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20   UNITED STATES DISTRICT COURT

21   NORTHERN DISTRICT OF CALIFORNIA

22   SAN FRANCISCO DIVISION

23 ORACLE AMERICA, INC. | Case No. CV 10-03561 WHA

24   Plaintiff, | **ORACLE'S TRIAL BRIEF**

25   v.

26 | Trial Date: October 31, 2011
    GOOGLE INC. | Dept.: Courtroom 8, 19th Floor
27 | Judge: Honorable William H. Alsup
             Defendant.
28

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I.   INTRODUCTION AND OVERVIEW

Oracle will prove at trial that Google deliberately chose to base its Android software platform on Java technology, seeking to develop and deploy Android rapidly and to capitalize on the large community of Java software developers. ██████████████████████████

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██ (Trial Ex. 7). Google chose to take its chances and push forward with Java, helping itself to Oracle's intellectual property without a license. Oracle will prove at trial that Google's Android software platform infringes (1) Oracle's copyrights in its Java software platform, and (2) six of Oracle's Java-related patents.

The evidence of Google's copyright infringement is overwhelming. To attract Java programmers to Android, Google copied the design specifications of at least 37 application programming interface packages ("APIs") for Java's *core* libraries into Android's core libraries. The designs for those 37 Java APIs, spanning 11,000 printed pages, contain the carefully-wrought architecture for thousands of individual Java class files, methods, and data fields at the core of the Java platform. The API designs detail the relationships and complex interdependencies among these thousands of elements, and contain highly original and creative expression. The 37 APIs that Google copied constitute a substantial and vital chunk of Java's core libraries (37 out of 166 APIs in Java Development Kit Version 5). Furthermore, notwithstanding Google's claim that it developed Android in a "clean room," it also copied proprietary Java source code, object code and comments in 12 software files.

Oracle will ask the Court, after hearing the evidence, to instruct the jury that the API specifications and the copied code are protected by copyright. The Court has already rejected Google's primary argument – that the API specifications are methods of operation – and Google does not contest that software code is copyrightable. A finding of infringement inevitably follows from a determination that the works are protected by copyright, because this is not a case where Google denies access or copying. ██

██████████████████████████████████████ Google's copyright expert also

1   acknowledges that Android copies the names and organization of the APIs. And Google does not

2   dispute copying the 12 source code files. The only issue will be whether the copying is justified

3   under Google's affirmative defenses.

4   The evidence of Google's patent infringement is equally strong. Google chose to model

5   Android on the key features of the Java software platform and development environment. As a

6   result, Android faced many of the same technical challenges that Oracle did with Java and, not

7   surprisingly, adopted many of the same technical solutions to those problems. Some of the most

8   important of those solutions are the subject of the six Java-related patents.

9   Oracle will rely in large part on the Android source code to prove that the accused

10 functionalities infringe each of the asserted claims. In addition, it will show that in blog postings

11 and public presentations, the Android engineers discussed in detail the features of Android that

12 are covered by the six Java-related patents, often in language that directly tracks the patent

13 claims. Similarly, Google engineers' comments in the Android source code confirm that the

14 patented features are included in Android.

15   Google's infringement was willful from the very beginning. ▇▇▇▇▇▇▇▇▇▇▇▇▇

16 ▇▇

17 ▇▇▇

18 ▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇ Indeed, even after Oracle's legal team

19 presented patent infringement charts to Google's lawyers on July 20, 2010, Google continued to

20 make Android available on its website and even created new versions of the platform.

21 Management repeatedly signed off on Android releases notwithstanding Oracle's patent

22 assertions. Google proffers no advice of counsel or other analysis to defend its conduct.

23   Google's damages expert says that Android is losing money. But the truth is that Android

24 is wildly successful, and is one of the most popular technology products in the world today.

25 550,000 new Android devices are activated every day. Google Chairman Eric Schmidt has

26 publicly touted Android's profitability, telling the market that Android revenues are "enough to

27 pay for all of the Android activities and a whole bunch more." ▇▇▇▇▇▇▇▇▇▇▇▇

28 ▇▇▇

1   █████████████████████████████████████ Moreover, Google's own

2 documents show this is just the tip of the iceberg of Android's value to Google. Google's use of

3 Java technology enabled Google to bring Android to market quickly, and ███████████████

4 ██

5 ████████████████████████████ Google estimates that the real value of Android

6 could eventually become up to $10 billion per year.

7   Google's success has come at Oracle's expense. Of course, Google must pay for the right

8 to use Oracle's intellectual property. But Oracle has suffered harm far beyond a lost license fee.

9 By incorporating the specific copyrighted works and patented inventions into Android and giving

10 Android away for free, Google has undermined Oracle's ability to license Java to wireless device

11 manufacturers. Sun was forced to abandon its project for a Java-based smartphone software stack

12 in the wake of Android's launch, realizing that there was no way to compete with a free product.

13 Worse still, because Android exploits Java but is not fully compatible with it, Android represents

14 Sun's, and now Oracle's, nightmare: an incompatible forking of the Java platform, which

15 undermines the fundamental "write once, run anywhere" premise of Java that is so critical to its

16 value and appeal. Oracle, as the owner and steward of the Java platform, has a vested interest in

17 avoiding platform fragmentation and facilitating an active Java developer community. Google is

18 fully aware of the importance of preventing fragmentation. Ironically, one of the reasons that

19 Google chose to build its platform on Java was its lack of fragmentation. ████████████

20 ██

21 ██████████████████████████████ The harm from this continued fragmentation,

22 from a product that is rapidly becoming one of the most widespread operating systems in the

23 world, is irreparable and beyond quantification. Oracle will ask the Court to issue an injunction

24 after the trial unless Google agrees to take immediate steps to remedy the fragmentation that has

25 already occurred, and further agrees that the fragmentation will stop.

26

27

28

1   ## II.   BACKGROUND OF JAVA AND ANDROID

2   ### A.   Oracle and Java

3   On January 27, 2010, Oracle Corp. acquired Sun Microsystems, Inc., merged it into

4   Oracle USA, Inc., a wholly owned subsidiary of Oracle Corp., and renamed it Oracle America,

5   Inc. ("Oracle"). One of the most important Sun technologies Oracle acquired was the Java

6   platform and associated intellectual property. After licensing negotiations between Oracle and

7   Google failed (and following several years of unsuccessful licensing discussions between Sun and

8   Google), Oracle filed this complaint against Google on August 12, 2010.

9   The Java platform is a bundle of programs, specifications, reference implementations, and

10   developer tools that allow developers to write applications in the Java programming language and

11   device manufacturers and users to deploy those applications on servers, desktops, mobile devices,

12   and other devices. Java was designed to achieve "write once, run anywhere" capability, a goal

13   that it achieved, as evidenced by its widespread adoption in the computer programming

14   community. The fundamental idea is that a software developer writes application source code

15   using the Java programming language, compiles it once into an intermediate form known as Java

16   "bytecode," and distributes the bytecode to users. Users' computers are configured with a pre-

17   installed Java "virtual machine" or "JVM" that was written for the user's particular computer

18   architecture. The Java bytecode application executes "on top" of the JVM. The JVM presents a

19   consistent interface to the bytecode application programs, so the same application bytecode can

20   run on any computer that has a JVM. This means application developers only have to write their

21   source code once, and it can run on any device containing a JVM, instead of writing a different

22   version compatible with each device.

23   Interposing a virtual machine between the application code and the machine created

24   significant technical challenges. Sun's engineers developed new technologies that overcame

25   those challenges. Among other things, they developed enhancements to improve performance

26   speed and efficient memory usage in mobile devices. They also innovated in the area of security

27   to address the many sources of Java programs available over the Internet. These efforts have

28

1   resulted hundreds of Java-related patents, including the six Java-related patents asserted in this

2   case.

3   The Java class libraries that Sun developed are important components of the Java

4   platform. The class libraries help application developers program more efficiently by supplying

5   pre-written code for various applications, thereby obviating the need to write such code from

6   scratch. The APIs are the blueprints to the class libraries, providing not just the names and

7   hierarchical structure of thousands of elements (classes and "interfaces" and associated methods

8   and data "fields"), but also the interdependencies among the various elements and the extent to

9   which they are exposed to one another. Long-time Java programmers have come to expect Sun's

10   particular API designs and class libraries to be present in Java-based platforms.

11   Oracle estimates that the Java platform has attracted more than 6.5 million software

12   developers, and that more than 1.1 billion desktop computers and 3 billion mobile phones run

13   Java. Oracle distributes the Java platform under a variety of licensing terms, all of which share

14   one common goal: protecting compatibility and thereby ensuring "write once, run anywhere."

15   This is the core value proposition for application developers and the bedrock of a positive

16   feedback loop that drives Java's success. As the Java website explains: "A marketplace flooded

17   with proprietary code that varies from the official specification, or worse, parallel platform

18   versions, would 'fork' the platform, eliminating its basic 'Write Once, Run Anywhere'

19   compatibility foundation." Oracle, and Sun before it, has gone to great lengths to prevent

20   incompatible forks.

21   **B.   Google and Android**

22   The Android operating system software "stack" consists of applications written in the Java

23   programming language, a Java-based application framework, and Java core class libraries, all

24   running on a "Dalvik" virtual machine (Android's version of the JVM). Android first compiles

25   Java application source code into Java bytecode, and then transforms the Java bytecode into

26   Android bytecode known as "DEX."

27   From the very beginning, Google built Android to be a Java operating system. Google

28   knew that it had no effective alternatives if it wished to develop and offer a mobile platform

1 quickly that would appeal to users and application developers on whose efforts the competitive

2 success of a platform depends.

3 Google invites Android application developers to program in the Java programming

4 language using the Android software development kit ("SDK"). The Android SDK provides the

5 tools and APIs necessary to develop applications on the Android platform using the Java

6 programming language. Google also makes available Java "class library APIs," which are

7 aspects of the Java programming interface. Google's expert testified that, once it chose to base its

8 platform on Java, Google was "practically required" to include these APIs.

9 Because the output of Android software developers is not Java bytecode but Android's

10 DEX bytecode, Android applications cannot run on Java virtual machines even though originally

11 written in the Java programming language. This disrupts the Java ecosystem and destroys the

12 write-once/run-anywhere paradigm that drove Java's acceptance. Android thus represents the

13 highly injurious fragmentation of Java that Sun and Oracle have worked assiduously to prevent.

14 Google developed Android with the expectation that it would be widely adopted and

15 profitable for Google by: (1) generating significant advertising revenue streams from Google

16 search and other Google applications on Android devices; and (2) reinforcing Google's dominant

17 position in search and advertisements by ensuring its access to and position in the increasingly

18 important mobile marketplace. Google believed it was critical to bring its Android mobile

19 platform to market quickly, fearing dramatic decline if it failed to do so. (Trial Ex. 370 ███

20 ███

21 **III. GOOGLE'S COPYRIGHT INFRINGEMENT**

22 **A. Direct Copyright Infringement**

23 Oracle will prove that Google is liable for copyright infringement based on Google's

24 substantial copying of 37 API design specifications from Java's *core* libraries, and software code

25 from Oracle's Java software platform.

26 To prevail on copyright infringement, Oracle must show that: (1) it owns the copyrights;

27 and (2) Google copied original elements of the copyrighted APIs and code. *Jada Toys, Inc. v.*

28 *Mattel, Inc.*, 518 F.3d 628, 637-38 (9th Cir. 2008). Oracle's Java-related works at issue in this

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1   case are registered with the Copyright Office, establishing Oracle's ownership of the copyrights-

2   in-suit. Google does not deny that it copied the API specifications and source code.

3   In developing Android, Google employees and contractors deliberately copied the 37 Java

4   API design specifications, containing the fundamental structure for much of the Java core class

5   libraries. The "core" libraries are at the heart of the Java platform, providing foundational

6   support for all applications running on the JVM. These APIs had been carefully and

7   painstakingly designed by Sun engineers. Designing APIs for a complex modern software

8   platform like Java is a highly creative, intellectually demanding endeavor. Google's own expert

9   acknowledged that designing APIs "certainly has creative elements" and he testified that:

10   "[W]e've been writing software for more than 50 years. And it's still incredibly difficult, despite

11   all the advances that have been made in languages, in libraries, APIs are one of the things,

12   although they're not software, they're related to software that it's still hard to do." In the words

13   of Google engineer and API designer Joshua Bloch, who formerly worked for Sun and designed

14   many of the APIs at issue, "API design is an art, not a science." Oracle will present evidence at

15   trial showing the many different and complex expressive choices that were made in designing the

16   Java APIs. This design is set forth in the API specifications themselves and is incorporated into

17   the Java source code that implements them.

18   Google engineers have admitted to consulting the Java API design specifications while

19   designing Android. Former Google engineer Robert Lee was the lead core library developer for

20   Android. He testified that he was tasked to ████████████████████████████

21   ██████ To this end, Google copied the 37 core Java API specifications into the Android API

22   specifications, and incorporated the Java API specifications and their design into the Android

23   source code, creating derivative works. Mr. Lee acknowledged that ███████████████

24   ██████████████████████████████████ Google engineers also testified that they

25   based some of Android on code obtained from the Apache Software Foundation's implementation

26   of Java known as "Harmony." But Google was well aware that the Harmony version of Java was

27   not licensed for use in mobile phones. This was the topic of a widely publicized dispute between

28   Sun and Apache. Google knew it should not have been copying from Harmony for Android.

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1   And even if this were not the case, Google cannot excuse its copyright infringement by claiming

2   that it copied from a third party, even if it thought the party was licensed. *Pye v. Mitchell*, 574

3   F.2d 476, 481 (9th Cir. 1978).

4   Android engineers also directly copied source code into Android from 11 Java code files

5   into 12 files of its own. ██

6   ██

7   ████████████████████████████████████   Google also copied object code for eight other Java files, de-

8   compiled it to source code, and copied the source code from the file into Android. Google copied

9   significant portions of comments from two additional files. The evidence of this copying is

10   compelling, and Google has never attempted to deny it.

11   **B.   Indirect Copyright Infringement**

12   Under Ninth Circuit law, as a consequence of Google's *direct* infringement, Oracle is

13   entitled to recover profits Google received from the further copying and exploitation of its

14   infringing work by others in the United States or abroad. *L.A. News Serv. v. Reuters Tv Int'l*, 340

15   F.3d 926, 931-32 (9th Cir. 2003). Google is liable for indirect copyright infringement as well,

16   based on the direct infringement of mobile device manufacturers, carriers and developers.

17   Google is liable for contributory infringement. To prove contributory infringement,

18   Oracle must show that: (1) Google knew or had reason to know of the infringing activity of

19   others; and (2) Google intentionally or materially contributed to the infringing activity of others.

20   *Louis Vuitton Malletier, S.A. v. Akanoc Solutions, Inc.,* No. 10-15909, No. 10-16015 2011 U.S.

21   App. LEXIS 18815, at *12-15 (9th Cir. Sept. 9, 2011).

22   The Ninth Circuit recently addressed the question of contributory copyright infringement

23   in *Louis Vuitton.* It held that: "Material contribution turns on whether the activity in question

24   'substantially assists' direct infringement." *Id.* at *13 (citation omitted). The Ninth Circuit found

25   there was contributory infringement in the *Louis Vuitton* case because the defendant's hosting of

26   servers was "an essential step in the infringement process." *Id.* at *13-14 (citation omitted).

27   Google "substantially assisted" the direct infringement of mobile device companies (OEMs),

28   carriers, and developers by distributing infringing copies of Android source code and binary code

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1   by making it available to them for download. Google requires its OEMs to maintain the full set

2   of Android APIs in Android devices ─ including the 37 core APIs it copied from Oracle ─ to

3   prevent fragmentation of the Android platform. Google's Android "anti-fragmentation" license

4   provides that "[d]evice implementations MUST NOT omit any managed APIs," and "MUST

5   NOT modify the publicly exposed APIs on the Android platform" and "MUST NOT add any

6   publicly exposed elements . . . to the APIs." (emphasis in original). The infringing code was

7   copied by mobile device manufacturers, and distributed by these manufacturers and carriers who

8   sold the Android mobile devices that contain them. Google also does not dispute that the

9   "rangeCheck" █████████████████████████████████████ has been included on

10   many generations of Android devices, and so has been copied and distributed as well. Developers

11   copy the infringing code from Google's website when they download the Android SDK, as

12   Google requires, to do their development work. Each of these activities is an "essential step" in

13   the infringement process and thus Google is liable for contributory infringement.

14   The Ninth Circuit emphasized in *Louis Vuitton* that no finding of intent is required for

15   contributory copyright infringement: "We have never held that an express finding of intent is

16   necessary to support liability for contributory copyright infringement. To the contrary, we have

17   held that 'intent may be imputed' as a result of 'a service provider's knowing failure to prevent

18   infringing actions.'" *Id* at *12-13 (quoting *Perfect 10, Inc. v. Amazon.com,* 508 F.3d 1146, 1172

19   (9th Cir. 2007)). Here, Google not only failed to prevent infringing actions – it actively

20   encouraged them.

21   Google is similarly liable for vicarious infringement. To prove vicarious infringement,

22   Oracle must show that: (1) Google profited directly from the infringing activity of the mobile

23   device manufacturers, application developers, and end-users; (2) Google had the right and ability

24   to supervise and control the infringing activity of those parties; and (3) Google failed to exercise

25   that right and ability. *MDY Indus., LLC v. Blizzard Entm't, Inc.*, Nos. 09-15932, 09-16044, 2011

26   U.S. App. LEXIS 3428, at *10 (9th Cir. Feb. 17, 2011). Google is profiting to the tune of

27   hundreds of millions in dollars in advertising revenue alone based on this infringing activity. The

28   Android licenses, with their anti-fragmentation requirements, prove that Google had the "right

1   and ability to supervise and control the infringing activity." Google not only failed to stop the

2   infringing activity, Google actually *requires* it.

3   **IV.   GOOGLE'S PATENT INFRINGEMENT**

4   **A.   Direct Patent Infringement**

5   Oracle will prove that Google has directly infringed the six Java-related patents by

6   making, using, offering to sell, selling, or importing devices running Android or the Android

7   SDK. The 26 asserted claims of the six Java-related patents include method, apparatus, and

8   computer-readable medium claims. Many of the asserted claims can be grouped into pairs or

9   triples, with each claim in the group having the same technical substance, but drafted as a

10   different type (method, apparatus, or CRM). Google's Android software is the linchpin of the

11   infringement of each type of claim. Installing Android software on a device creates a system that

12   infringes apparatus claims, using the Android device infringes the method claims, and the

13   Android device's storage media infringes the computer-readable media claim. Similarly, for two

14   of the patents (the '702 and '520), infringement of the apparatus, method, and CRM claims

15   occurs, respectively, through installation, use, and storage of the Android SDK on a computer to

16   write Android applications. In each case, infringement arises from meeting identical limitations

17   in all of the claim types.

18   To prevail on direct infringement, Oracle must show that Android, or the use of Android,

19   satisfies each and every requirement of the asserted claims. *Uniloc USA, Inc. v. Microsoft Corp.*,

20   632 F.3d 1292, 1301 (Fed. Cir. 2011). Oracle's evidence of Google's infringement will include

21   (1) a detailed analysis of Android source code performed by Oracle's experts, (2) the testimony of

22   Google engineers who developed Android, and (3) numerous comments in the Android source

23   code, Google e-mails, blog postings, and public presentations describing the infringing Android

24   functionality in a manner that often directly tracks the claim language.

25   Separately and together, the six Java-related patents cover innovations that are crucial to

26   the viability of Android's virtual-machine-based architecture. The internal e-mails among the

27   Android developers reveal that the Java virtual machine was essential to Android: e.g., ███

28   ██

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2　(Google engineer Brian Swetland, Trial Ex. 7). The six Java-related patents cover features

3　designed to enhance performance speed and memory efficiency of the Java virtual machine, as

4　well as provide a robust security framework:

5　　　　*Reissue Patent No. RE38,104.* This patent covers systems and methods for resolving

6　"symbolic references" (i.e., name references in bytecode for classes, methods, fields, or strings)

7　into numerical references (references by memory location). Oracle will show that the asserted

8　claims are infringed by Android's Dalvik virtual machine and dexopt software, both of which

9　resolve symbolic references in the bytecode into numeric references indicating memory locations.

10　　　　*Patent No. 6,910,205.* This patent increases the execution speed of bytecode instructions

11　by modifying them to represent or reference "native" machine instructions. Oracle will show that

12　the asserted claims are infringed by Android's dexopt software and Just-In-Time compiler, both

13　of which translate certain bytecode instructions into new instructions that reference or represent

14　native code.

15　　　　*Patent No. 5,966,702.* This patent saves memory space by removing from individual

16　class files certain code and data that are redundant across multiple class files and placing them in

17　a "shared constant pool table." The resulting "reduced class files" are packaged together in a

18　multi-class file. Oracle will show that the asserted claims are infringed by Android's dx tool,

19　which pre-processes class files to identify and remove duplicated constant pool entries, places

20　them into a shared table, and forms a multiclass file of reduced class files and the shared table.

21　　　　*Patent No. 7,426,720.* The asserted claims relate to a method for improving application

22　startup time and preserving memory space by running applications in separate virtual machines

23　created using a "copy-on-write" cloning mechanism. Application programs share a memory

24　space until one needs to "write" to that space, at which point, a copy of that space is made, thus

25　minimizing the amount of memory needed. Oracle will show that the asserted claims are

26　infringed by Android's zygote software, which clones a child Dalvik virtual machine from a

27　master Dalvik virtual machine for each new application launched using a copy-on-write cloning

28

1   mechanism that defers copying of the shared memory space until a process attempts to write to a

2   portion of the shared memory space.

3   *Patent No. 6,061,520.* The claimed invention simulates or "play executes" a program to

4   create a reduced number of instructions to perform the same operation. Oracle will show that the

5   asserted claims are infringed in part by Android's dx tool, which simulates execution of bytecode

6   to identify the static initialization of an array.

7   *Patent No. 6,192,476.* The claimed invention provides a security mechanism in which

8   objects are allowed to perform only the actions specified in the "protection domains" associated

9   with their classes. Although Google claims that Android does not use the Java security

10 mechanism, the infringing code was indisputably included in all Android versions prior to the

11 most recent release, allowing Android implementers the option of utilizing the Java security

12 framework.

13   The evidence of Google's infringement will not be difficult for a jury to follow, as it

14 includes comments in Google documentation describing Android's features in language that

15 plainly tracks the patent claims. For instance, engineer comments in the Android source code

16 show that Android resolves "symbolic references" (the term used in the '104 patent claims) into

17 memory location references, infringing the '104 patent:

```
        /*
         * Link (prepare and resolve). Verification is deferred until later.
         *
         * This converts symbolic references into pointers. It's independent of
         * the source file format.

 (Comments for "dvmLinkClass" routine in dalvik\vm\oo\Class.c)
```

23   Similarly, internal Google documents reveal that Android includes a "shared constant

24 pool" (the claim language of the '702 patent) for storing redundant items from multiple class

25 files, infringing the '702 patent: ███████████████████████████

26 ████████████████████████████████████Android Product

27 Requirements, Trial Ex. 141).

28

1   Google's own technical descriptions of Android show the substantial benefits of the

2   patented features to the speed and memory efficiency of Android devices. For example, in a

3   public video, Google engineer Dan Bornstein discussed the performance benefits of symbolic

4   reference resolution, the technology of Oracle's '104 patent:

5   We do optimization. . . . *we have a bunch of other things that we do*
         such that when, when it comes time to run, we can run that much
6   *faster.* So as an example of static linking, before, when, when a dex
         files arrives on a, on a device it will have *symbolic references to*
7   *methods and fields*, but afterwards it might just be a simple, a simple
         integer v-table offset.
8

9   (Google I/O Android Video on "Dalvik Virtual Machine Internals" by Dan Bornstein (2008).)

10   The performance benefits of the patented features were confirmed through performance

11   tests conducted by Oracle's experts. In summary, the tests showed that the patented features

12   substantially increase application execution speed on Android devices (as much as 13 times faster

13   for some of the patented features), and save memory by as much as 40%, which ultimately

14   prolongs battery life. A survey conducted by another Oracle expert demonstrates user demand for

15   faster application launch times and greater multitasking capability, characteristics enhanced by the

16   patented inventions.

17   **B.   Indirect Patent Infringement**

18   Oracle will prove that Google has contributed to infringement by mobile device

19   manufacturers, mobile service providers, developers, and end-users of Android, and actively

20   induced them to infringe the asserted claims. To prevail on contributory infringement, Oracle

21   must show that: (1) Google supplied an important component of the infringing part of the

22   product; (2) the component is not a common component suitable for non-infringing use; and (3)

23   Google supplied the component with knowledge of the Java-related patents (or having willfully

24   blinded itself to their existence) and knowledge that the component was especially made or

25   adapted for use in an infringing manner. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377

26   U.S. 476, 487-93 (1964); *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1303 (Fed. Cir. 2006) (en

27   banc).

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1   To prevail on active inducement, Oracle must show that: (1) Google took action intending

2 to cause acts by purchasers, licensees, and users of Android; (2) Google was aware of the six

3 Java-related patents (or had willfully blinded itself to their existence) and knew or should have

4 known that the acts, if taken, would constitute infringement of those patents; and (3) the acts were

5 actually carried out by the purchasers, licensees, and users of Android and directly infringed that

6 claim. *DSU Med. Corp*, 471 F.3d at 1304.

7   Oracle will show that Google has indirectly infringed the asserted claims by distributing

8 the Android platform to mobile device manufacturers, mobile service providers, developers, and

9 end-users, and encouraging them to use it without modification. Google uses the "Android"

10 trademark and ███████████████████ as a "carrot" for compliance with Google's

11 detailed compatibility requirements for Android devices. Among other things, Google's

12 Compatibility Definition Document prohibits most changes to the Java APIs within Android

13 ("Device implementations MUST NOT modify the publicly exposed APIs on the Android

14 platform by changing any method or class signatures"), and prohibits or discourages changes to

15 the infringing Dalvik virtual machine ("Device implementations MUST support the full Dalvik

16 Executable (DEX) bytecode specification and Dalvik Virtual Machine semantics"). Google also

17 encourages Java programmers to develop Android applications using the infringing Android

18 SDK. The testimony and documents of Google personnel, as well as testimony from a corporate

19 representative of Motorola Mobility (a major Android device maker), will show that Google goes

20 to great lengths to prevent mobile device manufacturers from fragmenting Android, and in doing

21 so, ensures that they do not modify the patented source code features.

22   **1.   Google's Willful Blindness**

23   In order to establish the "intent" prong of contributory infringement and infringement by

24 inducement, Oracle need not prove that Google had actual knowledge of the six Java-related

25 patents. Instead, as the Supreme Court recently held in *Global-Tech Appliances, Inc. v. SEB S.A.*,

26 Oracle can establish that Google had the requisite intent by showing that Google took deliberate

27 actions to avoid learning of the Java-related patents. 131 S. Ct. 2060, 2067, 2070-71 (2011).

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1   Google's jury instructions studiously avoid any reference to *Global-Tech's* willful blindness

2   standard, relying instead on model instructions decided four years before.

3   To prove willful blindness, Oracle must show that: (1) Google subjectively believed that

4   there was a high probability that Oracle had protective patents covering the Java platform; and

5   (2) Google took deliberate actions to avoid learning of that fact. *Global-Tech Appliances*, 131 S.

6   Ct. at 2070-71.

7   Oracle will show that Google knew Sun had a broad patent portfolio covering the Java

8   platform. Mr. Rubin, the head of Google's Android division, knew that Sun had intellectual

9   property covering Java from as early as 2003, when his company, Danger Inc., took a Java license

10   from Sun. He subsequently negotiated with Sun for a Java license while at Android Inc. and then

11   at Google. In late 2005 and 2006, after Google acquired Android Inc., Sun and Google discussed

12   a collaboration to incorporate Java technology into what became the Android operating system.

13   In 2008, Sun and Google engaged in further discussions. In the spring and summer of 2010,

14   before the filing of this lawsuit in August 2010, Oracle and Google had another series of meetings

15   to discuss a Java license for Android. ███████████████████████████████

16   ██████████████████████████████████████

17   Moreover, in a July 20, 2010 meeting, Oracle presented to Google the six Java-related patents

18   that are now at issue in the lawsuit. Given the history of licensing negotiations between Google

19   and Sun/Oracle, Google cannot deny that it knew Java was subject to intellectual property

20   protection and that Google needed a license to use it.

21   Furthermore, internal Google documents will show that Mr. Rubin and other Google

22   employees were aware that Sun had Java-related intellectual property rights. And Google hired

23   over one hundred former Sun employees, including four of the inventors of the asserted patents

24   (Lars Bak, Frank Yellin, Robert Griesemer, and James Gosling), several Sun Java engineers who

25   became key Android developers (Joshua Bloch and Tim Lindholm), and Sun's former CTO, Eric

26   Schmidt, who became Google's CEO and Chairman. The inventors were, of course, heavily

27   involved with the development of the Java virtual machine at Sun (Mr. Gosling, in particular, is

28   regarded as the father of the Java platform). Messrs. Bloch and Lindholm were also closely

1   involved with the JVM (Mr. Lindholm was co-author of the official Sun book on the JVM). And

2   Mr. Schmidt, as Sun's CTO, was intimately familiar with Java. With this large and

3   knowledgeable cast of former Sun personnel in its employ, Google cannot deny that it was aware

4   of Sun's Java intellectual property portfolio and licensing practices. Oracle will show that despite

5   its knowledge of the high probability that Android infringed Sun's Java-related patents, Google

6   made a deliberate choice not to investigate the patents in order to avoid learning of that fact.

7   Google's willful blindness to the existence of the Java-related patents satisfies the "intent" prong

8   of Oracle's indirect infringement claims.

9   **2.   Google Cannot Escape Liability By Claiming That Android is Free**

10   Google contends that because it ostensibly makes Android available without monetary

11   charge, it cannot be liable under §§ 271(a) or 271(c) for "offer[ing] to sell, or sell[ing]" Android.

12   But there is no basis for exempting no-charge products from infringement liability under the

13   statute. Google does not contest that it can still be liable under § 271(a) because it "makes" and

14   "uses" Android. Courts have held that giving away a product is a "use" under § 271(a),

15   particularly when the infringer derives economic gain from the product. There is no sound reason

16   why no-charge products liable for direct infringement under § 271(a) should be exempt from

17   contributory infringement under § 271(c). Moreover, Android is not given away free of

18   obligation, as Google requires OEMs to comply with its compatibility requirements if they wish

19   to benefit from use of the Android trademark and Google's Android applications store.

20   Courts have held that giving away an infringing product without charge is a "use" under

21   § 271(a). *Northbrook Digital, LLC v. Vendio Servs. Inc.*, 625 F. Supp. 2d 728, 754 (D. Minn.

22   2008) (holding that free software may "use" accused technology and infringe under § 271); *Thorn*

23   *EMI N. Am., Inc. v. Micron Tech., Inc.*, 821 F. Supp. 272, 275 (D. Del. 1993) ("because delivery

24   of free samples of allegedly infringing samples tangibly impinges on the patentee's monopoly

25   rights in a way that ordinary solicitation does not, such delivery must be regarded as 'use' of an

26   allegedly infringing product for the purposes of § 271(a)"). Liability for the distribution of no-

27   charge products is particularly appropriate where the infringer derives an economic gain from

28   distribution of the product. *See Northbrook*, 625 F. Supp. 2d at 755 n.5 ("Because usage is a

1   sufficient theory to establish jurisdiction over the infringement claims here, it is not necessary to

2   consider whether Vendio derives any other economic gain that may constitute a sale under

3   § 271(a). But there is little question that, even though Vendio distributes Dealio software for free,

4   it does so to its commercial advantage.").

5   There is no question that Google derives a huge economic benefit from its distribution of

6   Android, including millions of dollars in advertising revenue generated from Android devices.

7   Given the economic gain it derives from Android, it would make no sense to exempt Google's

8   distribution of Android from triggering contributory infringement liability under § 271(c).

9   Google has offered no authorities to support such an exemption.

10   **C.**   **Google's Invalidity Contentions**

11   Google's primary defense against Oracle's patent claims is the asserted invalidity of the

12   six Java-related patents, as well as a claim of patent unenforceability due to implied license,

13   laches, estoppel, and waiver. No doubt recognizing the deficiencies of its original invalidity

14   contentions, Google sought leave to supplement those contentions, but the Court mostly denied

15   Google's proffered supplementation as untimely. Google is now left with a narrowed group of

16   invalidity contentions, many of them based on tenuous obviousness assertions.

17   Oracle will oppose any effort by Google to assert invalidity contentions that it was not

18   granted leave to include in its supplemental contentions. In particular, Google still purports to

19   assert its "printed matter" defense under 35 U.S.C. §§ 101 and 102 against Claim 19 of the '720

20   patent and Claim 14 of the '476 patent, even though the Court denied Google's request to

21   supplement its contentions to provide further elaboration on this defense. (Dkt. 281 at 7.) This

22   printed matter defense was not timely disclosed and is not properly in the case. Similarly, Google

23   should not be permitted to assert any invalidity grounds not included in its Court-ordered

24   selection of contentions.

25   **V.**   **GOOGLE'S WILLFUL INFRINGEMENT**

26   **A.**   **Willful Infringement**

27   Oracle will prove that Google willfully infringed the copyrights-in-suit and the six Java-

28   related patents. To prevail on willful copyright infringement, Oracle must show that (1) Google

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1   was actually aware of the infringing actions; or (2) Google's actions were the result of reckless

2   disregard for, or willful blindness to, Oracle's rights. *Louis Vuitton Malletier,* 2011 U.S. App.

3   LEXIS 18815, at *15. To prevail on willful patent infringement, Oracle must show that: (1)

4   Google acted despite a high likelihood that Google's actions infringed a valid and enforceable

5   patent; and (2) Google actually knew or should have known that its actions constituted an

6   unjustifiably high risk of infringing a valid and enforceable patent. *In re Seagate Tech., LLC*, 497

7   F.3d 1360, 1371 (Fed. Cir. 2007).

8   Oracle will show that Google knew or willfully blinded itself to the fact that the Java

9   platform is protected by the Java-related copyrights and patents, that Google infringed the

10   copyrights and patents anyway, and that it contributed to and induced others to infringe them as

11   well. There can be no question that Google knew Java was a proprietary technology subject to

12   copyright and patent protection and that it needed a license to use it for Android. As previously

13   described, the history of Java license negotiations in which Mr. Rubin and Google were involved

14   unequivocally demonstrates Google's knowledge. Internal communications at Google reveal that

15   the company was well aware of the need to license Java technology for use in Android, and that it

16   deliberately chose to proceed without a license. And the numerous Sun personnel that Google

17   hired brought with them not only their knowledge of the Java technology, but also their

18   awareness of Sun's Java intellectual property and licensing practices.

19   Google argues that it cannot be liable for willful infringement prior to the time that it

20   became specifically aware of the six Java-related patents. The parties agree that Oracle presented

21   the six Java-related patents to Google at a meeting on July 20, 2010. Google insists that it had no

22   knowledge of the specific patents prior to that time, and so cannot be liable for willfulness.

23   Google is mistaken on the law.

24   Federal courts have found that specific knowledge of the patents is not necessarily

25   required to trigger a finding of willful infringement. The Federal Circuit in *Seagate* held that a

26   finding of willfulness requires a showing that "the infringer acted despite an objectively high

27   likelihood that its actions constituted infringement of *a valid patent*." *In re Seagate*, 497 F.3d at

28   1371 (emphasis added). District courts applying *Seagate* have found that specific knowledge of

1   the patents is not required if the infringers had enough information that they knew or *should have*

2   *known* their actions constituted an unjustifiably high risk of infringing a valid patent. *Krippelz v.*

3   *Ford Motor Co.*, 636 F. Supp. 2d 669, 671, n.2 (N.D. Ill. 2009) ("Knowledge of [a] patent is not

4   the same thing as knowledge of the high likelihood that one's actions constituted infringement of

5   a valid patent"); *PalTalk Holdings, Inc. v. Microsoft Corp.*, No. 2:06-CV-367 (DF), 2009 U.S.

6   Dist. LEXIS 131087, at *6-7 (E.D. Tex. Feb. 2, 2009). In *PalTalk*, the court held that

7   "knowledge may be actual or constructive." *Id*. at 5. The patentee in that case identified

8   information in the defendant's possession that demonstrated the defendant's awareness of both

9   "the innovative characteristics of [patentee's] technology and [its] development of a patent

10 portfolio." *Id*. at 6-7. The court held that "[a] reasonable jury could find based on the direct and

11 circumstantial evidence presented that [defendant] had actual knowledge of the patents-in-suit."

12 *Id*. at 7.

13   Given all of the information that Google possessed regarding Sun's Java intellectual

14 property and the need to obtain a license for Java, Oracle will be able to demonstrate that Google

15 willfully infringed the six Java-related patents both before and after the July 20, 2010 meeting.

16   **B.   Willful Infringement as Part of the Liability Phase of Trial**

17   If this Court bifurcates the trial into liability and damages phases, the issue of willful

18 infringement should be tried during the liability phase. There is a significant overlap between the

19 evidence proving infringement and willful infringement. For example, numerous internal Google

20 documents on Android's architecture also discuss aspects of the Java platform and reveal

21 Google's knowledge of the need to take a Java license. Oracle also intends to examine the same

22 Google witnesses for both infringement and willful infringement.

23   The evidence of willful infringement is relevant to other issues that the jury must decide in

24 the liability phase as well. Oracle asserts that Google is liable for both direct and indirect

25 infringement of the Oracle patents. While the parties do not agree on the instructions for

26 willfulness or indirect infringement, they do agree that both require proof of knowledge and

27 intent.

28

1   Further, Google is asserting equitable defenses to infringement. Google has failed to

2 articulate factual bases for these defenses, but if Google is allowed to present them during the

3 liability phase, Google's evidence and Oracle's in response will bear directly on the issue of

4 willfulness. *See Haworth, Inc. v. Herman Miller, Inc.*, No. 1:92CV877, 1993 WL 761974, at *3-

5 4 (W.D. Mich. July 20, 1993) (willfulness to be tried in liability phase along with defendant's

6 equitable defenses since proof of willful infringement could provide a basis for the plaintiff to

7 negate the defendant's equitable defenses); *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, No.

8 CV 92-4698 JGD, 1994 WL 471414, at *2 (C.D. Cal. Mar. 3, 1994), *aff'd on other grounds*, 103

9 F.3d 1571 (Fed. Cir. 1997) (willfulness bears on equitable estoppel defense and thus should be

10 tried with liability).

11   These closely related issues would become intertwined at trial. *See Kos Pharms., Inc. v.

12 Barr Labs., Inc.*, 218 F.R.D. 387, 393 (S.D. N.Y. 2003) ("questions regarding infringement and

13 willfulness cannot always be neatly disaggregated into distinct evidentiary foundations grounded

14 on entirely different witnesses and documents"); *THK Am., Inc. v. NSK Co. Ltd.*, 151 F.R.D. 625,

15 629 (N.D. Ill. 1993) ("A willfulness determination . . . is a finding of fact inextricably bound to

16 the facts underlying the alleged infringement."). If the issue of willful infringement is left for the

17 damages phase, Oracle will need to present much of the same evidence again. Accordingly,

18 trying both infringement and willful infringement issues during the liability phase would promote

19 judicial efficiency, conserve judicial resources, and respect the time commitment asked of the

20 jurors.

21 **VI.   COPYRIGHT AND PATENT DAMAGES**

22   Oracle seeks damages for both copyright infringement and patent infringement

23 independently. For both copyright and patent infringement, Oracle seeks damages measured as a

24 reasonable royalty for the infringement. For copyright, Oracle will also offer evidence on an

25 alternative measure of damages, lost profits, as well as evidence of Google's profits attributable

26 to the infringement to the extent not included in the royalty or lost profits. Oracle contends that it

27 is entitled to treble damages based on Google's willful infringement of its patents, and that

28

1   Google may not be able to deduct certain of its overhead costs if the jury finds that it deliberately

2   plagiarized Oracle's copyrights.

3   A "reasonable royalty" is calculated based on a hypothetical license negotiation as of the

4   date infringement began. *See Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324-25 (Fed.

5   Cir. 2009). The hypothetical license would allow use of the infringed intellectual property in

6   exactly the way Google has used it: to create a mobile platform based on Java technology that is

7   incompatible with Oracle's Java platform and provides Google with two important benefits – a

8   pre-existing base of application developers and platform independence crucial to ensuring that it

9   continues to be the dominant provider of search and advertising on the Internet. In calculating a

10   reasonable royalty, key considerations will be the substantial losses that Sun anticipated as a

11   result of Android and the enormous gains that Google expected (and, in fact, has earned and will

12   earn) from Android.

13   **A.   Damages for Patent Infringement**

14   Following the methodology prescribed by the Court in its July 22, 2011 Order and the

15   case law (including *Georgia Pacific*), Oracle's damages expert calculated damages from patent

16   infringement based on an assessment of a reasonable royalty arising from a hypothetical

17   negotiation for a license that would enable Google's use of the specific infringed intellectual

18   property. To do so, the expert identified a reasonable starting point royalty, based on the actual

19   negotiations between the parties in 2005 and 2006 and the nature of the license that Google

20   assumed. As suggested by the Court, Oracle's damages expert used $100 million as an

21   appropriate "starting point."

22   Following the Court's direction, Oracle's damages expert next determined that substantial

23   upward adjustments are warranted to reflect the "use made of the invention by the infringer." *See*

24   35 U.S.C. § 284; *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y.

25   1970). The actual-world negotiations between Sun and Google contemplated a license that would

26   have guaranteed Android's compliance with Java's compatibility test kit ("TCK compliance")

27   and overall compatibility with Sun's Java platform, thereby providing Sun substantial benefits in

28   the form of convoyed sales (such as additional fees for customized source code) and further

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1 platform momentum, whereas the hypothetical license for use of Sun's Java IP to create Android

2 in the *incompatible* form in which it exists today eliminated these benefits and fragmented Java

3 technology.

4   Oracle's expert then used the opinions of technical experts, industry performance

5 benchmarks, economic data, a consumer survey, detailed statistical analyses, and Google's own

6 documents to determine the contributions of the particular infringed patents relative to the

7 "starting point," adjusting downward as a result. He further apportioned to limit damages to the

8 consequences of infringing acts performed within the United States, and concluded that a

9 reasonable royalty for the patents-in-suit, taken together and based only on those elements that he

10 was able to quantify is approximately $202 million through December 2011. He did not include

11 the substantial, but irreparable and unquantifiable harm from fragmentation in this figure.

12   Consistent with the Court's guidance that Oracle should also address the assumption that

13 an injunction may not be entered, Oracle's damages expert also noted that annual future damages

14 will likely be significantly higher than annual past damages because of the finding of liability,

15 changed market circumstances since the time of the original hypothetical negotiation, and the

16 growing significance of fragmentation as Android increasingly penetrates multiple markets.

17 Using the structure of the original hypothetical license, patent damages for 2012 alone would be

18 approximately $200 million.

19   **B.   Damages for Copyright Infringement**

20   As damages for Google's copyright infringement, Oracle is entitled to recover the actual

21 damages that Oracle suffered as a result of the infringement, and any of Google's profits that are

22 attributable to the infringement and are not taken into account in computing the actual damages

23 17 U.S.C.A. § 504.

24   With respect to actual damages for copyright infringement, Oracle's expert first calculated

25 actual damages as a reasonable royalty, using much the same approach as for patent damages.

26 *See Polar Bear Prods., Inc. v. Timex Corp.*, 384 F.3d 700, 707-08 (9th Cir. 2004). The value of

27 the copyright hypothetical license is $102.6 million. As an alternative measure of actual

28 damages, Oracle's expert calculated Oracle's lost profits, which are also significant. Oracle has

1 suffered reductions in its Java licensing revenue to mobile device and other manufacturers, as

2 well as lost profits from revenue it had projected to earn from the Java-based smartphone

3 platform development project that it discontinued because Google released an infringing,

4 incompatible Android for free. Actual damages measured as lost profits are $136.2 million.

5 Oracle's expert also analyzed Google's infringer's profits. On this issue, it is Google's

6 burden to prove its deductible expenses and to demonstrate the portion of its profits that is not

7 attributable to the infringed APIs, which even its own copyright expert recognizes "are necessary

8 for functionality, interoperability and programming efficiency." Infringer's profits are already

9 substantial and will be immense in the future. Although Google's damages expert offered no

10 independent apportionment analysis of his own, if the jury accepts that Google has carried its

11 burden on apportionment, Oracle's damages expert calculates past damages as infringer's profits

12 of $61.3 million; going forward, they could be in the hundreds of millions of dollars for 2012

13 alone.

14 **VII.   ISSUES TO BE DECIDED BY THE COURT**

15 Several important issues of law should be decided by the Court after hearing the evidence

16 at trial. The same is true for Google's equitable defenses.

17 **A.   Copyrightability of The 37 API Design Specifications and Copied Code**

18 The Court should instruct the jury on the copyrightability of the 37 core API design

19 specifications and the 12 source code files that Google copied. Copyrightability is a question of

20 law for the court. *See Jonathan Browning, Inc. v. Venetian Casino Resort LLC*, No. C 07-03983

21 JSW, 2009 U.S. Dist. LEXIS 57525, at *2 (N.D. Cal. June 18, 2009) ("Determinations of

22 copyrightability are indeed questions of law reserved for the judge, and not the jury."). The Ninth

23 Circuit has held that the court should determine both copyright protection and its scope. *Apple

24 Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1443, 1447 (9th Cir. 1994).

25 However, to the extent there are facts underlying copyrightability these may be for the

26 jury to decide. *See* 3-12 *Nimmer on Copyright* § 12.10[B][1] ("to the extent that the defendant

27 challenges the quantum of plaintiff's originality or creativity as a matter of law, or urges other

28 such legal challenges to copyright subsistence, these matters should be resolved solely by the

1   judge. But threshold factual determinations in this regard, of course, are for the jury.")   In

2   addition, courts in this Circuit recognize that originality is a question of fact. *Dongxiao Yue v.*

3   *Chordiant Software, Inc.,* No. C-08-00019, 2009 U.S. Dist. LEXIS 118824, at *7 (N.D. Cal. Dec.

4   21, 2009) ("Whether a work is sufficiently original to warrant copyright protection is a question

5   of fact.") (citing *Dezendorf v. Twentieth Century-Fox Film Corp.,* 99 F.2d 850, 850 (9th Cir.

6   1938). When there are no genuine issues of fact, originality may be resolved as a matter of law.

7   *Jacobsen v. Katzer*, No. C 06-01905 JSW, 2009 U.S. Dist. LEXIS 115204, at *9-10 (N.D. Cal.

8   Dec. 10, 2009).

9   In this case, Google purports to raise several factual issues relating to the copyrightability

10   of the APIs. Google contends, for example, that its copying of the APIs was required by

11   "industry demand." Google's Motion for Summary Judgement (Dkt. 260) at 21. It also tries to

12   justify its copying on the grounds of compatibility (*id*. at 19), even though it does not deny that

13   Android fragmented Java and is incompatible with it. Google is also challenging the originality

14   of the 37 API design specifications that it copied. Oracle does not believe that any of these

15   factual challenges are valid. But the Court should consider this evidence as it relates to

16   copyrightability and originality over the course of the trial, and determine if there are any issues

17   of fact for the jury to determine. Oracle believes the Court will conclude, as a matter of law, that

18   the 37 API design specifications are both original and copyrightable.

19   As described above, the API design specifications set forth a very intricate, and creative

20   design, that contains thousands of different elements and defines the many complex relationships

21   among them. Google cannot raise a serious challenge to the expressive nature of the APIs or their

22   originality.   Copyright law protects expression in software design, including the selection and

23   structure of software elements. Courts have recognized the copyrightability of programs with

24   much simpler structures than the Java API design specifications herethan Java. For example, the

25   Tenth Circuit upheld a district court's finding of likelihood of success on copyrightability of the

26   "organization, structure and sequence" of a computer program designed to teach reading skills,

27   including a "keying procedure" that required students to respond by pressing the 1, 2 or 3 keys.

28   *Autoskill, Inc. v. Nat'l Educ. Support Sys., Inc.*, 994 F.2d 1476, 1492, 1495 n.23 (10th Cir. 1993).

1   Similarly, in *CMAX/Cleveland, Inc. v. UCR, Inc.,* 804 F. Supp. 337, 355 (M.D. Ga. 1992), the

2   court held that the file structures for a software program design for companies in the "rent to

3   own" business constituted copyrightable expression. *See also Eng'g Dynamics, Inc. v. Structural*

4   *Software, Inc.*, 26 F.3d 1335, 1345-46 (5th Cir. 1994) (rejecting argument that input data formats

5   in structural engineering software program did not contain original expression because they were

6   purportedly "organized in a particular fashion to effectuate the performance of mathematical

7   calculations"). Certainly the API design specifications reflect a far more complex structure and

8   organization than the software in these cases.

9   Google's main challenge to the copyrightability of the API design specifications was that

10   they are supposedly unprotectable "methods of operation." The Court has already has already

11   rejected this argument on summary judgment, concluding that, "This order finds that the API

12   package specifications at issue are not 'methods of operation' under 17 U.S.C. 102(b)." 9/15/11

13   Summary Judgment Order (Dkt. 433) at 10-11.

14   As for the 12 copied source and object code files, Google has never challenged that these

15   files are protected by copyright. "Source and object code, the literal components of a program,

16   are consistently held protected by a copyright on the program." *Johnson Controls, Inc. v.*

17   *Phoenix Control Systems, Inc.*, 886 F.2d 1173, 1175 (9th Cir. 1989).

18   Accordingly, at the conclusion of the evidentiary phase of the trial, Oracle will ask the

19   Court to instruct the jury that the 37 core API design specifications and the 12 source code files

20   that Google copied are protected by copyright. The Court should also instruct the jury on the

21   scope of protection to be afforded to the copyrighted works – in this case, substantial similarity –

22   and the frame of reference for comparing the copyrighted works to the infringing workswithin

23   which they should be compared.

24   Because Google does not deny access or copying, a finding that the APIs (and source

25   code) are protected by copyright leads to a determination of copyright infringement, and the main

26   issues for the jury to decideleaving will be Google's affirmative defenses and , willfulness and

27   damagesfor the jury to decide in the liability phase. The Court and the jury should hear this

28   evidence at the same time, because it will overlap almost completely, and will involve the same

1   fact and witness testimony and documentsation. As part of Google's fair use defense, which the

2   Court has already held raises factual issues that were not appropriate for determination on

3   summary judgment (9/15/11 Summary Judgment Order (Dkt. 433) at 13), the jury must consider

4   the "nature of the copyrighted work," the "purpose and character of the use" and the "amount and

5   substantiality of the portion used in relation to the work as a whole." *Id.* (quoting 17 U.S.C. §

6   107). Google expressly raises the issue of compatibility in the context of both copyrightability

7   and fair use. Google's Motion for Summary Judgement (Dkt. 260) at 21. The jury and the Court

8   will need to hear testimony from the same fact witnesses who were involved in designing these

9   APIs and Google's APIs to determine the amount of creativity involved in their design and their

10   expressive nature. The jury will also need to understand this as well to determine both damages

11   and the fourth fair use factor, the "effect of the use on the potential market for or value of the

12   work as a whole." *Id.*

13   At the conclusion of the evidence, the Court should instruct the jury on its findings of

14   copyrightability so that they can apply those findings in reaching their verdict. *See Pivot Point*

15   *Int'l, Inc. v. Charlene Prods., Inc.*, 932 F. Supp. 220, 225 (N.D. Ill. 1996) (Easterbrook, C.J.,

16   sitting by designation) (,"[i]f the court determines that mannequin heads are copyrightable subject

17   matter, the jury will be so instructed").

18   **B.   Google's Equitable Defenses of Laches, Equitable Estoppel, Waiver, and
                        Implied License**
19

20   Google is asserting laches, equitable estoppel, waiver, and implied license as defenses to

21   Oracle's claims of copyright and patent infringement. As set forth in the Joint Proposed Pretrial

22   Order (Dkt. 525 at 10, 12), the parties agree that these issues should be resolved by the Court.

23   But Google has nonetheless proposed that instructions be given to the jury on these defenses.

24   There is no reason the jury should be asked to opine on these issues, when the parties already

25   agree and the law is clear that the Court decides these defenses.

26   Laches, equitable estoppel, waiver, and implied license are equitable defenses to be

27   decided by courts, not juries. *A.C. Aukerman Co. v. RL Chaides Constr. Co.*, 960 F.2d 1020,

28   1028 (Fed. Cir. 1992) (en banc) ("As equitable defenses, laches and equitable estoppel are matters

1 committed to the sound discretion of the trial judge . . . ."); *Qualcomm Inc. v. Broadcom Corp.*,

2 548 F.3d 1004, 1019 (Fed. Cir. 2008) (reviewing "a district court's judgment on the equitable

3 defense of waiver for an abuse of discretion").

4   The Ninth Circuit has held that "[a] litigant is not entitled to have a jury resolve a disputed

5 affirmative defense if the defense is equitable in nature." *Granite States Ins. Co. v. Smart*

6 *Modular Techs. Inc.*, 76 F.3d 1023, 1027 (9th Cir. 1996). Equitable issues may be submitted to a

7 jury with the consent of both parties, but Oracle does not so consent. *See* Fed. R. Civ. P. 39(c);

8 *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1578 (Fed. Cir. 1997) ("The

9 parties agreed to submit Mitsubishi's implied license defense to the jury and the jury found an

10 implied license to exist.").

11   **C.   Injunction Against Android Platform**

12   Oracle pursues injunctive relief to prevent Google from further fragmenting the Java

13 platform and thereby undermining Oracle's and others' investments in Java's "write once, run

14 anywhere" promise. To prove that it is entitled to an injunction order against Google, Oracle

15 must show that: (1) it has suffered an irreparable injury; (2) remedies available at law, such as

16 monetary damages, are inadequate to compensate for that injury; (3) balancing of hardships

17 between Oracle and Google weighs in favor of the injunction; and (4) the public interest would

18 not be disserved by a permanent injunction. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391

19 (2006) (citations omitted). Injunction is an equitable remedy to be decided by the Court. *Id.* at

20 394.

21   Oracle will show that both the equities and the public interest require an injunction

22 preventing Google from making, using, and distributing unauthorized, non-Java-compliant

23 versions of the Android platform containing the copyrighted code and documentation and

24 patented technology.[1] Google's infringement and the resulting fragmentation to Java evidence a

25 clear case of irreparable injury. Oracle practices the copyrights-in-suit and the six Java-related

26   [1] Oracle will forego its injunction request only if Google commits in writing, in a form
    prescribed by Oracle, to ensure that Android will be Java-compatible and comply with all
27 applicable Java licensing and payment conditions.

28

1   patents, and has strived to keep the "write once, run anywhere" promise of the Java platform.

2   Android's incompatible forking of Java has caused irreparable injury to Oracle, and monetary

3   damages are inadequate to compensate Oracle for the injury Android has caused to the value of

4   the Java platform. An injunction is necessary to prevent Google from further fragmenting the

5   Java platform and undermining Oracle's and others' investments in Java. Furthermore, as a result

6   of Google's infringement, Oracle will continue to lose share in the market for mobile platforms,

7   as it has already lost significant sales for Java ME. *i4i Ltd. Partnership v. Microsoft Corp.*, 598

8   F.3d 831, 861 (Fed. Cir. 2010). Android will continue to draw application developers away from

9   Java and will score significant design wins as a result. Amazon's recent decision to make its

10 Kindle e-reader an Android device, for example, illustrates that Android has caused and will

11 cause further irreparable harm to Oracle. *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 702-

12 03 (Fed. Cir. 2008). Oracle practices the patents and copyrights-in-suit, and has strived to keep

13 the "write once, run anywhere" promise of the Java platform. Android's incompatible forking of

14 Java has caused irreparable injury to Oracle, and monetary damages are inadequate to

15 compensate Oracle for this injury. An injunction is necessary to prevent Google from further

16 fragmenting the Java platform and undermining Oracle's and others' investments in Java.

17   Oracle anticipates that its request for an injunction will be decided by the Court based on

18 evidence presented during trial as well as additional evidence presented through a hearing

19 following at least the trial on liability.

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1   Respectfully submitted,

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3   Dated: October 14, 2011   MORRISON & FOERSTER LLP

4   By: */s/ Michael A. Jacobs*
                                                Michael A. Jacobs
5
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6   ORACLE AMERICA, INC.

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