to Protect Computer Programs Under the Copyright Act.

Under the Copyright Act, computer programs are protectable like any other "literary work." 17 U.S.C. §§101, 102; see Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832, 838 (Fed. Cir. 1992) ("As literary works, copyright protection extends to computer programs."); H.R.Rep. No. 1476, 94th Cong., 2d Sess. 54 (explaining that 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") (reprinted in 1976 U.S.C.C.A.N. 5659, 5667); see generally 1 Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 2A.10[B] (2019).

Copyright protection was not the only way Congress could have protected computer programs, but it made the choice. After robust research and debate, in 1980 Congress amended the Copyright Act to define and reference "computer programs." In doing so, it codified CONTU's recommendations "to make it explicit that computer programs, to the extent that they embody an author's original creation, are proper subject matter of copyright[.]" Nat'l Comm'n on New Tech. Uses of Copyrighted Works, Final Report (1979) [hereinafter "CONTU Report"]. Congress adopted CONTU's recommendations in full, "making its report particularly useful in terms of shedding light on Congress's intent." Ralph Oman, Computer Software As Copyrightable Subject Matter: Oracle v. Google, Legislative Intent, and the Scope of Rights in Digital Works, 31 Harv. J. of L. & Tech. 639, 642 (2018) ["Oman"].

The CONTU Report acknowledged the growing "need for protecting the form of expression chosen by the author of a computer program." CONTU Report at 57. It noted that "the possibilities provided by [computer programs] are virtually limitless," but also that those possibilities are dependent on "the willingness of creators of such works to disseminate them at a reasonable price." Id. at 84. Because the cost of developing computer programs "is far greater" than the cost of duplication, CONTU observed that "some form of protection is necessary to encourage the creation and broad distribution of computer programs in a competitive market" and "that the continued availability of copyright protection for computer programs is desirable." Id. at 59. It concluded that computer programs are "literary works" and therefore within the scope of copyright protection under

<sup>2.</sup> The CONTU Report is available at https://repository.jmls.edu/cgi/viewcontent.cgi?article=1573&context=jitpl.

the Copyright Act, and did not recommend a separate category in the statute for computer programs. *Id.* at 66-67. In taking these recommendations, Congress chose to protect computer programs as any other type of copyrightable subject matter.

## 2. Congress Chose to Enact Specific Provisions with Respect to Computer Programs, None of Which Apply Here

Google and its *amici* argue for disparate treatment of computer programs under Sections 102(b) and 107 due to their "functional" nature. They argue that software developers, as a matter of industry practice, expect to be able to adopt pre-existing code (which, as CONTU observed, is efficient to duplicate and utilize). Brief of Petitioner Google LLC at 22-26, 30-31, 37-40, 44-45 ["Google Brief"]; *see also* Brief of Amici Curiae Small, Medium, and Open Source Technology Organizations at 9, 13-14; Brief of Microsoft Corporation as Amicus Curiae at 2-5, 12-17 ["Microsoft Brief"]; Brief for Amici Curiae Python Software Foundation, et al. at 2 ("Software is different from other literary works in that it is a mixed work, including both functional and expressive elements...").

Congress, however, delegated to CONTU to consider these arguments—and CONTU rejected them. The Commission carefully considered whether the functional nature of computer programs made them unsuitable for copyright protection. Indeed, one Commissioner dissented with CONTU's findings in part on that basis. *See* CONTU Report at 89 (statement of Commissioner Hersey arguing that "[t]he functions of computer programs are

fundamentally absolutely different in nature from those of sound recordings, motion pictures, or videotapes"). As the rest of the commission did not share this view, CONTU made clear that software should be treated no differently than any other work of authorship. *See id.* at 12-13, 18-19; Oman at 644 (Congress's "decision to adopt the CONTU majority's recommendations, especially in the face of such criticism, makes it indisputably clear that computer programs are copyrightable in the same manner as all other works.").

Contrary to Google's *amici*, the CONTU Report also noted the concerns about the "functional" nature of software, which is neither unique to software nor an obstacle to copyrightability:

All that copyright protection for programs, videotapes, and phonorecords means is that users may not take the works of others to operate their machines. In each instance, one is always free to make the machine do the same thing as it would if it had the copyrighted work placed in it, but only by one's own creative effort rather than by piracy.

CONTU Report at 75. Indeed, the CONTU Report concluded, the "only legitimate question" in evaluating whether any work, including a computer program, is entitled to protection, is whether "the object [is] an original work of authorship[.]" *Id.* at 78. Aware of the underlying debate regarding the level of copyright protection that computer programs should receive, Congress's amendments to the Copyright Act made no distinction between the copyrightability of computer programs and

other protected works listed in the statute in Section 102(a). Congress also chose not to alter the fair use defense with respect to infringing computer programs. See 17 U.S.C. §§ 102(a), 107; see also CONTU Report at 67 (stating that "no changes in the law, according to Congress, were necessary to afford copyright protection to programs") (citing S. Rep. No. 94-473 at 50–51; H.R. Rep. No. 94-1476, at 66 (1976) (reprinted in 1976 U.S.C.C.A.N. 5659, 5679)); id. at 75–76.

Google contends that because computer programs by their nature are only entitled to "thin" copyrights, limited copying of computer programs should weigh in favor of fair use pursuant to the second factor in Section 107 ("the nature of the copyrighted work"). See, e.g., Google Brief at 46. To argue that an entire category of works (computer programs) is only entitled to thin protection means the second statutory fair use factor in Section 107(2) would always weigh in favor of fair use in defense of the infringement of any software or computer program copyright. This argument is not supported by the intent of Congress or the text of the statute.

Congress also considered the likelihood that computer programs would be adapted or changed. And it agreed, as the CONTU Report recognized, that the copyright of computer programs "should in no way inhibit the *rightful* use of the works [or] block the development and dissemination of these works." CONTU Report at 60 (emphasis added). Accordingly, Congress enacted a limited exception with respect to computer programs. Under Section 117(a), the copying or adaptation of a program is not an infringement if the "new copy or adaptation" is either (1) "created as an essential step in the utilization of

the computer program in conjunction with a machine and that it is used in no other manner," or (2) "is for archival purposes only...." 17 U.S.C. § 117(a). CONTU recognized that such a provision would need to be limited to remain consistent with copyright protection. See CONTU Report at 63 (noting that Section 117 may "only be exercised so long as [it] did not harm the interests of the copyright proprietor"). The CONTU Report explained that the "adaptations could not, of course, deprive the original proprietor of copyright in the underlying work" and "[t] he adaptor could not vend the adapted program." Id.

As discussed below, the CONTU Report envisioned the possibility that some copyrighted computer programs may contain language "necessary to achieve a certain result" and that copyright protection "does not threaten to block the use of ideas or program language previously developed by others" in such an event. Id. at 74. However, "[w]hen other language [that is necessary to achieve a certain result] is available, programmers are free to read copyrighted programs and use the ideas embodied in them in preparing their own works." Id. (emphasis added). The right to "read and use" the language does not confer a right to take and verbatim copy to achieve a certain result. Google's position that the "merger" doctrine renders its copying non-infringing is contrary to, and threatens to destroy, the statutory rights of the copyright owner to "prepare derivative works based on the copyrighted work[.]" 17 U.S.C. § 106; Authors Guild, *Inc. v. HathiTrust*, 755 F.3d 87, 95 (2d Cir. 2014) ("The Act also gives authors the exclusive right to prepare certain new works—called 'derivative works'—that are based upon the copyrighted work."). Oracle, as the copyright owner, has the "exclusive right" to create adaptations of the copyrighted work, which would include use and replication of the code in a platform such as Android, even if Android was directed at the smartphone market. See Castle Rock Entm't, Inc. v. Carol Pub. Grp., Inc., 150 F.3d 132, 146 (2d Cir. 1998) ("It would ...not serve the ends of the Copyright Act—i.e., to advance the arts—if artists were denied their monopoly over derivative versions of their creative works merely because they made the artistic decision not to saturate those markets with variations of their original.") (citation omitted).

3. Notwithstanding Clear Invitation From CONTU For Review Based on Industry Changes, Congress Has Not Amended the Copyright Act With Respect to Computer Software

The authors of the CONTU Report were under no misimpression that computer software and the software industry would not evolve and expand over time. To the contrary, the CONTU Report recognized that technology, and the industry in general, would continue to develop, change, and grow. CONTU Report at 54, 58-59. Accordingly, it recommended periodic review of the Copyright Act in order to evaluate any necessary updates:

Any legislation enacted as a result of these recommendations should be subject to a periodic review to determine its adequacy in light of continuing technological change. This review should especially consider the impact of such legislation on competition and consumer prices in the computer and information industries and the effect on cultural values of

including computer programs within the ambit of copyright.

Id. at 54; see also id. at 60.

Implicit in CONTU's recommendation for periodic review is the recognition that alterations to the Copyright Act must be made by Congress, and that Congress is equipped to perform the research and fact-gathering necessary to review, evaluate, and address "continuing technological change" if deemed by Congress to be of sufficient importance. Id.; see Whitman v. Am. Trucking Assocs., 531 U.S. 457, 493 (2001) (Breyer, J., concurring) (Congress can change statutory limits "if necessary"); 3 Patry on Copyright § 8:2 ("The courts have, appropriately, been reluctant to expand the protections afforded by the copyright acts without explicit legislative guidance."); see also SAS Inst., Inc. v. Iancu, 138 S. Ct. 1348, 1358 (2018) ("Policy arguments are properly addressed to Congress, not this Court. It is Congress's job to enact policy and it is this Court's job to follow the policy Congress has prescribed.").

Since 1980, Congress has not enacted any limitations on the rights of computer software copyright owners in the Copyright Act. It certainly has had the opportunity, however: Congress has enacted several other amendments to the Copyright Act to address concerns resulting from technological changes. Several amendments relate directly to software and computer programs. None limit their baseline protections.

For example, in 1990, in recognition of the ease with which computer software could be copied, Congress enacted the Computer Software Rental Amendments Act, which excluded computer programs from the first sale doctrine, gave owners of computer programs control over the rental of their programs by making it an infringement to rent computer software without the permission of the copyright owner. See Pub. L. No. 101-650, 104 Stat. 5089, 5134 (1990) (codified as amended at 17 U.S.C. § 109(b)(1) (A)). This amendment thus represented an recognition by Congress of the need to *increase*, not decrease, the protections for software copyright owners.

Likewise, in 1998, Congress enacted the Digital Millennium Copyright Act (DMCA), in which it codified certain exemptions from direct and indirect liability of Internet service providers and other intermediaries in connection with copyrighted material posted online. In the same enactment, Congress established a set of new causes of actions related to circumvention of technological protection measures. See Pub. L. 105-304, 112 Stat. 2860 (1998) (codified as amended at 17 U.S.C. §§ 512, 1201–05). Importantly, Congress chose to provide for a limited reverse engineering exception with respect to those new causes of action. See 17 U.S.C. 1201(f). The DMCA thus represents a legislative change to narrow liability under the Copyright Act based on modern realities enabled by development of the Internet.

Most recently, in 2018, Congress enacted the Music Modernization Act (MMA), which is aimed at modernizing copyright-related issues for musical compositions and sound recordings due to new forms of technology, such as digital streaming, including improvement of music licensing and royalties to be paid in consideration of streaming media services. *See* Pub. L. 115-264, 132 Stat.

3676 (2018) (codified as amended at 17 U.S.C. §§ 114, 115). Each of these amendments demonstrate Congress' ability and willingness to act when it deems necessary to address modern technological advances in the software context and expand or narrow rights under the Copyright Act.

#### B. Google's Verbatim Copying of Oracle's Copyright Code for a Purely Commercial and Non-Transformative Purpose Is Not "Fair Use"

## 1. Google Copied Oracle's Code For a Purely Commercial Purpose

As the Federal Circuit noted, it is undisputed that Google copied "verbatim" and in its "entirety" the declaring code of the 37 Java API packages at issue, amounting to 11.500 lines of code, as well as the structure, sequence. and organization (SSO) of the Java API packages, to which Google added its own implementing code. Oracle II, 886 F.3d at 1187; see also Oracle Am., Inc. v. Google Inc., 750 F.3d 1339, 1356 (Fed. Cir. 2014) ["Oracle I"] ("Google concedes that it copied the declaring code verbatim."); id. at 1350-51 ("Google copied the declaring source code from the 37 Java API packages verbatim, inserting that code into parts of its Android software."). Google's copying was not only full and verbatim, but its purpose in copying the APIs was "purely commercial," a point which Google itself conceded to the lower courts. See id. at 1376 ("[I] t is undisputed that Google's use of the API packages is commercial"); see also Google Brief at 43 ("Google's creation of Android was a commercial endeavor[.]").

Commercial use of a copyrighted work weighs "against a finding of fair use" because "commercial

use of copyrighted material is presumptively an unfair exploitation of the monopoly privilege that belongs to the owner of the copyright." Harper & Row Publ'rs., Inc. v. Nation Enters., 471 U.S. 539, 562 (1985); see also Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 585 (1994) (noting that commercial use "tends to weigh against a finding of fair use"). The principal concern behind the commercial nature inquiry is "the unfairness that arises when a secondary user makes unauthorized use of copyrighted material to capture significant revenues as a direct consequence of copying the original work." Am. Geophysical Union v. Texaco Inc., 60 F.3d 913, 922 (2d Cir. 1994). Thus, fair use should not be found "when the secondary use can fairly be characterized as a form of 'commercial exploitation,' i.e., when the copier directly and exclusively acquires conspicuous financial rewards from its use of the copyrighted material." Id.; see also Harper & Row, 471 U.S. at 562 ("The crux of the [inquiry] is [] whether the user stands to profit from exploitation of the copyrighted material without paying the customary price."). Although Google touts the widespread benefits of its Android system, including the benefits to smartphone users from the creation of countless mobile applications, this does not change the fact that Google copied the APIs for purely commercial gain.

Google's commercial purpose is evident from its "refusal to make the implementation of its programs compatible with the Java virtual machine or interoperable with other Java programs." *Oracle I*, 750 F.3d at 1350. Oracle offered various licenses to those wanting to make use of Java and the API packages, including an "open source" license requiring the licensee to "contribute back" its innovations to the public, a "Specification License,"

permitting use of the declaring code and organization of the API packages but requiring the licensee to write its own implementing code, and a "Commercial License" for businesses wanting to use and customize the full Java code in their commercial products and keep their code secret, in exchange for royalties. Google did not take any of those licenses—for, as the Federal Circuit recognized, Google did not want to make Android generally Java compatible for commercial reasons. See id. at 1371 (noting "the record evidence that Google designed Android so that it would not be compatible with the Java platform") (emphasis in original). Indeed, "[t]he compatibility Google sought to foster was not with Oracle's Java platform . . . . Instead, Google wanted to capitalize on the fact that software developers were already trained and experienced in using the Java API packages at issue." Id.3

In sum, Google's intent in copying the API packages was merely a shortcut for commercial advantage. It was easier to copy Oracle's APIs rather than develop new ones and easier to attract developers to build the Android platform. "Google was free to develop its own API packages and to 'lobby' programmers to adopt them. Instead, it chose to copy Oracle's declaring code and the SSO to capitalize on the preexisting community of programmers who were accustomed to using the Java API packages." *Oracle I*, 750 F.3d at 1372. As a result of Google's shortcut,

<sup>3.</sup> This distinguishes Google's copying from the findings of fair use in *Sony Computer Entm't v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000), where the copying of code created "a new product that work[s] with the old system." Google's efforts were not to create a new product that worked with the Java system—its incentives were to quickly create a product with non-interoperable features and bring it to market in a profit-maximizing way.

it avoided delays in the development process and was able to recruit a wider pool of developers to work on Android to get to market faster. As the Federal Circuit observed in its 2014 decision, "[t]he evidence showed . . . that Google designed many of its own API packages from scratch, and, thus, could have designed its own corresponding 37 API packages if it wanted to do so." Id. at 1368; see also id. ("As the district court acknowledged, Google could have structured Android differently and could have chosen different ways to express and implement the functionality that it copied."); id. ("the declaring code could have been written and organized in any number of ways and still have achieved the same functions . . . "). Indeed, "nothing prevented Google from writing its own declaring code, along with its own implementing code, to achieve the same result," and "it is . . . undisputed that Google could have written its own API packages using the Java language. Google chose not to do that." Id. at 1353, 1361.

## 2. Google's Copying Is Not a Transformative Use

A use is "transformative" if it "adds something new, with a further purpose or different character, altering the first with new expression, meaning or message." *Campbell*, 510 U.S. at 579; *see TCA Television Corp. v. McCollum*, 839 F.3d 168, 180 (2d Cir. 2016) ("[T]he critical inquiry is whether the new work uses the copyrighted material itself for a purpose, or imbues it with a character, different from that for which it was created."); *HathiTrust*, 755 F.3d at 96 ("A use is transformative if it does something more than repackage or republish the original copyrighted work."). Google argues that its use is transformative because it was "new, innovative, and socially valuable." Google

Brief at 42. Contrary to Google's arguments, however, "a use does not become transformative by making an invaluable contribution to the progress of science and cultivation of the arts. Added value or utility is not the test: a transformative work is one that serves a new and different function from the original work and is not a substitute for it." *HathiTrust*, 755 F.3d at 96 (emphasis added) (internal quotation marks and citation omitted). Google's use of Oracle's code is not transformative.

Much of Google's transformative use argument hinges on the fact that it was able to reimplement Oracle's declaring code in a new platform. Yet using copyrighted material in a different context for the same purpose does not constitute "transformative" use. See Infinity Broad. Corp. v. Kirkwood, 150 F.3d 104, 108 n.2 (2d Cir. 1998) ("[A] change of format, [even if] useful, is not technically a transformation."); TCA Television Corp., 839 F.3d at 181-83 (stating that moving material to a new context is not transformative in and of itself, even if a "sharply different context"). Even the Second Circuit's Cariou case, characterized as the "high-water mark" of the transformative use analysis, TCA Television Corp., 839 F.3d at 181, stated that "[a] secondary work may modify the original without being transformative. For instance, a derivative work that merely presents the same material but in a new form . . . is not transformative." Cariou v. Prince, 714 F.3d 694, 708 (2d Cir. 2013).

And in Android, Google used the declaring source code for the same purpose as originally intended: namely, to build certain expressions in order to enable execution of the implementing code to carry out declared functions. *See Oracle I*, 750 F.3d at 1349-50. This was not technically

necessary—rather, Google wanted it to be "for the benefit of developers, who—familiar with the Java programming language—had certain expectations regarding the language's APIs." *Oracle II*, 886 F.3d at 1201. Thus, while the setting might have been different, the purpose was not.<sup>4</sup> Because the code was copied verbatim to perform a similar task, there was no "altering the first [work] with new expression, meaning or message." *Campbell*, 510 U.S. at 579.<sup>5</sup> The entire purpose of copying Oracle's declaring code was to enable it to do the same thing in Android as in Java—thus amounting to a use that was superseding, not transformative. *See Harper & Row*, 471 U.S. at 550-51.

# 3. Google's "Efficient Infringement" or "Permission-less Innovation" Is Inconsistent with the Text and Purpose of the Copyright Act

Google attempts to characterize a deliberate business shortcut as fair use. It warns that allowing a copyright owner to restrict use of the portions of its software that Google deems valuable to further software development

<sup>4.</sup> *Cf. Am. Geophysical Union*, 60 F.3d at 923 ("Texaco suggests that its conversion of the individual *Catalysis* articles through photocopying into a form more easily used in a laboratory might constitute a transformative use. However, Texaco's photocopying merely transforms *the material object* embodying the intangible article that is the copyrighted original work.") (emphasis in original).

<sup>5.</sup> Google's argument that "mobile devices [] have different constraints from [] desktops" (*i.e.*, power, memory) is irrelevant. Google Brief at 43. Whatever the technological distinctions between mobile devices and desktops, the underlying purpose of the copied code was identical.

will stifle innovation and development possibilities. Google Brief at 39-40. It argues that if the opportunities that result from the copying are beneficial enough, the copying should be excused. *Id.* at 39-41. In other words, Google is advocating a theory of "efficient infringement." *See* Adam Mossoff & Bhamati Viswanathan, *Explaining Efficient Infringement*, George Mason University School of Law, Center for the Protection of Intellectual Property (May 11, 2017).

Faced with license terms it found unattractive, Google made the decision to go forward without a license. In doing so, it weighed the upside of copying, particularly attracting developers familiar with the existing programming language, against the downsides of not copying, i.e., starting from scratch, which would delay its efforts to enter the smartphone market. That business decision yielded an enormous windfall to Google in the form of Android. In that respect, Google's decision was efficient. See Am. Geophysical Union, 60 F.3d at 931 ("[I]t is sensible that a particular unauthorized use should be considered 'more fair' when there is no ready market or means to pay for the use, while such an unauthorized use should be considered 'less fair' when there is a ready market or means to pay for the use.") (emphasis added). But that successful outcome does not alter the fact that Google's actions were an infringement of Oracle's copyrighted code, and that although Google's goal was to build a new platform, its purpose in copying and using Oracle's code was to build that platform by making the task more attractive to developers familiar with the existing APIs. In other words, Google's adoption of Oracle's copyrighted code was not an innovative use of the code; it was merely a convenient step to more quickly

realize a larger innovative product. As a result, Google's use falls outside of the bounds of fair use under Section 107.

Google argues it *had* to use Oracle's "mandatory declarations," *i.e.*, that there was no other way to express the needed commands and that it "created its own computer code whenever possible[.]" *See* Google Brief at 8. Not so. Google conceded it could have written its own APIs. *Oracle II*, 886 F.3d at 1206 ("Google has conceded both that it could have written its own APIs and that the purpose of its copying was to make Android attractive to programmers.").

What Google is actually arguing is that it would be very inconvenient for its Java developers to create and/or learn alternative calls. For example, Google states that "the Java language would not permit Google to write its own declarations for those methods that Android reimplemented, without requiring Java developers to learn thousands of new calls. . . . Google's engineering team therefore reused the mandatory declarations that correspond to the calls for the Java methods reimplemented by Android." Google Brief at 8. But the inconvenience of available alternatives is not a legally-recognized absolution from infringing conduct.

<sup>6.</sup> See Oman at 648 ("The answer simply cannot be, 'allowing users already familiar with the SSO of Oracle's packages to continue using them.' If it were, then any follow-on work targeted at an existing base of adherents could indiscriminately replicate elements of the original that were necessary to the 'function' of free-riding off of the pre-existing community's affinity for the creative, unconstrained choices made by the original author. It should go without saying that the Copyright Act simply does not tolerate that result.") (emphasis in original).

The merger doctrine provides that if there is only a single way to express an idea, the work is not copyrightable. See Oracle I, 750 F.3d at 1360. When, as here, there is an available alternative, there is no "inconvenience" exception to the exploitation of copyrighted works. In essence, Google argues that if what is taken is burdensome (but not impossible) to express in a different manner, and the result of the copying is a beneficial new product, it should be considered a fair and non-infringing use of the copyrighted work.

However, this argument is but a mere repackaging of the "efficient infringement" or "permission-less innovation" concept that Google and numerous other Internet companies have advanced in recent years as a justification for their exploitative conduct designed to avoid paying license fees. The self-interested rationale, presented with a faux-teleological façade, is that this "efficient infringement" should actually be the goal of copyright, as it leads to innovation, no matter the cost. However, this concept quickly leads to the dangerous slippery slope whereby it becomes the decision of the infringer as to what is "enough" to copy based on its planned "innovative" use, leaving the copyright owner and a court with the expensive, time-consuming, and often difficult task of unpacking what the infringer has done and determining whether or not the use was actually transformative; such an exercise is often impractical from a time and cost perspective, particularly in an regularly evolving industry like software. Indeed, for a majority

<sup>7.</sup> Indeed, as the Federal Circuit correctly observed, "[n] ecessary in the context of the cases upon which Google relies does not simply mean easier." *Oracle II*, 886 F.3d at 1206.

of software creators, the idea of chasing a company like Google, whose infringement may be hard to detect and potentially bankrupting to prosecute, is simply not an economically viable option. See Sean M. O'Connor, Creators, Innovators, and Appropriation Mechanisms, 22 Geo. Mason L. Rev. 973, 997 (2015) ["O'Connor"]. Google relies on, and profits from, that harsh reality, and so the "infringe first, ask questions later" approach has clearly been a boon to Google and other Internet companies, notwithstanding that it is antithetical to the aims of the Copyright Act. Irrespective of the extent to which Google can get away with it due to the practical cost hurdles of modern litigation, copyright exists to prevent such exploitative conduct, not enable or encourage it.

Moreover, this "efficient infringement" rationale does not appear in the text of the Copyright Act, nor does it align with Congress' purposes in amending the statute to include fair use. See Campbell, 510 U.S. at 577 (When Congress codified the fair use doctrine in Section 107 in 1976, "Congress meant 'to restate the present judicial doctrine of fair use, not to change, narrow, or enlarge it in any way' and intended that courts continue the commonlaw tradition of fair use adjudication.") (quoting H.R. Rep. No. 94-1476, at 66 (1976); S. Rep. No. 94-473, at 62 (1975)); accord Harper & Row, 471 U.S. at 554. And furthermore, this notion of "efficient infringement" or "permission-less innovation" is nowhere close to the enumerated activities deemed to be fair use in Section 107 of the copyright law: "the fair use of a copyrighted work . . . for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright." 17 U.S.C. § 107.

- C. Allowing Google to Escape Responsibility for Copying Will Have Devastating Effects on Innovation and Protections for Other Types of Creative Works
  - 1. Departing From Established Protection For Software Creators Will Be Harmful To Innovation and Will Disrupt the Software Industry

"[C]opyright law *celebrates* the profit motive." *Eldred* v. *Ashcroft*, 537 U.S. 186, 212 n.18 (2003) (emphasis in original) (citation omitted). It "recogniz[es] that the incentive to profit from the exploitation of copyrights will redound to the public benefit by resulting in the proliferation of knowledge." *Id.* ("The profit motive is the engine that ensures the progress of science.").

Granting copyright protection to software has accomplished this goal. First, copyright protection gives developers "the incentive to invest in developing and marketing new programs by providing a legal mechanism through which developers can capture at least some of their software's value—whatever that may be—in the marketplace." Bradford L. Smith & Susan O. Mann, Innovation and Intellectual Property Protection in the Software Industry: An Emerging Role for Patents?, 71 U. Chi. L. Rev. 241, 241 (2004) ["Smith & Mann"]. Second, copyright protection for software "provided the foundation for a new generation of software providers that greatly expanded the range and diversity of costeffective software options available to consumers. Id. at 246 (noting "the growing range of software programs to which copyright protection provided an impetus vastly

improved the means through which people could create, distribute, and enjoy creative works of all types").

For software creators to have incentives aligned with creating and disseminating their programs, they need to be able to recover costs and obtain a fair return on the sale and licensing of their products. See CONTU Report at 60. If there is no copyright protection, the price of computer programs would be prohibitively high. Id. at 59. These considerations convinced CONTU that "some form of protection is necessary to encourage the creation and broad distribution of computer programs in a competitive market." Id. The incentive to create and the incentive for commercialized dissemination of information are "necessary in justifying how copyright law secures the dynamic innovation that makes possible the 'Progress of Science.'" Adam Mossoff, How Copyright Drives Innovation: A Case Study of Scholarly Publishing in the Digital World, 2015 Mich. St. L. Rev. 955, 957 (2015) ["Mossoff"].

Because of the specific ease with which software can be copied, copyright protection is critical to ensuring that programmers continue to create and disseminate their work. See T. Randolph Beard, George S. Ford & Michael Stern, Fair Use in the Digital Age, Phoenix Ctr. Pol'y Paper No. 51, at 3 (2016). What incentive would a programmer have to create software that a less ambitious, less creative, or perhaps less scrupulous competitor could easily and instantaneously copy? See O'Connor at 1000. A copyright owner would not only incur the loss on the time, resources, and creativity used to create the software, but would not be able to collect fair market value for its work as payment for its creative efforts once the work

has been copied. See Jiarui Liu, An Empirical Study of Transformative Use in Copyright Law, 22 Stan. Tech. L. Rev. 163, 220 (2019) ["Liu"]. Without sufficient protections for copyrighted software, authors are not only less likely to devote the resources to create computer programs in the first place, but they are also less likely to disseminate the works they do create at the risk they will be copied or taken without compensation or consequences.

Google's *amici* dispute this premise—that is, they dispute the premise of copyright law itself. For example, one of Google's *amici* concludes that "[e]ver increasing incentives will not lead to ever increasing output" and that narrow copyright protection will better promote the aims of the Copyright Act. *See* Brief of Professor Glynn Lunney as Amicus Curiae at 4 ["Lunney Br."]. This is a misguided and dangerous argument. Professor Lunney's argument is premised on the fact that when music sales revenue declined due to the proliferation of file-sharing, there was no corresponding decrease in the creative output of musical artists. *Id*. Yet while the "profit motive is the engine that ensures the progress of science," *Eldred*,

<sup>8.</sup> Of course, sales of recorded music, whether sales of records, cassette tapes, or CDs in the past or digital downloads or streaming in the present, have never been the lone (and in many cases, primary) revenue source or motivator for recording artists, nor the lone revenue source protected by the Copyright Act. Rather, recording artists have historically derived, and continue to derive, revenue from a plethora of other sources in addition to sales of recorded music, such as concerts, television appearances, and licensing fees for use of their songs in various media (advertisements, movies, video games, etc.). These alternatives are not available for software creators, who depend exclusively on selling and licensing their works.

537 U.S. at 212 n.18 (citation omitted), that does not mean that copyright fails when artists create in the shadow of infringement. What's important is that when these artists do create, they will be able to monetize their works. Maintaining robust copyright protection for musical works is integral to artists' ability to access and grow their other revenue streams and exposure opportunities, independent of recording sales. Even if a decline in sales of recorded music has occurred, recording artists still have ample motivation, financial or otherwise, to create new music to take advantage of those other valuable revenue and exposure sources, the exploitation of which depends on robust copyright protection. See 17 U.S.C. § 106 (exclusive rights of copyright holder include "in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission," "distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending," and "to perform the copyrighted work publicly"). But importantly, such alternative revenue and exposure sources for music are not necessarily available for creators of software, meaning that maintaining protections for software authors to sell and license their work, without having it copied for free, is all the more important to motivate development in software. This is a further example of why Professor Lunney's focus on the music industry as guidance to the Court's decision here is misplaced.

Likewise misguided is the view that copyright law enriches the most successful artists at a disproportionate level. Lunney Br. at 16. This argument fails in the face of the purpose of the copyright protection. All creators and all types of creative works are entitled to the same egalitarian protection under the Copyright Act. The ability of some creators to receive greater success from their work does not counsel for the diminution of protection for all. Nor is there a point when an artist is rewarded "enough" such that courts may narrow the scope of copyright protection. See Glenn S. Lunney, Copyright and the 1%. Stan, Tech, L, Rev, (forthcoming) (Texas A&M University School of Law Legal Studies Research Paper No. 19-51, at 13-14). This theory is an affront to the right of individual creators to profit from the fruits of their efforts and the exclusive ownership of their creative works, should they desire.

It is not just individual authors who will be affected should the Court accept Google's position. Intermediate distributors will have less incentive to distribute copyrighted works of lower economic value, resulting in reduced dissemination of those works. See Mossoff at 957. Further, the incentive to invest in software companies would decrease, negatively affecting the growth and establishment of software companies and the motivation of programmers at those companies to create software, which could have cascading repercussions to the software industry and beyond. Stripping copyright protection of software would upend the burgeoning and innovative market for software, in which the United States dominates worldwide, and without the established copyright

<sup>9.</sup> See, e.g., O'Connor at 982 ("[I]t should be clear that no one would invest without some appropriation mechanism that would provide them with a favorable return on their investment through the monetization of the commercialized goods or services. If they cannot see a way to get such a return, they will not make the investment.").

<sup>10.</sup> See Catalina Martinez, Expanding Patents in the Digital World: The Example of Patents in Software, in Xavier Seuba,

protections in place, this position in the global market will be in jeopardy.<sup>11</sup>

#### 2. Google's Approach Favors Large, Corporate Infringers at the Expense of Individual Copyright Owners

Google is a powerful global company with enormous resources at its disposal. The reason this case was tried twice previously, and is before this Court now, is because Google copied code from another large company. However, if Google did the same to a small developer's code, the dispute would never have made it this far. The Court's acceptance of Google's conduct here would devastate the economic incentives of exclusive ownership rights of smaller companies and individuals to innovate, some of the intended beneficiaries of applying copyright protection

Christophe Geiger, and Julien Penin (eds), Intellectual Property and Digital Trade in the Age of Artificial Intelligence and Big Data, Global Perspectives for the Intellectual Property System, CEIPI-ICTSD, Issue Number 5, 2018, at p. 58 (citing BSA/The Software Alliance, The \$1 Trillion Economic Impact of Software (June 2016)).

<sup>11.</sup> See Oman at 652 ("Copyright protection continues to stimulate creativity, competition, and technological advancement. It suppresses piracy and predatory commercial practices. It encourages investment in new and better works. It contains the nuance necessary for complex technological environments. And, under the leadership of the United States, it has led to international consensus that computer programs are best protected with the application of general copyright principles. Diverting from this well-trod, proven path, chosen by Congress and relied on by innovators, requires more than policy arguments and disagreements with outcomes.").

to computer programs. See CONTU Report at 66-67 ("[C]opyright is likely to be increasingly important in protecting computer programs, particularly those of small entrepreneurs who create their works for individual consumers and can neither afford nor properly use other forms of protection.").12 Larger companies like Google would be less likely to consider the costs of developing original computer programs with similar functionalities of the programs it can freely take and capitalize upon, increasing the likelihood of copying at the expense of creating. See, e.g., O'Connor at 997 (companies can "limit[] their costs of doing business by running roughshod over content copyrights"); see also Daniel F. Spulber, How Do Competitive Pressures Affect Incentives to Innovate When There Is a Market for Inventions?, 121 J. Pol. Econ. 1007 (2013). Eroding the protections for copyrighted works for the benefit of larger corporations like Google at the expense of the rights of individual authors is incompatible with the social justice underpinnings of copyright law.

#### 3. Google's Approach Will Have Broader Impacts Across Non-Software Industries and All Types of Creative Works

Permitting Google's actions here would lead to limited protections for authors and would result in the legitimization of copying of all types of creative works—not just software—for almost any purpose. Recognizing this expansive impact, Google argues that certain exceptions

<sup>12.</sup> See also Marc H. Greenberg, Reason or Madness: A Defense of Copyright's Growing Pains, 7 J. Marshall Rev. Intell. Prop. L. 1, 7 (2007) ("In fact, it is the individual artist who has gained substantially by the increased scope of copyright protection.").

to and limitations of the Copyright Act and the fair use doctrine should apply solely to copyrighted computer programs. See, e.g., Google Brief at 44-46; Copyright Scholars Brief at 18-20, 27-29; Brief for Rimini Street, Inc. as Amicus Curiae at 19-23; Microsoft Brief at 15-26.

But the Copyright Act makes no distinction as to the copyrightability, the scope of copyright protection, or the application of the fair use defense between the types of copyrighted works. As Professor Lunney concedes, "Congress is better positioned to answer th[e] question" of whether "broader" or "narrower" protection of original works will better "promote the Progress of Science." Lunney Br. at 2. Creating judicial carveouts and exceptions for certain types of creative works at the behest of infringers seeking to escape liability for their copying would likely create a "slippery slope" threatening to limit protections for other categories of creative works such as photographs, music, and art.<sup>13</sup> This is particularly worrisome in the modern digital age where "compatibility" and "interoperability" are proffered as justifications to copy and the mechanisms to copy are increasingly simple and powerful.14

<sup>13.</sup> See, e.g., Liu at 228, 240 ("Transformative use is prone to the problem of the slippery slope: courts start cautiously on uncontroversial cases and then extend the doctrine bit by bit to fact patterns increasingly remote from the original context.").

<sup>14.</sup> See Smith & Mann at 249-58.

#### **IV. Conclusion**

For at least the reasons described herein, the Court should affirm the Federal Circuit and hold that Google has infringed Oracle's copyright.

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