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Appendix A

**United States Court of Appeals
for the Federal Circuit**

ORACLE AMERICA, INC.,
Plaintiff-Appellant

v.

GOOGLE LLC,
Defendant-Cross-Appellant

2017-1118, 2017-1202

Appeals from the United States District Court for the Northern District of California in No. 3:10-cv-03561-WHA, Judge William H. Alsup.

Decided: March 27, 2018

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Before O'MALLEY, PLAGER, and TARANTO, *Circuit Judges*.
O'MALLEY, *Circuit Judge*.

This copyright case returns to us after a second jury trial, this one focusing on the defense of fair use. Oracle America, Inc. (“Oracle”) filed suit against Google Inc. (“Google”)¹ in the United States District Court for the Northern District of California, alleging that Google’s unauthorized use of 37 packages of Oracle’s Java application programming interface (“API packages”) in its Android operating system infringed Oracle’s patents and copyrights.

At the first trial, the jury found that Google infringed Oracle’s copyrights in the Java Standard Edition platform, but deadlocked on the question of whether Google’s copying was a fair use.² After the verdict, however, the district court found that the API packages were not copyrightable as a matter of law and entered judgment for Google. *Oracle Am., Inc. v. Google Inc.*, 872 F. Supp. 2d 974 (N.D. Cal. 2012). Oracle appealed that determination to this court, and we reversed, finding that declaring code and the structure, sequence, and organization (“SSO”) of the Java API packages are entitled to copyright protection. *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339, 1348 (Fed. Cir. 2014). We remanded with instructions to reinstate the jury’s infringement verdict and for further proceedings on Google’s fair use defense and, if appropriate, on damages. *Id.* at 1381.

Google subsequently filed a petition for certiorari on the copyrightability determination. The Supreme Court called for the views of the Solicitor General, who expressed agreement with our determination and recommended denying review. The Supreme Court denied

¹ In September 2017, Google converted from a corporation to a limited liability company and changed its name to Google LLC, as reflected in the amended caption.

² The jury found no patent infringement, and the patent claims are not at issue on appeal.

certiorari in 2015. *Google Inc. v. Oracle Am., Inc.*, 135 S. Ct. 2887 (2015) (Mem.).

At the second jury trial, Google prevailed on its fair use defense. After the jury verdict, the district court denied Oracle's motion for judgment as a matter of law ("JMOL") and entered final judgment in favor of Google. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561, 2016 WL 3181206 (N.D. Cal. June 8, 2016) ("*Order Denying JMOL*"); Final Judgment, *Oracle Am., Inc. v. Google Inc.*, No. 3:10-cv-3561 (N.D. Cal. June 8, 2016), ECF No. 1989. Oracle filed a renewed motion for JMOL and separately moved for a new trial. The district court denied both motions in a single order. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561, 2016 WL 5393938 (N.D. Cal. Sept. 27, 2016) ("*Order Denying Renewed JMOL/New Trial*"). Consistent with these determinations, no damages verdict was rendered.

Oracle now appeals from the district court's final judgment and its decisions denying Oracle's motions for JMOL and motion for a new trial. Google cross-appeals from the final judgment purportedly to "preserv[e] its claim that the declarations/SSO are not protected by copyright law," but advances no argument for why this court can or should revisit our prior decision on copy-rightability. Cross-Appellant Br. 83.

Because we conclude that Google's use of the Java API packages was not fair as a matter of law, we reverse the district court's decisions denying Oracle's motions for JMOL and remand for a trial on damages. We also dismiss Google's cross-appeal.

I. BACKGROUND

A. The Technology

Oracle's predecessor, Sun Microsystems, Inc. ("Sun"), developed the Java platform for computer programming in the 1990s, and Oracle purchased Sun in 2010. The

Java platform is software used to write and run programs in the Java programming language. It allows programmers to write programs that “run on different types of computer hardware without having to rewrite them for each different type.” *Oracle*, 750 F.3d at 1348. With Java, programmers can “write once, run anywhere.” *Id.*

The Java 2 Standard Edition (“Java SE”) of the platform includes, among other things, the Java Virtual Machine and the Java Application Programming Interface (“API”). The Java API is a collection of “pre-written Java source code programs for common and more advanced computer functions.” *Order Denying JMOL*, 2016 WL 3181206, at *3. These APIs “allow programmers to use the prewritten code to build certain functions into their own programs rather than write their own code to perform those functions from scratch. They are shortcuts.” *Oracle*, 750 F.3d at 1349. The prewritten programs are organized into packages, classes, and methods. Specifically, an API package is a collection of classes and each class contains methods and other elements. “Each method performs a specific function, sparing a programmer the need to write Java code from scratch to perform that function.” *Order Denying JMOL*, 2016 WL 3181206, at *3.

To include a particular function in a program, the programmer invokes the Java “declaring code.” As the district court explained, the declaring code is the line or lines of source code that “declares or defines (i) the method name and (ii) the input(s) and their type as expected by the method and the type of any outputs.” *Id.* at *4. After the declaring code, each method includes “implementing code,” which takes the input(s) and gives the computer step-by-step instructions to carry out the declared function.

By 2008, Java SE included 166 API packages divided into 3,000 classes containing more than 30,000 methods.

At issue in this appeal are 37 API packages from Java SE Version 1.4 and Version 5.0. We have already concluded that the declaring code and the SSO of the 37 Java API packages at issue are entitled to copyright protection. *Oracle*, 750 F.3d at 1348.

The Java programming language itself is free and available for use without permission. At this stage, it is undisputed that, to write in the Java programming language, “62 classes (and some of their methods), spread across three packages *within* the Java API library, *must* be used. Otherwise the language itself will fail.” *Order Denying JMOL*, 2016 WL 3181206, at *5. It is also undisputed that anyone using the Java programming language can write their own library of prewritten programs to carry out various functions.

Although Oracle makes the Java platform freely available to programmers building applications (“apps”), it devised a licensing scheme to attract programmers while simultaneously commercializing the platform. In relevant part, Oracle charges a licensing fee to those who want to use the APIs in a competing platform or embed them in an electronic device. To preserve the “write once, run anywhere” philosophy, Oracle imposes strict compatibility requirements on licensees. *Oracle*, 750 F.3d at 1350. Oracle also made available without charge under an open source license a version of Java called “OpenJDK.” *Order Denying JMOL*, 2016 WL 3181206, at *10. Oracle maintains, however, that OpenJDK came with an important catch: any company that improved on the packages in OpenJDK had to “give away those changes for free’ to the Java community.” Appellant Br. 53.

The evidence showed that Oracle licensed Java in 700 million PCs by 2005. Although Oracle never successfully developed its own smartphone platform using Java, it licensed Java SE for mobile devices. According to Oracle, the “mobile device market was particularly lucrative,” and

“Java quickly became the leading platform for developing and running apps on mobile phones.” Appellant Br. 9.

B. Google’s Android Platform

In 2005, Google acquired Android, Inc. as part of a plan to develop a software platform for mobile devices. That same year, Google and Sun began discussing the possibility of Google taking a license to use and adapt the Java platform for mobile devices. *Oracle*, 750 F.3d at 1350. The parties were unable to reach an agreement, in part 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.

The jury heard evidence that Google wanted to move quickly to develop a platform that would attract Java developers to build apps for Android. The Android team had been working on creating its own APIs, but was unable to do so successfully. After negotiations between the parties reached an impasse, Google elected to “[d]o Java anyway and defend [its] decision, perhaps making enemies along the way.” *Order Denying JMOL*, 2016 WL 3181206, at *6. It is undisputed that Google copied verbatim the declaring code of the 37 Java API packages—11,500 lines of Oracle’s copyrighted code. It also copied the SSO of the Java API packages. Google then wrote its own implementing code.

Google announced its Android software platform for mobile devices in 2007, and the first Android phones went on sale the following year. Google provides the Android platform free of charge to smartphone manufacturers and publishes the source code for use without charge under an open source license. Although Google does not directly charge its users, Android has generated over \$42 billion in revenue from advertising. Oracle explains that Android was “devastating” to its licensing strategy and that many of its customers switched to

Android. Appellant Br. 15. Even customers who stayed with Oracle cited Android as a reason to demand discounts. The jury heard evidence that Amazon, which had entered into a license to use Java for its Kindle tablet device, switched to Android for the subsequently released Kindle Fire and then used the existence of Android to leverage a steep discount from Oracle on the next generation Kindle.

C. Remand Proceedings

In the first appeal, we held that the declaring code and the SSO of the 37 API packages are entitled to copyright protection and ordered the district court to reinstate the jury's infringement finding. *Oracle*, 750 F.3d at 1381. We also considered Oracle's argument that it was entitled to judgment as a matter of law on Google's fair use defense. Although we found that Oracle's position was "not without force," and that Google was overstating what could be fair use under the law, we found that the record evidence regarding the relevant fair use factors was insufficiently developed for us to resolve the issue on appeal. *Oracle*, 750 F.3d at 1376. In doing so, we pointed to sharp disputes between the parties, both legal and factual, including whether Google's use was transformative, whether "functional aspects of the package" and Google's "desire to achieve commercial 'interoperability'" weighed in favor of the second and third factors, and whether Android caused market harm to Oracle. *Id.* at 1376-77. We concluded that "due respect for the limit of our appellate function" required remand. *Id.* at 1376.

During the pendency of the first appeal, Google's Android business expanded significantly. Android gained new users and developers, and Google "released modified implementations and derivatives of Android for use in numerous device categories, including wearable devices with small screens (Android Wear), dashboard interfaces in cars (Android Auto), television sets (Android TV), and

everyday devices with Internet connectivity.” *Oracle Am., Inc. v. Google Inc.*, No. C10-03561, 2016 WL 1743111, at *1 (N.D. Cal. May 2, 2016) (“*Order on Motion in Limine*”).

When the case returned to the district court, Oracle filed a supplemental complaint adding allegations of market harm and damages resulting from new versions of Android released since the original complaint. Specifically, Oracle alleged that Google had launched new versions of Android for phones and tablets and had expanded Android into new device categories. *Id.* Google did not oppose the supplemental complaint, and the district court granted Oracle’s motion to file it. But when Oracle served expert reports that addressed versions of Java SE that were not at issue in the first trial, Google moved to strike those reports. *Id.*

When the parties were unable to agree on the scope of the retrial, the district court limited it to: (1) the two versions of Java SE that Oracle asserted in the first trial; and (2) released versions of Android used in smartphones and tablets “which Google . . . agreed would be subject to the prior jury’s adverse finding of infringement and which Oracle identified in its supplemental complaint.” *Id.* The court explained that Oracle retained the right to sue Google for infringement with respect to the other versions and implementations of Android in a separate trial or proceeding. Order re: Google’s Motion to Strike at 2, *Oracle Am., Inc. v. Google Inc.*, No. 3:10-cv-3561 (N.D. Cal. Feb. 5, 2016), ECF No. 1479. The court also granted Google’s motion in limine to exclude all evidence of the new Android products.

The district court bifurcated the issue of fair use from willfulness and monetary remedies, and the trial on fair use began on May 10, 2016. After roughly one week of evidence and several days of deliberations, the jury found that Google’s use of the declaring lines of code and the SSO of the 37 API packages constituted fair use.

Oracle moved for JMOL, which the district court denied. At the outset, the court noted that Oracle stipulated before the jury “that it was fair to use the 62 ‘necessary’ classes given that the Java programming language itself was free and open to use without a license.” *Order Denying JMOL*, 2016 WL 3181206, at *5. “That the 62 ‘necessary’ classes reside without any identification as such within the Java API library (rather than reside within the programming language),” the court explained, “supports Google’s contention that the Java API library is simply an extension of the programming language itself and helps explain why some view the Java API declarations as free and open for use as the programming language itself.” *Id.* Because Android and Java both “presupposed the Java programming language in the first place,” the court noted that a jury reasonably could have found that it “was better for both to share the same SSO insofar as they offered the same functionalities, thus maintaining usage consistency across systems and avoiding cross-system confusion.” *Id.* at *6.

The district court then considered each of the four statutory fair use factors. As to factor one—the purpose and character of the use—the court concluded that a reasonable jury could have found that, although Google’s use was commercial, it was transformative because Google integrated only selected elements for mobile smartphones and added its own implementing code. *Id.* at *7-9. With respect to factor two—the nature of the copyrighted work—the district court found that a reasonable jury could have concluded that, “while the declaring code and SSO were creative enough to qualify for copyright protection,” they were not “highly creative,” and that “functional considerations predominated in their design.” *Id.* at *10.

As to factor three—the amount and substantiality of the portion used—the court concluded that a reasonable jury could have found that “Google copied only so much as

was reasonably necessary for a transformative use,” and that the number of lines duplicated was minimal. *Id.* Finally, as to factor four—market harm—the court concluded that the jury “could reasonably have found that use of the declaring lines of code (including their SSO) in Android caused no harm to the market for the copyrighted works, which were for desktop and laptop computers.” *Id.* The court determined that, on the record presented, the jury could have found for either side and that the jury was “reasonably within the record in finding fair use.” *Id.* at *11.

Oracle subsequently renewed its motion for JMOL and separately moved for a new trial challenging several of the court’s discretionary decisions at trial. The district court denied both motions in a single order. With respect to JMOL, the court simply stated that it denied Oracle’s renewed motion for the same reasons it denied the original motion. With respect to the motion for a new trial, the court rejected Oracle’s argument that the court abused its discretion by limiting the evidence at trial to Google’s use of Android in smartphones and tablets.

The court also rejected Oracle’s allegation that Google engaged in discovery misconduct by withholding evidence during discovery relating to Google’s App Runtime for Chrome (“ARC”), which enabled laptops and desktops running Google’s computer operating system to run certain Android applications. *Order Denying Renewed JMOL/New Trial*, 2016 WL 5393938, at *5. The court found that Google had produced relevant documents during discovery and that, in any event, those documents pertained to issues beyond the scope of the retrial. *Id.* at *7-8.

Finally, the district court rejected Oracle’s argument that certain of the court’s evidentiary rulings were abuses of discretion. The court explained that it: (1) redacted one line from an email because it was “too inflammatory and

without foundation;” and (2) excluded other documents because Oracle had withheld them as privileged until trial. *Id.* at *9-12.

On June 8, 2016, the district court entered final judgment in favor of Google and against Oracle. Oracle timely appealed from the district court’s judgment against it, including the court’s underlying decisions denying its motions for JMOL and for a new trial. Google timely cross-appealed from all adverse orders and rulings underlying that final judgment.

This court has exclusive jurisdiction over all appeals in actions involving patent claims, including where, as here, an appeal raises only non-patent issues. 28 U.S.C. § 1295(a)(1). Because copyright law is not within this court’s exclusive jurisdiction, we apply the law of the regional circuit in which the district court sits; here, the Ninth Circuit. *Atari Games Corp. v. Nintendo of Am., Inc.*, 975 F.2d 832, 837 (Fed. Cir. 1992).

II. ORACLE’S APPEAL

A. Legal Framework

It is undisputed that Google copied Oracle’s declaring code and SSO for the 37 API packages verbatim. The question is whether that copying was fair. “From the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfill copyright’s very purpose, ‘to promote the Progress of Science and useful Arts.’” *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994) (quoting U.S. Const., art. I, § 8, cl. 8). As the Supreme Court noted in *Campbell*, “[i]n truth, in literature, in science and in art, there are, and can be, few, if any, things, which in an abstract sense, are strictly new and original throughout. Every book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known

and used before.” *Id.* (quoting *Emerson v. Davies*, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845)).

The fair use defense began as a judge-made doctrine and was codified in Section 107 of the 1976 Copyright Act. *Id.* at 576. It operates as a limited exception to the copyright holder’s exclusive rights and permits use of copyrighted work if it is “for purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research.” 17 U.S.C. § 107. The “such as” language confirms that the listing “was not intended to be exhaustive,” but nevertheless “give[s] some idea of the sort of activities the courts might regard as fair use under the circumstances.” *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 561 (1985) (citation omitted).

“Section 107 requires a case-by-case determination whether a particular use is fair, and the statute notes four nonexclusive factors to be considered.” *Id.* at 549. Those 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 Supreme Court has cautioned against adopting bright-line rules and has emphasized that all of the statutory factors “are to be explored, and the results weighed together, in light of the purposes of copyright.” *Campbell*, 510 U.S. at 578.

The legislative history reveals that Congress intended § 107 “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 common-law tradition of fair use adjudication.” *Id.* at 577 (quoting H.R. Rep. No. 94-1476, at 66 (1976), S. Rep. No. 94-473 at 62 (1975), U.S. Code Cong. & Admin. News 5659, 5679 (1976)).

Accordingly, in balancing the four statutory factors, courts consider “whether the copyright law’s goal of ‘promot[ing] the Progress of Science and useful Arts,’ U.S. Const., art. 1, § 8, cl. 8, ‘would be better served by allowing the use than by preventing it.’” *Castle Rock Entm’t, Inc. v. Carol Publ’g Grp., Inc.*, 150 F.3d 132, 141 (2d Cir. 1998) (quoting *Arica Inst., Inc. v. Palmer*, 970 F.2d 1067, 1077 (2d Cir. 1992)).

Despite this guidance, the doctrine of fair use has long been considered “the most troublesome in the whole law of copyright.” *Monge v. Maya Magazines, Inc.*, 688 F.3d 1164, 1170 (9th Cir. 2012) (quoting *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661, 662 (2d Cir. 1939) (per curiam)). It both permits and requires “courts to 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 (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

Because fair use is an affirmative defense to a claim of infringement, Google bears the burden to prove that the statutory factors weigh in its favor. *Id.* at 590. Not all of the four factors must favor Google, however. *See Wall Data Inc. v. L.A. Cty. Sheriff’s Dep’t*, 447 F.3d 769, 778 (9th Cir. 2006). Instead, “fair use is appropriate where a ‘reasonable copyright owner’ would have consented to the use, i.e., where the ‘custom or public policy’ at the time would have defined the use as reasonable.” *Id.* (citation omitted).

On appeal, Oracle argues that each of the four statutory factors weighs against a finding of fair use. Specifically, it submits that: (1) the purpose and character of Google’s use was purely for commercial purposes; (2) the nature of Oracle’s work is highly creative; (3) Google copied 11,330 more lines of code than necessary to write in a Java language-based program; and (4) Oracle’s customers stopped licensing Java SE and switched to

Android because Google provided free access to it. In the alternative, Oracle argues that it is entitled to a new trial because the district court made several errors that deprived it of a fair opportunity to present its case. Because, as explained below, we agree with Oracle that Google's copying was not fair use as a matter of law, we need not address Oracle's alternative arguments for a new trial.

B. Standards of Review

Before turning to a consideration of the four statutory factors and any relevant underlying factual determinations, we first address the standard of review we are to employ in that consideration. While this section of most appellate opinions presents easily resolvable questions, like much else in the fair use context, that is not completely the case here.

There are several components to this inquiry. First, which aspects of the fair use determination are legal in nature and which are factual? Particularly, is the ultimate question of fair use a legal inquiry which is to be reviewed *de novo*? Second, what factual questions are involved in the fair use determination and under what standard are those determinations to be reviewed? Finally, though neither party addresses the question in detail, we consider what, if any, aspects of the fair use determination are for the jury to decide.

The Supreme Court has said that fair use is a mixed question of law and fact. *Harper & Row*, 471 U.S. at 560 (citing *Pac. & S. Co. v. Duncan*, 744 F.2d 1490, 1495 n.8 (11th Cir. 1984)). Merely characterizing an issue as a mixed question of law and fact does not dictate the applicable standard of review, however. *See U.S. Bank Nat'l Ass'n ex rel. CWC Capital Asset Mgmt. LLC*, No. 15-1509, 2018 WL 1143822, at *5 (U.S. Mar. 5, 2018).

The Supreme Court has recently explained how we are to determine what the standard of review should be in connection with any mixed question of law and fact. *Id.* Specifically, the Court made clear that an appellate court is to break mixed questions into their component parts and to review each under the appropriate standard of review. *Id.* at *5-7. In *U.S. Bank*, the Supreme Court considered the level of review to be applied to a Bankruptcy Court’s determination of whether a creditor in a bankruptcy action qualified as a “non-statutory insider” for purposes of 11 U.S.C. § 1129(a). *Id.* at *3-4. The Court found that there were three components to that inquiry: (1) determining the legal standard governing the question posed and what types of historical facts are relevant to that standard; (2) finding what the historical facts in the case at hand are; and (3) assessing whether the historical facts found satisfy the legal test governing the question to be answered. *Id.* at *4-5. As the Court explained, the first of these three is a purely legal question to be reviewed de novo on appeal and the second involves factual questions which “are reviewable only for clear error.” *Id.* at *4 (citing Fed. R. Civ. P. 52(a)(6) (clear error standard)). The third is what the Court characterized as the “mixed question.” *Id.* at *5.

Importantly, the Court noted that “[m]ixed questions are not all alike.” *Id.* The Court then held that “the standard of review for a mixed question all depends—on whether answering it entails primarily legal or factual work.” *Id.* Where applying the law to the historical facts “involves developing auxiliary legal principles of use in other cases—appellate courts should typically review a decision de novo.” *Id.* (citing *Salve Regina College v. Russell*, 499 U.S. 225, 231-33 (1991)). But where the mixed question requires immersion in case-specific factual issues that are so narrow as to “utterly resist generalization,” the mixed question review is to be deferential. *Id.* (quoting *Pierce v. Underwood*, 487 U.S. 552, 561-62

(1988)). Ultimately, the Court found that review of the mixed question at issue in that bankruptcy context should be deferential because de novo review of the question would do little to “clarify legal principles or provide guidance to other courts resolving other disputes.” *Id.* at *7.

While this may be the first time the Supreme Court has so clearly explained how appellate courts are to analyze mixed questions of law and fact, it is not the first time the Supreme Court has told us how to analyze the particular mixed question of law and fact at issue here. In other words, while the Supreme Court has not previously broken the fair use inquiry into its three analytical components as expressly as it did the question in *U.S. Bank*, it has made clear that both the first and third of those components are subject to de novo review.

In *Harper & Row*, the Court explained that, “[w]here the district court has found facts sufficient to evaluate each of the statutory factors, an appellate court ‘need not remand for further factfinding but may conclude as a matter of law that the challenged use does not qualify as a fair use of the copyrighted work.’” 471 U.S. at 560 (quoting *Pac. & S. Co.*, 744 F.2d at 1495) (internal alterations omitted)). The Ninth Circuit has resolved the question in the same way. Where fair use is resolved on summary judgment, the Ninth Circuit reviews the district court’s ultimate determination de novo. *SOFA Entm’t, Inc. v. Dodger Prods., Inc.*, 709 F.3d 1273, 1277 (9th Cir. 2013) (“Whether Dodger’s use of the clip constitutes fair use is a mixed question of law and fact that we review de novo.”). That court has explained that, “as fair use is a mixed question of fact and law, so long as the record is ‘sufficient to evaluate each of the statutory factors,’ we may reweigh on appeal the inferences to be drawn from that record.” *Mattel Inc. v. Walking Mountain Prods.*, 353 F.3d 792, 800 (9th Cir. 2003) (quoting *L.A. News Serv. v. CBS Broad., Inc.*, 305 F.3d 924, 942 (9th Cir. 2002)).

This treatment of the ultimate question posed when a fair use defense is raised makes sense. The fair use question entails, in the words of *U.S. Bank*, a primarily legal exercise. It requires a court to assess the inferences to be drawn from the historical facts found in light of the legal standards outlined in the statute and relevant case law and to determine what conclusion those inferences dictate. Because, as noted below, the historical facts in a fair use inquiry are generally few, generally similar from case to case, and rarely debated, resolution of what any set of facts means to the fair use determination definitely does not “resist generalization.” *See U.S. Bank*, 2018 WL 1143822, at *5. Instead, the exercise of assessing whether a use is fair in one case will help guide resolution of that question in all future cases.

For these reasons, we conclude that whether the court applied the correct legal standard to the fair use inquiry is a question we review de novo, whether the findings relating to any relevant historical facts were correct are questions which we review with deference, and whether the use at issue is ultimately a fair one is something we also review de novo.

We have outlined the legal standard governing fair use above. We consider below whether the court properly applied those standards in the course of its fair use analysis and whether it reached the correct legal conclusion with respect to fair use. Before doing so, we briefly discuss the historical facts relevant to the fair use inquiry and consider the jury’s role in determining those facts.

The Supreme Court has described “historical facts” as “a recital of external events.” *Thompson v. Keohane*, 516 U.S. 99, 110 (1995); *see also U.S. Bank*, 2018 WL 1143822, at *4 (describing the historical facts at issue there as facts relating to “the attributes of a particular relationship or the circumstances and terms of a prior transaction”). In the fair use context, historical facts

include the “origin, history, content, and defendant’s use” of the copyrighted work. *Fitzgerald v. CBS Broad., Inc.*, 491 F. Supp. 2d 177, 184 (D. Mass. 2007); *see also Lotus Dev. Corp. v. Borland Int’l, Inc.*, 788 F. Supp. 78, 95 (D. Mass. 1992) (defining historical facts to include “who did what, where, and when”). When asked at oral argument to identify historical facts relevant to the fair use inquiry, counsel for Oracle agreed that they are the “who, what, where, when, how, [and] how much.” Oral Arg. at 3:28-54, available at <http://oralarguments.ca9.uscourts.gov/default.aspx?fl=2017-1118.mp3>. Google did not dispute this characterization. This is, in part, because, in most fair use cases, defendants concede that they have used the copyrighted work, and “there is rarely dispute over the history, content, or origin of the copyrighted work.” *See* Ned Snow, *Judges Playing Jury: Constitutional Conflicts in Deciding Fair Use on Summary Judgment*, 44 U.C. Davis L. Rev. 483, 493 (2010).

While some courts once treated the entire question of fair use as factual, and, thus, a question to be sent to the jury, that is not the modern view.³ Since *Harper & Row*, the Ninth Circuit has described fair use as an “equitable defense.” *Fisher v. Dees*, 794 F.2d 432, 435 (9th Cir. 1986) (“The fair-use doctrine was initially developed by courts as an equitable defense to copyright infringement.”). Indeed, the Supreme Court referred to fair use as “an

³ In *DC Comics, Inc. v. Reel Fantasy, Inc.*, 696 F.2d 24, 28 (2d Cir. 1982), the Second Circuit found that “[t]he four factors listed in Section 107 raise essentially factual issues and, as the district court correctly noted, are normally questions for the jury.” So too, Justice Joseph Story described fair use as a “question of fact to come to a jury” in 1845. *Emerson v. Davies*, 8 F. Cas. 615, 623-24 (C.C.D. Mass. 1845).

equitable rule of reason” in *Harper & Row*. 471 U.S. at 560. Congress did the same when it codified the doctrine of fair use in 1976. See H.R. Rep. No. 94-1476, 94th Cong., 2d Sess. 65-66 (1976), U.S. Code Cong. & Admin. News 1976, 5659, 5679-80 (“[S]ince the doctrine [of fair use] is an equitable rule of reason, no generally applicable definition is possible, and each case raising the question must be decided on its own facts . . .”). If fair use is equitable in nature, it would seem to be a question for the judge, not the jury, to decide, even when there are factual disputes regarding its application. See *Granite State Ins. Co. v. Smart Modular Techs., Inc.*, 76 F.3d 1023, 1027 (9th Cir. 1996) (“A litigant is not entitled to have a jury resolve a disputed affirmative defense if the defense is equitable in nature.”). In that instance, it would be the judge’s factual determinations that would receive a deferential review—being assessed for clear error on the record before the court.

That said, the Supreme Court has never clarified whether and to what extent the jury is to play a role in the fair use analysis. *Harper & Row* involved an appeal from a *bench* trial where the district court concluded that the use of the copyrighted material was not a fair use. *Harper & Row Publishers, Inc. v. Nation Enters.*, 723 F.2d 195, 199 (2d Cir. 1983). The Court, thus, had no reason to discuss a jury determination of fair use and has not since taken an opportunity to do so.

Perhaps because of this silence, even after *Harper & Row*, several courts—including the Ninth Circuit—have continued to accept the fact that the question of fair use may go to a jury, albeit without analysis of why it may. *Compaq Comput. Corp. v. Ergonome Inc.*, 387 F.3d 403, 411 (5th Cir. 2004) (“The evidence presented at trial and the reasonable inferences therefrom, when viewed through the lens of the statutory fair use factors, support the jury’s fair use finding.”); *Jartech, Inc. v. Clancy*, 666 F.2d 403, 407-08 (9th Cir. 1982) (concluding that substan-

tial evidence supported the jury's verdict on fair use); *Fiset v. Sayles*, No. 90-16548, 1992 WL 110263, at *4 (9th Cir. May 22, 1992) (finding that a reasonable jury could have concluded that "the evidence supporting fair use was not substantial"); *see also BUC Int'l Corp. v. Int'l Yacht Council*, 489 F.3d 1129, 1137 (11th Cir. 2007) (noting that the fair use defense went to the jury); *N.Y. Univ. v. Planet Earth Found.*, 163 F. App'x 13, 14 (2d Cir. 2005) ("As to the copyright infringement claim, the evidence also supports the jury's finding of fair use, under the four-factored analysis prescribed by statute.").

The Ninth Circuit has clarified, however, that the jury role in this context is limited to determining disputed "historical facts," not the inferences or conclusions to be drawn from those facts. *See Fisher*, 794 F.2d at 436. In *Fisher*, for example, the court explained that "[n]o material historical facts are at issue in this case. The parties dispute only the ultimate conclusions to be drawn from the admitted facts. Because, under *Harper & Row*, these judgments are legal in nature, we can make them without usurping the function of the jury." *Id.*; *see also Seltzer v. Green Day, Inc.*, 725 F.3d 1170, 1175 (9th Cir. 2013) ("As in *Fisher*, [n]o material historical facts are at issue in this case. The parties dispute only the ultimate conclusion to be drawn from the admitted facts." (citing *Fisher*, 794 F.2d at 436)); *Hustler Magazine, Inc. v. Moral Majority, Inc.*, 606 F. Supp. 1526, 1532 (C.D. Cal. 1985) (noting that "fair use normally is a question of fact for the jury," but concluding that "the issue of fair use, at least in the context of this case, presents primarily a question of law"). Accordingly, while inferences from the four-factor analysis and the ultimate question of fair use are "legal in nature," in the Ninth Circuit, disputed historical facts represent questions for the jury. *Fisher*, 794 F.2d at 436. Where there are no disputed material historical facts, fair use can be decided by the court alone. *Id.*

Despite this case law, all aspects of Google’s fair use defense went to the jury with neither party arguing that it should not. Thus, the jury was asked not just what the historical facts were, but what the implications of those facts were for the fair use defense. During the first appeal, Google argued to this court that there were disputed issues of material historical fact relevant to its fair use defense. As discussed below, the parties stipulated—or at least ceased to dispute—some of those facts, and presented the remaining disputed historical facts to the jury on remand. The jury returned a verdict in favor of Google on its fair use defense. Because the verdict form—though captioned as a “special verdict”—did not ask the jury to articulate its fact findings in any detail, we must assume that the jury resolved all factual issues relating to the historical facts in favor of the verdict.⁴ Despite the posture of the fair use finding, we must break that finding into its constituent parts. We must then review the subsidiary and controverted findings of historical fact for

⁴ As counsel for Oracle noted at oral argument, this is similar to the standard we apply in obviousness cases. Oral Argument at 9:34-10:24. Because obviousness is a mixed question of law and fact, we “first presume that the jury resolved the underlying factual disputes in favor of the verdict [] and leave those presumed findings undisturbed if they are supported by substantial evidence. Then we examine the [ultimate] legal conclusion [of obviousness] de novo to see whether it is correct in light of the presumed jury fact findings.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1356-57 (Fed. Cir. 2012) (quoting *Jurgens v. McKasy*, 927 F.2d 1552, 1557 (Fed. Cir. 1991)). Likewise, Google cited our decision in *Kinetic Concepts* for the proposition that we must “presume that the jury made all findings in support of the verdict that are supported by substantial evidence.” Cross-Appellant Br. 35.

substantial evidence. *See Seltzer*, 725 F.3d at 1175; *see also Brewer v. Hustler Magazine, Inc.*, 749 F.2d 527, 528 (9th Cir. 1984) (“We may disturb a jury verdict only if the evidence was insufficient as a matter of law.”).

All jury findings relating to fair use other than its implied findings of historical fact must, under governing Supreme Court and Ninth Circuit case law, be viewed as advisory only. Accordingly, while we might assess the jury’s role in the assessment of fair use differently if not bound by Ninth Circuit law, we proceed on the assumption both that: (1) it was not error to send the question to the jury, because the Ninth Circuit has at least implicitly endorsed doing so; and (2) we must assess all inferences to be drawn from the historical facts found by the jury and the ultimate question of fair use *de novo*, because the Ninth Circuit has explicitly said we must do so.

The parties have identified the following historical facts relating to Google’s use of the copyrighted work:

- the history and origin of the copyrighted work, including what declaring code is;
- how much of the copyrighted work was copied;
- whether there were other ways to write the API packages;
- whether the copied material was used for the same purpose as in the original work;
- whether the use was commercial in nature;
- whether Google acted in bad faith in copying the work;

- whether there are functional aspects to the copyrighted work that make it less deserving of protection; and
- whether there was harm to the actual or potential markets for the copyrighted work.

The parties now agree on the resolution of the first four factual questions: (1) what the declaring code is and what it does in Java SE and Android, and that the code at issue was a work created by Oracle; (2) how many lines of code were copied; (3) that there were other ways for Google to write API packages; and (4) that Google used the API packages in Android for the same purpose they were created for in Java. The parties dispute, however, the remaining historical facts they identified. We address those disputes in the context of our assessment of the statutory factors to which the respective historical fact is relevant.

C. Applying the Fair Use Factors

Factor 1: The Purpose and Character of the Use

The first factor in the fair use inquiry involves “the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes.” 17 U.S.C. § 107(1). This factor has two primary components: (1) whether the use is commercial in nature, rather than for educational or public interest purposes; and (2) “whether the new work is transformative or simply supplants the original.” *Wall Data*, 447 F.3d at 778 (citing *Campbell*, 510 U.S. at 579). As explained below, the first is a question of fact and the second is a question of law. As Oracle points out, moreover, courts sometimes also consider whether the historical facts support the conclusion that the infringer acted in bad faith. *See Harper & Row*, 471 U.S. at 562. We address each component in turn.

a. Commercial Use

Analysis of the first factor requires inquiry into the commercial nature of the use. Use of the copyrighted work that is commercial “tends to weigh against a finding of fair use.” *Harper & Row*, 471 U.S. at 562. Courts have recognized, however, that, “[s]ince many, if not most, secondary users seek at least some measure of commercial gain from their use, unduly emphasizing the commercial motivation of a copier will lead to an overly restrictive view of fair use.” *Am. Geophysical Union v. Texaco, Inc.*, 60 F.3d 913, 921 (2d Cir. 1994); *see also Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 109 (2d Cir. 1998) (“[N]otwithstanding its mention in the text of the statute, commerciality has only limited usefulness to a fair use inquiry; most secondary uses of copyrighted material, including nearly all of the uses listed in the statutory preamble, are commercial.”). Accordingly, although the statute requires us to consider the “commercial nature” of the work, “the degree to which the new user exploits the copyright for commercial gain—as opposed to incidental use as part of a commercial enterprise—affects the weight we afford commercial nature as a factor.” *Elvis Presley Enters., Inc. v. Passport Video*, 349 F.3d 622, 627 (9th Cir. 2003).

“[I]t is undisputed that Google’s use of the declaring code and SSO from 37 Java API packages served commercial purposes.” *Order Denying JMOL*, 2016 WL 3181206, at *7. Although the jury was instructed that commercial use weighed against fair use, the district court explained that the jury “could reasonably have found that Google’s decision to make Android available open source and free for all to use had non-commercial purposes as well (such as the general interest in sharing software innovation).” *Id.*

On appeal, Oracle argues that Android is “hugely profitable” and that “Google reaps billions from exploiting

Java in Android.” Appellant Br. 29. As such, Oracle maintains that no reasonable jury could have found Android anything but “overwhelmingly commercial.” *Id.*⁵

Google responds that: (1) because it gives Android away for free under an open source license the jury could have concluded that Android has non-commercial purposes; and (2) the jury could have reasonably found that Google’s revenue flows from the advertisements on its search engine which preexisted Android. Neither argument has merit.

First, the fact that Android is free of charge does not make Google’s use of the Java API packages non-commercial. Giving customers “for free something they would ordinarily have to buy” can constitute commercial use. *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1015 (9th Cir. 2001) (finding that “repeated and exploitative copying of copyrighted works, even if the copies are not offered for sale, may constitute a commercial use”). That Google might also have non-commercial motives is

⁵ Oracle also argues that Google conceded that its use was “entirely commercial” during oral argument to this court in the first appeal. *Order Denying JMOL*, 2016 WL 3181206, at *7 (“Q: But for purpose and character, though, you don’t dispute that it was entirely a commercial purpose. A: No.”). The district court treated this colloquy as a judicial admission that Google’s use was “commercial.” *Id.* (noting that the word “entirely” was “part of the give and take” of oral argument). The court therefore instructed the jury that Google’s use was commercial, but that it was up to the jury to determine the extent of the commerciality. *Id.* at *8. Oracle does not challenge the district court’s jury instructions on appeal. In any event, as the district court noted, “even a wholly commercial use may still constitute fair use.” *Id.* at *7 (citing *Campbell*, 510 U.S. at 585).

irrelevant as a matter of law. As the Supreme Court made clear when *The Nation* magazine published excerpts from Harper & Row’s book, partly for the purpose of providing the public newsworthy information, the question “is not whether the sole motive of the use is monetary gain but whether the user stands to profit from exploitation of the copyrighted material without paying the customary price.” *Harper & Row*, 471 U.S. at 562. Second, although Google maintains that its revenue flows from advertisements, not from Android, commerciality does not depend on how Google earns its money. Indeed, “[d]irect economic benefit is not required to demonstrate a commercial use.” *A&M Records*, 239 F.3d at 1015. We find, therefore, that, to the extent we must assume the jury found Google’s use of the API packages to be anything other than overwhelmingly commercial, that conclusion finds no substantial evidentiary support in the record. Accordingly, Google’s commercial use of the API packages weighs against a finding of fair use.

b. Transformative Use

Although the Copyright Act does not use the word “transformative,” the Supreme Court has stated that the “central purpose” of the first fair use factor is to determine “whether and to what extent the new work is transformative.” *Campbell*, 510 U.S. at 579. Transformative works “lie at the heart of the fair use doctrine’s guarantee of breathing space within the confines of copyright, and the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.” *Id.* (internal citation omitted).

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.” *Id.* The critical question is “whether the new work merely supersede[s] the objects of the original creation . . . or instead

adds something new.” *Id.* (citations and internal quotation marks omitted). This inquiry “may be guided by the examples given in the preamble to § 107, looking to whether the use is for criticism, or comment, or news reporting, and the like.” *Id.* at 578-79. “The Supreme Court has recognized that parodic works, like other works that comment and criticize, are by their nature often sufficiently transformative to fit clearly under the fair use exception.” *Mattel Inc. v. Walking Mountain Prods.*, 353 F.3d 792, 800 (9th Cir. 2003) (citing *Campbell*, 510 U.S. at 579).

“Although transformation is a key factor in fair use, whether a work is transformative is a often highly contentious topic.” *Seltzer*, 725 F.3d at 1176. Indeed, a “leading treatise on this topic has lamented the frequent misuse of the transformation test, complaining that it has become a conclusory label which is ‘all things to all people.’” *Id.* (quoting Melville B. Nimmer & David Nimmer, 4 Nimmer on Copyright § 13.05[A][1][b], 13168-70 (2011)).

To be transformative, a secondary work must either alter the original with new expression, meaning, or message or serve a new purpose distinct from that of the original work. *Campbell*, 510 U.S. at 579; *Elvis Presley Enters.*, 349 F.3d at 629. Where the use “is for the same intrinsic purpose as [the copyright holder’s] . . . such use seriously weakens a claimed fair use.” *Worldwide Church of God v. Phila. Church of God, Inc.*, 227 F.3d 1110, 1117 (9th Cir. 2000) (quoting *Weissmann v. Freeman*, 868 F.2d 1313, 1324 (2d Cir. 1989)).

Although “transformative use is not absolutely necessary for a finding of fair use, the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works.” *Campbell*, 510 U.S. at 579 (citation and footnote omitted). As such, “the more transformative the new work, the less will be the significance of other factors, like commercialism, that may

weigh against a finding of fair use.” *Id.* Importantly, in the Ninth Circuit, whether a work is transformative is a question of law. *See Mattel*, 353 F.3d at 801 (explaining that parody—a well-established species of transformative use—“is a question of law, not a matter of public majority opinion”); *see also Fox News Network, LLC v. TVEyes, Inc.*, No. 15-3885, 2018 WL 1057178, at *3-4 (2d Cir. Feb. 27, 2018) (reassessing whether the use in question was transformative and deciding it was as a matter of law).

In denying JMOL, the district court explained that “of course, the copied declarations serve the same function in both works, for by definition, declaring code in the Java programming language serves the [same] specific definitional purposes.” *Order Denying JMOL*, 2016 WL 3181206, at *8.⁶ The court concluded, however, that the jury could reasonably have found that Google’s selection of some, but not all, of the Java API packages—“with new

⁶ According to the district court, if this fact were sufficient to defeat fair use, “it would be impossible ever to duplicate declaring code as fair use and presumably the Federal Circuit would have disallowed this factor on the first appeal rather than remanding for a jury trial.” *Id.* But in our prior decision, we remanded in part because Google represented to this court that there were disputes of fact regarding how Android was used and whether the APIs Google copied served the same function in Android and Java. *Oracle*, 750 F.3d at 1376. Without the benefit of briefs exploring the record on these issues, and Google’s later agreement with respect to these facts, we concluded that we could not say that there were no material facts in dispute. *Id.* As explained previously, however, those facts are no longer in dispute. The only question that remains regarding transformative use is whether, on the now undisputed facts, Google’s use of the APIs was, in fact, transformative.

implementing code adapted to the constrained operating environment of mobile smartphone devices,” together with new “methods, classes, and packages written by Google for the mobile smartphone platform”—constituted “a fresh context giving new expression, meaning, or message to the duplicated code.” *Id.* at *9.

On appeal, Oracle argues that Google’s use was not transformative because it did not alter the APIs with “new expression, meaning, or message.” Appellant Br. 29 (quoting *Campbell*, 510 U.S. at 579). Because Google concedes that it uses the API packages for the same purpose, Oracle maintains that it was unreasonable for either the jury or the court to find that Google sufficiently transformed the APIs to overcome its highly commercial use.

Google responds that a reasonable jury could have concluded that Google used a small portion of the Java API packages to create a new work in a new context—“Android, a platform for smartphones, not desktops and servers.” Cross-Appellant Br. 37. Google argues that, although the declarations and SSO may perform the same functions in Android and Java, the jury could reasonably find that they have different purposes because the “point of Android was to create a groundbreaking platform for smartphones.” *Id.* at 39.

Google’s arguments are without merit. As explained below, Google’s use of the API packages is not transformative as a matter of law because: (1) it does not fit within the uses listed in the preamble to § 107; (2) the purpose of the API packages in Android is the same as the purpose of the packages in the Java platform; (3) Google made no alteration to the expressive content or message of the copyrighted material; and (4) smartphones were not a new context.

First, though not dispositive, we turn to the examples given in the preamble to § 107, “looking to whether the

use is for criticism, or comment, or news reporting, and the like.” *Campbell*, 510 U.S. at 578-79. Google’s use of the Java API packages does not fit within the statutory categories, and Google does not suggest otherwise. Instead, Google cites *Sony Computer Entertainment, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000), for the proposition that the “Ninth Circuit has held other types of uses—specifically including uses of computer code—to be fair.” Cross-Appellant Br. 41. In *Sony*, the court found that the defendant’s reverse engineering and intermediate copying of Sony’s copyrighted software system “was a fair use for the purpose of gaining access to the unprotected elements of Sony’s software.” 203 F.3d at 602. The court explained that Sony’s software program contained unprotected functional elements and that the defendant could only access those elements through reverse engineering. *Id.* at 603. The defendant used that information to create a software program that let consumers play games designed for Sony’s PlayStation console on their computers. The court found that the defendant’s use was only “modestly transformative” where: (1) the defendant created “a wholly new product” with “entirely new . . . code,” and (2) the intermediate copying was performed to “produce a product that would be compatible.” *Id.* at 606-07. As Oracle points out, even the “modest” level of transformation at issue in *Sony* is more transformative than what Google did here: copy code verbatim to attract programmers to Google’s “new and incompatible platform.” Appellant Response Br. 21.

It is undisputed that the API packages “serve the same function in both works.” *Order Denying JMOL*, 2016 WL 3181206, at *8. And, as Oracle explains, the historical facts relevant to transformative use are also undisputed: what declaring code is, what it does in Java and in Android, how the audience of computer developers perceives it, how much Google took and added, what the added code does, and why Google used the declaring code

and SSO. Indeed, Google conceded that “including the declarations (and their associated SSO) was for the benefit of developers, who—familiar with the Java programming language—had certain expectations regarding the language’s APIs.” Google’s Opp. to Oracle’s Rule 50(a) Motion for JMOL at 20, *Oracle Am., Inc. v. Google Inc.*, No. 3:10-cv-3561 (N.D. Cal. May 21, 2016), ECF No. 1935. The fact that Google created exact copies of the declaring code and SSO and used those copies for the same purpose as the original material “seriously weakens [the] claimed fair use.” *See Wall Data*, 447 F.3d at 778 (finding that, where the “Sheriff’s Department created exact copies of RUMBA’s software . . . [and] put those copies to the identical purpose as the original software,” the use was not transformative); *see also Campbell*, 510 U.S. at 580 (noting that where the alleged infringer merely seeks “to avoid the drudgery in working up something fresh,” any “claim to fairness . . . diminishes accordingly”).

Google argues that Android is transformative because Google selectively used the declarations and SSO of only 37 of the 166 Java SE API packages and wrote its own implementing code. But taking only select passages of a copyrighted work is, by itself, not transformative. *See L.A. News Serv. v. CBS Broad., Inc.*, 305 F.3d 924, 938-39 (9th Cir. 2002) (“Merely plucking the most visually arresting excerpt from LANS’s nine minutes of footage cannot be said to have added anything new.”). While, as discussed below, the volume of work copied is relevant to the fair use inquiry generally, thought must be given to the quality and importance of the copied material, not just to its relative quantity vis-à-vis the overall work. *See Campbell*, 510 U.S. at 586-87. To hold otherwise would mean that verbatim copying could qualify as fair use as long as the plagiarist stops short of taking the entire work. That approach is inconsistent with settled law and is particularly troubling where, as here, the portion copied is qualitatively significant. *See Harper & Row*, 471 U.S.

at 569 (finding that verbatim copying of 300 words from a manuscript of more than 200,000 words was not a fair use); *see also Folsom v. Marsh*, 9 F. Cas. 342, 345 (C.C.D. Mass 1841) (Story, J.) (“There must be real, substantial condensation of the materials, and intellectual labor and judgment bestowed thereon; and not merely the facile use of the scissors; or extracts of the essential parts, constituting the chief value of the original work.”).

That Google wrote its own implementing code is irrelevant to the question of whether use of the APIs was transformative. As we noted in the prior appeal, “no plagiarist can excuse the wrong by showing how much of his work he did not pirate.” *Oracle*, 750 F.3d at 1375 (quoting *Harper & Row*, 471 U.S. at 565). The relevant question is whether Google altered “the *expressive content or message* of the original work” that it copied—not whether it rewrote the portions it did not copy. *See Seltzer*, 725 F.3d at 1177 (explaining that a work is not transformative where the user “makes no alteration to the *expressive content or message* of the original work”). That said, even where the allegedly infringing work “makes few physical changes to the original or fails to comment on the original,” it will “typically [be] viewed as transformative as long as new expressive content or message is apparent.” *Id.* Here, however, there is no suggestion that the new implementing code somehow changed the expression or message of the declaring code. While Google’s use could have been transformative if it had copied the APIs for some other purpose—such as teaching how to design an API—merely copying the material and moving it from one platform to another without alteration is not transformative.

Google’s primary argument on appeal is that Android is transformative because Google incorporated the declarations and SSO of the 37 API packages into a new *context*—smartphones. But the record showed that Java SE APIs were in smartphones before Android entered the

market. Specifically, Oracle presented evidence that Java SE was in SavaJe mobile phones and that Oracle licensed Java SE to other smartphone manufacturers, including Danger and Nokia. Because the Java SE was already being used in smartphones, Google did not “transform” the copyrighted material into a new context and no reasonable jury could conclude otherwise.⁷

In any event, moving material to a new context is not transformative in and of itself—even if it is a “sharply different context.” *TCA Television Corp. v. McCollum*, 839 F.3d 168, 181-83 (2d Cir. 2016) (finding that use “at some length, almost verbatim,” of the copyrighted comedy routine “Who’s on First?” in a dramatic play was not transformative where the play neither “imbued the Routine with any new expression, meaning, or message,” nor added “any new dramatic purpose”). As previously explained, a use becomes transformative only if it serves a different purpose or alters the “expression, meaning, or message” of the original work. *Kelly*, 336 F.3d at 818. As such, “[c]ourts have been reluctant to find fair use when an original work is merely retransmitted in a different medium.” *A&M Records*, 239 F.3d at 1015. Accordingly, although a change of format may be “useful,” it “is not technically a transformation.” *Infinity Broad.*, 150 F.3d at 108 n.2 (finding that retransmitting copyrighted radio transmissions over telephone lines was not transformative because there was no new expression, meaning, or message).

⁷ Because we conclude that smartphones were not a new context, we need not address the argument, made by Oracle and certain amici, that the district court’s order excluding evidence of Google’s use of Android in multiple other circumstances—including laptops—tainted the jury’s and the court’s ability to fairly assess the character of the use.

The Ninth Circuit has stated that “[a] use is considered transformative only where a defendant changes a plaintiff’s copyrighted work or uses the plaintiff’s copyrighted work in a different context such that the plaintiff’s work is transformed into a new creation.” *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1165 (9th Cir. 2007) (quoting *Wall Data*, 447 F.3d at 778). In *Perfect 10*, for example, the court found Google’s use of thumbnail versions of copyrighted images “highly transformative” because, “[a]lthough an image may have been created originally to serve an entertainment, aesthetic, or informative function, a search engine transforms the image into a pointer directing a user to a source of information.” *Id.* Although the court discussed the change in context (moving the copyrighted images into the electronic reference tool), it emphasized that Google used the images “in a new context to serve a different purpose.” *Id.* In reaching this conclusion, the court reiterated that “even making an exact copy of a work may be transformative so long as the copy serves a different function than the original work.” *Id.* (citing *Kelly*, 336 F.3d at 818-19). It is clear, therefore, that the change in context alone was not dispositive in *Perfect 10*; rather, the change in context facilitated the change in purpose, which made the use transformative.

To some extent, any use of copyrighted work takes place in a slightly different context than the original. And of course, there is no bright line identifying when a use becomes transformative. But where, as here, the copying is verbatim, for an identical function and purpose, and there are no changes to the expressive content or message, a mere change in format (e.g., from desktop and laptop computers to smartphones and tablets) is insuffi-

cient as a matter of law to qualify as a transformative use.⁸

c. Bad faith

In evaluating the “purpose and character” factor, the Ninth Circuit applies “the general rule that a party claiming fair use must act in a manner generally compatible with principles of good faith and fair dealing.” *Perfect 10*, 508 F.3d at 1164 n.8 (citing *Harper & Row*, 471 U.S. at 562-63). In part, this is based on the fact that, in *Harper & Row*, the Supreme Court expressly stated that “[f]air use presupposes ‘good faith’ and ‘fair dealing.’” 471 U.S. at 562 (citation omitted). It is also in part true because, as the Ninth Circuit has said, one who acts in bad faith should be barred from invoking the equitable defense of fair use. *Fisher*, 794 F.2d at 436 (calling the principle of considering the alleged infringer’s “bad conduct” as a “bar [to] his use of the equitable defense of fair use” a sound one).⁹

⁸ As some amici note, to hold otherwise could encroach upon the copyright holder’s right to “prepare derivative works based upon the copyrighted work.” 17 U.S.C. § 106(2); see Br. of Amicus Curiae N.Y. Intell. Prop. L. Ass’n at 17-20.

⁹ As the district court recognized, there is some debate about whether good or bad faith should remain relevant to the factor one inquiry. *Order Denying JMOL*, 2016 WL 3181206, at *2 (“[T]here is a respectable view that good or bad faith should no longer be a consideration after the Supreme Court’s decision in *Campbell*.”); see also Hon. Pierre N. Leval, *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105, 1128 (1990) (“Whether the secondary use is within the protection of the [fair use] doctrine depends on factors pertinent to the objectives of the

Consistent with this authority, and at Oracle’s request, the district court instructed the jury that it could consider whether Google acted in bad faith (or not) as part of its assessment of the first fair use factor. *Order Denying JMOL*, 2016 WL 3181206, at *6. And, because Oracle was permitted to introduce evidence that Google acted in bad faith, the court permitted Google to try to prove its good faith. *Id.*

At trial, Oracle introduced evidence suggesting that “Google felt it needed to copy the Java API as an accelerant to bring Android to the market quicker” and knew that it needed a license to use Java. *Id.* For its part, Google presented evidence that it believed that the declaring code and SSO were “free to use and re-implement, both as a matter of developer practice and because the availability of independent implementations of the Java API enhanced the popularity of the Java programming language, which Sun promoted as free for all to use.” *Id.* at *7. Given this conflicting evidence, the district court

copyright law and not on the morality or motives of either the secondary user or the copyright-owning plaintiff.”). In *Campbell*, the Supreme Court expressed skepticism about “the weight one might place on the alleged infringer’s state of mind.” *Campbell*, 510 U.S. at 585 n.18. But the Ninth Circuit has not repudiated its view that “‘the propriety of the defendant’s conduct’ is relevant to the character of the use at least to the extent that it may knowingly have exploited a purloined work for free that could have been obtained for a fee.” *L.A. News Serv. v. KCAL-TV Channel 9*, 108 F.3d 1119, 1122 (9th Cir. 1997) (quoting *Harper & Row*, 471 U.S. at 562). For that reason, and because we conclude in any event that the jury must have found that Google did not act in bad faith, we address that question and the parties’ arguments relating thereto.

found that the jury could reasonably have concluded that “Google’s use of parts of the Java API as an accelerant was undertaken based on a good faith belief that at least the declaring code and SSO were free to use (which it did use), while a license was necessary for the implementing code (which it did not use).” *Id.*

On appeal, Oracle argues that there was ample evidence that Google intentionally copied Oracle’s copyrighted work and knew that it needed a license to use Java. Google responds that the jury heard sufficient evidence of Google’s good faith based on industry custom and was entitled to credit that evidence.

But, while bad faith may weigh against fair use, a copyist’s good faith cannot weigh in favor of fair use. Indeed, the Ninth Circuit has expressly recognized that “the innocent intent of the defendant constitutes no defense to liability.” *Monge*, 688 F.3d at 1170 (quoting 4 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 13.08[B][1] (Matthew Bender rev. ed. 2011)). If it were clear, accordingly, that the jury found fair use solely or even largely because it *approved* of Google’s motives even if they were in bad faith, we would find such a conclusion improper. Because evidence of Google’s good faith was relevant to rebut evidence of its bad faith, however, and there is no objection to the instructions to the jury on this or any other point, we must assume that the jury simply did not find the evidence of Google’s bad faith persuasive.¹⁰ We note, moreover, that merely “being

¹⁰ The jury was instructed that, “[i]n evaluating the extent to which Google acted in good faith or not, you may take into account, together with all other circumstances, the extent to which Google relied upon or contravened any recognized practices in the industry concerning re-implementation of API libraries.” *Order Denying JMOL*,

denied permission to use a work does not weigh against a finding of fair use.” *Campbell*, 510 U.S. at 585 n.18 (“If the use is otherwise fair, then no permission need be sought or granted.”).

Ultimately, we find that, even assuming the jury was unpersuaded that Google acted in bad faith, the highly commercial and non-transformative nature of the use strongly support the conclusion that the first factor weighs against a finding of fair use.

Factor 2: Nature of the Copyrighted Work

The second factor—the nature of the copyrighted work—“calls for recognition that some works are closer to the core of intended copyright protection than others, with the consequence that fair use is more difficult to establish when the former works are copied.” *Campbell*, 510 U.S. at 586. This factor “turns on whether the work is informational or creative.” *Worldwide Church of God*, 227 F.3d at 1118; *see also Harper & Row*, 471 U.S. at 563 (“The law generally recognizes a greater need to disseminate factual works than works of fiction or fantasy.”). Creative expression “falls within the core of the copyright’s protective purposes.” *Campbell*, 510 U.S. at 586. Although “software products are not purely creative works,” it is well established that copyright law protects computer software. *Wall Data*, 447 F.3d at 780 (citing *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1519 (9th Cir. 1992) (“[T]he 1980 amendments to the Copyright Act unambiguously extended copyright protection to computer programs.”)).

Here, the district court found that the jury could have concluded that the process of designing APIs was “highly creative” and “thus at the core of copyright’s protection” or

2016 WL 3181206, at *3 n.2. Oracle has not challenged this instruction on appeal.

it could “reasonably have gone the other way and concluded that the declaring code was not highly creative.” *Order Denying JMOL*, 2016 WL 3181206, at *10. While the jury heard testimony from Google’s own expert that API design is “an art, not a science,” other witnesses emphasized the functional role of the declaring code and the SSO and minimized the creative aspects. *Id.* Accordingly, the district court concluded that the “jury could reasonably have found that, while the declaring code and SSO were creative enough to qualify for copyright protection, functional considerations predominated in their design.” *Id.*

On appeal, Oracle emphasizes that designing the APIs was a highly creative process and that the organization of the packages was not mandated by function. Indeed, this court has already held that the declaring code and the SSO of the 37 API packages at issue were sufficiently creative and original to qualify for copyright protection. *Oracle*, 750 F.3d at 1356. According to Oracle, the district court erred in assuming that, because the APIs have a “functional role,” they cannot be creative.

As Google points out, however, all we found in the first appeal was that the declarations and SSO were sufficiently creative to provide the “minimal degree of creativity,” *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991), that is required for copyrightability. We also recognized that a reasonable jury could find that “the functional aspects of the packages” are “relevant to Google’s fair use defense.” *Oracle*, 750 F.3d at 1369, 1376-77. On remand, Oracle stipulated that some of the declarations were necessary to use the Java language and presented no evidence explaining how the jury could distinguish the functionality and creativity of those declarations from the others. Google maintains that it presented evidence that the declarations and SSO were functional and the jury was entitled to credit that evidence.

Although it is clear that the 37 API packages at issue involved some level of creativity—and no reasonable juror could disagree with that conclusion—reasonable jurors could have concluded that functional considerations were both substantial and important. Based on that assumed factual finding, we conclude that factor two favors a finding of fair use.

The Ninth Circuit has recognized, however, that this second factor “typically has not been terribly significant in the overall fair use balancing.” *Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc.*, 109 F.3d 1394, 1402 (9th Cir. 1997) (finding that the “creativity, imagination and originality embodied in *The Cat in the Hat* and its central character tilts the scale against fair use”); *Mattel*, 353 F.3d at 803 (similar). Other circuits agree. *Fox News Network*, 2018 WL 1057178, at *5 (“This factor ‘has rarely played a significant role in the determination of a fair use dispute,’ and it plays no significant role here.” (quoting *Authors Guild v. Google, Inc.*, 804 F.3d 202, 220 (2d Cir. 2015))). We note, moreover, that allowing this one factor to dictate a conclusion of fair use in all cases involving copying of software could effectively negate Congress’s express declaration—continuing unchanged for some forty years—that software is copyrightable. Accordingly, though the jury’s assumed view of the nature of the copyrighted work weighs in favor of finding fair use, it has less significance to the overall analysis.

Factor 3: Amount and Substantiality of the Portion Used

The third factor focuses on the “amount and substantiality of the portion used in . . . the context of the copyrighted work, not the infringing work.” *Oracle*, 750 F.3d at 1375. Indeed, the statutory language makes clear that “a taking may not be excused merely because it is insubstantial with respect to the *infringing* work.” *Harper & Row*, 471 U.S. at 565. “[T]he fact that a substantial portion of the infringing work was copied verbatim [from

the original work] is evidence of the qualitative value of the copied material, both to the originator and to the plagiarist who seeks to profit from marketing someone else's copyrighted expression." *Id.* Thus, while "wholesale copying does not preclude fair use per se, copying an entire work militates against a finding of fair use." *Worldwide Church of God*, 227 F.3d at 1118 (citation and quotation marks omitted). But, there is no relevance to the opposite—i.e., adding substantial content to the copyrighted work is not evidence that what was copied was insubstantial or unimportant.

The inquiry under this third factor "is a flexible one, rather than a simple determination of the percentage of the copyrighted work used." *Monge*, 688 F.3d at 1179. The Ninth Circuit has explained that this third factor looks to the quantitative amount and qualitative value of the original work used in relation to the justification for its use. *Seltzer*, 725 F.3d at 1178. The percentage of work copied is not dispositive where the portion copied was qualitatively significant. *Harper & Row*, 471 U.S. at 566 ("In view of the expressive value of the excerpts and their key role in the infringing work, we cannot agree with the Second Circuit that the 'magazine took a meager, indeed an infinitesimal amount of Ford's original language.'" (citation omitted)). Google is correct that the Ninth Circuit has said that, "this factor will not weigh against an alleged infringer, even when he copies the whole work, if he takes no more than is necessary for his intended use." *Id.* (citing *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 820-21 (9th Cir. 2003)). But the Ninth Circuit has only said that is true where the intended use was a transformative one, because the "extent of permissible copying varies with the purpose and character of the use." *Id.* (quoting *Campbell*, 510 U.S. at 586-87). Here, we have found that Google's use was not transformative and 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. “Necessary” in the context of the cases upon which Google relies does not simply mean easier.

In assessing factor three, the district court explained that the “jury could reasonably have found that Google duplicated the bare minimum of the 37 API packages, just enough to preserve inter-system consistency in usage, namely the declarations and their SSO only, and did not copy any of the implementing code,” such that Google “copied only so much as was reasonably necessary.” *Order Denying JMOL*, 2016 WL 3181206, at *10. In reaching this conclusion, the court noted that the jury could have found that the number of lines of code Google duplicated was a “tiny fraction of one percent of the copyrighted works (and even less of Android, for that matter).” *Id.* We disagree that such a conclusion would have been reasonable or sufficient on this record.

On remand, the parties stipulated that only 170 lines of code were necessary to write in the Java language. It is undisputed, however, that Google copied 11,500 lines of code—11,330 more lines than necessary to write in Java. That Google copied more than necessary weighs against fair use. *See Monge*, 688 F.3d at 1179 (finding that, where the copyist “used far more than was necessary” of the original work, “this factor weighs against fair use”). And, although Google emphasizes that it used a small percentage of Java (11,500 lines of declarations out of roughly 2.86 million lines of code in the Java SE libraries), it copied the SSO for the 37 API packages in its entirety.

The district court emphasized Google’s desire to “preserve inter-system consistency” to “avoid confusion among Java programmers as between the Java system and the Android system.” *Order Denying JMOL*, 2016 WL 3181206, at *10-11. As we noted in the prior appeal, however, Google did not seek to foster any “inter-system

consistency” between its platform and Oracle’s Java platform. *Oracle*, 750 F.3d at 1371. And Google does not rely on any interoperability arguments in this appeal.¹¹ Google sought “to capitalize on the fact that software developers were already trained and experienced in using the Java API packages at issue.” *Id.* But there is no inherent right to copy in order to capitalize on the popularity of the copyrighted work or to meet the expectations of intended customers. Taking those aspects of the copyrighted material that were familiar to software developers to create a similar work designed to be popular with those same developers is not fair use. *See Dr. Seuss Enters.*, 109 F.3d at 1401 (copying the most famous and well recognized aspects of a work “to get attention” or “to avoid the drudgery in working up something fresh” is not a fair use (quoting *Campbell*, 510 U.S. at 580)).

Even assuming the jury accepted Google’s argument that it copied only a small portion of Java, no reasonable jury could conclude that what was copied was qualitatively insignificant, particularly when the material copied was important to the creation of the Android platform. Google conceded as much when it explained to the jury the importance of the APIs to the developers it wished to attract. *See* Tr. of Proceedings held on 5/16/16 at 106:8-

¹¹ In the prior appeal, we noted that “Google’s competitive desire to achieve commercial ‘interoperability’ . . . may be relevant to a fair use analysis.” *Oracle*, 750 F.3d at 1376-77. But, although several amici in this appeal discuss interoperability concerns, Google has abandoned the arguments it once made about interoperability. This change in course is not surprising given the un rebutted evidence that Google specifically designed Android to be *incompatible* with the Java platform and not allow for interoperability with Java programs. *Id.* at 1371.

14, *Oracle Am., Inc. Google Inc.*, No. 3:10-cv-3561 (N.D. Cal. May 20, 2016), ECF No. 1930; *Id.* at 134:6-11. Indeed, Google’s own expert conceded that “it was a sound business practice for Google to leverage the existing community of developers, minimizing the amount of new material and maximizing existing knowledge,” even though Google also conceded that it could have written the APIs differently to achieve the same functions. *Id.* at 144:5-10. For these reasons, we find that the third factor is, at best, neutral in the fair use inquiry, and arguably weighs against such a finding.

Factor 4: Effect Upon the Potential Market

The fourth and final factor focuses on “the effect of the use upon the potential market for or value of the copyrighted work.” 17 U.S.C. § 107(4). This factor reflects the idea that fair use “is limited to copying by others which does not materially impair the marketability of the work which is copied.” *Harper & Row*, 471 U.S. at 566-67. It requires that courts “consider not only the extent of market harm caused by the particular actions of the alleged infringer, but also whether unrestricted and widespread conduct of the sort engaged in by the defendant . . . would result in a substantially adverse impact on the potential market for the original.” *Campbell*, 510 U.S. at 590 (citation and quotation marks omitted).

The Supreme Court once said that factor four is “undoubtedly the single most important element of fair use.” *Harper & Row*, 471 U.S. at 566. In its subsequent opinion in *Campbell*, however, the Court emphasized that none of the four factors can be viewed in isolation and that “[a]ll are to be explored, and the results weighed together, in light of the purposes of copyright.” 510 U.S. at 578; see also *Infinity Broad.*, 150 F.3d at 110 (“Historically, the fourth factor has been seen as central to fair use analysis, although the Supreme Court appears to have backed away from this position.” (internal citation omitted)). The

Court has also explained that “[m]arket harm is a matter of degree, and the importance of this factor will vary, not only with the amount of harm, but also with the relative strength of the showing on the other factors.” *Campbell*, 510 U.S. at 590 n.21.

The Ninth Circuit recently indicated that likely market harm can be presumed where a use is “commercial and not transformative.” *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 861 (9th Cir. 2017) (citing *Leadsinger*, 512 F.3d at 531, for the proposition that, where a use “was commercial and not transformative, it was not error to presume likely market harm”). That presumption allegedly traces back to *Sony Corp. of America v. University City Studios, Inc.*, 464 U.S. 417, 451 (1984), where the Supreme Court stated that, “[i]f the intended use is for commercial gain, that likelihood [of future harm] may be presumed. But if it is for a noncommercial purpose, the likelihood must be demonstrated.” The Supreme Court has since clarified that market impact, “no less than the other three [factors], may be addressed only through a ‘sensitive balancing of interests’” and that earlier interpretations of *Sony* to the contrary were incorrect. *Campbell*, 510 U.S. at 590 n.21 (quoting *Sony*, 464 U.S. at 455 n.40);¹² see also *Monge*, 688 F.3d at 1181 (cautioning against overemphasis on a presumption of market harm after *Campbell*). On this point, we must apply clear Supreme Court precedent rather than the more recent Ninth Circuit’s statements to the contrary.

¹² The Court noted, however, that “what *Sony* said simply makes common sense: when a commercial use amounts to mere duplication of the entirety of an original, it clearly ‘supersede[s] the objects,’ of the original and serves as a market replacement for it, making it likely that cognizable market harm to the original will occur.” *Id.* at 591.

In evaluating the fourth factor, courts consider not only harm to the actual or potential market for the copyrighted work, but also harm to the “market for potential derivative uses,” including “those that creators of original works would in general develop or license others to develop.” *Campbell*, 510 U.S. at 592; *see also A&M Records*, 239 F.3d at 1017 (“[L]ack of harm to an established market cannot deprive the copyright holder of the right to develop alternative markets for the works.”). A court can therefore consider the challenged use’s “impact on potential licensing revenues for traditional, reasonable, or likely to be developed markets.” *Swatch Grp. Mgmt. Servs. Ltd. v. Bloomberg L.P.*, 756 F.3d 73, 91 (2d Cir. 2014) (citation omitted); *see also Seltzer*, 725 F.3d at 1179 (“This factor also considers any impact on ‘traditional, reasonable, or likely to be developed markets.’” (citation omitted)).

Also relevant to the inquiry is the fact that a copyright holder has the exclusive right to determine “when, ‘whether and in what form to release’” the copyrighted work into new markets, whether on its own or via a licensing agreement. *Monge*, 688 F.3d at 1182 (quoting *Harper & Row*, 471 U.S. at 553). Indeed, the Ninth Circuit has recognized that “[e]ven an author who had disavowed any intention to publish his work during his lifetime” was entitled to copyright protection because: (1) “the relevant consideration was the ‘potential market’” and (2) “he has the right to change his mind.” *Worldwide Church*, 227 F.3d at 1119 (citing *Salinger v. Random House, Inc.*, 811 F.2d 90, 99 (2d Cir. 1987)); *see also Micro Star v. Formgen Inc.*, 154 F.3d 1107, 1113 (9th Cir. 1998) (noting that only the copyright holder “has the right to enter that market; whether it chooses to do so is entirely its business”).

Here, the district court concluded that the jury “could reasonably have found that use of the declaring lines of code (including their SSO) in Android caused no harm to

the market for the copyrighted works, which were for desktop and laptop computers.” *Order Denying JMOL*, 2016 WL 3181206, at *10. In reaching this conclusion, the district court noted that, before Android was released, Sun made all of the Java API packages available for free and open source under the name OpenJDK, subject only to the terms of a general public license. *Id.* According to the district court, the jury could have concluded that “Android’s impact on the market for the copyrighted works paralleled what Sun already expected via its OpenJDK.” *Id.*

On appeal, Oracle argues that the evidence of actual and potential harm stemming from Google’s copying was “overwhelming,” and that the district court erred as a matter of law in concluding otherwise. Appellant Br. 52. We agree.

First, with respect to actual market harm, the evidence showed that Java SE had been used for years in mobile devices, including early smartphones, prior to Android’s release. Specifically, the jury heard testimony that Java SE was already in smartphones, including Blackberry, SavaJe, Danger, and Nokia. That Android competed directly with Java SE in the market for mobile devices is sufficient to undercut Google’s market harm arguments. With respect to tablets, the evidence showed that Oracle licensed Java SE for the Amazon Kindle. After Android’s release, however, Amazon was faced with two competing options—Java SE and Android—and selected Android.¹³ The jury also heard evidence that

¹³ Google submits that the jury could have discounted this evidence because the Java SE APIs were available for free through OpenJDK. But Amazon moved from Java to Android—not to OpenJDK. And the evidence of record makes clear that device manufacturers did not view

Amazon later used the fact that Android was free to negotiate a steep discount to use Java SE in its newer e-reader. In other words, the record contained substantial evidence that Android was used as a substitute for Java SE and had a direct market impact. Given this evidence of actual market harm, no reasonable jury could have concluded that there was no market harm to Oracle from Google's copying.

Even if there were a dispute about whether Oracle was licensing Java SE in smartphones at the time Android launched, moreover, "fair use focuses on *potential*, not just actual, market harm." *Monge*, 688 F.3d at 1181. Accordingly, although the district court focused exclusively on the market it found that Oracle had already entered—desktops and laptops—it should have considered how Google's copying affected potential markets Oracle might enter or derivative works it might create or license others to create. *See Campbell*, 510 U.S. at 590. Licensing Java SE for smartphones with increased processing capabilities was one such potential new market. And the fact that Oracle and Google engaged in lengthy licensing negotiations demonstrates that Oracle was attempting to license its work for mobile devices, including smartphones.¹⁴ Smartphones were, therefore, a "tradi-

OpenJDK as a commercially viable alternative to using Java SE because any improvement to the packages in OpenJDK had to be given away for free to the Java community.

¹⁴ Of course, the fact that those negotiations were not successful does not factor into the analysis. *Campbell*, 510 U.S. at 585 n.18 ("If the use is otherwise fair, then no permission need be sought or granted. Thus, being denied permission to use a work does not weigh against a finding of fair use."). Such evidence was only relevant to show Oracle's interest in the potential market for smartphones.

tional, reasonable, or likely to be developed market.” See *Swatch Grp.*, 756 F.3d at 91; see also *Seltzer*, 725 F.3d at 1179.

Google argues that a reasonable jury could have concluded that Java SE and Android did not compete in the same market because Oracle: (1) was not a device maker; and (2) had not yet built its own smartphone platform. Neither argument has merit. That Oracle never built a smartphone device is irrelevant because potential markets include licensing others to develop derivative works. See *Campbell*, 510 U.S. at 592. The fact that Oracle had not yet developed a smartphone platform is likewise irrelevant as a matter of law because, as Oracle submits, a market is a potential market even where the copyright owner has no immediate plans to enter it or is unsuccessful in doing so. See *Worldwide Church*, 227 F.3d at 1119; *Micro Star*, 154 F.3d at 1113. Even assuming a reasonable jury could have found no *current* market harm, the undisputed evidence showed, at a minimum, that Oracle intended to license Java SE in smartphones; there was no evidence in the record to support any contrary conclusion. Because the law recognizes and protects a copyright owner’s right to enter a “potential market,” this fact alone is sufficient to establish market impact.

Given the record evidence of actual and potential harm, we conclude that “unrestricted and widespread conduct of the sort engaged in by” Google would result in “a substantially adverse impact on the potential market for the original” and its derivatives. See *Campbell*, 510 U.S. at 590 (citation and quotation marks omitted). Accordingly, the fourth factor weighs heavily in favor of Oracle.

Balancing the Four Factors

Having undertaken a case-specific analysis of all four factors, we must weigh the factors together “in light of the purposes of copyright.” *Campbell*, 510 U.S. at 578. We

conclude that allowing Google to commercially exploit Oracle's work will not advance the purposes of copyright in this case. Although Google could have furthered copyright's goals of promoting creative expression and innovation by developing its own APIs, or by licensing Oracle's APIs for use in developing a new platform, it chose to copy Oracle's creative efforts instead. There is nothing fair about taking a copyrighted work verbatim and using it for the same purpose and function as the original in a competing platform.

Even if we ignore the record evidence and assume that Oracle was not already licensing Java SE in the smartphone context, smartphones were undoubtedly a potential market. Android's release effectively replaced Java SE as the supplier of Oracle's copyrighted works and prevented Oracle from participating in developing markets. This superseding use is inherently unfair.

On this record, factors one and four weigh heavily against a finding of fair use, while factor two weighs in favor of such a finding and factor three is, at best, neutral. Weighing these factors together, we conclude that Google's use of the declaring code and SSO of the 37 API packages was not fair as a matter of law.

We do not conclude that a fair use defense could never be sustained in an action involving the copying of computer code. Indeed, the Ninth Circuit has made it clear that some such uses can be fair. *See Sony*, 203 F.3d at 608; *Sega*, 977 F.2d at 1527-28. We hold that, given the facts relating to the copying at issue here—which differ materially from those at issue in *Sony* and *Sega*—Google's copying and use of this particular code was not fair as a matter of law.

III. GOOGLE'S CROSS-APPEAL

Google cross-appeals from the district court's final judgment solely to "preserv[e] its claim that the declara-

tions/SSO are not protected by copyright law.” Cross-Appellant Br. 83. Specifically, Google maintains that the declaring code and SSO are: (1) an unprotected “method of operation” under 17 U.S.C. § 102(b), because they allow programmers to operate the pre-written programs of the Java language; and (2) subject to the merger doctrine. We resolved these issues against Google in the first appeal, finding that the declaring code and the SSO of the 37 API packages at issue are entitled to copyright protection. *Oracle*, 750 F.3d at 1354.

Google did not petition this court for rehearing and instead filed a petition for a writ of certiorari asking the Supreme Court to determine whether our copyrightability determination was in error. Oracle responded to the petition, and the Supreme Court invited the Solicitor General to express the views of the United States. The government agreed that Oracle’s computer code is copyrightable, and the Supreme Court denied Google’s petition in June 2015. *Google, Inc. v. Oracle Am., Inc.*, 135 S. Ct. 2887 (2015).

Google neither asks the panel for relief on the copyrightability issue nor offers any arguments on that issue. We remain convinced that our earlier copyrightability decision was consistent with Congress’s repeated directives on the subject. Accordingly, we provide no relief to Google on its cross-appeal, finding a ruling on it unnecessary.

IV. CONCLUSION

For the foregoing reasons, we conclude that Google’s use of the 37 Java API packages was not fair as a matter of law. We therefore reverse the district court’s decisions denying Oracle’s motions for JMOL and remand for a trial on damages. The district court may determine the appropriate vehicle for consideration of infringement allegations regarding additional uses of Android. We dismiss Google’s cross-appeal.

**REVERSED AND REMANDED;
CROSS-APPEAL DISMISSED**

COSTS

No costs.

Appendix B

NOTE: This order is nonprecedential.

United States Court of Appeals for the Federal Circuit

ORACLE AMERICA, INC.,
Plaintiff-Appellant

v.

GOOGLE LLC,
Defendant-Cross-Appellant

2017-1118, 2017-1202

Appeals from the United States District Court for the Northern District of California in No. 3:10-cv-03561-WHA, Judge William H. Alsup.

ON PETITION FOR REHEARING EN BANC

Before PROST, *Chief Judge*, NEWMAN, PLAGER*, LOURIE, DYK, MOORE, O'MALLEY, REYNA, WALLACH, TARANTO, CHEN, HUGHES, and STOLL, *Circuit Judges*.

PER CURIAM.

ORDER

Cross-Appellant Google LLC filed a petition for rehearing en banc. A response to the petition was invited by the court and filed by appellant Oracle America, Inc.

The petition was first referred as a petition for rehearing to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on September 4, 2018.

FOR THE COURT

August 28, 2018
Date

/s/Peter R. Marksteiner
Peter R. Marksteiner
Clerk of Court

* Circuit Judge Plager participated only in the decision on the petition for panel rehearing.