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 FOR THE AMERICAN LEGISLATIVE EXCHANGE COUNCIL IN SUPPORT OF RESPONDENT

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IDENTITY AND INTERESTS OF AMICUS CURIAE

Pursuant to Supreme Court Rule 37, the American Legislative Exchange Council respectfully submits this brief *amicus curiae* in support of Respondent Oracle America, Inc.¹

The American Legislative Exchange Council (ALEC) is a nonprofit, tax exempt corporation headquartered in the Commonwealth of Virginia for the purpose educating state legislators and operating as a forum for the exchange of ideas, developing real, state-based solutions to encourage growth, preserve economic security and protect hardworking taxpayers. Roughly 25 percent of all state legislators are members.

Intellectual property (IP), and the innovation that underpins it, are vital US economic drivers and are indirectly responsible for millions of American jobs that pay higher than average wages. Intellectual property rights are property rights and, consistent with America's founding fathers, they are natural rights. America's founders linked IP protections to natural rights and the social contract underpinning

¹ Pursuant to this Court's Rule 37.3(a), all parties have provided blanket consent to the filing of amicus briefs, which consent is on file with the Clerk's office.

Pursuant to Rule 37.6, *Amicus Curiae* affirms that no counsel for any 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 Curiae*, its members, or its counsel made a monetary contribution to its preparation or submission.

functional governance. They reasoned that inventors create property in its tangible and intangible forms and the government has a duty to protect both.

For more than a decade, ALEC has provided state legislators with information about every facet of IP, from the importance of incorporating strong IP provisions when negotiating trade frameworks to fighting counterfeits. While IP protections are the responsibility of the federation government, the benefits of strong IP protections are felt in states and among the constituencies of ALEC state legislators. The employers, innovators, and consumers in each state legislative district benefit from the trillions of dollars in IP created over the past few decades.

Because of the benefits enjoyed by state legislators' constituencies, ALEC has highlighted the difficulties of protecting trade secrets including from leaks by careless federal government agencies and offered state legislators a nuanced approach on how to deal with patent trolls. ALEC has submitted comments to foreign governments criticizing policies that were inconsistent with protecting intellectual property within their own nations and globally and through a resolution proposed by its state legislative members has called for increased funding to the US State Department to strengthen America's International IP Attaché program. ALEC state

² Curt Bramble, Patent trolls spell trouble for America's economy, Reuters, (Nov. 18, 2013), http://blogs.reuters.com/great-debate/2013/11/18/patent-trolls-spell-trouble-for-americas-economy/.

³ Resolution on the Importance of International Intellectual Property Rights Protections, American Legislative Exchange

legislative members also understand the link between strong IP protections and a nation's economic performance. OECD has reported that countries with strong IP regimes experience more robust economic growth.⁴ And because Federalism is a guiding ALEC principle, ALEC has worked hard to ensure that members understand the high regard America's Founders (many of whom held patents) had for IP.

While state legislators rarely have jurisdiction over IP issues, their constituents include innovators, creators, programmers, and others who enjoy protections under IP law. Any weakening of IP protections will have significant impacts in their districts, potentially harming both the economies in those districts and their constituents. Additionally, state legislators often serve as an important conduit for information both to and from the federal government to their constituents.

SUMMARY OF ARGUMENT

The United States leads the world in economic activity related to Intellectual Property (IP) rights and protections. U.S. Chamber of Commerce, Global Innovation Policy Center (GIPC) Art of the Possible: U.S. Chamber International IP Index, 8th Ed. (2020),

Council (September 4, 2015), https://www.alec.org/model-policy/resolution-on-the-importance-of-international-intellectual-property-rights-protections/.

⁴ Organization for Economic Co-operation and Development (OECD), Enquiries into Intellectual Property's Economic Impact, (2015), Ch. V, Copyright in the Digital Era: Country Studies https://www.oecd.org/sti/ieconomy/Chapter5-KBC2-IP.pdf

https://www.theglobalipcenter.com/wp-content/uploads/2020/02/GIPC_IP_Index_2020_FullR eport.pdf. As recognized by state legislators through the Resolution in Support of Intellectual Property Rights Protection of the American Legislative Exchange Council (ALEC), "U.S. intellectual property-intensive industries generate nearly \$7.7 trillion in gross output and account for more than 60% of total U.S. exports."⁵

The positive impact of strong IP rights and protection systems benefits each state. States like California, Texas, New York, Pennsylvania, and Ohio have enjoyed billions, if not trillions, of dollars in trade and investment, tens of millions of jobs, and so on. See Employing Innovation Across America, U.S. Chamber of Commerce Global Innovation Policy Center, https://www.theglobalipcenter.com/ipemploys-innovation/.

Many of these benefits can be traced, directly or indirectly, to decisions in the late 1970s and early

⁵ American Legislative Exchange Council, Resolution in Support of Intellectual Property Rights Protection (October 16, 2012, reapproved November 16, 2017), https://www.alec.org/model-policy/resolution-in-support-of-intellectual-property-rights-protection/, accord, ALEC Resolution on the Importance of International Intellectual Property Rights Protections, n.3, above ("IP-intensive jobs now make up a significant portion of the economy, sustaining millions of jobs and adding trillions of dollars to GDP across vast sections of the world; and... studies have found that nations with laws protecting IPR also perform strongly in economic indicators such as Household Income, Gross Domestic Product and Foreign Direct Investment").

1980s to ensure computer programs were subject to copyright protections. See Commission on New Technological Uses of Copyright (CONTU), Final Report, 3 Computer L.J. 53, 78-80 (1981)⁶ ("One of the hallmarks of a competitive industry is the ease which entrepreneurs may enter competition with firms already doing business. The absence of significant barriers to entering the program-writing market is striking... New software firms may be formed with few people and little money; entry into the market has thus far been fairly easy" id. at 79). The decisions to extend protections to computer programs were rooted in the founder's desire to extend IP rights to inventors and authors.

The founders incorporated the Lockean labor theory of property and a general liberty of contract in the Constitution. See Randolph J. May and Seth L. Cooper, Liberty of Contract and the Free Market Foundations of Intellectual Property, Free State Foundation (July 29. 2016), https://freestatefoundation.org//wpcontent/uploads/2019/06/Liberty-of-Contract-and-the-Free-Market-Foundations-of-Intellectual-Property-072916.pdf and The Constitutional Foundations of Intellectual Property, Free State Foundation (October 5. https://freestatefoundation.org//wpcontent/uploads/2019/06/The-Constitutional-Foundations-of-Intellectual-Property-100515.pdf.

Property rights and a general liberty of contract also form the basis of a free market. When people are free to assign or sell certain economic rights,

⁶ This brief references the version of the final report found in the Computer Law Journal.

economies flourish. The free market works to provide benefits to all involved. Innovators are free to sell protected works, the right to use protected works, or the protections themselves.

The Constitution and copyright law seek to achieve a balance: protect property rights while incentivizing innovation. Oracle, and its predecessor in interest Sun Microsystems, developed tiered licenses that protected property rights and maximized innovation. The tiered licenses provide maximum flexibility for software developers, save them valuable time and effort, expand the devices available for these developers, and protect IP rights from competitors.

Google warns of change in the software development market unless this Court overturns the Federal Circuit's decision and rules either that the Copyright Act of 1976, and its 1980 amendments, 7 do not protect Application Programming Interfaces (APIs) or that fair use protects Google's copying of the Java code.

Congress intended for the Copyright Act to protect computer programs. Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1247 (3rd Cir. 1983) ("Although section 102(a) does not expressly list computer programs as works of authorship, the legislative history suggests that programs were considered copyrightable as literary works.") This intention is evident through the expansive definition of "literary work," the 1980 addition of a definition for "computer program," and

⁷ 17 U.S.C. §§101, et seq.

Congress's understanding that the 1980 amendments adopted the reasoning of the CONTU Final Report. Id.

Copyright law does not distinguish between classes of computer programs including APIs or declaring code, instead defining computer programs as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101, Sega Enterprises Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992). While copyright law does not distinguish between classes of computer programs, just because something is created does not mean that it qualifies for copyright protection. The law provides that "[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b).

The Constitution reserves patent and copyright standards for Congress. Only Congress can say what is, or is not, protected. While Google, or its amici, ask the Court to make a determination as to whether the code in question is subject to copyright protections, they could also seek to carve interfaces out from under copyright protection via Congressional action. CONTU recommended Congress periodically review copyright law to determine whether the law was keeping pace with technological advances.

Any legislation enacted as a result of these recommendations should be subject to a periodic review to determine its adequacy in the 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 effect on cultural values of including computer programs within the ambit of copyright.

3 Computer L.J. at 54.

Fair use requires a case-by-case analysis of the facts and law. Section 107 of the Copyright Act provides the court with a non-exhaustive list of factors to weigh when a defendant raises fair use. See, Harper & Row Publishers, Inc. v. Nation Enterprises, 471 U.S. 539 (1985). The enumerated four factors include:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107.

The parties disagree on the specific copyright question before the Court with Google phrasing the question as "whether copyright protection extends to software interfaces" and Oracle phrasing the question as whether "the Copyright Act protects the code and organization that Google concedes were original and creative and that Oracle could have

written in countless ways to perform the same function." The circuit court had even a slightly different take, deciding that "the declaring code and the structure, sequence, and organization of the 37 Java API packages are entitled to copyright protection." *Oracle America, Inc. v. Google Inc.*, 750 F.3d 1339, 1354 (Fed. Cir. 2014) (hereafter "*Oracle I*").

ARGUMENT

A. State Economies and the American Economy Benefit from Strong Intellectual Property Protections

Copyright is essential for "protecting computer programs, particularly those of small entrepreneurs who create their works for individual consumers and who can neither afford nor properly use other forms of protection." CONTU *Final Report*, 3 Computer L.J. at 67.

Compared to many other industries, computer programming is a unique opportunity for individual innovators to enter the market and do so successfully. An innovator need only access to a computer, understand how programming languages work, and the internet to access other helpful tools. "One of the hallmarks of a competitive industry is the ease with which entrepreneurs may enter into competition with firms already doing business. The absence of significant barriers to entering the program-writing market is striking." *Id.* at 79.

This Court's decision could have a significant impact on innovation within the computer programming field. The Court's decision will impact property rights and determine the effectiveness of tiered licenses. Licensing requirements, or the freedom to contract, form part of the backbone of the American IP system and the foundation of a free market generally. Licensing agreements establish perimeters, allow innovators access to protected works, and allow them to build upon those protected works. Third, the decision is likely to impact the United States' ability to protect IP rights globally. It is well known that certain foreign nations—such as Russia, China, Kuwait, and Saudi Arabia, among others—misappropriate IP routinely and to the detriment of the U.S. economy as well as to all U.S. citizens. A decision that would effectively expand fair use would be problematic and risk enabling copyright theft by bad actors.

The United States' IP protection regime has inured the economy greatly. The United States is a global leader in IP and IP protection. Art of the Possible, at 253-258. The broad IP field in the United States accounts for 45 million jobs and represents approximately 38% of GDP. U.S. Chamber of Commerce GIPC, Human Progress: Sustaining the

⁸ China, for example, has been hacking, stealing, and appropriating IP held by western companies for years. In 2014, the U.S. Department of Justice indicted a number of Chinese military personnel for economic espionage. At the time, Attorney General Holder noted the damage such IP theft did to the market and stated that "[s]uccess in the global market place should be based solely on a company's ability to innovate and compete, not on a sponsor government's ability to spy and steal business secrets." JAMES GRIFFITHS, THE GREAT FIREWALL OF CHINA 189 (2019). Kuwait and Saudi Arabia, on the other hand, tend to be hotspots for unlicensed software, with some estimates of unlicensed software use hovering between 32% and 57%. See Art of the Possible at 52.

Wave, Innovation & Creativity Barometer 2019 Report 13 (2019),at https://www.theglobalipcenter.com/wpcontent/uploads/2019/12/023644 GIPC Barometer R eport 2019 FINv2 WEB.pdf. Computer represented, as of 2016, about \$36 billion in exports. JESSICA NICHOLSON. U.S. DEPARTMENT COMMERCE, DIGITAL TRADE IN NORTH AMERICA at 4, (January https://www.commerce.gov/sites/default/files/media/fi les/2018/digital-trade-in-north-america.pdf.

Intellectual property, and more specifically copyright, positively benefit states' economies. Innovators in states like California, Texas, and New York hold more than 20,000 patents, copyrights, and trademarks in each state. Innovators in states like Pennsylvania, Virginia, Ohio, and Colorado hold between 5,000 and 20,000 IP rights in each state.

These IP holdings translate to significant economic benefits. For example, California has over 7.5 million jobs related to IP, realizes nearly a trillion dollars in sales, and sees over \$100 billion invested in research and development. In Similarly, Texas can claim over 5 million jobs related to IP, realizes about \$750 billion in sales, and sees over \$20 billion invested in research and development.

⁹ U.S. CHAMBER OF COMMERCE, GLOBAL INNOVATION POLICY CENTER, EMPLOYING INNOVATION ACROSS AMERICA, https://www.theglobalipcenter.com/ip-employs-innovation/#ranking (last visited, February 13, 2020).

 $^{^{10}}$ Id.

 $^{^{11}}$ Id. at R&D Map.

Pennsylvania can trace over 2.5 million jobs related to IP, almost \$270 billion in sales, and \$14.6 billion invested in research and development.

The Bureau of Labor Statistics estimates that as of 2018, there were over 230,000 computer programming jobs in the United States. BUREAU OF LABOR STATISTICS, OCCUPATIONAL EMPLOYMENT AND WAGES FOR COMPUTER PROGRAMMERS 15-311 (May 2018).

https://www.bls.gov/oes/current/oes151131.htm#(1). The number may be higher, as this figure excludes those who are self-employed.

Computer programmers are paid well, with the median annual wage of nearly \$85,000 per year, roughly 46 percent higher than "non-IP-intensive industries). See, id. and U.S. DEPARTMENT OF COMMERCE. INTELLECTUAL PROPERTY AND THE U.S. 2016 ECONOMY: UPDATE 19 (2016),https://www.commerce.gov/sites/default/files/migrate d/reports/ip-and-the-us-economy-september-2016.pdf. For states like California, Texas, New York, and Pennsylvania, this means that their economies benefit from between 5,530 and 29,740 well-paying jobs. Occupational Employment and Wages for COMPUTER PROGRAMMERS, above.

Because of the benefit from strong IP protections that states enjoy, the Court's decision is likely to significantly impact their economies, as well as the United States' economy. Any change to the *status quo* is likely to inject uncertainty into the field, discourage innovation, and harm America's status as a leader protecting and promoting IP rights.

Changes to the *status quo*, additionally, are likely to have significant impacts on global IP rights. The

past decade or so has witnessed one of the largest involuntary transfers of IP ever. In countries like Kuwait, Saudi Arabia, and Qatar, people and companies pirate software—that is they copy and distribute it to software others unauthorized manner. China and Russia simply steal valuable IP. In 2011, one report claimed that "an amount of intellectual property larger than that contained in the Library of Congress is stolen from bv U.S. networks maintained businesses. universities, and government departments and agencies." ADAM SEGAL, THE HACKED WORLD ORDER 65-66 (2016).

Regardless of how the IP theft occurs, it harms businesses. For example, American Semiconductor controlled the rights to a computer program that controlled the flow of electricity from wind turbines. The Chinese government was able to steal the computer program's code and, consequently, it "stopped making purchases, and American Semiconductor soon had to announce it had lost its biggest customer, responsible for close to \$210 million in revenue." Id. at 152. This loss of business not only harmed the U.S. economy, it also harmed the economy of the state legislative districts in which the company was located.

Recently, the United States and China executed "Phase One of the Economic and Trade Agreement between the United States of America and the People's Republic of China." Through this agreement, China has promised to "better define and protect rights-holders' legal interests." Art of the Possible at 24.

The ability to prosecute IP theft globally hangs in the balance. A wrong step could harm the United States' ability to protect computer program rights-holders in the international IP market, providing foreign nations with an excuse to ignore international treaties, agreements and standards. An inability to prosecute IP rights globally will have a significant impact on state economies, job markets, and revenue.

B. Property Rights as the Foundation of Copyright

"The purpose of copyright is to create incentives for creative work." Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 450 (1984).

The Constitution grants Congress the power to create the national, legal framework for intellectual property protections. "Congress shall have power to... promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." U.S. Const. Art. 1, Sec. 8.

The idea to promote the progress of science and useful arts by granting property interests to authors and inventors was not a new idea to the founders. Instead, they drew upon the ideas of John Locke in his *Second Treatise on Government*. According to Locke, the roots of property may be traced to the fruits of a man's labor.

Though the earth and all inferior creatures be common to all men, yet every man has a "property" in his own "person." This nobody was any right to but himself. The "labour" [sic] of his body and the "work" of his hands, we may say are property his. Whatsoever, then, he removes out of the state that Nature hath provided and left it in, he hath mixed his labour with it, and joined to it something that is his own, and thereby makes it is property."

JOHN LOCKE, SECOND TREATISE OF GOVERNMENT 17 (Barnes & Noble Books, ed. 2004) (1690).

The founders expounded, and expanded, upon Locke's ideas. The ideas of the founders eventually found their way into the Constitution. Shortly after the Constitution's ratification, James Madison wrote an essay entitled "On Property." In that essay, he "offered a broad definition of property, which, he said, 'in its larger and juster [sic] meaning ... embraces everything to which a man may attach a value and have a right.' According to Madison, 'A man has property in his opinions and the free them." communication ofTheConstitutional Intellectual*Foundations* of Property, According to the authors, through "On Property," Madison demonstrated that the founders "applied to intellectual property the Lockean idea that a person has a natural right to enjoy the fruits of his or her labor, regardless of whether those fruits take tangible or intangible form." Id.

As property rights are the foundation for the Constitution's Intellectual Property Clause, so also are property rights the foundation of the free market. The founders understood that "[a] person's natural right to property also includes a natural right to assign it or exchange it by contract." Randolph J. May and Seth L. Cooper, *The Public Contract Basis of Intellectual Property Rights*, Free State

Foundation (April 19, 2016), https://freestatefoundation.org//wp-content/uploads/2019/06/The-Public-Contract-Basis-of-Intellectual-Property-Rights-041816.pdf. The market is nothing more than ability to transfer all, or some portion, of rights to another. An author or inventor is free to assign IP rights, license them, or retain them as he or she sees fit. The Intellectual Property Clause of the Constitution protects someone who progresses science or the useful arts and while placing guidelines for protection of the market.

Congress fulfills its constitutional responsibilities to protect property rights, promote innovation, science, and the useful arts through copyright and patent law. These laws provide inventors and authors a limited time monopoly to their works. "[T]he limited grant is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired." Sony Corp., 464 U.S. at 429, accord Harper & Row, 471 U.S. at 545-546 ("[C]opyright is intended to increase and not to impede the harvest of knowledge... The rights conferred by copyright are designed to ensure contributors to the store of knowledge a fair return for their labors.")

Fair use began as a judicially created doctrine, which Congress later adopted as part of the Copyright Act. In *Harper & Row*, this Court explained, "Fair use was traditionally defined as 'a privilege in others than the owner of the copyright to use the copyrighted material in a reasonable manner without his consent." 471 U.S. at 549 (internal

citations omitted). Early courts recognized that some use of a protected work was necessary to "promote the progress of science and the useful arts." Because some reasonable use is necessary, academics and courts have always implied "the author's consent to a reasonable use of his copyrighted works." *Id.* Section 107 exists not just as a restatement of the common law, but also as guiding principles trying to determine whether the "reasonable copyright owner [would] have consented to the use." *Id.* at 550.

Modern copyright and fair use are creations of statute. See, e.g., Sony Corp., 464 U.S. at 429-431 (Constitutional roots and purposes for copyright law), Harper & Row, 471 U.S. at 546-547, 549-551 (Constitutional and statutory sources of copyright law and fair use), Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 576-578 (1994) (brief history and purpose of fair use). As creations of statute within Congress's constitutional responsibility, this Court has cautiously approached any claim that would expand rights either under copyright or fair use. "The judiciary's reluctance to expand the protections afforded by copyright without explicit legislative guidance is a recurring theme. Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyright materials." Sony, 464 U.S. at 431.

C. Property Rights and the Progress of Science

The founders recognized that property rights promote the progress of science. This promotion is achieved by granting exclusive usage rights for a limited time. The licensing of IP rights is consistent with both property rights and promoting the

progress of science. In Liberty of Contract and the Free Market Foundations of Intellectual Property, above, authors Randolph J. May and Seth L. Cooper trace the history of cases recognizing the IP holders' rights to "sell it or keep it; to manufacture the article himself or to license others to manufacture it; to sell such article himself or to authorize others to sell it." Quoting E. Bement & Sons v. National Harrow Co., 186 U.S. 70, 88-89 (1902).

Courts recognize the paradox of copyright law. Too strict an application of copyright law may suffocate scientific progress. Too loose an application of copyright law may discourage invention. Courts need to be mindful, then and "avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster." *Campbell*, 510 U.S. at 577 (internal citations omitted).

The Commissioners on CONTU also recognized that copyright protections would spur innovation and economic growth. In the *Final Report*, they recommended "[t]o provide reasonable protection for proprietors without unduly burdening users of programs and the general public, the following statements concerning program copyright ought to be true... 4. Copyright should not grant anyone more economic power than is necessary to achieve the incentive to create." CONTU *Final Report*, 3 Computer L.J. at 60.

The developers at Sun Microsystems created Java to solve the problem of programs only running on a single electronic device. When creating the licenses to protect its property rights, Oracle imposed one of three licenses to use Java: The first is the General Public License, which is free of charge and provides that the licensee can use the packages... but must "contribute back" its innovations to the public;

The second option is the Specification License, which provides that the licensee can use the declaring code and organization of Oracle's API packages but must write its own implementing code; and

The third option is the Commercial License, which is for businesses that "want to use and customize the full Java code in their commercial products and keep their code secret.

Oracle offers the Commercial License in exchange for royalties. The maintain Java's "write once, run anywhere" motto, the Specification and Commercial Licenses require that the licensees' programs pass certain tests to ensure compatibility with the Java platform.

Oracle I, 750 F.3d at 1350; See also, Oracle America, Inc. v. Google LLC, 886 F.3d 1179, 1187 (Fed. Cir. 2018) (hereafter "Oracle II").

As described in *Oracle II*, the Specification license was "freely available to programmers building applications ("apps")" while for the Commercial License, "Oracle charge[d] a licensing fee" and imposed strict compatibility requirements. *Oracle II*, 886 F.3d at 1187. The Specification License would encourage the widespread adoption by application developers of its copyrighted works. The Commercial

License appears to be an attempt to preserve interoperability amongst platforms subject to it and a way to prevent competitors from seizing its property and supplanting it in the market.

Tiered licensing works. Potential competitors built interoperability into their devices. As more devices entered the market, application developers—who were not charged for use of Java—had more devices available to them, expanding their potential market. As the market continued to expand, more application developers utilized the platform, leading to more innovation and beneficial products for consumers.

D. Congress Intended for The Plain Text of the Copyright Act to Protect Computer Programs

copyright Congress intended to include protections for computer programs, as evidenced both by the definition of the term in § 101 and the term "literary works" in § 102(a). The Copyright Act protects "original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." 17 U.S.C. § 102(a). The law further lists several categories of "works of authorship," one of which is "literary works." "Literary works," in turn, is defined as "works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the objects, such as books, material periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied." 17 U.S.C. § 101.

To qualify as a "literary work," the prospective work must be "fixed in any tangible medium of expression," which means that it is "emobod[ied] in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory definition." 17 U.S.C. § 101.

Computer programs are written and stored on various mediums of expression. "Computer programs are prepared by the careful fixation of words, phrases, numbers, and other symbols in various media. The instructions that make up a program may be read, understood, and followed by a human being." CONTU *Final Report*, 3 Computer L.J. at 56. Similarly, while the specific material on which computer programs are "fixed" or "stored" may have changed, they are still embodied in mediums that are "sufficiently permanent or stable." ¹³

During the debate of the Copyright Act in 1976, members of Congress thought the Act's language adequately protected computer programs. "In some of these cases the new expressive forms—electronic music, filmstrips, and computer programs, for example—could be regarded as an extension of copyrightable subject matter Congress had already intended to protect, and were thus considered copyrightable from the outset without the need of new legislation." CONTU Final Report, 3 Computer L.J. at 67, quoting U.S. Congress, Senate Judiciary

¹² See 17 U.S.C. § 102(a).

¹³ See CONTU Final Report, 3 Computer L.J. at 57.

Committee, 94th Cong., 1st sess. 1975, S. Rept. 473, at 50-51 and U.S. Congress, House Judiciary Committee, 94th Cong., 2d sess., 1976, H. Rept. 1733, at 510 (citations original) Similarly, at least one circuit court noted during the debate that Congress thought "programs were considered copyrightable as literary works. See H.R.Rep. No. 1476, 94th Cong. 2d Sess. 54, reprinted in 1976 U.S. Code Cong. & Ad.News 5659, 5667 ('literary works includes computer programs')." Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1247 (3rd Cir. 1983) (citations original) (ellipses omitted).

As part of the 1980 amendments to copyright law, Congress adopted the definition of "computer program" recommended by the Commission and revised Section 117.¹⁴ Noting the legislative history of the 1980 amendments, the court in *Franklin* stated that it could

consider the CONTU Report as accepted by Congress since Congress wrote into the law majority's recommendations almost verbatim. See Cong.Rec. H10767 (daily ed. Nov. 17, 1980) (Rep. Kastenmeier: Bill "eliminates confusion about the legal status of computer software by enacting recommendations of CONTU clarifying the law of copyright of computer software"); 18 Cong.Rec. S14766 (daily ed. 1980)(Sen. Bayh: "this language reflects that proposed by CONTU").

Franklin, 714 F.2d at 1252.

¹⁴ *Id*. at 61.

E. The Constitution Grants Congress the Authority to Change Copyright Standards, Including the Definition of Computer Program

Neither CONTU nor the definition of "computer program" found in Section 101 of the Copyright Act distinguish between types of computer programs. According to Section 101, a "computer program" is "a set of statements or instructions to be used directly on indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. As interpreted by the 9th Circuit, this definition means "the Copyright Act does not distinguish between unauthorized copies of a copyrighted work on the basis of what work the alleged infringer's stage of unauthorized copies represent." Sega Enterprises Ltd. v. Accolade, Inc., 977 F.2d 1510, 1518 (9th Cir. 1992).15

The Constitution delegated to Congress the authority to create copyright and patent standards. Thus, Congress is empowered to change the law. In fact, the CONTU *Final Report* recommended that Congress periodically review the state of technology and revise the Act as necessary.

¹⁵ The Federal Circuit seemed to understand that Congress did not distinguish between types of computer code, seemingly rejecting Google's phrasing of the copyright issue before this Court. "The parties have often referred to these groups of computer programs, individually or collectively, as 'application programming interfaces,' or API packages, but it is their content, not their name that matters." *Oracle I*, 750 F.3d at 1347.

Any legislation enacted as a result of these recommendations should be subject to a periodic review to determine its adequacy in the 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 effect on cultural values of including computer programs within the ambit of copyright.

3 Computer L.J. at 54.

F. Originality, the Idea-Expression Dichotomy, and the Merger Doctrine

Originality "is the sine qua non of copyright" Feist Publications, Inc. v. Rural Telephone Services Co., Inc., 499 U.S. 340, 345 (1991) (internal citations omitted). This factor is not very difficult to prove. All one need do is establish "a work [as] original to the author." Id. There can be little doubt that the Java programming language is original and independently created by Oracle's predecessor in interest, Sun Microsystems.

The question then turns to the idea-expression dichotomy and the merger doctrine. Merger occurs "when there is but a limited number of ways to express a given idea." CONTU Final Report, 3 Computer L.J. at 74. The dichotomy is an exception to copyright "intended to prohibit the monopolization of an idea" should limited ways to express it exist. Apple Computer, Inc. v. Formula International, Inc., 725 F.2d 521, 525 (9th Cir. 1984), see also Mazer v. Stein, 347 U.S. 201, 217 (1954) ("a copyright gives no exclusive right to the art disclosed; protection is

given only to the expression of the idea—not the idea itself'). 16

The merger doctrine, which appears to be created by the circuit courts, states that when only one way exists to express an idea "the idea and the expression merge and neither qualifies for copyright protection." CDN Inc v. Kapes, 197 F.3d 1256, 1261 (9th Cir. 1999). The Federal Circuit, when comparing patent and copyright protections stated that copyright law "can protect a multitude of expressions that implement [a patentable] process. If the patentable process is embodied inextricably in the line-by-line instructions of the computer program, however, then they process merges with the expression and precludes copyright protection." Atari Games Corp. v. Nintendo of America Inc., 975 F.2d 832, 839-840 (Fed. Cir. 1992). Merger is not available, though "so long as alternate expressions are available." Id. at 840. If there are other ways to program devices so that programmers may code once and run across devices, merger fails as there are multiple ways to express an idea in the context of computer programming.

The Constitution gives Congress the sole power to establish national intellectual property standards. The CONTU *Final Report* accurately predicted the changing nature of technology and presciently observed that cultural values within the broader

¹⁶ Ideas cannot be protected by copyright. The law makes this clear by stating that protection "any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b)

innovative community would be subject to debate. This is a political debate, though, properly reserved to the elected branches of government than to the courts.

G. Fair Use is an Equitable Question that Requires a Case-by-Case Analysis

Fair use is an equitable question. This Court has not yet had the opportunity to opine on the topic as it relates to computer programs. Despite this, the CONTU *Final Report* and several circuit courts have weighed in on whether specific uses of computer programs are, or are not, fair use.

Fair use is an affirmative defense. Fair use is a mixed question of fact and law, requiring a case-by-case analysis. "[C]onsideration of the unique nature of computer object code thus is more appropriate as part of the case-by-case, equitable 'fair use' analysis authorized by section 107." Sega Enterprises, 977 F.2d at 1520; see also, Harper & Row 471 U.S. at 549 ("Section 107 requires a case-by-case determination whether a particular use is fair, and the statute notes four nonexclusive factors to be considered.").

Before the widespread adoption of personal computers, programs tended to work only on one type of machine. When Congress was rewriting copyright law and considering the CONTU *Final Report*, therefore, it was a fair use of computer programs to modify programs so that they would work on multiple devices.

Because of a lack of complete standardization among programming languages and hardware in the computer industry, one who rightfully acquires a copy of a program frequently cannot use it without adapting it to that limited extent which will allow its use in the possessor's computer...

CONTU Final Report, 3 Computer L.J. at 62.

Because programs could originally only run on one device, copyright law contemplates modifying and licensing of computer programs. Someone who rightfully acquired a computer program would be permitted to modify it for the purpose of running it on multiple devices. While the purchaser could alter the code, fair use had its limits—he or she could not convey the adapted program "to others along with the licensed or owned program without the express authorization of the owner of the copyright in the original work." *Id.* at 63.¹⁷

A court may not stop after just analyzing one or two of the factors. Instead, a court must analyze all four factors together. "Nor may the four statutory factors be treated in isolation, one from another. All are to be explored, and the results weighed together, in light of the purposes of copyright." *Campbell* 510 U.S. at 578.

1. Fair Use Factor One – The Purpose and Character of the Use, Including Whether the Use is for a Commercial or Non-Profit Purpose

When analyzing the purpose and character of a use, courts need to consider whether an infringing work is "transformative" and the infringer copied for commercial or noncommercial purposes. *E.g. Campbell*, above; *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001), 17 U.S.C. § 107.

 $^{^{17}}$ Sun Microsystems created Java to solve this very problem.

Starting, though, with the uncontroverted reasons Google opted to copy the Java declaring code. Google wanted to launch a smartphone. Apple was in the process of developing the iPhone. Other companies were trying to create a mobile market, including several that licensed the Java platform. Among those companies that licensed the Java platform were Blackberry, SavaJe, Danger, and Nokia. See Oracle II 886 F.3d at 1209.

In 2005, Google purchased Android "as part of a plan to develop a smartphone platform." *Oracle I*, 750 F.3d at 1350. To expedite the development of the operating system, Google started discussing licensing the Java platform. Discussions fell apart "because Google wanted device manufacturers to be able to use Oracle's APIs in Android for free with no limits on modifying the code, which would jeopardize the 'write once, run anywhere' philosophy." *Oracle II*, 886 F.3d at 1187.

Rather than create its own operating system, Google copied over 11,000 lines of the Java platform. "Google copied the declaring source code from 37 Java API packages verbatim, inserting that code into parts of its Android software. In so doing, Google copied the elaborately organized taxonomy of all the names of methods, classes, interfaces, and packages..." *Oracle I*, 750 F.3d at 1351.

Economic gain need not be a motivation when copying a protected work. For example, in finding that Napster's peer-to-peer music file sharing system was a commercial purpose, the court noted, "[d]irect economic benefit is not required to demonstrate a commercial use. Rather, repeated and exploitative copying of copyrighted works, even if the copies are

not offered for sale, may constitute a commercial use." A&M Records, 239 F.3d at 1015. Napster allowed users to share music, allowing other users to escape the need to purchase albums. Napster did not economically benefit from the transaction, but harmed the market by decreasing the number of albums people purchased.

Under these standards, Google copied Java for a commercial purpose. The purpose—commercial or noncommercial—establishes the burden for the fourth factor: effect on the market. "If the intended use is commercial gain, that likelihood may be presumed. But if it is for a noncommercial purpose, the likelihood must be demonstrated." *Sony Enterprises*, 464 U.S. at 451.

Courts upheld copyright protections and found defendants' copying of code as not protected by fair use. In both *Formula* and *Franklin*, the courts discussed why the Copyright Act protects computer programs and declined to extend fair use to the verbatim copying of Apple's programs and operating code, even though the purposes in both were to create systems compatible with the Apple operating system.

2. Fair Use Factor Two – The Nature of the Copyrighted Work

This factor "calls for recognition that some works are closer to the core of intended copyright protection than others, with the consequences that fair use is more difficult to establish when the former works are copied." *Campbell*, 510 U.S. at 586. Copyright law, as discussed above, protects computer programs.

An example of material that does not qualify for copyright protection may be facts, such as in Feist, where this Court was asked to decide if information contained in a phone directory could be protected by copyright law. Deciding the answer in the negative, this Court noted, "writings which are to be protected are the fruits of intellectual labor, embodied in the form of books, prints, engravings, and the like." U.S. 346 (emphasis Feist. 499 at original). Alphabetized lists of residents are not the result of intellectual labor and thus not protectable by copyright.

It is without question that computer programs are the result of intellectual labor. As such, for the purpose of fair use, they fall within the intended protections of copyright law.

3. Fair Use Factor Three – Amount and Substantiality of the Portion Used In Relation to the Copyrighted Work as a Whole

"As the statutory language indicates, a taking may not be excused merely because it is insubstantial with respect to infringing work. As Judge Learned Hand cogently remarked, 'no plagiarist can excuse the wrong by showing how much of his work he did not pirate." Harper & Row, 471 U.S. at 565.

The amount and substantiality factor does not focus on what percentage the copied portion represents of the defendant's product. Instead, it focuses on the work that is copied. While, in some cases, the percentage of protected content copied from the original may matter, in this case, the inquiry focuses on the "substantiality." As this Court noted in *Harper & Row*, if the defendant copies the

"heart" of an original work, he or she may still be liable for infringement without the benefit of fair use. "In absolute terms, the words actually quoted were an insubstantial portion of 'A Time to Heal.' The District Court, however, found that 'The [respondent] took what was essentially the heart of the book." Harper & Row, 471 U.S. at 564-565.

As with the other factors, the information discerned may relate to the others for fair use, as it asks

Whether "a substantial portion of the infringing work was copied verbatim" from the copyrighted work is a relevant question, for it may reveal a dearth of transformative character for the purpose under the first factor, or a greater likelihood of market harm under the fourth; a work composed primarily of an original, particularly its heart, with little added or changed, is more likely to be a merely superseding use, fulfilling demand for the original.

Campbell, 510 U.S. at 587-588 (internal citations omitted).

When looking at substantiality, one may ask, "why did the infringer copy the protected work?" The answer may be to learn from the code. The answer may also be to supplant the creator in the market, or somewhere in between. When looking at substantiality, courts should keep in mind the purpose under the first factor for fair use and examine the importance of the copied portion—whether what is copied is "the heart" of the original program.

For some programs, there is an expectation that aspects of code will be copied, either to allow the programmer to focus on other functions, or to promote interoperability with different devices or other applications. Looking to the tiered licenses, application programmers still have the expectation that they can use Java for free, while competitors and other device manufacturers understand that they need to license the product.

4. Fair Use Factor Four – The Effect of the Use Upon the Potential Market for or Value of the Copyrighted Work

When a defendant copies an original work for a commercial use, it bears the burden to prove that there is no harm to the potential market. Sony, 464 U.S. at 451 and Campbell, 510 U.S. at 590 ("Since fair use is an affirmative defense, its proponent would have difficulty carrying the burden of demonstrating fair use without favorable evidence about relevant markets.") This is a tall task, but not impossible.

[T] o negate fair use one need only show that if challenged "should become use widespread, it would adversely affect the potential market for the copyrighted work." This inquiry must also take account not only of harm to the original but also of harm to the derivative "If market for works. defendants work adversely affects the value of any of the rights in the copyrighted work (in this case the adaptation [and serialization] right) the use is not fair."

Harper & Row, 471 U.S. at 568 (internal citations omitted).

Looking at one market, such as smartphones, is insufficient. Courts must "take account not only of harm to the original [market] but also of harm to the market for derivative works." *Campbell*, 510 U.S. at 590. In this case, there are several markets at play, such as those for computer programmers, devices, and the general public that would benefit from more computer programs and devices. Google must prove that its copying of Java impacts none of these markets.

CONCLUSION

The Founding Fathers designed a Constitutional structure for intellectual property based, in large part, on Lockean property rights theory. They sought to balance the progress of science with the need to promote innovation. The best way they could achieve this balance was to provide authors and inventors the exclusive rights to their writings and inventions for a limited time and vest in Congress the ability to further define those rights.

The Founding Fathers also recognized a healthy, robust free market benefit the national and state economies. The very same property rights upon which the Intellectual Property Clause were based also form the basis of the free market. Without a government protecting property rights, people would not be free to trade, assign property rights, or receive any value for those rights.

The American economy, and the economies of many states, relies on solid IP protections. The American IP boom has benefited many states to the tune of billions of dollars in sales and investment, tens of millions of jobs, and so much more.

State legislators represent many of the innovators, employers, and consumers who benefit from IP and the markets that IP create. Any change, even small, will ripple out into the states and these districts, impacting even the smallest of innovators.

When Congress received the Commission on New Technological Uses for Copyright Law's *Final Report*, it decided computer programs deserved express copyright law protections. When doing so, Congress made no distinction between types of computer programs.

The Commission also recommended that Congress periodically visit and revise copyright law. Copyright law should keep pace with technology and cultural understandings of technology. Congress has not followed the advice of the Commission.

Congress's decision not to update copyright law does not make this Court's decision any easier, but looking to the text of the law and the Commission's advice to Congress may provide a path forward.

Respectfully submitted,

/s/
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