

APRIL 2020

DEVOTED TO  
LEADERS IN THE  
INTELLECTUAL  
PROPERTY AND  
ENTERTAINMENT  
COMMUNITY

VOLUME 40 NUMBER 4

THE *Licensing*  
*Journal*®

*Edited by Gregory J. Battersby and Charles W. Grimes*

---

# Google v. Oracle: Will Software Be Free?

Dorothy Auth, Howard Wizenfeld, and Jaclyn Hellreich

---

*Dr. Dorothy Auth chairs Cadwalader's Intellectual Property Group and is based in the firm's New York office. She coordinates global intellectual property enforcement, licensing and procurement strategies for her clients to maximize their protected field, with experience that spans diverse industries, including biotechnology, pharmaceutical, and medical devices, as well as consumer products, computers, and other mechanical devices.*

*Howard Wizenfeld is a special counsel in Cadwalader's Intellectual Property Group based in the firm's New York office. He handles complex patent litigations primarily in the electrical engineering, telecommunications, and computer science fields, and has handled litigations in the biotechnology, pharmaceutical, and chemical sectors.*

*Jaclyn Hellreich is an associate in Cadwalader's Intellectual Property Group based in the firm's New York office. She focuses her practice on patent, copyright, and trademark litigation.*

Referred to as “the copyright case of the century,”<sup>1</sup> the Supreme Court could determine the fate of software protection in *Google v. Oracle*, namely that of Java. At its core, the case asks whether software programmers may copy functional names present in software code (known as a software interface—e.g., the “print” function) so long as they do not copy the underlying source code implementing the function. Indeed, this issue the Court will address relates to the following two questions: 1) whether copyright protections extend to a software interface; and 2) whether Google’s use of a software interface in context of creating a new computer program constitutes fair use. Deciding this issue could influence how future software and other computer technology develops. This article breaks down the arguments likely to be heard by the Supreme Court.

## Background

Java is one of the most popular computer languages. Originally developed by Sun Microsystems

(Sun) in 1996, the Java platform grew in popularity with developers in part because of its “write once, run anywhere” ability.<sup>2</sup> This ability allowed a programmer to write a Java program on a computer using one operating system (e.g., IBM using DOS) and run that program on a computer using a completely different operating system (e.g., Apple Macintosh). But to function properly, the Java language requires the use of the Java Application Programming Interface (Java API), a library of pre-written functions organized into packages that include “declaration codes” and “implementing codes”. “Declaration codes” are command names that correspond to a particular function (e.g., the “print” declaration code corresponds to the print function), while “implementing codes” are the lines of code instructing the computer on how to implement that function.<sup>3</sup> Attempting to obtain wide adoption of its new Java programming language by computer programmers, Sun emphasized the Java API’s preexisting code as an easy and practical way to further develop software.<sup>4</sup>

Google wanted to use the Java programming language in developing its Android operating system for use in mobile phones and therefore entered into negotiations with Sun for a Java license. No deal was reached. Instead, Google used the declaration code and integrated it into Android on the theory that the declaration code was not copyrightable.<sup>5</sup> Given the constrained computing power of a mobile phone as compared to a desktop computer, Google did not use Java’s implementing code for any Java declaration.<sup>6</sup> Instead, Google created its own implementing code for use in Android’s mobile phone operating system.<sup>7</sup> With respect to the Java declaration codes embedded in Android, only a small portion of these declarations was used.<sup>8</sup> At the time of its release in 2007, Android was praised by Sun as a very exciting use of Java.<sup>9</sup> In 2010, Sun, however, was acquired by Oracle America, Inc. who began enforcing the Java licensing provisions, and in particular sued Google for copyright infringement due to the use of Java APIs in Android devices. The Court of Appeals for the Federal Circuit found Google to have infringed Oracle’s copyright in Java and to have no defense of fair use.

---

## Whether Copyright Protection Extends to a Software Interface

The first issue at the Supreme Court is whether Java API's code and organizational system of classes are eligible for copyright protection. Typically, computer programs can obtain copyright protections as a literary work. The law, however, states "an author cannot claim a copyright in an idea, system, or method indirectly, by copyrighting one of only a few possible means of expression" because that would grant the author exclusive use of "the idea, system or method itself."<sup>10</sup> This is referred to as the Merger Doctrine, i.e., where the idea (which is not copyrightable) merges with its expression (which is otherwise copyrightable).

The question before the Court is whether the Merger Doctrine should apply to Java APIs because the APIs are purely functional and can be written only one way for the computer to be able to understand commands by Java developers.<sup>11</sup> The appellate court<sup>12</sup> had ruled that computer programs are copyrightable as literary works as long as they "incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves."<sup>13</sup> Google conceded that Congress provided copyright protection for software, but argued this protection excluded *purely functional* software.<sup>14</sup> Oracle countered that Google's argument was "[i]mpossible" because "[a]ll computer programs are functional by definition."<sup>15</sup> Additionally, Oracle relied on the Federal Circuit's decision which stated "Java API packages are... expressive and could have been written and organized in any number of ways to achieve the same functions," indicating that the Java API was creative and therefore copyrightable.<sup>16</sup> Indeed, the "unique arrangement of computer program expression...does not merge with the process so long as alternate expressions are available."<sup>17</sup>

## Whether Google's Use of a Software Interface in the Context of Creating a New Computer Program Constitutes Fair Use

If the Court holds the Java APIs copyrightable, the next question will be whether Google's inclusion of declaration codes constitutes fair use. A

fair use determination utilizes a 4-factor test: 1) the purpose and character of use; 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 use upon the potential market for or the value of the copyright.<sup>18</sup>

This is a highly fact-specific test and although the Federal Circuit found no fair use, the U.S. Supreme Court could come to a different conclusion. Facts such as (i) only a miniscule portion of the Java API was used, (ii) a massive amount of new code was created by Google, and (iii) the declaration codes were highly functional are all issues to be determined in a fair use analysis. It is also possible the Supreme Court will agree with Oracle that Android effectively replaced Java and therefore is not entitled to a fair use defense.<sup>19</sup>

## Potential Outcomes

Because the U.S. Supreme Court postponed oral argument due to the COVID-19 pandemic, it is unclear when a decision can be expected. Whenever the Court issues its decision, it will likely have a significant effect on software development. For example, if the Court affirms the Federal Circuit, the result will be that all software developers must either (i) pay for a license to use both Java's declaration and implementing codes, or (ii) use a declaration code that does not rely on Java APIs. This could change how many software applications (apps) are developed and whether or not apps would be accessible to each different platform. In fact, Google specifically chose to use declaration codes from the Java API because the difficulty of starting from scratch would stifle new software development as developers would have to learn new declarations for every type of hardware. But, as Oracle pointed out, "it will always be easier to co-opt someone else's audience than build your own. That does not eliminate protection for the original."<sup>20</sup> Upholding the Federal Circuit's decision may also mean the cost of software will significantly increase to compensate for either Oracle's licensing fee or to pay for additional research and development in creating new APIs for every platform. If the Court reverses the decision, software developers, however, may lose what little protections they have, resulting in less software innovation or an increase in competition.

- 
1. Stanford Law Professor Mark Lemley <https://www.law.com/nationallawjournal/2019/11/15/supreme-court-finally-takes-up-google-v-oracle/>.
  2. *Oracle America, Inc. v. Google Inc.*, 750 F.3d 1339, 1348 (Fed. Cir. 2014).
  3. *Id.* at 1349.
  4. Writ of Certiorari, *Google v. Oracle*, at 3.
  5. *Oracle America, Inc. v. Google Inc.*, 2016 WL 3181206, \*7 (N.D. Cal. 2016).
  6. *Oracle America, Inc. v. Google Inc.*, 886 F.3d 1179, 1200 (Fed. Cir. 2018).
  7. *Id.*
  8. Android only used about 11,500 lines of code from Java, which is less than 0.5% of Java's SE Libraries and only about 0.1% of Android's total code.
  9. Brief for Petitioner, *Google v. Oracle*, at 3.
  10. *Id.* at 18 (referencing 17 U.S.C. §102(a)).
  11. *See, e.g.*, Brief for Petitioner, *Google v. Oracle*, at 21, claiming "Google's engineering team reused the declarations only because it had no other choice."
  12. Court of Appeals for the Federal Circuit.
  13. *Oracle America, Inc. v. Google Inc.*, 750 F.3d at 1354.
  14. Brief for Petitioner, *Google v. Oracle*, at 22–23 (referencing 17 U.S.C. §102(b)).
  15. Brief for Respondent, *Google v. Oracle*, at 26.
  16. *Oracle America, Inc. v. Google Inc.*, 750 F.3d at 1358–59.
  17. *Id.* at 1360 (citing *Atari Games Corp. v. Nintendo of America Inc.*, 975 F.2d 832 (Fed. Cir. 1992)).
  18. *Oracle America, Inc. v. Google Inc.*, 886 F.3d at 1190–91.
  19. Brief for Respondent, *Google v. Oracle*, at 18.
  20. *Id.* at 18.

Copyright © 2020 CCH Incorporated. All Rights Reserved.  
Reprinted from *The Licensing Journal*, April 2020,  
Volume 40, Number 4, pages 1–3, with permission from Wolters Kluwer,  
New York, NY, 1-800-638-8437, [www.WoltersKluwerLR.com](http://www.WoltersKluwerLR.com)

