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13 Attorneys for SAMSUNG ELECTRONICS  
 CO., LTD., SAMSUNG ELECTRONICS  
 14 AMERICA, INC. and SAMSUNG  
 TELECOMMUNICATIONS AMERICA, LLC  
 15

16 UNITED STATES DISTRICT COURT  
 17 NORTHERN DISTRICT OF CALIFORNIA, SAN JOSE DIVISION

18 APPLE INC., a California corporation,  
 19 Plaintiff,  
 20 vs.  
 21 SAMSUNG ELECTRONICS CO., LTD., a  
 Korean business entity; SAMSUNG  
 22 ELECTRONICS AMERICA, INC., a New  
 York corporation; SAMSUNG  
 23 TELECOMMUNICATIONS AMERICA,  
 LLC, a Delaware limited liability company,  
 24 Defendants.

CASE NO. 11-cv-01846-LHK

**DECLARATION OF TREVOR  
 DARRELL, PH.D. IN SUPPORT OF  
 SAMSUNG'S MOTION TO STRIKE  
 EXPERT TESTIMONY BASED ON  
 UNDISCLOSED FACTS AND THEORIES**

Date: June 21, 2012  
 Time: 10:00 a.m.  
 Place: Courtroom 5, 4th Floor  
 Judge: Hon. Paul S. Grewal

PUBLIC REDACTED VERSION

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1 I, Trevor Darrell, declare:

2 1. I have been retained by counsel for defendants Samsung Electronics Co., Ltd.,  
3 Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC  
4 (collectively, "Samsung"). I have been retained to give expert opinions related to technical  
5 matters at issue in the case named, *Apple, Inc. v. Samsung Elecs. Co., Ltd., et al.*, Case No. 11-cv-  
6 01846-LHK in the Northern District of California. I am being compensated at my standard rate  
7 of \$400 per hour for my work in this litigation. My compensation does not depend on the  
8 outcome of the case. I submit this declaration in support of Samsung's Motion to Strike. If  
9 asked at hearings or trial, I am prepared to testify regarding the matters I discuss in this declaration.

10 2. I have previously submitted two expert reports in this case. On March 22, 2012, I  
11 submitted the Expert Report of Trevor Darrell, Ph.D. Regarding the Invalidity of U.S. Patent Nos.  
12 6,493,002 and 7,853,891. On April 16, 2012, I submitted the Rebuttal Expert Report of Trevor  
13 Darrell, Ph.D. Regarding Noninfringement of U.S. Patent Nos. 6,493,002 and 7,853,891.

14 3. I reserve the right to supplement or amend this declaration based on any new  
15 information that is relevant to my opinions.

16 **I. PROFESSIONAL BACKGROUND**

17 4. I am an Adjunct Associate Professor of Computer Science at the University of  
18 California, Berkeley, and a senior research scientist at the International Computer Science Institute  
19 ("ICSI"). I lead the Computer Vision Group at ICSI. My group develops algorithms to enable  
20 multimodal conversation with robots and mobile devices, which enables users to interact with  
21 machines using natural expression and gesture, and also allows machines to understand a user's  
22 physical environment. In addition, my group works on methods for object and activity  
23 recognition, allowing robots and mobile devices to recognize objects of interest to a user and  
24 provide situated search for information about those objects. Before joining UC Berkeley, I  
25 worked as an Associate Professor at the MIT Department of Electrical Engineering and Computer  
26 Science ("EECS") and led the Vision Interface Group at the MIT Computer Science and Artificial  
27 Intelligence Laboratory.

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1           5.       I received a Bachelor of Science in Engineering from the University of  
2 Pennsylvania in 1988. I received a Master of Science from MIT in 1991, and a Ph.D. from MIT  
3 in 1996. I have published hundreds of papers related to computer vision and pattern recognition.  
4 My articles can be found in noted journals, such as IEEE Transactions on Pattern Analysis and  
5 Machine Intelligence, and in the proceedings of many highly selective conferences.

6           6.       I am the named inventor on several issued patents related to computer vision,  
7 including:

8                   US5563988, issued 10/8/1996, Method and system for facilitating  
9                   wireless, full-body, real-time user interaction with a digitally  
                    represented visual environment;

10                  US6356669, issued 3/12/2002, Example-based image synthesis  
11                  suitable for articulated figures;

12                  US6343150, issued 01/29/2002, Detection of image correspondence  
                    using radial cumulative similarity;

13                  US6188777, issued 02/13/2002, Method and apparatus for personnel  
14                  detection and tracking;

15                  US6,445,810, issued 9/3/2002, Method and apparatus for personnel  
                    detection and tracking; and

16                  US6,661,918, issued 12/9/2003, Background estimation and  
17                  segmentation based on range and color.

18           7.       I teach and have taught for several years classes in Computer Vision and Computer  
19 Science, including courses on Visual Object and Activity Recognition, Computer Vision and  
20 Applications, Computer Vision for Interface and Surveillance: Algorithms and Implications, and  
21 Structure and Interpretation of Computer Programs.

22           8.       In sum, I have been involved in the study of computers, and machine and computer  
23 vision, in both the academic and commercial settings for over two decades. In this time, I have  
24 become intimately familiar with a wide variety of computer vision systems that recognize users,  
25 objects, and their environment, including robots and mobile devices.

26           9.       My attached Curriculum Vitae (Exhibit A) provides further details.  
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1 **II. U.S. PATENT NOS. 6,493,002 AND 7,853,891**

2 10. I understand that Apple previously asserted both U.S. Patent Nos. 6,493,002  
3 ("the '002 patent") and 7,853,891 ("the '891 patent") against Samsung in this litigation. In  
4 particular, Apple accused multiple Samsung products of infringing these patents, including many  
5 of Samsung's mobile phone devices and Samsung's Galaxy Tab and Galaxy Tab 10.1 tablets.

6 11. I had previously been retained to give expert opinions related to technical aspects  
7 of both the '002 and '891 patents, and thus I have extensively studied these patents.

8 12. On March 22, 2012, I submitted the Expert Report of Trevor Darrell, Ph.D.  
9 Regarding the Invalidity of U.S. Patent Nos. 6,493,002 and 7,853,891 (the "Invalidity Report") in  
10 which I opined that the asserted claims of the '002 patent and the '891 patent are invalid on the  
11 basis of multiple items of prior art. On April 16, 2012, I provided the Rebuttal Expert Report of  
12 Trevor Darrell, Ph.D. Regarding the Noninfringement of U.S. Patent Nos. 6,493,002 and  
13 7,853,891 (the "Noninfringement Report") in which I opined that the asserted claims of the '002  
14 patent and the '891 patent were not infringed by the accused Samsung products. Attached as  
15 Exhibits B and C to this declaration are the '002 and '891 patents respectively.

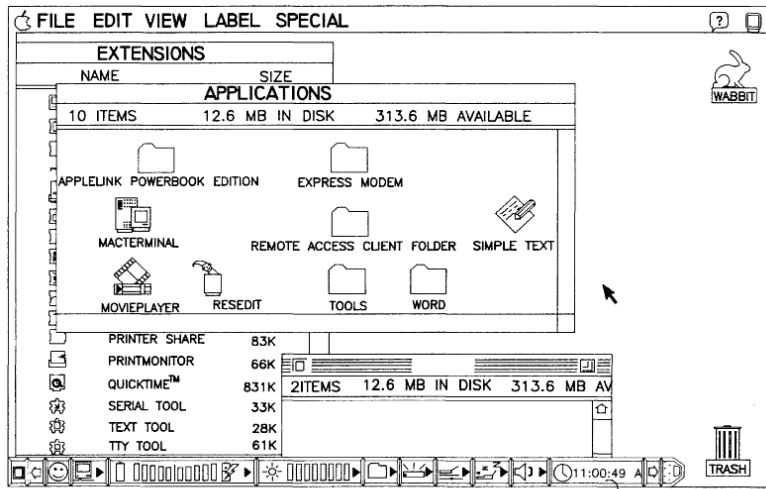
16 13. I understand that on May 29, 2012, the Court signed a Joint Stipulation and Order  
17 Dismissing Claims Without Prejudice. I understand that this Order dismissed Apple's claims  
18 against Samsung for infringement of the '002 patent and the '891 patent.

19 A. **Overview of the '002 and '891 patents**

20 14. The '002 patent, entitled "Method and Apparatus for Displaying and Accessing  
21 Control Status Information in a Computer System," was filed on March 20, 1997, and issued on  
22 December 10, 2002. It is a continuation of U.S. Appl. No. 08/316,237, filed on September 30,  
23 1994. The named inventor on the patent is Steven W. Christensen, and the assignee is Apple, Inc.

24 15. The '002 patent relates to computer graphical user interfaces, particularly the use of  
25 a dedicated space or window to provide important information and access useful functions. This  
26 dedicated space, defined in the patent as a "control strip," allows a user to view status information  
27 and control certain functions or programs on the computer. The control strip is a window which  
28 contains icons or displays. These icons provide information and respond to user inputs, such as

1 mouse clicks. Embodiments of the control strip can be seen in Figures 2A to 2F. Figure 2A of  
2 the patent is shown below:



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FIG. 2A

16. Independent claim 1 discloses a computer-controlled display system that includes a processor, data display screen, and a cursor control device for positioning a cursor. The system includes a first window region with a plurality of display areas at least one of which is sensitive to user input, where the first window region is independent of any application program, and implemented in a window layer on top of application programming windows that may be generated. Independent claims 14 and 25 disclose similar inventions, and independent claims 26, 39 and 50 are means-plus-function counterparts to claims 1, 14, and 25.

17. The '891 patent, entitled "Method and Apparatus for Displaying a Window for a User Interface," was filed on February 1, 2008, and issued on December 14, 2010. The patent claims priority to U.S. Appl. No. 10/193,573, filed on July 10, 2002. The named inventors on the patent are Imran Chaudhri and Bas Ording, and the assignee is Apple, Inc.

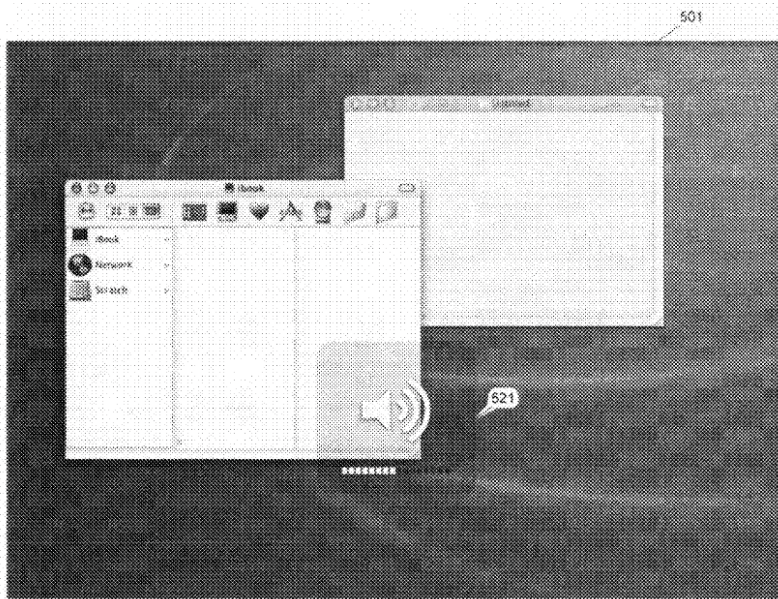
18. The '891 patent also relates to computer graphical user interfaces. In particular, the '891 patent is directed to the display and removal of windows in graphical user interfaces, and includes features such as a window being translucent, increasing the transparency of a window in order to close it, a timer, a window hierarchy, and a cursor.

19. Independent claim 1 discloses a method of displaying a user interface window in response to receiving a first input from a user input device, starting a timer, closing the first

1 window in response to a determination that the timer expired, where the window is displayed  
2 independently of the location of a cursor on the screen. Independent claims 26 and 51 repeat this  
3 disclosure in reference to “machine readable media” and a means-plus-function format.

4 20. Independent claim 20 discloses another method to display a user interface window.  
5 Specifically, displaying a translucent window at a location independent of a cursor on a screen,  
6 and then closing the window without user input. Independent claims 45 and 70 repeat this  
7 disclosure for a machine readable media and a means-plus-function system.

8 21. In essence then, the '891 patent claims the concept of a window, the disappearance  
9 of which is timed. The '891 patent describes the usefulness of such windows as compared to  
10 “traditional” windows, which “provide strong user interactions, which may cause  
11 distractions.” '891 patent at 2:12-13. The '891 patent is thus in part directed to windows which  
12 do not force the user to interact in order to move past them. One embodiment of the window can  
13 be seen in Figure 17 of the patent, reproduced below:



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**III. U.S. PATENT NO. [REDACTED]**

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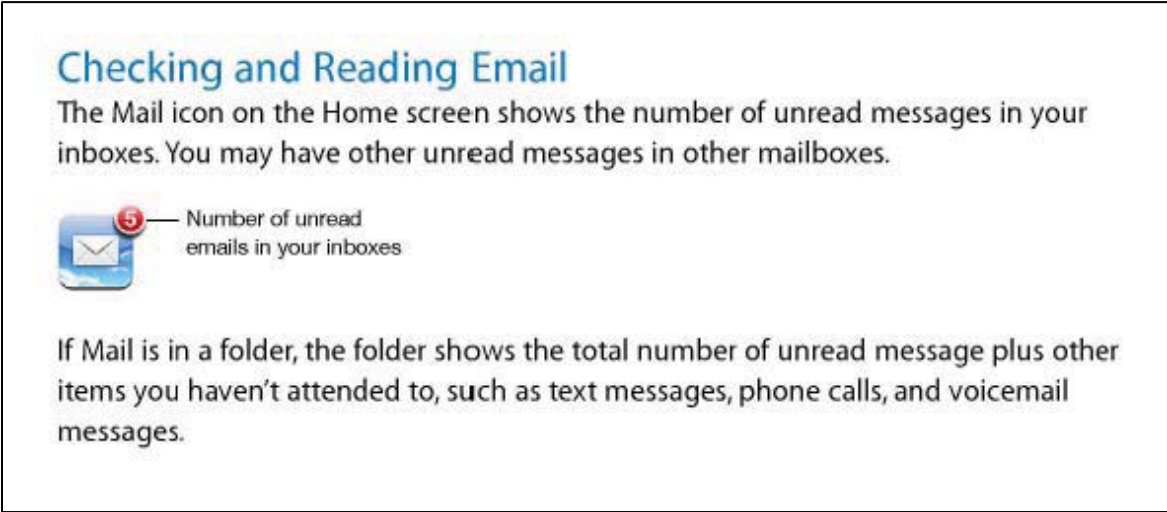
27. [REDACTED]

[REDACTED]

[REDACTED]. For example, as described in Apple's iPhone



1 User Guide for iOS 4 Software (SAMNDCA00001916-2159), the Apple iOS 4 displays a red and  
2 white number on the top right corner of the mail icon, which displays the number of unread e-  
3 mails. An excerpt describing this behavior on page 73 of the Guide (SAMNDCA00001988) is  
4 shown below:



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14 **IV. U.S. PATENT NO. [REDACTED]**

15 28. U.S. Patent No. [REDACTED]  
16 [REDACTED]  
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32. [REDACTED]

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[REDACTED] For example, as described in Apple's iPhone

User Guide for iOS 4 Software (SAMNDCA00001916-2159), a user making a phone call is presented with a screen that employs various call options, similar to a telephone mode. However, the user has the option of hitting the home button, which will instead allow access to other applications on the device, similar to an information terminal mode. The telephone screen and instructions for accessing other applications on the home screen are described in pages 63 and 64 of the Guide (SAMNDCA00001978-79), excerpted below:



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The call options may vary, depending on which iPhone you're using.

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<b>Mute your line</b>	Tap Mute. You can still hear the caller, but the caller can't hear you.
<b>Use the numeric keypad to enter information</b>	Tap Keypad.
<b>Use the speakerphone or a Bluetooth device</b>	Tap Speaker. The Button is labeled Audio Source when a Bluetooth device is available, which lets you select the Bluetooth device, iPhone, or Speaker Phone.
<b>See contact information</b>	Tap Contacts.
<b>Put a call on hold</b>	<i>iPhone 4:</i> Touch and hold Mute. <i>iPhone 3G or iPhone 3GS:</i> Tap Hold. Neither party can hear the other. When a call is on hold, tap Hold again to return to the call.
<b>Make another call</b>	Tap Add Call.

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You can use other applications during a call, checking your schedule in Calendar for example.

**Use another application during a call:** Press the Home  button, then tap an application icon. To return to the call in Phone, tap the green bar at the top of the screen.

**End a call:** Tap End Call. Or press the center button on your iPhone earphones (or the equivalent button on your Bluetooth headset).

V. RELEVANCE OF THE [REDACTED] TO APPLE'S ASSERTED PATENTS

33. [REDACTED]

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[REDACTED]

I declare under penalty of perjury that the foregoing is true and correct. Executed in  
Berkeley, CA \_\_\_\_\_ on June 7, 2012.

By   
Trevor Darrell