

Exhibit 1

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

APPLE INC., a California corporation,
Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., A
Korean business entity; SAMSUNG
ELECTRONICS AMERICA, INC., a New York
corporation; SAMSUNG
TELECOMMUNICATIONS AMERICA, LLC, a
Delaware limited liability company,
Defendants.

Case No. 11-cv-01846-LHK

**EXPERT REPORT OF SUSAN
KARE**

****CONFIDENTIAL – CONTAINS MATERIAL DESIGNATED AS HIGHLY
CONFIDENTIAL – ATTORNEYS’ EYES ONLY PURSUANT TO A PROTECTIVE
ORDER****

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3 **EXPERT REPORT OF SUSAN KARE**

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10 **I. INTRODUCTION**

11 1. I, Susan Kare, submit this Expert Report in connection with certain patent, trade
12 dress, and trademark claims being asserted by Apple Inc. (“Apple”) in the above-captioned case.
13 I have been informed that Apple has alleged that Defendants Samsung Electronics Co. Ltd.,
14 Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC
15 (collectively, “Samsung”) have infringed Apple’s patents, trade dress, and trademarks.

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28 **II. QUALIFICATIONS**

1 2. I am currently an icon designer and user interface graphic designer for my design
2 studio, Susan Kare Design, which provides icon, user interface graphics, branding and corporate
3 identity design services.

4 3. I received a Bachelor of Arts degree in fine arts and English from Mount Holyoke
5 College in 1975. I graduated Summa Cum Laude and was elected to membership in the Phi Beta
6 Kappa Society.

7 4. After receiving my Bachelor of Arts degree, I studied graphic design as part of my
8 fine arts curriculum in graduate school at New York University, and I received my Master of Arts
9 degree in 1976. I was granted a Ph.D. in fine arts in 1978 from New York University. My liberal
10 arts background and my experience doing Ph.D.-level research contribute to my ability to develop
11 logical concepts for the groups of icons and other images that I have designed since then.

12 5. After receiving my Masters and Ph.D. degrees, I received a Rockefeller
13 Fellowship to work at the Fine Arts Museums of San Francisco.

14 6. Overall, I have over 28 years of experience in the field of icon design and user
15 interface graphic design. (A copy of my curriculum vitae is attached as Exhibit 1.) From 1982

1 through 1985, I worked for Apple Computer, Inc., first as a graphic artist in the Macintosh
2 software group, and then as a creative director. While at Apple, I created many of the graphical
3 elements of the original Macintosh computer's user interface, including many of its icons and
4 typefaces. From 1986 through 1988, I was the creative director at NeXT, Inc., where I managed
5 the development of that company's graphic identity and other marketing materials.
6

7 7. Since leaving NeXT in 1988, I have worked as an independent user interface
8 graphic designer. My work in that capacity has included designing the screen appearance for
9 Microsoft Windows 3.0, including numerous icons and other graphic elements such as buttons
10 and scroll bars. Subsequently I designed icons for a variety of clients, including images for over
11 100 functions in AutoDesk's AutoCAD and a symbol set for IBM's OS/2 operating system. In
12 the early 90s, I was an employee at General Magic, which developed a handheld communicator,
13 and I provided the graphics for the device's highly visual user interface. I co-founded Glam
14 Media in 2003 and worked as its creative director, along with providing website graphics and
15 design for its fashion-oriented site, through 2008. Glam Media continues to focus on premium
16 digital brand advertising with its family of sites and network of small and midsize online
17 publishers. I am no longer an employee of Glam Media, but I am occasionally consulted as an
18 informal advisor.
19

20 8. Since I started working on icon design at Apple Computer in 1982, I have
21 designed thousands of icons for hundreds of clients, including Fortune 500 companies as well as
22 startup companies. I have created icons for a broad range of software programs and products,
23 such as AutoCad (Autodesk), Studio 8 (Electronic Arts), watches (Swatch and Fossil), and over
24 500 virtual gifts for Facebook.
25

26 9. I have also worked as a digital font designer, starting in 1983. I designed most of
27 the bitmap fonts that shipped with the original Macintosh in 1984, including Chicago, New York,
28

1 Geneva, Monaco, and Cairo. Subsequently, I designed other bitmap fonts for clients including
2 Fossil and Danger Research, and a number that were sold online by Atomic Media. My
3 experience in font design includes fonts for user interfaces that require a combination of graphic
4 elements and type.

5
6 10. In 2001, I was one of six individuals to receive the Chrysler Design Award, which
7 celebrates “the achievements of individuals who have consistently championed seminal works of
8 architecture and design, and significantly influenced modern American culture.”

9
10 11. In 2003, I was appointed by Secretary of the Treasury John W. Snow to the
11 Citizens Coinage Advisory Committee (“CCAC”). I was recommended to the Secretary by
12 House Minority Leader Nancy Pelosi, in accordance with Public Law 108-15, to fill one of four
13 CCAC positions recommended by Congressional leadership.

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15 12. My expertise in icon design and user interface graphics is the result of various
16 skills that I have developed and practiced over the years. For example, effective icon design
17 requires me to understand the characteristics of the user and the purpose of the icons within a
18 particular user interface. Effective icon design depends on successful visual communication, so
19 that a user understands and remembers the intended association between an icon’s image and its
20 meaning. Icons can be used to represent a variety of user interface elements: applications, tools,
21 files, settings, etc. Also, because icons are part of a graphical interface, icon design requires
22 fundamental graphic design skills and an understanding of onscreen presentation and
23 arrangement, which provide the context within which icons exist, and the ability to make
24 aesthetic judgments. Finally, it is also necessary to know how to present type and symbols so that
25 the user can take in information at a glance.

26
27 13. I have spent most of my career as a designer developing and evaluating user
28 interface graphics for average users. Through my practical experience, I have gained an

1 understanding of how icons and user interface graphics are interpreted by average users. This
2 understanding enhances my ability to identify graphic elements that are meaningful and
3 memorable for the average user.

4 14. I have not testified as an expert or been retained as an expert in any previous
5 lawsuit.

6 15. I have been retained by Apple in this matter and have been asked to provide my
7 opinions with respect to the visual appearance of the designs depicted in U.S. Design Patent No.
8 627,790 (the “D’790 patent”), U.S. Design Patent No. D604,305 (the “D’305 patent”), and U.S.
9 Design Patent No. D617,334 (the “D’334 patent”) (collectively, the “Design Patents”), as well as
10 the visual appearance of the user interface graphics of the iPhone¹, iPhone 3G, iPhone 3GS, and
11 iPhone 4 (collectively, the “iPhone Devices”).

12 16. I have been asked to provide my opinion with respect to the availability of designs
13 for user interface graphics that constitute alternatives to the designs depicted in the Design
14 Patents and the designs utilized in the iPhone Devices.

15 17. I have been asked to provide my opinion with respect to the visual appearance of
16 the designs depicted in the Design Patents compared with the visual appearance of the
17 applications screens of the following Samsung phones: Captivate, Continuum, Droid Charge,
18 Epic 4G, Fascinate, Galaxy S 4G, Galaxy S i9000, Gem, Indulge, Infuse 4G, Mesmerize, Galaxy
19 S Showcase (i500), and Vibrant (collectively, the “Samsung Phones”). I have also been asked to
20 provide my opinion with respect to the visual appearance of the user interface graphics of the
21 iPhone Devices compared to the visual appearance of the “applications screens” of the Samsung
22 Phones.

23 18. I have been asked to provide my opinion with respect to the design of icons

24 ¹ The term “iPhone,” as used in this report, refers only to the original iPhone, not to the line of iPhone variants
25 generally.

1 appearing on the Samsung Phones compared with the design of icons appearing in the Design
2 Patents, the iPhone Devices, U.S. Trademark Reg. No. 3,886,196, U.S. Trademark Reg. No.
3 3,886,200, U.S. Trademark Reg. No. 3,886,197, U.S. Trademark Reg. No. 2,935,038, and U.S.
4 Trademark Application Serial No. 85/041,463.

5
6 19. I expect to testify at trial concerning these opinions as well as my bases for them,
7 such as my knowledge, experience, and expertise concerning the creative process of icon design.
8 I also expect to rebut any opinions I disagree with that are provided by Samsung's expert(s) with
9 respect to the subject matter of this report.

10 20. I am being compensated for my work in connection with this matter at a rate of
11 \$550 per hour. I am being separately reimbursed for all out-of-pocket expenses. No part of my
12 compensation is dependent upon the outcome of this litigation or the opinions that I express.

13 **III. MATERIALS CONSIDERED**

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15 21. In forming the opinions set forth in this report, I considered and relied upon my
16 education, background, and experience. I also have reviewed the Design Patents, U.S. Trademark
17 Reg. No. 3,886,196, U.S. Trademark Reg. No. 3,886,200, U.S. Trademark Reg. No. 3,886,197,
18 U.S. Trademark Reg. No. 2,935,038, and U.S. Trademark Application Serial No. 85/041,463, as
19 well as the other documents or reference materials cited or listed in this report. In addition, I have
20 evaluated photographs and physical samples of the Samsung Phones and the iPhone Devices.

21
22 22. In forming my opinions, I have also reviewed and considered the materials listed
23 in Exhibit 2 of this report.

24 23. I reserve the right to rely upon any additional information or materials that may be
25 provided to me or that are relied upon by any of Samsung's experts or witnesses, if called to
26 testify or to give additional opinions regarding this matter.

27
28 24. I have been informed that expert discovery in this lawsuit is still ongoing, and I

1 will consider additional facts and material produced through discovery to determine whether such
2 additional material has an impact on my opinions. I may amend or supplement this report as
3 necessary based on such additional information.

4 **IV. FUNDAMENTALS OF ICON DESIGN**

5 25. The icon design process is one of creative problem-solving and involves
6 conceptual and visual components. It often involves the marriage of metaphor and aesthetics.
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8 26. An icon is a visual representation that creates a shortcut for a user in a device
9 interface. A group of icons can represent a set of ideas with images that are differentiated from
10 each other so they can be recognized at a glance.

11 27. Sometimes an icon is a graphical illustration of a user interface element that
12 functions as something in particular (e.g., a clock). Icons may instead be designed as symbols,
13 either because they represent abstract concepts or verbs (e.g., “copy” or “undo”) or portray a
14 generic concrete noun (e.g., document).
15

16 28. The first step in icon design is to identify the concept (e.g., a specific category or
17 function) for which an icon is required and consider what visual metaphors might be used to
18 represent that concept or to make it easy to remember. This is the “design problem” that the
19 designer must solve: How can a particular concept or function be represented by an image?
20 Sometimes, the design problem might extend to developing a set of related icons.
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22 29. Icon design may also need to take into account any marketing or design
23 considerations typically found in a creative brief. These considerations might include the nature
24 of the product itself; the target audience; the desired appearance for the user interface graphics;
25 and the competitive landscape (e.g., the goal of being differentiated from competitors in some
26 way). All of these factors can influence the development of an icon beyond the need for the clear
27 and memorable communication of an idea.
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1 30. Because icon design is not an exact science, there is always a great range of visual
2 alternatives for an icon image even when a designer opts for a conventional approach, such as
3 using images associated with traditional postal service mail (e.g., an envelope, stamp, or mail
4 slot) to represent an electronic mail application. An icon of an envelope, for example, still
5 requires many aesthetic choices—including those involving color, style, viewpoint, rendering
6 techniques, etc.—as it is designed. The envelope icon could be a photograph, an illustration, or a
7 simple diagram; either side of the envelope can be shown; details such as a stamp and/or print can
8 be indicated; and the envelope can be rotated or shown in perspective. An icon can also appear to
9 be a flat, two-dimensional image or have the appearance of a three-dimensional image with depth.
10 Beyond the appearance of an individual icon, the designer also takes into consideration how the
11 image will appear along with other icons and graphic elements on a screen.

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14 31. Various factors influence the development of an icon’s final visual appearance.
15 Aesthetics are a prime consideration, but issues mandated by a mobile phone environment might
16 include limited screen real estate, touch screen “hit” area space requirements, the relationship of
17 the industrial design to the user interface, and creative issues or goals provided by a client’s
18 marketing organization. Moreover, the designer must be aware of any technical requirements or
19 constraints, such as pixel dimensions, bit depth, specific color palette, or touch screen issues. An
20 additional consideration might be optimizing for a user’s perception of ease of use, which may
21 affect the desired number and density of icons within a space.

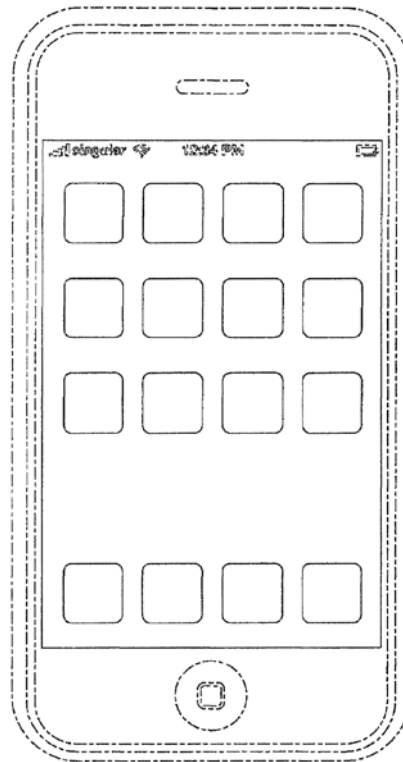
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23 32. Various alternative design approaches are available for the overall layout of a
24 group of icons, such as presenting icon images as “badges” or “buttons” with a uniform
25 background shape (e.g., a circle or rounded rectangle); presenting icons with border shapes that
26 are irregular regions (different border shapes than a single, fixed border shape); or presenting
27 icons within a visible grid or other delineated framework. Color palette might be determined by
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1 branding considerations or used to indicate categories of applications or features. Overall visual
2 style (e.g., a two-dimensional or three-dimensional look, hand drawn effect, primary colors, etc.)
3 might be driven by marketing issues such as target audience or price point. Icon design is
4 typically an iterative process, with design alternatives presented and a final icon set chosen in
5 tandem with a client decision maker.
6

7 **V. OPINIONS REGARDING SIMILARITIES BETWEEN APPLE AND SAMSUNG
8 ICONS AND USER INTERFACE GRAPHICS**

9 **A. Characteristics of Apple Icons and User Interface Graphics**

10 **1. The Design Patents**



22
23 **Figure 1
24 D'790 Patent**

25 33. The D'790 depicts an overall appearance for the layout and shape of icons in a
26 graphical user interface for a display screen. (See Figure 1, above.) A 4 x 3 array (4 columns, 3
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1 rows) of rounded rectangular² shapes, which appear to be squares with rounded corners, is shown
2 in the top portion of a display screen.³ (APLNDC00032009-012.) A separate row of rounded
3 rectangular shapes is shown along the bottom of the display screen. In both the 4 x 3 array and
4 the row along the bottom of the display screen, the shapes are evenly spaced horizontally. Within
5 the 4 x 3 array, the shapes are evenly spaced vertically, with slightly more space vertically than
6 horizontally. The width:height ratio of the display screen is approximately 1:1.5.

8 34. In the D’305 patent, icons are displayed on a display screen. (APLNDC00030421-
9 425.) The width:height ratio of the display screen is approximately 1:1.5. There is a 4 x 3 array
10 (4 columns, 3 rows) on a black background, with an additional row of icons in a gray gradient
11 area at the bottom of the screen. (See Figure 2, below.) Approximately the top 80% appears as a
12 solid black background containing the 4 x 3 array. Against the black background, the 12 icons in
13 the top portion provide a bright contrast and appear virtually illuminated against the black. The
14 lower approximately 20% of the screen has a gray gradient-patterned background containing the
15 additional row of icons—the main effect being that the top part and lower part of the screen
16 appear as separate, bounded areas, setting off the icons in the lower part as a separate group. The
17 icons in the D’305 patent have the shape of squares with rounded corners. Under each icon there
18 is gray text that describes the application represented by the icon. There is a band across the top
19 of the screen displaying information: signal strength, carrier name, time, and battery charge
20 status.
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26 ² I use the term “rounded rectangle,” the name of the shape drawn by a tool in Adobe Photoshop and Adobe
27 Illustrator, to refer to the shapes appearing in the D’790 patent as well as the shape of icons in the D’305 patent, the
28 D’334 patent, the iPhone Devices, and the Samsung Phones. Because the icons appear to have equal height and
width dimensions, I also refer to their shape as “square with rounded corners.”

³ In dotted lines, the D’790 patent shows elements besides the display screen and the rounded rectangles. I have not
been asked to offer any commentary on anything shown in dotted lines.

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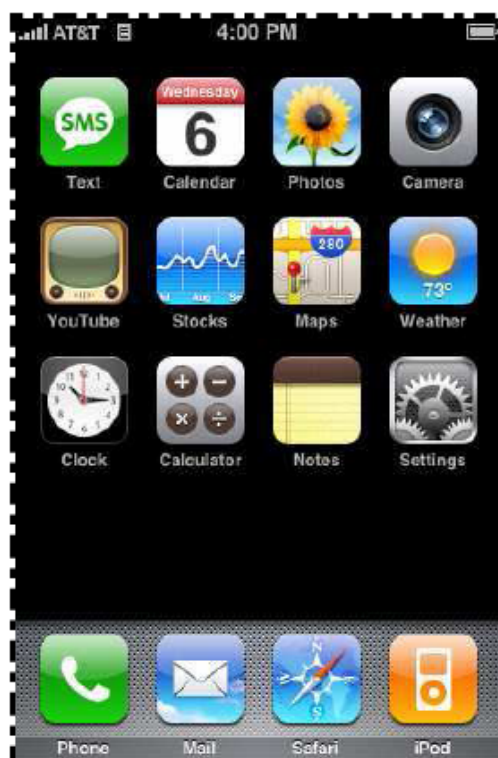


Figure 2
D'305 Patent Fig. 1⁴

35. The D'334 patent shows a display screen with two additional features. (APLNDC00030409-4220.) First, there are additional icons placed in a fourth row in the top portion of the screen. Second, there is a row of dots between the top portion and the bottom portion of the screen. The width:height ratio of the display screen is approximately 1:1.5.

⁴ Although the D'305 patent was published in black-and-white, I have been informed that this color image submitted during prosecution of the patent is available from the USPTO. This drawing corresponds to Figure 1 in the issued patent. I have been informed that this drawing has been produced to Samsung in this case. (See APLNDC-Y0000232557 at 232558.)

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Figure 3
D'334 Patent Fig. 6⁵

36. Many icons in the D'305 and D'334 patents show a curved reflection of a light source that creates a shiny, arc-shaped effect over the top half of the icon; this is visible in the icons for Text, Photos, YouTube, Stocks, Weather, Clock, Settings, Phone, Mail, iTunes, App Store, and iPod. (See Figures 2 and 3, above.) The design of particular icons is discussed in greater detail in Section V.A.2, below, in the discussion of the iPhone Devices' user interface graphics.

⁵ I have been informed that, unlike the D'305 patent, the D'334 does not incorporate the color versions of the designs submitted during prosecution of the patent. I have been informed that Figure 3 is an image submitted during prosecution of the patent that corresponds to Figure 6 in the issued patent and is available from the U.S. Patent and Trademark Office. I have included this image because it is a higher quality image than what can be reproduced from the printed patent. I have been informed that this drawing has been produced to Samsung in this case. (See APLNDC-0000237387 at Y0000237392.)

2. Graphical Styles of the iPhone Devices' User Interface Graphics

37. I have examined the user interface graphics of an iPhone running iOS version 2.2.1. To do so I have examined an iPhone itself as well as “screen capture” images of an iPhone home screen. (Exhibit 3.) I examined the images using Adobe Photoshop.

38. The overall visual appearance of the iPhone screen is substantially the same as the designs shown in the Design Patents. The iPhone displays a grid of icons in the top portion of the screen. There are four columns and three full rows of icons, with a partial fourth row of icons.⁶ There is a separate row of four icons along the bottom of the screen on a gray gradient-patterned background filling approximately the bottom 20% of the screen.

39. When the iPhone is configured to display icons on additional “pages,” the separate row of four icons along the bottom of the screen does not change when the user views the additional pages.

40. The iPhone screen is 480 pixels tall and 320 pixels wide, measuring 3.5 inches (diagonal) with a pixel density of 163 pixels per inch.⁷ Each icon is a smooth (anti-aliased) rounded rectangle that is 57 x 57 pixels. The black background of pixels blends seamlessly with the black border of the phone itself, so the 16 icons are a bright contrast and appear virtually illuminated against the black. As in the D’305 and D’334 patents, many icons show a curved reflection of a light source that creates a shiny, arc-shaped effect over the top half of the icon; this is visible on all icons except Calendar, Camera, Maps, Calculator, Notes, Safari, and Contacts. (See Figures 4(a) and 4(b), below; Exhibit 3.)

⁶ The number of rows visible in the top portion of the screen can be reduced to three rows by moving some icons onto a second “page,” as shown in Figure 4(b).

⁷ <http://support.apple.com/kb/SP2>

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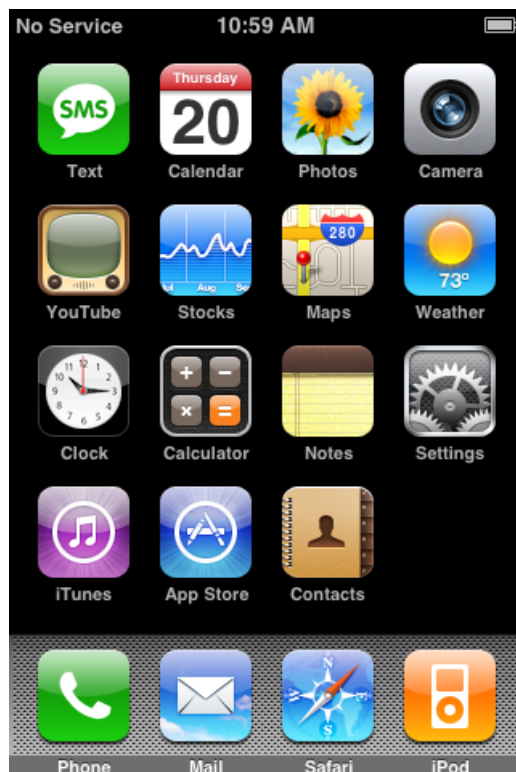


Figure 4(a)
iPhone Screenshot (Home Screen)

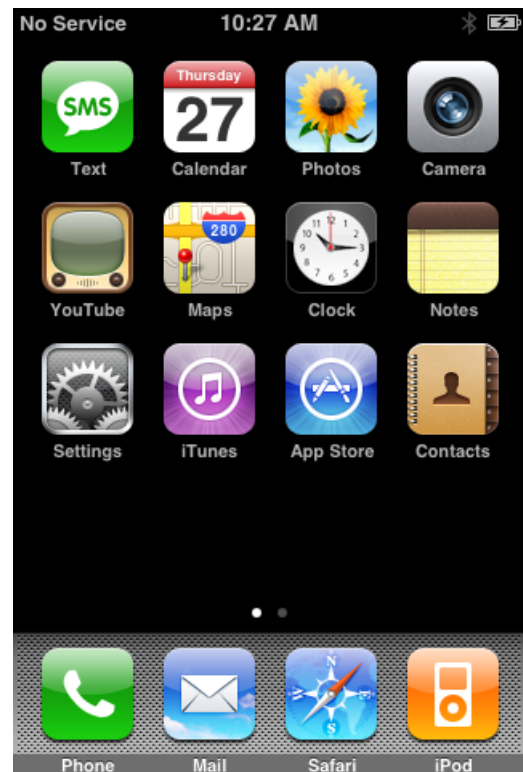


Figure 4(b)
iPhone Screenshot (With Three Icons Moved to Separate “Page”)

41. Each iPhone icon is labeled with pale gray, sans-serif, approximately 12 point anti-aliased text (upper and lowercase). The baseline of the text is 14 pixels below the lower edge of the icon.

42. There is a distinctive, overall graphical consistency to the iPhone screen. The button-like icons are all shaped as squares with rounded corners. Images are either cropped by this shape (e.g., Notes), or a discrete image is set within the rectangle, which acts as a background (e.g., Clock). Although graphic styles vary between the individual icons (e.g., a phone symbol for Phone, but photorealistic images for Photos and Camera), the uniform shape and precise placement in a grid provides a sense of organization and unity. There is more vertical space than horizontal space between icons, but because of the text, the amount of black space that runs vertically and horizontally between the icons appears similar. There is additional black

1 background above and below the grid of icons to afford screen real estate for additional elements
2 (e.g., time and battery life above, page indicator below). Another distinctive feature is the gray
3 panel at the bottom of the screen that sets off four icons in a separate group; the distinctive green
4 Phone icon anchors the far left.

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6 43. I have also examined an iPhone 3GS⁸ and an iPhone 4, each running iOS version
7 5.0.1, and I have used Adobe Photoshop to examine screen capture images from the devices.
8 (Exhibits 4, 5.) The overall visual appearance of the iPhone 3GS and iPhone 4 screens is
9 substantially the same as the designs shown in the Design Patents.



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Figure 5
iPhone 3GS Screenshot (Home Screen)



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Figure 6
iPhone 4 Screenshot (Home Screen)

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⁸ I have been informed that the user interface graphics of the iPhone 3G and iPhone 3GS running the same operating system are the same. Accordingly, My analysis regarding the iPhone 3GS throughout this report applies equally to the iPhone 3G.

1 44. The user interface graphics of the iPhone 3GS and iPhone 4—the shape,
2 arrangement and spacing of the icons—is consistent with the original iPhone, but there are some
3 small changes. (See Figures 5 and 6, above.) The iPhone 3GS screen has the same size and
4 resolution as the original iPhone,⁹ but the 3.5 inch (diagonal) screen of the iPhone 4 has a higher
5 resolution of 940 x 640, for a pixel density of 326 pixels per inch.¹⁰ Rather than a gray gradient-
6 patterned background for the bottom portion of the screen, there is a rectangular, reflective
7 surface that creates a virtual shelf, which serves as a base for the row of icons. The background is
8 not black, but rather has a gray gradient with scattered water droplets. The anti-aliased text below
9 the icons is white with a drop shadow. As in the D’334 patent, there is a row of dots between the
10 top and bottom portion of the screen. These dots provide an indicator of which “page” of icons is
11 displayed. When the second page is viewed, the second dot becomes white, and the first dot
12 becomes gray.¹¹ (Exhibits 4, 5.) Otherwise, the above description of the iPhone’s appearance
13 applies equally to the user interface graphics of these phones.

14 45. The icon layouts depicted in Figures 1 through 6 are not the only ways to solve the
15 design problem of how to represent a set of icons on a touch screen device. Even restricted to the
16 choice of using icon images (as opposed to words in a menu), a grid of rectangular icons with
17 rounded corners is not the only way to show and arrange them in a vertical space. For example,
18 the icons could be presented as irregular shapes on a background, as shown in the Xperia arc S
19 and Xperia neo V phones, both by Sony Ericsson. (Exhibits 6, 7.) Or, icons could be presented
20 within or on top of other shapes, as in the Blackberry Storm 2 (Exhibit 8), which displays icons—
21 designed with a strong, light-colored outline—in a grid but with each appearing on a black
22 background.

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26 ⁹ <http://www.apple.com/iphone/iphone-3gs/specs.html>

27 ¹⁰ <http://www.apple.com/channel/iphone/iphone-4/tour/specs.html>. As discussed in footnote 20 below, the
28 proportional size of the icons in the iPhone 4 is unchanged from the iPhone and iPhone 3GS.

¹¹ The iPhone shown above in Figure 4(a) does not display a series of dots because there is no second page of
applications. However, any of the applications shown could be moved off to a second page, which would cause the
dots to appear, as in Figure 4(b).

1 rectangle that almost completely fills the space between the icons and has a gradient to add
2 dimension. The Xperia arc S and Storm 2 are shown in Figures 7 and 8, below. Another
3 alternative would have been to divide the screen using a visible grid. Also, any uniform color,
4 bands of color, gradient, or background texture might have been employed.



18 **Figure 7**
19 **Sony Xperia arc S**



18 **Figure 8**
19 **Blackberry Storm 2**

20 46. Exhibit 9 is a collection of images depicting a variety of visually distinctive,
21 alternative approaches to showing a set of icons on a phone screen. As these examples
22 demonstrate, user interface graphics for phones need not display icons in a 4 x 4 or 4 x 5 grid, nor
23 do they need to feature icons shaped like those in the Design Patents and the iPhone Devices. In
24 fact, the icons can be displayed without using a regular grid of rows and columns at all, as shown
25 in Exhibit 10. (See figures 9 and 10, below.)
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Figure 9



Figure 10

47. Two alternative approaches depicted in Exhibits 11 and 12, applications screens of the Blackberry Torch 9850 and the Nokia N9, are particularly relevant examples because they are visually distinctive from the iPhone but display roughly the same number of elements in a touch screen space comparable to that of the iPhone Devices.



Figure 11
Blackberry Torch 9850

48. First, the BlackBerry Torch 9850 shown in Figure 11 (*see* Exhibit 11) has an 800 x 480, 3.7 inch (diagonal) screen with a pixel density of approximately 253 pixels per inch.¹² As shown in Figure 11, the applications screen of the BlackBerry Torch 9850 shows a grid of up to 20 icons (four columns, five rows) on a dark background. Other than the presence of a grid of icons, most of the graphical features of the applications screen distinguish its appearance from that of the iPhone Devices and the Design Patents.

49. At the top of the screen, above the icon grid, are two horizontal bands that occupy approximately 17 percent of the available screen—a significant portion of the screen real estate. The bands are on a background of dark reds and contain variable information such as date, time,

¹² <http://us.blackberry.com/smartphones/blackberry-torch-9850-9860/#!phone-specifications>

1 signal strength and battery charge, as well as indicators relating to sounds and alerts (speaker
2 icon) and the presence of messages (letter icon).

3 50. Immediately above the grid of icons, there is a horizontal band that indicates the
4 categories of applications currently being shown in the grid. This band has a blue highlight with
5 faded edges when it is “selected” (see figure 11, above), but otherwise it appears along with the
6 grid of icons as a translucent overlay on top of the background. The icons appear to be stylized
7 illustrations; many suggest everyday objects (e.g., wrench, envelope, alarm clock, camera,
8 folders), but others are more abstract (e.g., Social Feeds, Backup Assistant). There is no pattern
9 of rectangular shapes or rounded corners for the icons; most are various irregular shapes, so even
10 though the icons are laid out in a grid, they do not read as uniform button-shaped icons. Because
11 the icons have different dimensions and border shapes, left and right edges and top and bottom
12 edges of adjacent icons are not precisely aligned. The icons are labeled below with upper and
13 lower case sans serif, anti-aliased, pale gray/blue text. When there is a highlight to indicate a
14 glossy finish (e.g., BlackBerry Messenger, Text Messages, Instant Messaging, Applications,
15 Games, App World) the light area runs diagonally from the upper left to lower right, and fills the
16 upper right portion of the icons. Unlike the iPhone Devices and the Design Patents, there is no
17 area on the screen for a separate group of omnipresent icons. The result of all of these elements is
18 an overall visual impression that is clearly different from that of the iPhone and the Design
19 Patents.
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Figure 12
Nokia N9

51. Second, the Nokia N9 shown in Figure 12 has a 854 x 480, 3.9 inch (diagonal) screen.¹³ (See Exhibit 12.) As shown in Figure 12, this device utilizes icons displayed within uniform, extremely rounded rectangles that approach being read as circular. Most of the icon images are minimal and symbolic, with few colors and details against a dominant background color with a slight gradient. Most of the icon images read as flat symbols, although there are subtle, shadowed dimensional effects. There is a fairly limited background color set: green, blue, gray, white, magenta, and yellow. The overall visual impression of this interface is clearly distinct from that of the iPhone Devices and the Design Patents, and it can display more icons on the screen than the iPhone Devices can. All the rounded buttons are grouped together on one continuous pane, rather than on separate “pages” as on the iPhone Devices, so that a row of icons may only partially be on the screen as the user scrolls up or down. Also, unlike the iPhone

¹³ <http://europe.nokia.com/find-products/devices/nokia-n9/specifications>

1 Devices and the Design Patents, there is no area on the screen for a separate group of omnipresent
2 icons.



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Figure 13
“Meizu M8”

17 52. Finally, the image shown in Figure 13 represents another alternative design
18 concept for interface graphics of a phone screen.¹⁴ (See Exhibit 13.) The dimensions of the
19 image are 675 x 450 pixels, giving it an aspect ratio of 1:1.5, the same as the iPhone Devices.
20 The dark gray background has a subtle highlight and narrow vertical stripes, and it is darker at the
21 edges and corners. It shows sixteen icons in a 4 x 4 grid, each within approximately 80 x 80
22 pixels, anti-aliased directly against the background (no rectangular button “containers”) and (with
23 the exception of the SMS icon) all rendered in a similar dimensional style with detail and
24 highlights. The icons generally show gray, black, and white, and primary colors (red, yellow, and
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27 ¹⁴ This graphic was obtained from <http://www.loopycellphones.com/tag/meizu/>. It is identified
28 as a screenshot for an upcoming phone called “Meizu M8.”

1 blue), though there are some other accent colors. Several of the icons reference “throwback”
2 technology: an LP record, a cassette, film with sprockets, and a physical calculator. Each is set
3 off with a thin, dark shadow against the background. At the bottom of the screen, a rounded
4 rectangular panel “floats” against the background. It separates three gray gradient, unlabeled
5 icons from the others. There is no row of dots. The overall visual impression of this interface is
6 clearly distinct from that of the iPhone and the Design Patents, yet it displays approximately the
7 same number of icons on the screen—sixteen in the grid and three distinct icons in the separate
8 panel along bottom of screen—as the iPhone and the Design Patents.

10 3. Design of Specific iPhone Device Icons

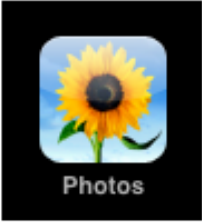
11 53. The five icons described below—the icons for Camera, Photos, Contacts, Phone
12 and iTunes—are specific solutions employed by the iPhone Devices for particular button images.
13 They also represent a variety of *types* of approaches (e.g., photorealistic vs. stylized symbol).
14 This suggests that the consistent use of the rounded rectangular buttons in a grid enabled a fair
15 amount of stylistic freedom regarding the icons themselves while preserving the overall
16 distinctive visual impression of the iPhone Devices.



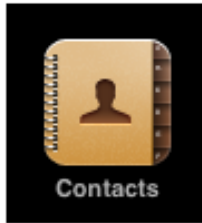
- 18 ■ **Camera.** This image¹⁵ is a photorealistic view of a generic camera lens as a
19 symbol for the Camera application. It suggests a lens built into a physical
20 camera (as opposed to an interchangeable lens) and is surrounded by a gray
21 metallic gradient, indicating a non-specific camera body. An unseen light
22 source creates reflected highlights, contributing to the precise, 3D quality of
23 the glass lens, which appears to recede into the button.
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28 ¹⁵ I have been informed that this image is the subject of U.S. Trademark Reg. No. 3,983,841.

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▪ **Photos.** This image appears to be a realistic illustration or photograph of a single sunflower matted against a blue sky background as a symbol for the Photos application (used for viewing photos on the device). The flower evokes a photograph but is an apparently arbitrary choice for a category often represented by iconic vacation scenes (e.g., beaches, dogs, or mountain landscapes). It symbolizes photos, but it does not suggest a literal representation of a printed photo or typical digital photo aspect ratio. It seems to be a generic photograph—without a reference to any particular camera or photographic end product. The sunflower is a non-controversial subject that is not specific, such as a photo of a particular, identifiable person or place, and the blue sky both provides contrast against black and is a general symbol of optimism. It also echoes the sunny day image on the Weather icon. The icon is the subject of U.S. Trademark Reg. No. 3,866,200. (Dkt. 75-25.)



▪ **Contacts.** This image is a cropped view of a tabbed, spiral-bound notebook. The tabs protrude beyond the cover, and the debossed silhouette of a person’s head and shoulders appears in the center. It is a combination of a realistic or literal object and an idealized view of an object. It is realistic or literal in that it is a recognizable physical object, with highlights to indicate the metal of the wire binding. It is an idealized view in that the tabs are visible beyond the cover, unlike those in most closed address books, and are relatively large and few, and the silhouette on the cover is filled with a gradient to appear three-dimensional rather than printed. The latter element in particular is a curious, non-realistic detail among other more “book-like”

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graphic details. The icon is the subject of U.S. Trademark Reg. No. 3,886,197. (Dkt. 75-28.)



iPhone



**iPhone 3GS/
iPhone 4**

- Phone.** This image is a silhouette of a telephone handset resembling those from classic Bell telephones designed by Henry Dreyfuss in the 1950s (though he designed many similar handsets from 1938-1982¹⁶). It is a “retro” shape that is a nod to the era before cell phones. It is shown at a 45 degree angle, facing right and in an upward position, set on a primary green background. The characteristic arc of light causes the top part of the icon to be brighter. This phone icon contrasts with the camera icon—it is a flat retro shape of an entire object, whereas the camera lens is a highly detailed part of a device that suggests contemporary consumer electronics. In the iPhone 3GS and iPhone 4 that I examined (running iOS version 5.0.1), the Phone icon has a texture of subtle, dark green with lighter green diagonal stripes that run from the lower left to upper right. The overall texture appears to be filled with a gradient, so the texture becomes very faint as it merges with the bright, lighter green in the lower part of the icon. The diagonal stripes are approximately 2 pixels across, but they are anti-aliased so their edges blend with the background. There is more contrast (darker green texture) in a horizontal band across the center of the icon. There is also a pale gray gradient on the silhouette, but it reads as a solid color, and there also appears to be a slight drop shadow. The phone in the iPhone icon is white and has no drop shadow. The iPhone 3GS/iPhone 4 version of the icon appears in U.S. Trademark Reg. No. 3,886,196. (Dkt. 75-23.)

¹⁶ See <http://imprint.printmag.com/animation/saying-goodbye-to-an-old-friend-the-hardwired-attbell-systemwestern-electric-telephone/>.



- **iTunes.** This image could be interpreted as an updated, stylized version of the “iTunes Eighth Notes + CD” depicted in U.S. Trademark Reg. No. 2,935,038. (Dkt. 75-30.) It is presented as the silhouette of a pair of eighth notes within a thick circular border. The round border could be seen as an abstract reminder of LPs and CDs. The notes are an unmistakable symbol for music, and they are the same basic notes used in the original iTunes logo (see Figure 19, below). The background is violet, with a subtle starburst tone-on-tone pattern that might suggest sound emanating from the image. The icon is the subject of pending U.S. Trademark Application Serial No. 85/041,463. (Dkt. 75-29.)

54. Each of the icons described above represents one particular graphic option for each concept. There is a wide range of alternatives: both different ways to render those particular choices, and different options altogether. In Exhibit 14 and in the following figures, I have gathered a sampling of varying approaches to those icons to demonstrate that there is a variety of valid solutions to these design problems. It is not difficult to find a range of graphic options that could have been used instead.

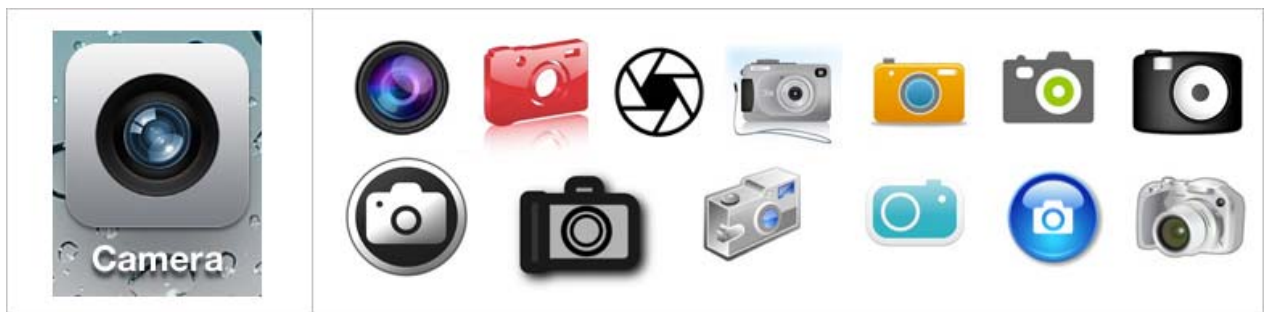


Figure 14

- **Camera.** A camera icon is fairly straightforward in that a camera is an easy noun to represent visually. However, a camera lens could be used by itself, or a camera body could be shown. The amount of detail shown to indicate a lens

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is completely variable. In fact, very little visual information is needed to make a shape recognizable as a camera; a horizontal rectangle with a circular outline for a lens and a stylized viewfinder or flash is sufficient. Also, the lens need not be dominant; colors and angles can be varied; and a shutter can also symbolize a camera or the act of taking photographs.

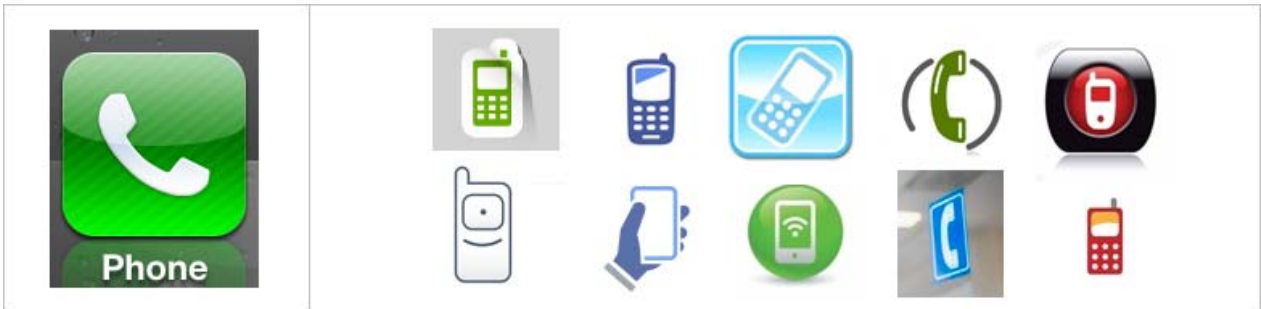


Figure 15

- **Phone.** The phone icons on the iPhone Devices are not self-referential—they do not look like an iPhone Device. They exhibit a classic silhouette, but they are actually a bit discordant because they resemble a vintage, if generic, phone handset, not a mobile phone. Other possible images might have included a stylized cell phone, a more recent phone or receiver, a phone keypad, or a hand holding a cell phone. The receiver could also be at a different angle, or vertical (as is common on phone booths).



Figure 16

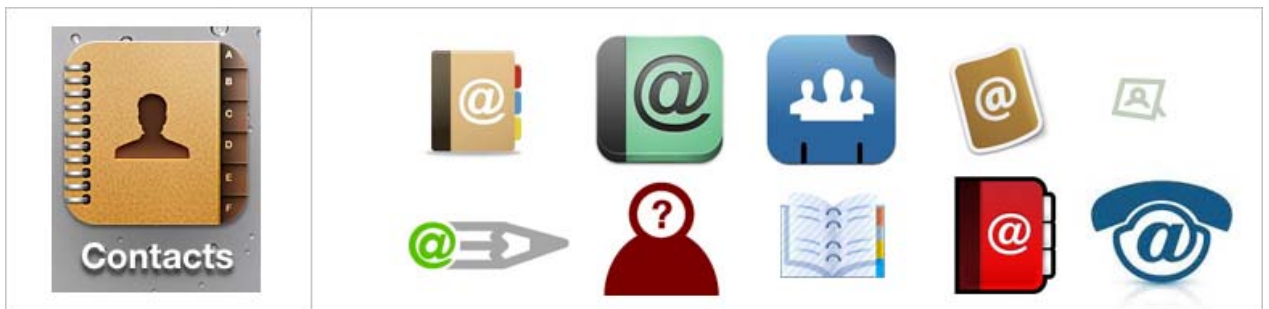
- **Photos.** If the symbol for a user’s photos is a sample photographic image, the possibilities are limitless. It makes sense to avoid a person, because there is no

1 one typical person, but any kind of landscape, animal, or other easily
 2 recognizable image from nature could be representative: a palm tree with the
 3 ocean behind it, mountains, a bird, a starry sky with crescent moon, a blue sky
 4 with clouds, a dog, etc. Most of these images work across cultures and evoke
 5 typical subjects for a wide range of photographers. Besides a sunflower, any
 6 easily recognizable flower or plant could work as an icon image.
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 13 **Figure 17**

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- 15 ▪ **iTunes.** Music-related applications can be represented by a wide range of
 16 symbols.¹⁷ A single musical note, instrument, headphones, or treble clef are all
 17 simple shapes that are easy to recognize and associate with music. An image
 18 incorporating a play button is also an option. Not being tied to a particular
 19 type of music storage (e.g., disc or device) is advantageous for icon longevity.



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 25 **Figure 18**

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- 27 ▪ **Contacts.** To represent Contacts, Apple uses a cropped illustration of a tabbed
 28 notebook with wire-o binding containing a silhouette of a person's head and

¹⁷ This discussion applies equally to the iTunes Eighth Note and CD icon described below.

1 shoulders. There are small indications of letters of the alphabet on the tabs.
2 Many options that could work as Contacts icons feature the “@” sign, as
3 shorthand for contacting someone via email. Even the “@” sign alone is used
4 in some icons, although it also adorns many book images. Stylized groups of
5 people, and other styles of tabbed notebooks abound.

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7 55. Looking at the collection of icons portrayed in the iPhone Devices, the D’305
8 patent, and the D’334 patent as a group, the main unifying graphical feature is the rounded
9 rectangular button shape against black, or, for the iPhone 3GS and iPhone 4, the alternative
10 background depicted in Figures 5 and 6 above. In part because the style of the icons themselves
11 varies, the container shape is an essential element of the overall visual impression created by the
12 icon arrangement. There are images that read either as illustrations, photographs, or iconic
13 symbols. The Phone icon and iTunes icon are pale, near-monochromatic symbols – simplified
14 light gray or white shapes each centered on a distinctive bright-colored gradient background. The
15 Camera icon, in contrast, is a cropped view of a camera lens, rendered in a photorealistic style
16 with many details and realistic highlights, receding into what appears to be a brushed aluminum
17 camera body. The Contacts icon is a cropped view of an illustrated, tabbed notebook, and the
18 Photos icon shows a photographic image of a single deep yellow sunflower with two green
19 leaves, matted against blue sky.

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22 56. It would have been possible, if desired, to design all the icons of the iPhone
23 Devices using a single, consistent stylistic approach. For example, the camera lens is detailed and
24 “modern” while the phone is stylized, “retro,” and detail-free. It would have been possible
25 instead to create a simplified camera icon to “match” the style of the Phone icon. As designed,
26 while there is a variety of different graphic styles for the icons—the simple (e.g., chat bubble for
27 Text/Messages) versus the detailed (e.g., sunflower for Photos), the literal (e.g., camera lens for
28

1 Camera) versus the metaphorical (e.g., gears for Settings)—the consistent rounded rectangular
2 shape of the icons and their layout on the screen unifies them in producing their overall visual
3 appearance as a group.

4 **4. Design of the iTunes Eighth Notes + CD Icon**

5 57. This icon (*see* Figure 19, below) combines a background image (optical disc) with
6 a pair of eighth notes that appear to be in the foreground because they overlap the outline of the
7 disc. The eighth note at left is slightly lower, so the bar that connects them angles up to the right.
8 The disc appears as concentric circles—not exactly circular, but condensed at a slight angle. The
9 disc is easily recognizable as an audio CD due to the size and location of the two inner circles and
10 the fact that it is paired with musical notes. This icon is registered in U.S. Trademark
11 Registration No. 2,935,038. (Dkt. 75-30.)
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19 **Figure 19**

20 **B. Similarity Between Apple Designs and Samsung Icons and User Interface Graphics**

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22 58. I have been asked to examine Samsung Phones and opine on the design—
23 including with respect to layout and icon design—of the “applications screens” that are accessible
24 via a button displayed on the phones’ default home screens.¹⁸ The phones I have analyzed are:

- 25
- 26 • Captivate

27
28 ¹⁸ The iPhone Devices, in contrast, do not have a “home screen” that is separate from the screens showing a grid of icons as in Figures 4 through 6. With respect to the iPhone Devices, “home screen” and “applications screen” are synonymous.

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VIII. EXHIBITS TO BE USED

93. I anticipate using as exhibits during trial certain documents and things referenced or cited in this report or accompanying this report. I also anticipate using other demonstrative exhibits or things at trial.

Dated: March 22, 2012



SUSAN KARE

sf-3098252

Exhibit 1

Susan Kare
1 Presidio Avenue
San Francisco, CA 94115

415 346 3629
415 921 1740 fax
www.kare.com

Education

B.A. Mount Holyoke College, summa cum laude, fine arts and English (1975)
M.A., Ph.D. New York University, fine arts (1978)

Experience

1982 - 1985 Macintosh Artist; Creative Director, Apple Computer
1986 - 1988 Creative Director, NeXT, Inc.
1987 - Founder, Susan Kare LLP (user interface graphic design practice)
2005 – 2009 Founder; Creative Director, Glam Media, Inc.
1990 -1994 User Interface Graphics, General Magic, Inc.

Additional Information

1982 - 1985 Designed fonts and screen images for the Apple Macintosh and related literature
1986 - 1988 Managed the development of the NeXT, Inc. graphic identity
1988 - 1989 Designed screen appearance for Microsoft Corporation's Windows 3.0
2001 Received the Chrysler Design Award
2002 - present Board of Directors, Manhattan Toy Company LLC
2003 - 2004 Citizens Coinage Advisory Committee, U.S. Mint (Congressional appointment)
2004 Designed retail merchandise (stationery), Museum of Modern Art, New York
2007-2010 Designed Facebook's "virtual gifts"

List of United States Patents and Patent Applications Named on as Inventor

D575,302
D561,192
D561,191
D424,036
D403,674
D403,673
D399,501
D399,196
D397,687
D395,428
D395,427
6,361,851
5,611,031
5,541,656
11/515,618
12/340,112

Partial List of Past and Current Clients (more at http://www.kare.com/design_bio.html)

Apple Inc.
AT&T
Autodesk, Inc.
BBDO
Chumby Industries
Danger Research
Digg, Inc.
DualCor, Inc.

Electronic Arts
Facebook, Inc.
Fidelity Investments
Fossil, Inc.
Galileo International
Getty Technology Group
Google, Inc.
Handspring
Hewlett-Packard, Inc.
IBM Corporation
Intel Corp.
Intellisync
Logitech
Microsoft Corporation
Motorola, Inc.
Museum of Modern Art, New York
Netscape Communications
Nokia
Oracle Corporation
Palm
Pelco, Inc.
Peoplesoft, Inc.
Plastic Logic, Inc.
Scribd, Inc.
Sequoia Capital
Siebel Systems
Silicon Graphics, Inc.
Sun Microsystems
Swatch, Inc.
Thomson-Reuters, Inc.
Intel Corp.
Vodafone, Inc.
Wireless Generation, Inc.
Xerox Corp.
Yahoo, Inc.

Exhibit 2

Apple Inc. v. Samsung, No. 11-01846 LHK (PSG)
 Documents Considered by Susan Kare

BEG BATES	END BATES
APLNDC-Y0000232663	APLNDC-Y0000232665
APLNDC-Y0000232666	APLNDC-Y0000232668
APLNDC-Y0000232669	APLNDC-Y0000232672
APLNDC00032009	APLNDC00032012
APLNDC00030421	APLNDC00030425
APLNDC-Y0000232557	APLNDC-Y0000232557
APLNDC-Y0000237385	APLNDC-Y0000237386
APLNDC-Y0000237387	APLNDC-Y0000237394
SAMNDCA10478726	SAMNDCA10478726
SAMNDCA10272033	SAMNDCA10272067
SAMNDCA10272186	SAMNDCA10272225
SAMNDCA10272056	SAMNDCA10272056
SAMNDCA10272060	SAMNDCA10272060
SAMNDCA00228887	SAMNDCA00228933
SAMNDCA00204884	SAMNDCA00205031
SAMNDCA10202899	SAMNDCA10202983
SAMNDCA10202957	SAMNDCA10202957
SAMNDCA10272003	SAMNDCA10272032
SAMNDCA10272033	SAMNDCA10272067
SAMNDCA10252511	SAMNDCA10252525
SAMNDCA00229011	SAMNDCA00229108
SAMNDCA10202899	SAMNDCA10202899
SAMNDCA10272186	SAMNDCA10272225
SAMNDCA10298457	SAMNDCA10298457
SAMNDCA11030081	SAMNDCA11030359
SAMNDCA10247689	SAMNDCA10247689
SAMNDCA00203880	SAMNDCA00204010
S-ITC-000118719	S-ITC-000118775

Apple Inc. v. Samsung, No. 11-01846 LHK (PSG)
Documents Considered by Susan Kare

Amended Complaint (Dkt. 75), and Exhibits 23 (Dkt. 75-23), 25 (Dkt. 75-25), 28 (Dkt. 75-30), 29 (Dkt. 75-29), and 30 (Dkt. 75-30)
Bressler Reply Declaration (Dkt. 279-0)
Order Denying Preliminary Injunction (Dkt. 452)
iPhone, iPhone 3GS, iPhone 4 Devices
Devices depicted in Exhibits 6-8, 11-12, and 15-27

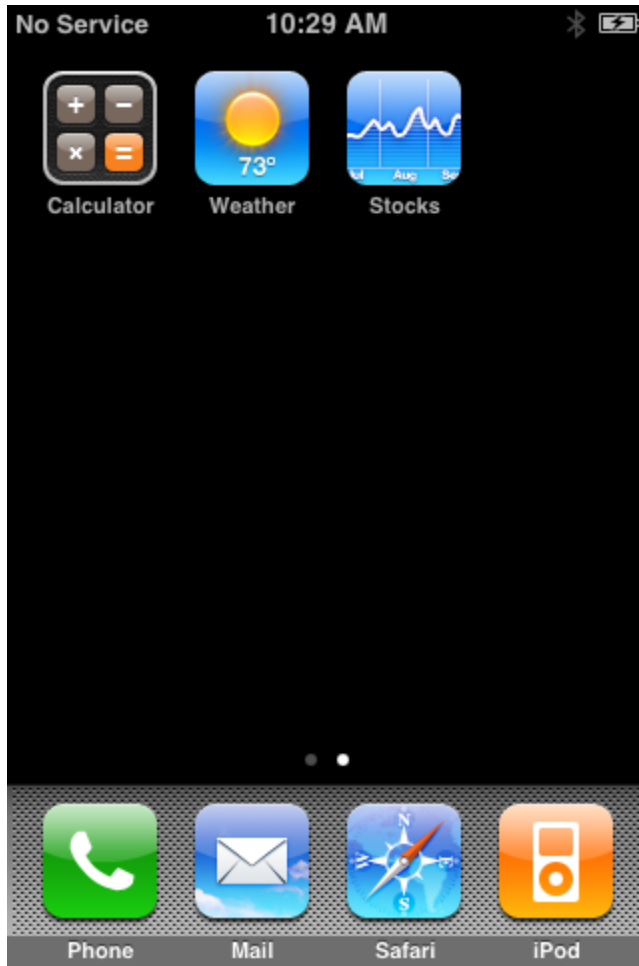
Exhibit 3



iPhone Screen Capture



iPhone Screen Capture



iPhone Screen Capture

Exhibit 4



iPhone 3GS Screen Capture



iPhone 3GS Screen Capture

Exhibit 5



iPhone 4 Screen Capture



iPhone 4 Screen Capture

Exhibit 6



Sony Ericsson Xperia arc S



Sony Ericsson Xperia arc S



Sony Ericsson Xperia arc S



Sony Ericsson Xperia arc S

Exhibit 7



Sony Ericsson Xperia neo V



Sony Ericsson Xperia neo V



Sony Ericsson Xperia neo V

Exhibit 8



Blackberry Storm 2



Blackberry Storm 2



Blackberry Storm 2

Exhibit 9



A



B

A: <http://mea.nokia.com/find-products-en/devices/nokia-n9/specifications>

B: <http://www2.pcmag.com/media/images/269068-blackberry-torch-9850-u-s-cellular.jpg>



Synaptics FuSE

C



D

C : <http://www.nolapeles.com/2010/11/07/synaptics-fuse-smartphone-conceptual-con-superficie-posterior-tactil/>

D : <http://www.designbuzz.com/entry/blue-bee-touchscreen-interface-wraps-itself-around-the-phone/>



E

<http://www.nolapeles.com/2010/11/07/synaptics-fuse-smartphone-conceptual-con-superficie-posterior-tactil/>

F

Samsung AnyCall Haptic
<http://www.unwiredview.com/2008/05/08/samsung-anycall-haptic-phone-100000-units-sold-pink-and-white-versions-on-the-way/>

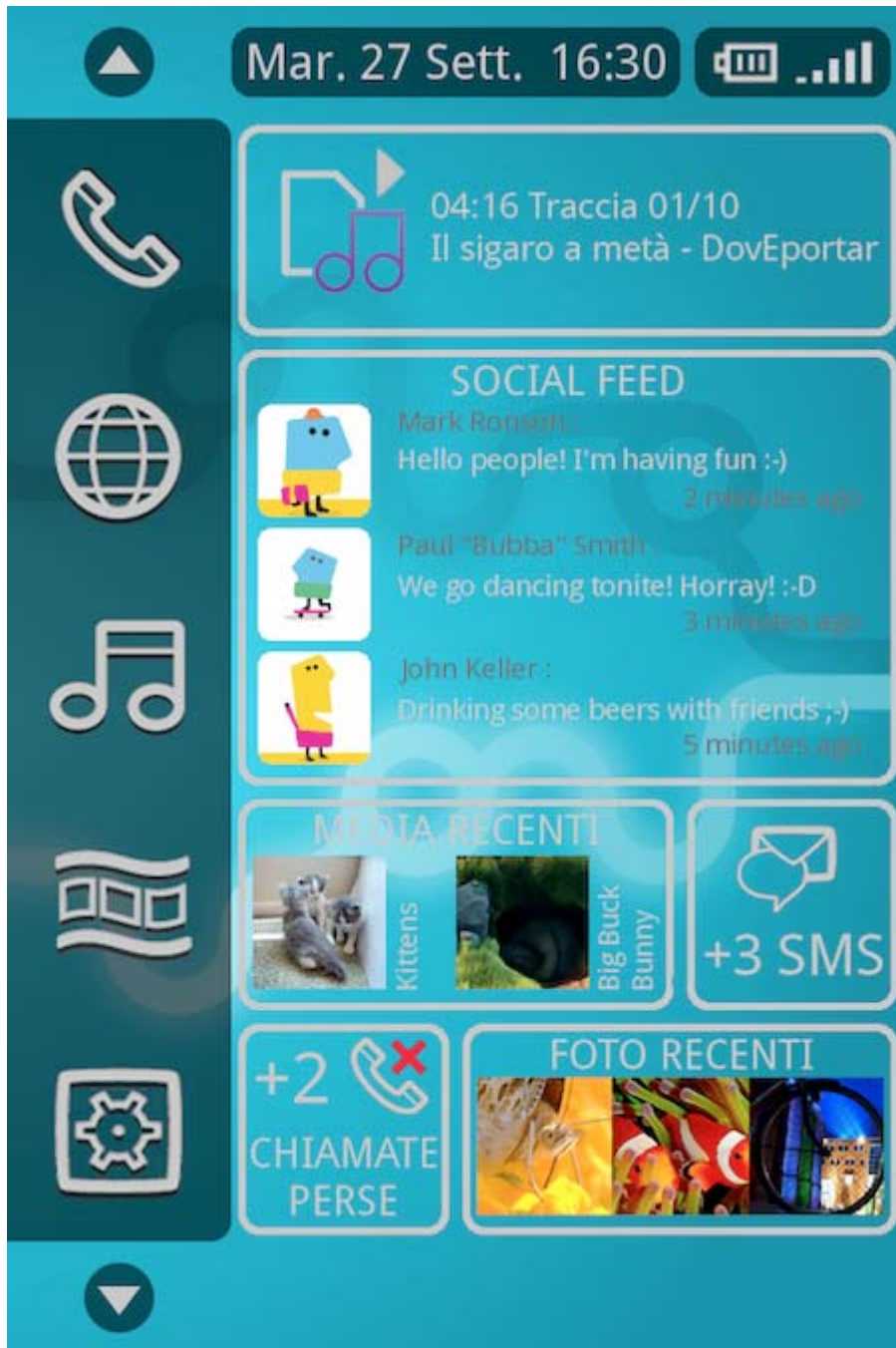


G <http://gdgt.com/pantech/pocket/>



H <http://c2499022.cdn.cloudfiles.rackspacecloud.com/wp-content/uploads/2011/10/Verizon-Pantech-Hotshot.jpg>

Exhibit 10



<http://linuxbird.deviantart.com/art/Mockup-MeeGo-handset-260376988>



<http://www.warungdigital.com/wp-content/uploads/2011/05/kddi-infobar-a01-android.jpg>



<http://www.portablegadgets.net/index.php?id=300>



<http://www.hpsblog.com/2011/02/personalize-your-phone-screen-with.html>



<http://www.geeky-gadgets.com/wp-content/uploads/2009/02/windows-mobile-6-5.jpg>

Exhibit 11



Blackberry Torch 9850

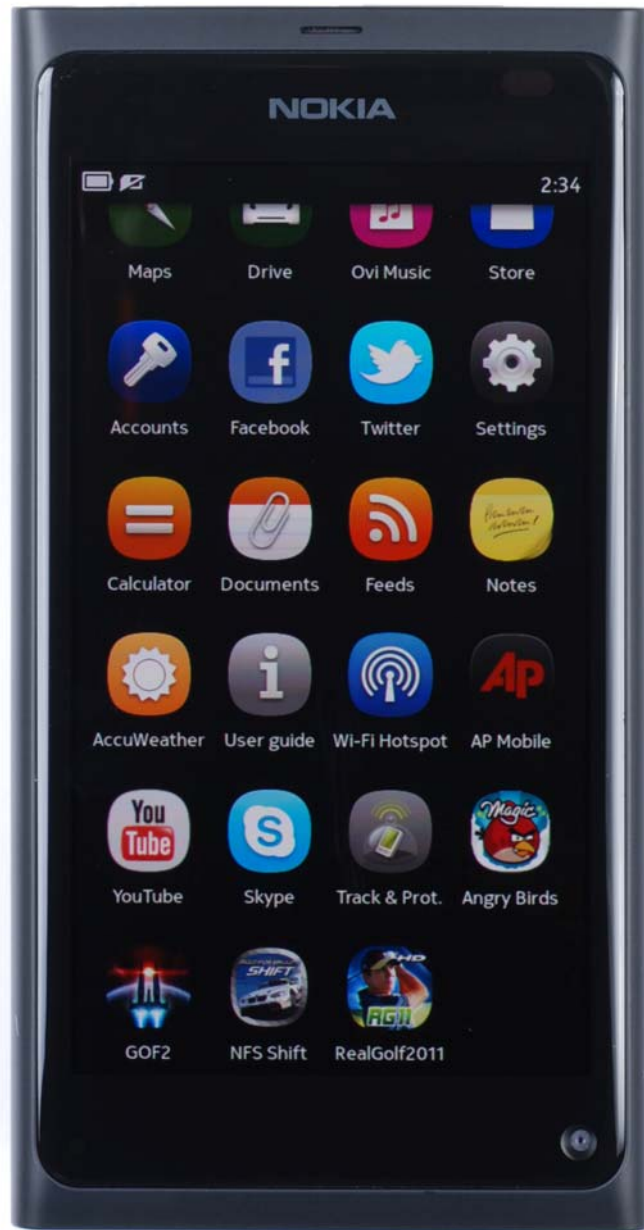


Blackberry Torch 9850

Exhibit 12



Nokia N9



Nokia N9

Exhibit 13



Meizu M8
(<http://www.loopycellphones.com/tag/meizu/>)

Exhibit 14

iPhone 4

