Exhibit 1

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****

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

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

[9] http://www.apple.com/iphone/iphone-3gs/specs.html
[10] http://www.apple.com/channel/iphone/iphone-4/tour/specs.html. As discussed in footnote 20 below, the 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).

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

Figure 7
Sony Xperia arc S

Figure 8
Blackberry Storm 2

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

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

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

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

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

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

Figure 13
"Meizu M8"

52. Finally, the image shown in Figure 13 represents another alternative design concept for interface graphics of a phone screen.[14] (*See* Exhibit 13.) The dimensions of the image are 675 x 450 pixels, giving it an aspect ratio of 1:1.5, the same as the iPhone Devices. The dark gray background has a subtle highlight and narrow vertical stripes, and it is darker at the edges and corners. It shows sixteen icons in a 4 x 4 grid, each within approximately 80 x 80 pixels, anti-aliased directly against the background (no rectangular button "containers") and (with the exception of the SMS icon) all rendered in a similar dimensional style with detail and highlights. The icons generally show gray, black, and white, and primary colors (red, yellow, and

[14] This graphic was obtained from http://www.loopycellphones.com/tag/meizu/. It is identified as a screenshot for an upcoming phone called "Meizu M8."

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 D. Kare

SUSAN KARE

sf-3098252