United States Court of Appeals for the Federal Circuit

ORACLE AMERICA, INC.,

Plaintiff-Appellant,

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GOOGLE INC.,

Defendant-Cross Appellant.

Appeal from the United States District Court for the Northern District of California in case no. 10-CV-3561, Judge William H. Alsup.

BRIEF OF AMICI CURIAE INTELLECTUAL PROPERTY LAW PROFESSORS IN SUPPORT OF DEFENDANT-CROSS APPELLANT AND AFFIRMANCE

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May 30, 2013

CERTIFICATE OF INTEREST

Pursuant to Federal Rule of Appellate Procedure 26.1 and Federal Circuit Rule 47.4, counsel for amici curiae Intellectual Property Law Professors certifies the following:

- 1. The full name of every amicus curiae represented by me is: LISTED IN APPENDIX A.
- 2. The name of the real parties in interest represented by me is: N/A.
- All parent corporations and any publicly held companies that own 10 percent 3. or more of the stock of the party or amicus curiae represented by me are: NONE.
- The names of all law firms and the partners or associates that appeared for 4. the party or amicus curiae now represented by me in the trial court or are expected to appear in this Court are:

MEREDITH JACOB, AMERICAN UNIVERSITY WASHINGTON COLLEGE OF LAW.

Dated: May 30, 2013 Respectfully submitted,

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Intellectual Property Law Professors

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STATEMENT OF INTEREST¹

Amici curiae are individuals who have been teaching and writing about intellectual property law at accredited law schools in the United States. A list of amici appears in Appendix A. Amici respectfully submit this brief to express our views and our concerns. We represent no institution, group, or association and have no personal interest or stake in the outcome of this case. Our sole interest in this case is with respect to a number of traditional principles of copyright law that we, as instructors and commentators on intellectual property law, believe should be considered in determining the proper scope of copyright protection for certain elements of computer programs. We oppose Oracle's legal position in this case on the merits and urge this Court to affirm the lower court's ruling on the copyrightability of the application program interfaces at issue. We believe that the outcome of this case will have a significant impact on software copyright law, particularly with regard to interoperability, and on innovation and competition, which intellectual property law seeks to maintain.

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¹ This brief is filed pursuant to Fed. R. App. P. 29(a) with the consent of all parties. Pursuant to Fed. R. App. P. 29(c)(5), *amici* hereby state that none of the parties to this case nor their counsel authored this brief in whole or in part; no party or any party's counsel contributed money intended to fund preparing or submitting the brief; and no one else other than *amici* and their counsel contributed money that was intended to fund preparing or submitting this brief.

SUMMARY OF ARGUMENT

Three fundamental errors undergird Oracle's legal position on this appeal of a District Court ruling that the Java Application Programming Interfaces (APIs) at issue in this case are unprotectable by U.S. copyright law.

First and foremost, Oracle takes an unduly narrow view of 17 U.S.C. § 102(b), which provides that "[i]n no case does copyright protection . . . extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied" in a protected work. This statute codifies the principal holding of a venerable Supreme Court decision ruling that bookkeeping systems, any methods of operation they might entail, and other useful arts depicted in copyrighted works are not within the scope of protection that copyright law provides to original works of authorship. Systems and methods may be eligible for patent protection, however.

Oracle tries to read the procedure/process/system/method of operation exclusions out of the statute by asserting that to take these exclusions seriously would undermine copyright protection for computer programs. Nothing could be further from the truth. The legislative history of the Copyright Act of 1976 (1976 Act) indicates that Congress was well aware that computer programs would instantiate numerous types of unprotectable processes and methods of operation. It

added the § 102(b) exclusions to the statute with the specific intent of ensuring that copyright protection for programs would not be interpreted too broadly.

It is a basic canon of statutory interpretation that courts must endeavor to give all words in a statute appropriate meaning. If Congress has decided that computer programs are copyrightable, but processes and methods they embody are not, then it is incumbent on courts to determine which processes and methods embodied in programs are outside the scope of copyright protection. After a full trial on the merits and consideration of numerous briefs, the District Court determined that the command structure of the Java APIs at issue in this case were methods that enabled program interoperability, and consistent with controlling Ninth Circuit decisions, ruled that these APIs were unprotectable methods under § 102(b).

A second fundamental error in Oracle's legal position in this appeal is its overbroad understanding about the protectability of "structure, sequence and organization" (SSO) of computer programs. While some case law endorses the view that program SSO may in appropriate cases be within the scope of protection that copyright provides to programmers, courts and commentators have recognized that the SSO concept is too imprecise to be useful in software copyright cases. The main reason is because this concept does not help courts to make appropriate

distinctions between protectable and unprotectable structural elements of programs.

Procedures, processes, systems, and methods of operation, almost by definition, contribute to the structure and organization of works of authorship that may describe or embody them. But this does not make those elements protectable by copyright. The main reason why computer programs have a "thinner" scope of protection than, say, Harry Potter novels is that programs have more functional design elements, including processes and methods, that are beyond copyright's scope.

A third fundamental error in Oracle's legal position in this appeal lies in its mistaken understanding of the merger doctrine as applied to elements of computer programs that are essential to interoperability. Oracle wants to believe that as long as its engineers exhibited creativity in the design of the Java APIs and those engineers were not constrained in their choices about how to construct the APIs, the APIs are ab initio copyright-protectable expression.

This view is mistaken. The case law is clear that when the design choices of subsequent programmers are constrained by the interface designs embodied in earlier programs, the merger doctrine applies to the reuse of elements necessary to achieving interoperability. All that subsequent programmers must do is to

reimplement those elements in independently created code, as the District Court found that Google had done in this case.

ARGUMENT

I. Copyright Protection Does Not Extend to Procedures, Processes, Systems, Methods of Operation, and Other Useful Arts Embodied in Original Works of Authorship.

In its landmark software copyright decision *Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 704 (2d Cir. 1992), the Second Circuit Court of Appeals stated that "[t]he doctrinal starting point in analyses of utilitarian works [such as computer programs] is the seminal case" of *Baker v. Selden*, 101 U.S. 99 (1879). We agree. Computer programs, like books on bookkeeping systems such as Selden's, are "process oriented texts" that "hover . . . closely to the elusive boundary line described in § 102(b)." *Altai*, 982 F.2d at 704. The methods and processes explained or embodied in such works lie outside the scope of copyright protection available to them. *See id*.

This principle is pertinent in this case because the District Court has ruled that the command structure of the Java APIs at issue in this case is an unprotectable system or method of operation under § 102(b). *Oracle America, Inc. v. Google Inc.*, 872 F. Supp. 2d 974, 977 (N.D. Cal. 2012). Oracle contends that § 102(b) only codifies the distinction between ideas and expressions, along with the merger of idea and expression principle, and that the District Court's

interpretation of § 102(b) threatens to eviscerate copyright protection for computer programs. *See* Appellant's Br. at 59-61.

To demonstrate the serious error in Oracle's position about § 102(b), it makes sense to revisit the origins of copyright's exclusion of systems and methods in *Baker*. That case considered "whether the exclusive property in a system of book-keeping can be claimed, under the law of copyright, by means of a book in which it is explained[.]" *Baker*, 101 U.S. at 101. Selden claimed that Baker infringed his copyright by copying the selection and arrangement of columns and headings in the forms Selden designed to illustrate how to implement his novel bookkeeping system. *See id*.

The Supreme Court ruled that the copyright in Selden's book was not infringed by Baker's publication of very similar forms. *See Baker*, 101 U.S. at 100-02. The Court considered several analogies to illustrate the soundness of its ruling against Selden's claim:

A treatise on the composition and use of medicines, be they old or new; on the construction and use of ploughs, or watches, or churns; or on the mixture and application of colors for painting or dyeing; or on the mode of drawing lines to produce the effect of perspective, — would be the subject of copyright; but no one would contend that the copyright of the treatise would give the exclusive right to the art or manufacture described therein.

Id. at 102.

It may require considerable creativity, as well as the expenditure of substantial time, money, and energy, to develop innovative methods of composing medicines or constructing ploughs, watches or churns. These innovations may well be deserving of some intellectual property protection, but copyright cannot provide it.

To give to the author of the book an exclusive property in the [useful] art described therein, when no examination of its novelty has ever been officially made, would be a surprise and a fraud upon the public. That is the province of letters-patent, not of copyright. The claim to an invention or discovery of [a useful] art or manufacture must be subjected to the examination of the Patent Office before an exclusive right therein can be obtained; and it can only be secured by a patent from the government.

Id. This was relevant in *Baker* because the preface to Selden's book revealed that he had sought (and apparently not obtained) a patent on the very same bookkeeping system over which he was suing Baker in the copyright lawsuit. See Pamela Samuelson, Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection, 85 Tex. L. Rev. 1921, 1929-30 (2007).

Between 1880 and the enactment of the 1976 Act, dozens of cases followed *Baker*, extended its analysis to a wide variety of subject matters beyond bookkeeping methods and systems, and offered additional insights about why such things as systems, methods, processes, and procedures should be excluded from the scope of copyright. *See* Samuelson, *supra*, at 1936-44 (discussing the post-*Baker* case law). Section 102(b) was intended to codify the exclusion of processes,

systems, and methods of operation from the scope of copyright in keeping with the post-*Baker* case law. *See id.* at 1944-61.

Even more pertinent to the dispute in the present case are these statements from the legislative history of the 1976 Act:

Some concern has been expressed lest copyright in computer programs should extend protection to the methodology or processes adopted by the programmer, rather than merely to the 'writing' expressing his ideas. Section 102(b) is intended, among other things, to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of the copyright law.

H.R. Rep. No. 94-1476, at 57 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5670.

The exclusion of methods and processes from the scope of copyright helps to preserve the distinction between the patent and copyright realms, as explained in *Taylor Instrument Co. v. Fawley-Brost Co.*, 139 F.2d 98 (7th Cir. 1943). *Taylor* involved claims of copyright in charts designed as components of temperature recording systems. Taylor had registered claims of copyright in several hundred charts for use in connection with its machines. Taylor charged Fawley-Brost with infringing eighteen of these copyrights by making and selling charts that were virtually identical to Taylor's charts and hence interoperable with Taylor's machines. *See id.* at 99. The Seventh Circuit invoked *Baker* in ruling against this

claim because the charts, as components of temperature recording systems, were not protectable by copyright law. *See id.* at 99-101.²

The court in *Taylor* perceived Congress to have provided "two separate and distinct fields of protection, the copyright and the patent," and to have placed writings of authors in the former and inventive useful arts in the latter. *Id.* at 99. "While it may be difficult to determine in which field protection must be sought, it is plain . . . that it must be in one or the other; it cannot be found in both." *Id.* The court quoted extensively from *Baker* as to policy rationales for maintaining the patent/copyright domain distinction. *See id.* at 99-100. The court took into account that many patents had issued for temperature recording machines and charts for use in connection with them. Its examination of Taylor's recording devices and charts left "no room for doubt but that the latter is a mechanical element of the instrument of which it is an integral part." *Id.* at 100.

The court in *Taylor* went on to observe that "the chart neither teaches nor explains the use of the art. It is an essential element of the machine; it is the art itself." *Id.* Upholding Taylor's claim would "produce[an] intolerable situation" because Taylor could "extend indefinitely the fifty-six years of protection afforded

² Soon thereafter, the Register of Copyrights denied Brown's application to register copyrights in similar charts, and the D.C. Circuit affirmed this rejection relying on *Baker* and *Taylor*. *See Brown Instrument Co. v. Warner*, 161 F.2d 910, 910-11 (D.C. Cir. 1947).

by the copyright laws" by changing the configuration of its machines and thwart competition by firms such as Fawley-Brost. *Id* at 101.

The District Court cited to *Baker* in support of its expression of concern that Oracle might be seeking through its copyright claim against Google to obtain "an exclusive right to a functional system, process, or method of operation that belongs in the realm of patents, not copyrights." *Oracle*, 872 F. Supp. 2d at 984. The court noted that "[b]oth Oracle and Sun have applied for and received patents that claim aspects of the Java API." *Id.* at 996. *See also* Pamela Samuelson, *Are Patents on Interfaces Impeding Interoperability?* 94 Minn. L. Rev. 1943, 1959-69 (2009) (giving examples of program interface patents).

Oracle's principal response to the District Court's concern is to point to one sentence from a Supreme Court opinion to the effect that "[n]either the Copyright Statute nor any other says that because a thing is patentable it may not be copyrighted." Appellant's Br. at 38, quoting *Mazer v. Stein*, 347 U.S. 201, 217 (1954). Oracle fails to mention that the Court made this statement in relation to design patents and copyrights. Some overlaps in subject matter may exist between these two fields. Stein's statuette of a Balinese dancer, for instance, was eligible for copyright protection as an original work of art and probably also for design patent protection as an inventive ornamental design for an article of manufacture (to serve as a lamp base). *See Mazer*, 347 U.S. at 217. Nothing in *Mazer* suggests

that the Court had changed its mind since *Baker* about the important policy reasons to limit the scope of copyright so that it will not conflict with utility patent law.

Oracle also ignores both Ninth Circuit and Federal Circuit precedents that warn against construing copyrights so broadly that they would grant patent-like protection to subject matters that are ineligible under 17 U.S.C. § 102(b). In Sega Enterprises, Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992), the Ninth Circuit considered whether making copies of computer programs for purposes such as getting access to interface procedures was copyright infringement or fair use. The court observed that "[i]f disassembly of copyrighted object code is *per se* an unfair use, the owner of the copyright gains a de facto monopoly over the functional aspects of his work—aspects that were expressly denied copyright protection by Congress," citing § 102(b). *Id.* at 1526. It went on to say that "to enjoy a lawful monopoly over the idea or functional principle underlying a work, the creator of the work must satisfy the more stringent standards imposed by the patent laws." Id.

Consider also the Federal Circuit's decision in *Atari Games Corp. v.*Nintendo of America Inc., 975 F.2d 832 (Fed. Cir. 1992). After quoting the pertinent parts of § 102(b), this Court observed:

In conformance with the standards of patent law, title 35 provides protection for the process or method performed by a computer in accordance with a program. Thus, *patent and copyright laws protect distinct aspects of a computer program*. Title 35 protects the process

or method performed by a computer program; title 17 protects the expression of that process or method. While title 35 protects any novel, nonobvious, and useful process, title 17 can protect a multitude of expressions that implement that process.

Id. at 839 (emphasis added) (citations omitted). This shows that Oracle is simply wrong in its interpretation of § 102(b) and in its view that patent and copyright have overlapping roles in protecting computer program innovations. Functional methods and processes embodied in computer programs may be eligible for patent protection, but not for copyright.

The District Court's interpretation of § 102(b) is sound, for it heeds two key statutory principles: that copyright protection is available to protect expressive aspects of program code and that procedures, processes, systems, and methods of operations embodied in programs are unprotectable by copyright law. Oracle's interpretation would read the procedure/process/system/method exclusions out of the statute in violation of traditional canons of statutory construction.

II. Copyright Protection For the Structure, Sequence and Organization of Programs Is Much More Limited Than Oracle Recognizes.

Several courts have accepted the proposition that copyright protection for computer programs may sometimes extend to the "structure, sequence and organization" (SSO) of computer programs. *See, e.g., Altai*, 982 F.2d at 702-03; *Atari Games*, 975 F.2d at 839-41; *Johnson Controls, Inc. v. Phoenix Control Sys., Inc.*, 886 F.2d 1173, 1175 (9th Cir. 1989).

The conception of SSO as protectable expression in programs has substantially eroded over time because courts have realized that it fails to provide a workable framework within which to distinguish protectable and unprotectable structural aspects of programs. *See Altai*, 982 F.2d at 705-06. Since *Altai*, the trend in the copyright case law "has been driven by fidelity to Section 102(b) and recognition of the danger of conferring a monopoly by copyright over what Congress expressly warned should be conferred only by patent." *Oracle*, 872 F. Supp. 2d at 996.

Because *Altai* presented the first and most powerful challenge to the utility of SSO as a way to think about program expression, it is worth delving into the particulars of this case. Computer Associates (CA) relied heavily on similarities in the SSO of its and Altai's parameter lists and macros in arguing that Altai had infringed by copying this SSO from CA's scheduling program. Parameter lists and macros are elements of program structure, but that did not mean that they were necessarily protectable by copyright. The Second Circuit affirmed a lower court ruling that most similarities between the programs were "dictated by the functional demands" of the programs at issue or were otherwise in the public domain. *Altai*, 982 F.2d at 714. Altai needed to use parameter lists that were very similar to CA's because both firms' scheduling programs were designed to provide the same

services and conform to the interface procedures necessary to interoperate with IBM systems programs. *See id.* at 715.

The court in *Altai* was quite explicit that elements of programs that are "dictated by external factors" such as "compatibility requirements of other programs with which a program is designed to operate in conjunction" lie outside the scope of protection that copyright provides to programs. *Id.* at 709-10. Similarities of these kinds need to be filtered out before courts make a determination as to whether the defendant infringed. *See id*.

The Ninth Circuit in *Sega* followed *Altai*'s lead in holding that interface procedures necessary for achieving interoperability among programs were functional elements of programs that copyright did not protect under § 102(b). *See Sega*, 977 F.2d at 1522. Reverse engineering of Sega's program to allow Accolade to get access to these interface procedures so that they could be reimplemented in independently written code was fair use. *See id.* at 1527-28.

Interface procedures are not the only structural design elements that are beyond the scope of copyright under § 102(b). Algorithms, like interface procedures, are unquestionably part of program SSO. Yet they too are beyond the scope of copyright protection as unprotectable procedures and processes, as was recognized in *Gates Rubber Co. v Bando Chemical Indus., Ltd.*, 9 F.3d 823, 844-45 (10th Cir. 1993).

Program behavior, that is, the structure and sequence of functional tasks that programs are designed to perform, is similarly unprotectable by copyright as a process excluded by § 102(b), as the Federal Circuit recognized in *Hutchins v. Zoll Medical Corp.*, 492 F.3d 1377 (Fed. Cir. 2007). In *Hutchins*, the plaintiff complained that the defendant's program performed the same tasks and in the same way as the plaintiff's program and that the defendant had appropriated the plaintiff's system of logic and incorporated this structure in its program. The Court affirmed a grant of summary judgment of non-infringement, holding that copyright protection was unavailable to the "technologic method of treating victims by using CPR and instructing how to use CPR." *Id.* at 1384.

One other notable thing about *Hutchins* is the Federal Circuit's endorsement of the First Circuit Court of Appeals' ruling in *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff'd by an equally divided Court*, 516 U.S. 233 (1996). *See Hutchins*, 492 F.3d at 1383. The District Court also relied on the *Borland* decision in support of its ruling against Oracle's copyright claims. *See Oracle*, 872 F. Supp. 2d at 990-91.

Lotus claimed that Borland infringed copyright in its popular spreadsheet program, Lotus 1-2-3, by copying the hierarchy of Lotus commands for the emulation interface of Borland's competing Quattro Pro program. *See Borland*, 49 F.3d at 810. Borland argued that it was necessary for its software to reproduce

exactly the same commands in exactly the same order so that prospective users who had constructed macros of frequently executed functions in the Lotus macro language could continue to use those macros if they switched to the Borland program. *See id.* The macro programs Lotus users had constructed would, in other words, not interoperate with the Borland program unless the emulation mode commands were in exactly the same order. Lotus argued that the command hierarchy was part of the protectable SSO expression of the 1-2-3 software. The First Circuit, rightly in our view, rejected this argument and held that the command hierarchy was an unprotectable method of operation under § 102(b). *See id.* at 815.

Oracle understandably wants to cast doubt on the viability of the ruling in *Borland*, for that decision supports the District Court's ruling in this case. *See* Appellant's Br. at 62-63. In addition to the Federal Circuit's endorsement in *Hutchins*, the *Borland* decision has attracted considerable acceptance and support in the law review literature.³

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³ See, e.g., Christina Bohannan, Reclaiming Copyright, 23 Cardozo Arts & Ent. L.J. 567, 592-93 (2006); Michael W. Carroll, One For All: The Problem of Uniformity Cost in Intellectual Property Law, 55 Am. U. L. Rev. 845, 899 n.254 (2006); Thomas F. Cotter, The Procompetitive Interest in Intellectual Property Law, 48 Wm. & Mary L. Rev. 483, 510 n.115 (2006); Stacey L. Dogan & Joseph P. Liu, Copyright Law and Subject Matter Specificity: The Case of Computer Software, 61 N.Y.U. Ann. Surv. Am. L. 203, 211-12 (2005); Herbert Hovenkamp, Response: Markets in IP and Antitrust, 100 Geo. L.J. 2133, 2144 n.54 (2012); Dennis S. Karjala, A Coherent Theory for the Copyright Protection of Computer Software and Recent Judicial Interpretations, 66 U. Cin. L. Rev. 53, 105-107 (1997); Peter Lee, The Evolution of Intellectual Infrastructure, 83 Wash. L. Rev.

It is because computer programs embody so many unprotectable elements, including procedures, methods, and processes, as well as abstract ideas and applied know-how, that courts often speak of programs as having a relatively "thin" or "weak" level of copyright protection. *See, e.g., Altai*, 982 F.2d at 712; *Sega*, 977 F.2d at 1527. Harry Potter novels, by contrast, have a thicker scope of protection because they contain a higher quantum of copyrightable original expression.

III. When a Computer Program Interface Constrains the Design Choices of Subsequent Programmers, the Merger Doctrine Precludes Copyright Protection for that Interface Design.

Oracle wants to believe that as long as its engineers were not constrained in their design choices as they developed the Java APIs at issue in this case, as long as they exercised creative judgments in selecting and arranging the structure and other components of each API, and as long as these designs satisfy the minimal creativity requirement for copyright protection, the Java APIs and their SSO are protectable by copyright law. *See* Appellant's Br. at 36-45.

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^{39, 84-85 (2008);} Aaron K. Perzanowski, *Rethinking Anticircumvention's Interoperability Policy*, 42 U.C. Davis L. Rev. 1549, 1563 n.39 (2009); Randal C. Picker, *Competition and Privacy in Web 2.0 and the Cloud*, 103 Nw. U. L. Rev. Colloquy 1, 8 (July 28, 2008),

http://www.law.northwestern.edu/lawreview/colloquy/2008/25/; J.H. Reichman & Jonathan A. Franklin, *Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information*, 147 U. Pa. L. Rev. 875, 894 n.70 (1999); Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 Colum. L. Rev. 534, 604-08 (2003).

The software copyright case law of the last 21 years demonstrates that this view is plainly erroneous. *Altai* established, and other courts later followed, the rule that external factors such as the "compatibility requirements of other programs with which a program is designed to operate" limit the scope of copyright in programs because these factors constrain the freedom of design choices of subsequent programmers. *Altai*, 982 F.2d at 709-10. To interoperate with existing programs, any new program must send and be designed to receive information in the precise fashion required by the interface specifications of the programs with which it is to be compatible. Anyone who develops an API is, in a very real sense, designing that aspect of the program for itself and for others.

The Second Circuit was convinced that Altai had taken from CA's program only what was necessary to achieve compatibility. *See id.* at 714-15. By contrast, Atari Games copied more than was necessary to achieving compatibility with Nintendo's programs, which was why the Federal Circuit ruled against its compatibility defense in that case. *See Atari Games*, 975 F.2d at 840.

The Second Circuit in *Altai* referred to the merger doctrine in discussing why external factors such as compatibility needs limited the scope of copyright protection in programs. *See Altai*, 982 F.2d at 708-09. That is a sound doctrinal basis for such a ruling. Courts often recognize that when there is only one or a

small number of ways to express an idea, idea and expression will be considered to have merged, and no copyright protection is available to the merged elements.

The merger principle, like the exclusion of methods and processes, derives from *Baker v. Selden*. There, the Supreme Court observed that "where the [useful] art [a work] teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public." *Baker*, 101 U.S. at 103. Baker had no choice but to use substantially the same arrangement of headings and columns if he wanted to reimplement Selden's bookkeeping system in his own independently written work. APIs pose similar constraints on the design choices of subsequent programmers.

The Ninth Circuit, whose rulings should be given considerable deference on this appeal, has reached the same conclusion about the unprotectability of interfaces necessary for interoperability as the Second Circuit did in *Altai*. It did not matter in *Sega* that the plaintiff had designed the interface procedures for its Genesis console in a creative way. The Sega interface procedures constrained Accolade's design choices when it sought to write a program that would run on the Sega platform. *See Sega*, 977 F.2d at 1522. For this reason, the interface procedures were unprotected aspects of the Sega program under § 102(b). *See id*. at 1526. Nor did it undercut Accolade's defense that Sega had a licensing program

for Genesis-compatible videogames in which Accolade declined to participate. *See id.* at 1514, 1523.

Eight years after Sega, the Ninth Circuit revisited the legality of reverseengineering copyrighted program code, considering this time the development of software that could interoperate with third-party software designed to run on the plaintiff's platform. In Sony Computer Entertainment, Inc. v. Connectix, Inc., 203 F.3d 596 (9th Cir. 2000), Connectix developed a program to emulate the functionality of the Sony PlayStation for which many videogames had been developed. Sony sought to distinguish the Sega decision on numerous grounds, all of which were unavailing. See id. at 602-07. The bottom line was the same. The Sony interface procedures were unprotected elements of the PlayStation software, see id. at 603, and reverse engineering Sony's code to get access to these unprotected elements was fair use. See id. at 608. It did not matter that the Connectix software aimed to be a substitute for the plaintiff's product, see id. at 606-07, and not merely a complementary product as in Sega v. Accolade. See Sega, 977 F.2d at 1522. Nor, apparently, did it matter that the Connectix software was not fully compatible with the PlayStation games. See Connectix, 203 F.3d at 599.

The District Court found that the Java APIs at issue in this case were necessary for achieving interoperability. *Oracle*, 872 F. Supp. 2d at 979-81.

Accordingly, under *Altai* and *Sega*, the Java APIs should be deemed unprotectable by copyright law.

Oracle tries to make much of a few statements made by the Third Circuit Court of Appeals in *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983). *See* Appellant's Br. at 64-65. Apple sued Franklin for copyright infringement because Franklin copied the Apple operating system (OS) programs in order to make a computer that would be compatible with programs written to run on the Apple II computer. *See Apple*, 714 F.2d at 1243-44. One of Franklin's defenses was that it was necessary to copy the Apple OS in order to be compatible with the applications software developed to run on the Apple platform, for there were only "a limited number of ways to arrange operating systems to enable a computer to run . . . Apple-compatible software." *Id.* at 1253 (citation omitted) (internal quotation marks omitted).

It is true that the Third Circuit regarded Franklin's compatibility argument as having "no pertinence to either the idea/expression dichotomy or merger." *Id.*Compatibility was, in its view, "a commercial and competitive objective which does not enter into the somewhat metaphysical issue of whether particular ideas and expressions have merged." *Id.*

These statements do not provide as much support for Oracle's appeal as it thinks for three reasons. First, Franklin made no effort to reimplement the

interface procedures embedded in the Apple OS in independently written code. It just copied the Apple programs exactly, bit for bit. *See id.* at 1245. Second, these statements were made at an earlier stage in the evolution of software copyright law, well before the *Altai*, *Atari Games*, *Sega v. Accolade*, and *Connectix* cases that provided more thorough analyses of the copyright implications of a second comer's reimplementation of interface procedures necessary for interoperability. Third, the very purpose of developing and promoting widespread use of Java APIs was to enable greater interoperability among programs.

In our view, the District Court gave appropriate weight to the later Ninth Circuit rulings and wisely eschewed blindly embracing the anti-compatibility dicta from the earlier *Franklin* decision.⁴

CONCLUSION

Oracle has invited this Court to ignore or radically reinterpret more than two decades of copyright jurisprudence concerning the application of copyright law to elements of computer programs that are essential to achieving interoperability among programs. This Court should decline this invitation.

Ninth Circuit.

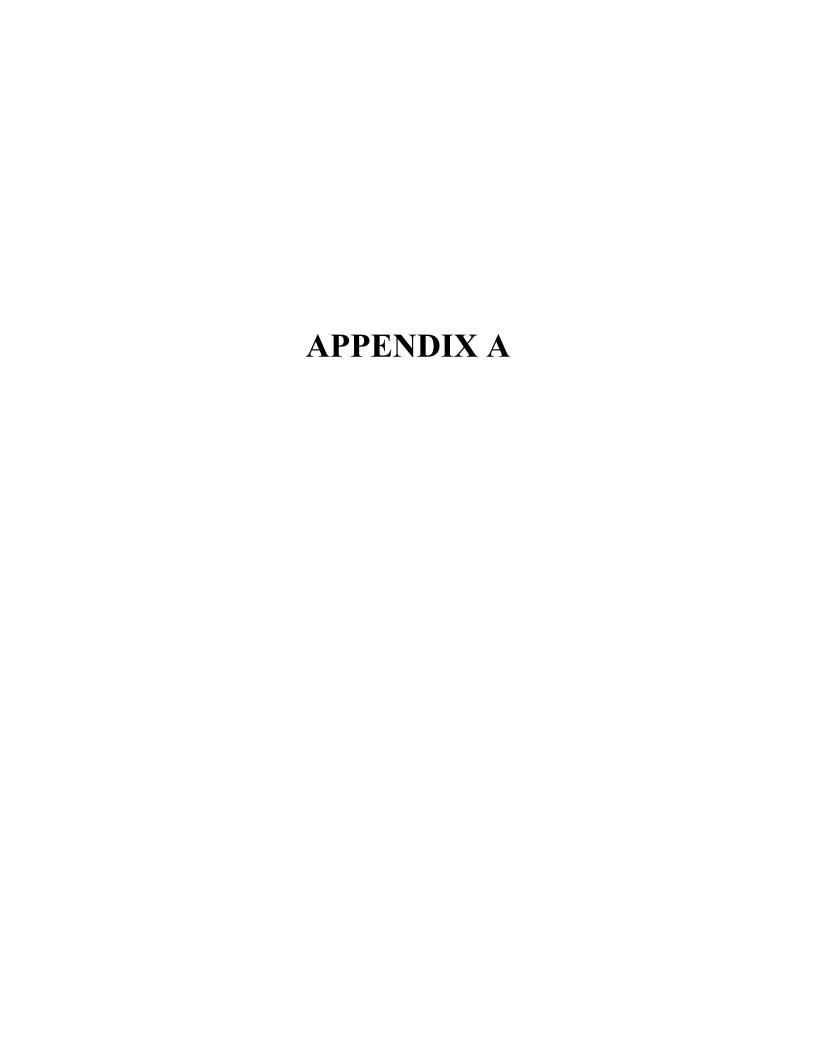
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⁴ In addition, the *Franklin* decision came out of the Third Circuit Court of Appeals and is in no way a binding precedent in a case such as *Oracle*, which arose in the

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United States Court of Appeals for the Federal Circuit

ORACLE AMERICA, INC. v. GOOGLE INC., 2013-1021, -1022

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I, Robyn Cocho, being duly sworn according to law and being over the age of 18, upon my oath depose and say that:

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