

Research & Study: Competitor's GUI study

Samsung Galaxy S1

vs.

- Competitor's Android phones,
- (Non-Android) Smart phones &
- Samsung Android Phones for
2 different carriers

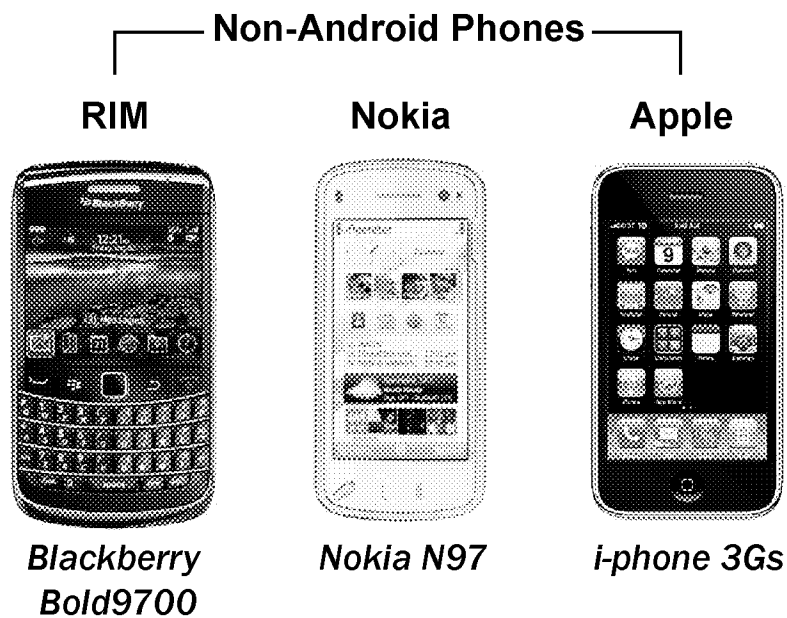
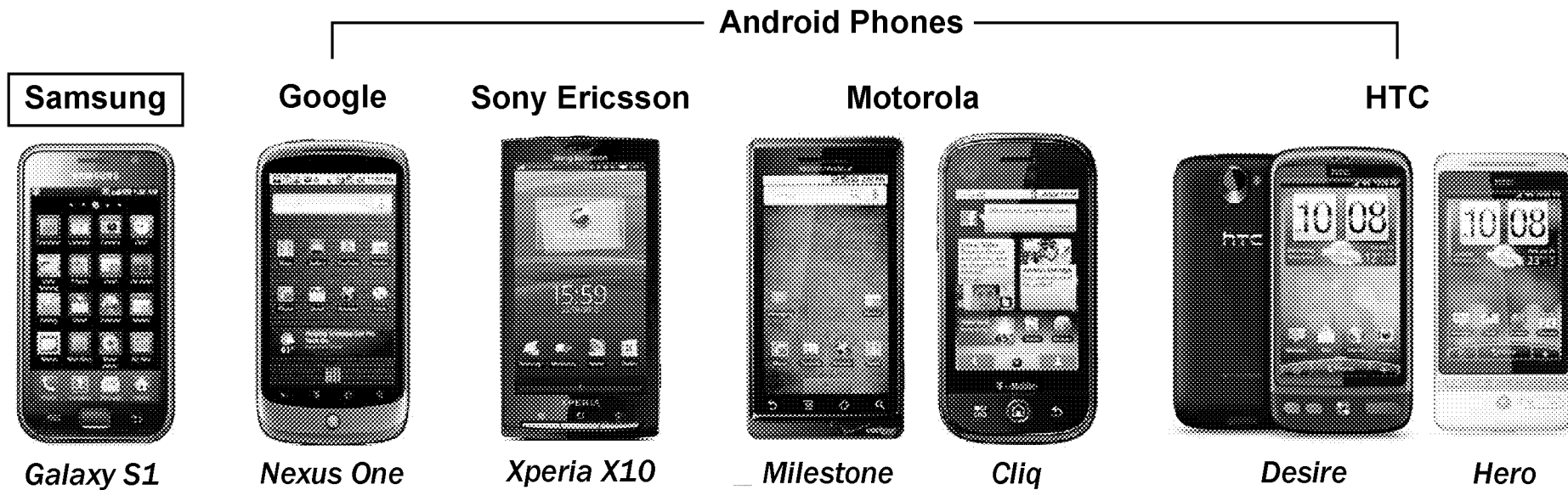
PLAINTIFF'S EXHIBIT NO. 179

United States District Court
Northern District of California
No. 11-CV-01846-LHK (PSG)

Apple Inc. v. Samsung Elecs.

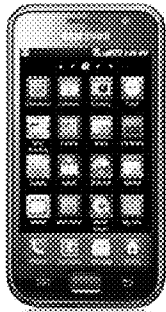
Date Admitted: _____ By: _____

Competitors' Product lists for GUI study



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Samsung Galaxy S1



OS	Android 2.1(Éclair)
UI	Samsung Android UI(TouchWiz 3.0)
Size	64.2X122.4X9.9mm
Weight	118g
Display	4.0" Super AMOLED (OCTA) WVGA
Pixel	480X800
Touchscreen	Multi-touch
Keyboard	Virtual
Color	Black

GUI	
Look & Feel:	Crispy, Colorful, Smooth, Fresh
Color:	■ ■ ■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	Detailed full color icons, Glossy, Various Colored - square buttons with rounded corners

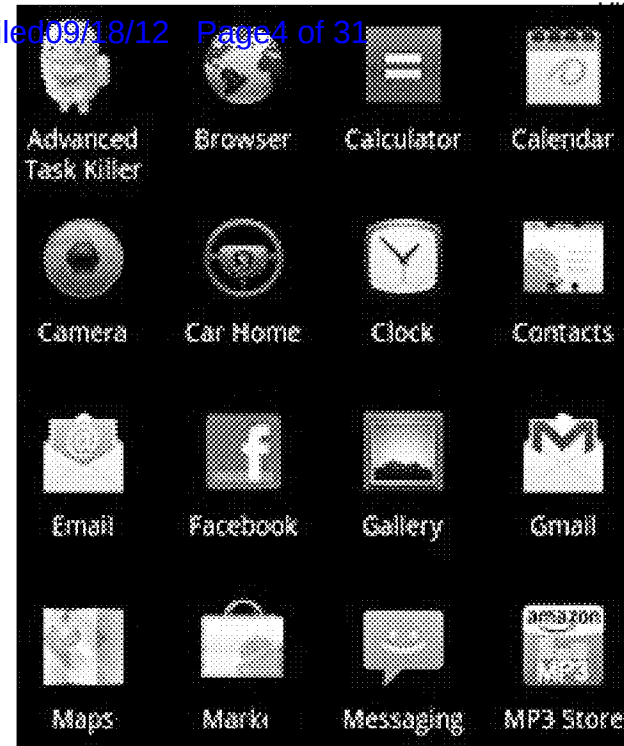
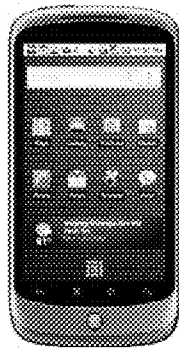


Screen Design

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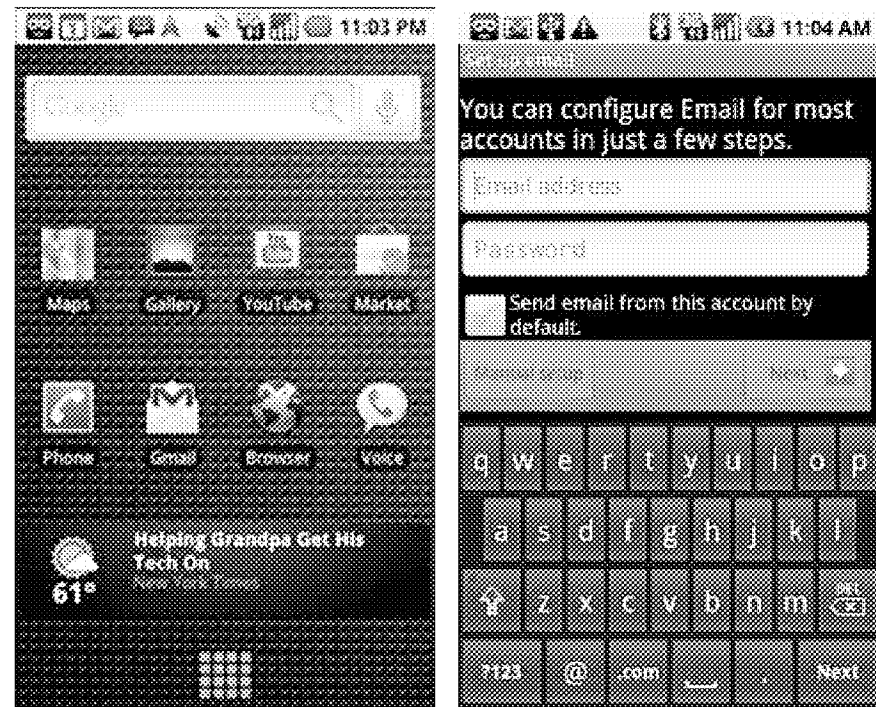
Google Nexus One



OS	Android 2.1(Éclair)
UI	Google(GED)

Size	59.8X119X11.5
Weight	130g
Display	3.7" AMOLED WVGA
Pixel	480X800
Touchscreen	Capacitive
Keyboard	Virtual
Color	2 tone gray

GUI	
Look & Feel:	Not fancy, Convenient, Neat, Grey -> Upgradable Look, old apple GUI feel
Color:	■ ■ ■ ■
Font:	Droid Sans
Icons:	Neat, Standard drawing & type icons

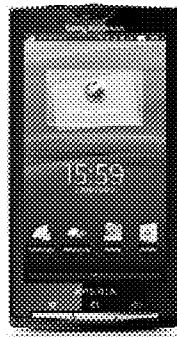


Screen Design

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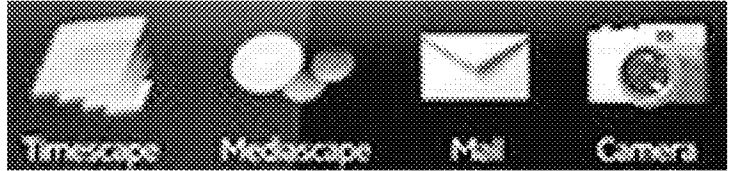
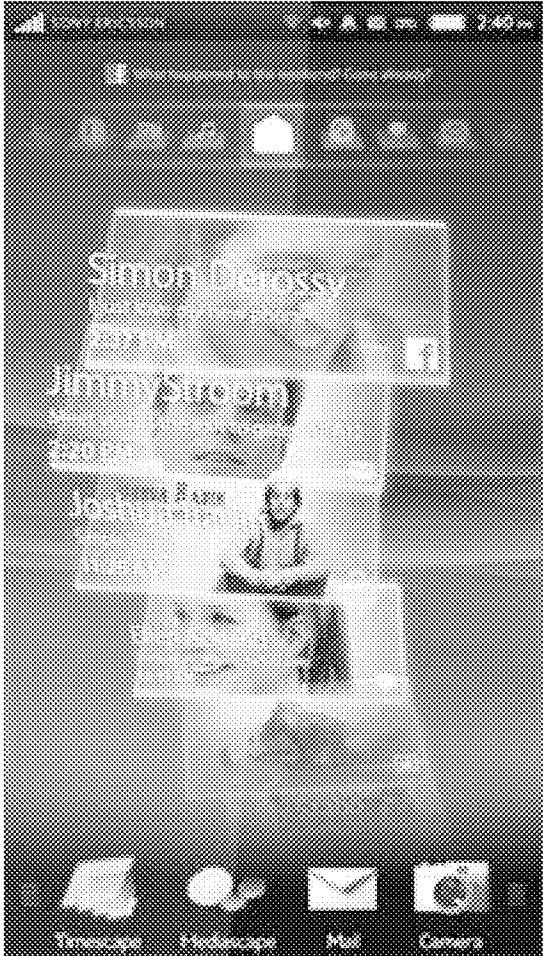
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Sony Ericsson Xperia X10



OS	Android 2.0
UI	Nexus(Rachael) UI
Size	63X119X13
Weight	135g
Display	4.0" TFT WVGA
Pixel	480X854
Touchscreen	Capacitive
Keyboard	Virtual
Color	Black, White

GUI	
Look & Feel:	Cold, Sleek, Futuristic, Neat
Color:	■ ■ ■ ■ ■ ■ ■ ■ ■ ■
Font:	*
Icons:	Dimetional, Clean, Sharp / Blue & White
	Color - > Consistent Feel



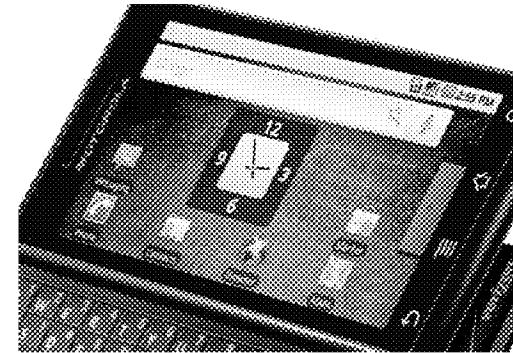
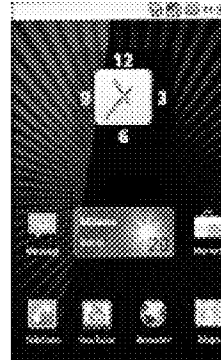
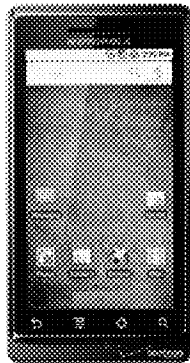
Screen Design

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Motorola

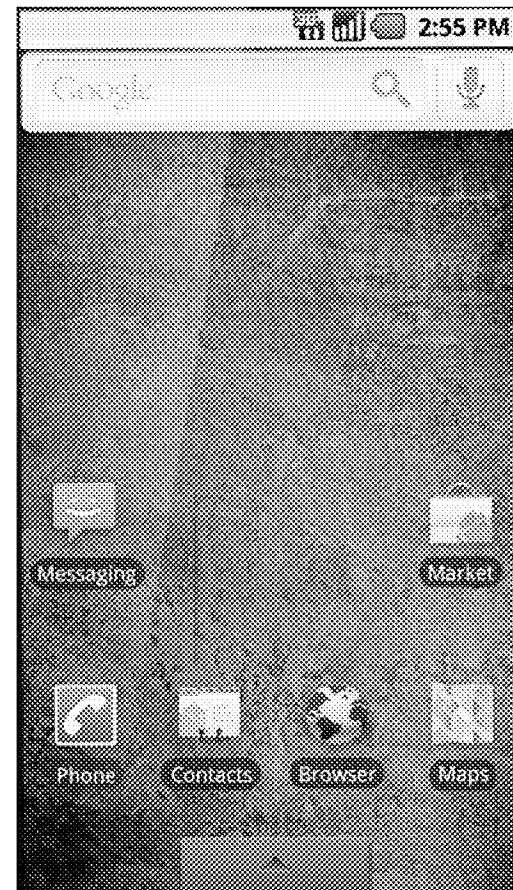
Droid Milestone



OS	Android2.0 (Éclair)
UI	Google(GED)

Size	60X115.80X13.70
Weight	169g
Display	3.7" TFT WVGA
Pixel	480X854
Touchscreen	Capacitive
Keyboard	Slider QWERTY
Color	Black

GUI	
Look & Feel:	Hard, Cool, Gray, Neat <- Wallpaper, Clock
Color:	■ ■ ■ ■
Font:	Droid Sans
Icons:	identical GED icons, Neat, Standard



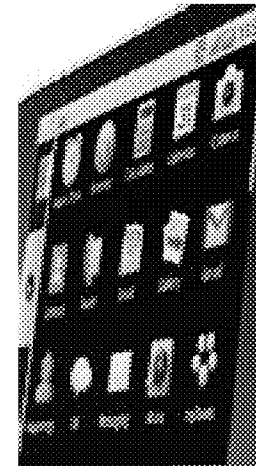
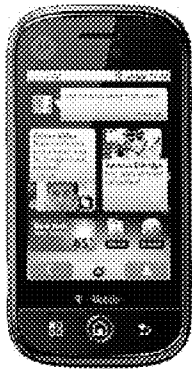
Screen Design

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Motorola

Cliq



OS	Android 1.5
UI	MOTOBLUR UI

Size	58X114X15.6
Weight	163g
Display	3.1" TFT HGVA
Pixel	320X480
Touchscreen	Capacitive
Keyboard	Slider QWERTY
Color	Titanium, White

GUI	
Look & Feel:	Cooler, Younger, a little Cute, Neat
Color:	■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	some 2.5D icons, Lighter, Softer rendered icons than GED icons

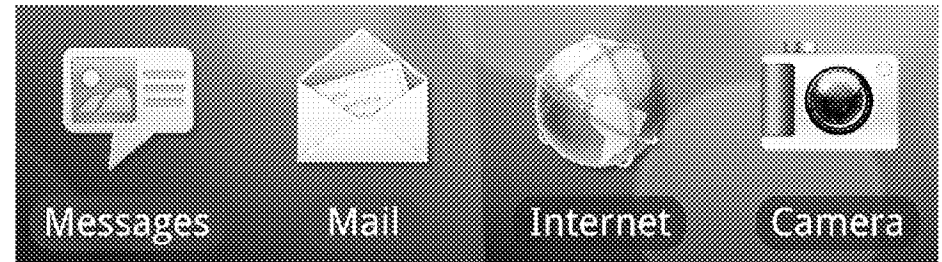
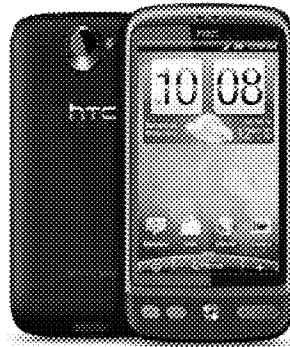


Screen Design

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HTC **Desire**



OS	Android2.1 (Éclair)
UI	HTC Sense UI
Size	119X60X11.9
Weight	135g
Display	3.7" AMOLED WVGA
Pixel	480X800
Touchscreen	Capacitive
Keyboard	Virtual
Color	Two tone gray

GUI	
Look & Feel:	Crispy, Clear, Light, Comfortable
Color:	■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	Upgraded look of GED icons, Lighter, Softer, Brighter, Dimentional Design

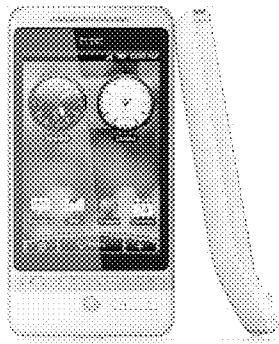


Screen Design

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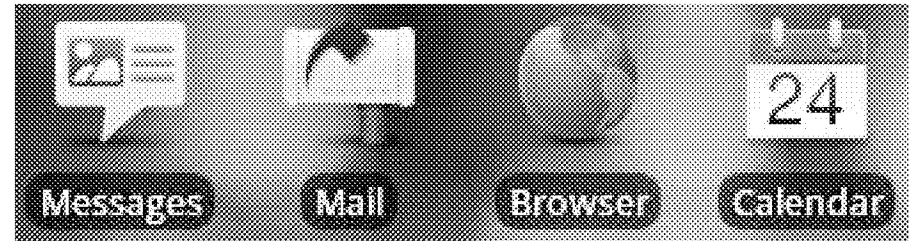
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HTC Hero



OS	Android
UI	HTC Sense UI
Size	112X56.2X14.35
Weight	135g
Display	3.2" TFT HVGA
Pixel	320X480
Touchscreen	Capacitive
Keyboard	Virtual
Color	Black, White

GUI	
Look & Feel:	Smooth Shape & Gray, Cute Gadget
Color:	■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	Identical GED icons, but Upgraded look, Standing objects w Shadow, Neat icons

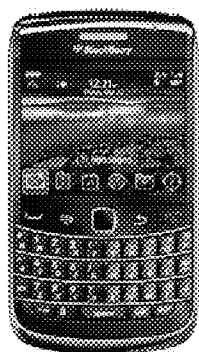


Screen Design

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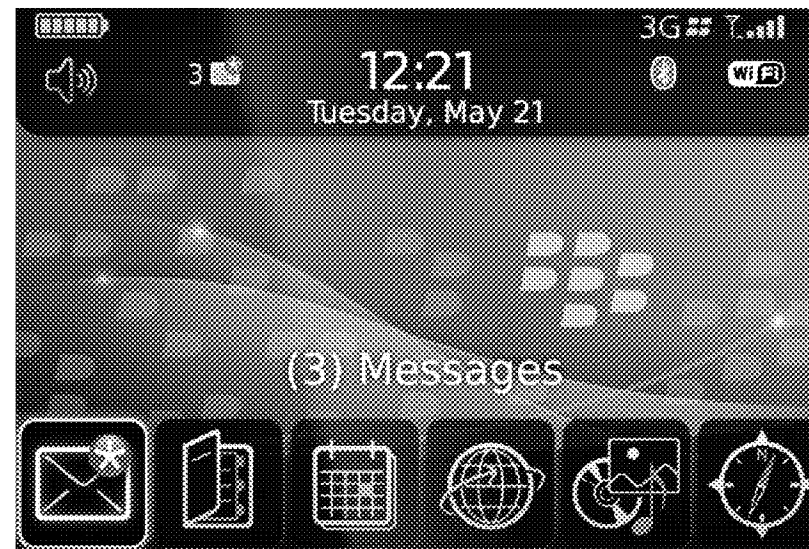
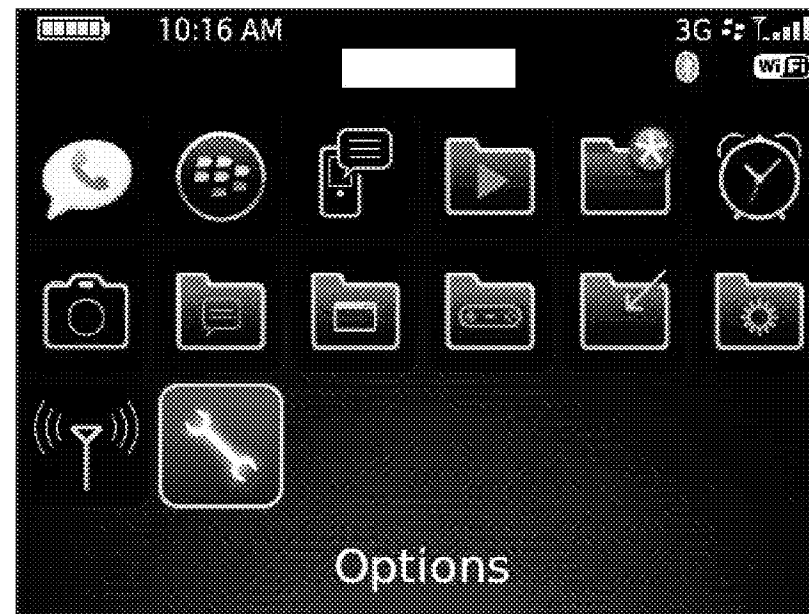
RIM BlackBerry Bold 9700



OS	Blackberry OS 5.0
UI	Blackberry UI

Size	60 X 109 X 14.1
Weight	122 g
Display	2.44" TFT HVGA
Pixel	480X360
Touchscreen	Disable / Trackpad nav
Keyboard	Full QWERTY keyboard
Color	Black

GUI	
Look & Feel:	Simple, Easy, Empasis
Color:	■ ■ ■ ■ ■ ■ ■ ■
Font:	*
Icons:	LineArt, Rounded, Simple Icons w Strong Promary Colors

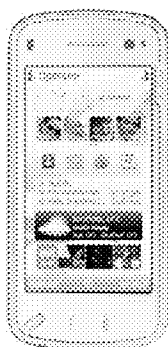


Screen Design

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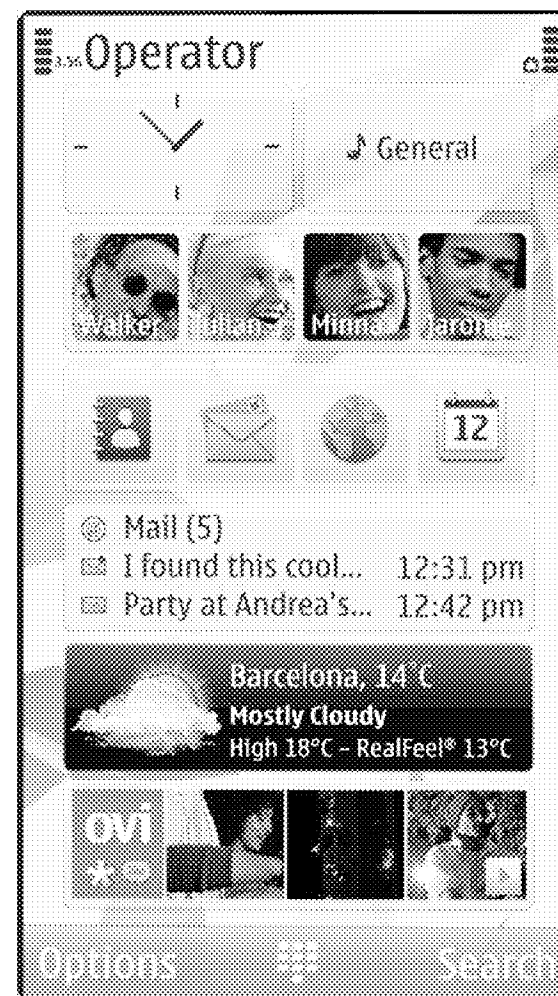
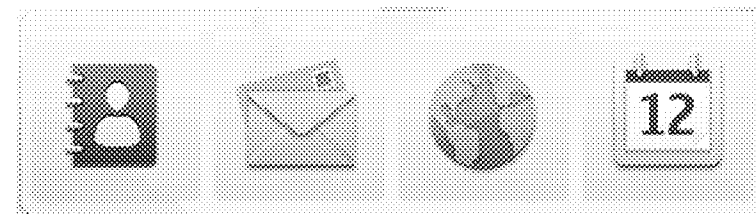
Nokia **Nokia N97**



OS	Symbian OS9
UI	*

Size	117X55X15
Weight	148g
Display	3.5" TFT
Pixel	360 x 640
Touchscreen	Capacitive
Keyboard	Full QWERTY keyboard
Color	White, Black

GUI	
Look & Feel:	Clean, Sharp, Neat, Light, Feminine
Color:	■ ■ ■ ■ ■
Font:	*
Icons:	Simple, Light, Cut-Out Paper-feel icons
	Pastel Colors

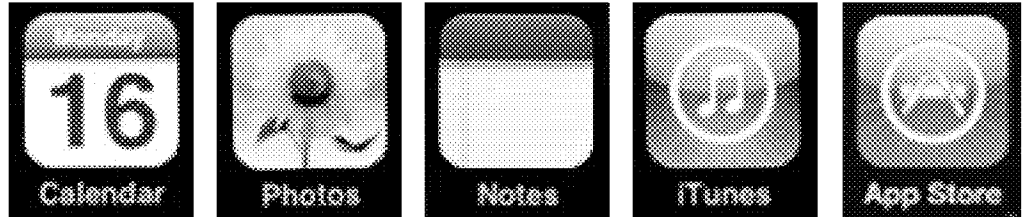
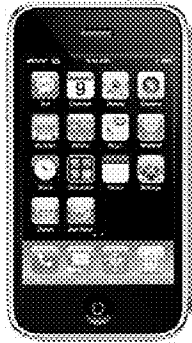


Screen Design

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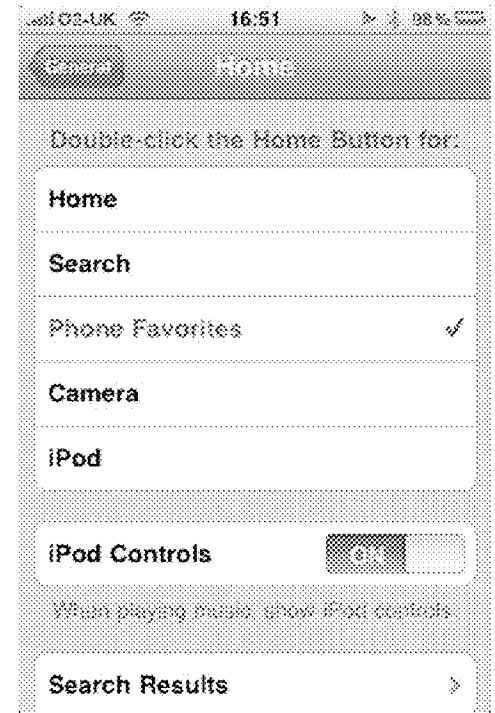
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Apple i - phone 3Gs



OS	Mac OS X v.10.4.11
UI	Apple UI
Size	62.1X115.5X12.3
Weight	134g
Display	3.5" HVGA
Pixel	480X320
Touchscreen	Multi-touch
Keyboard	Virtual
Color	White, Black

GUI	
Look & Feel: Pure, Clear, Soft, Transparent	
<- Aqua Theme GUI	
Color:	■ ■ ■ ■ ■ ■ ■ ■
Font:	*
Icons:	Buttons w Aqua feel



Screen Design

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TRANSLATION

Current Samsung Android GUI Design

- Attempts Samsung's unique UI/GUI called Samsung UI (Touch Wiz), just like competitors
- Endeavoring to make good use of Samsung's strength in display technology: more detailed and colorful GUI than the competitor companies
- Influence of i-Phone's GUI: Google's GED GUI has techie feel / Samsung's GUI has Apple-like design feel
- Especially in the US market, depending on the telecommunications carrier*/ wants to furnish with GUI theme differentiated according to model

Current Competitors GUI Design

- Each competitor endeavoring to move away from Google GED and have a UI/GUI with a differentiated identity
- Influence of i-Phone's GUI: The recognized influence of Aqua theme GUI is great
- Competitors' GUI change per telecommunications carrier is not great; slight differences in feel, detail among icons

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TRANSLATION

Samsung GUI Differentiation

* Per telecommunications carrier / per each model differentiated GUI

- **AT&T:** Preference for GUI maintained as-is

case1) Kepler: GUI implemented almost identical to S1 / icon added, power animation

⇒ Direction of GUI characteristics: Smart, sleek and cool, but more elegant and intelligent than T-mobile

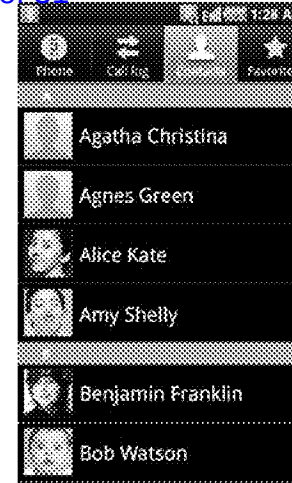
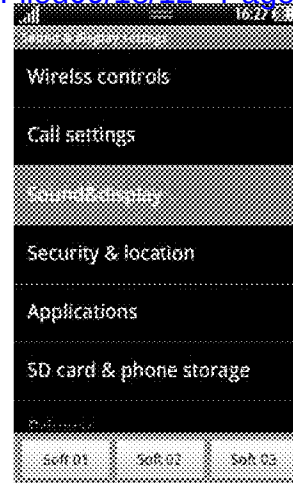
- **T Mobile:** In general, differentiated GUI depending on model

case1) Supersonic: Add slightly Glossy Skin / Tap Bar with rounded corner
Decreased color saturation for a little more transparent and cool feeling

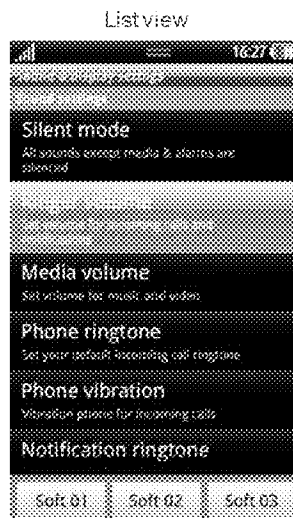
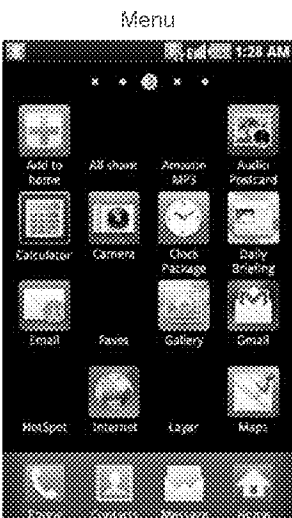
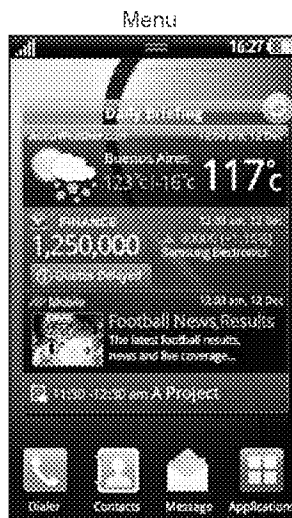
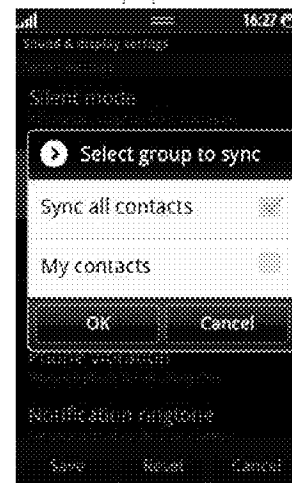
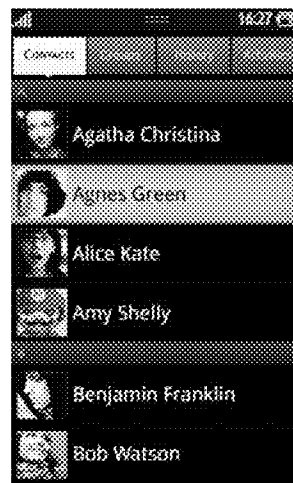
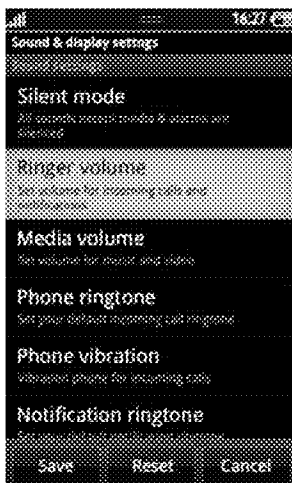
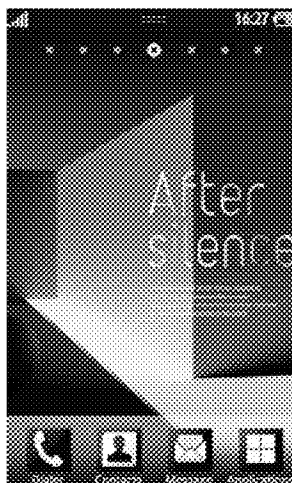
case2) SideKick: Furnished with trendy and funky graphic style preferred by youths to
match the distinctive product concept

⇒ Direction of GUI characteristics: Cool GUI preferred by young Americans

AT&T



T-Mobile



Peter Mauro Schroepfer
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Oakland, CA 94611

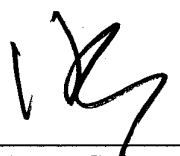
schroepfer@gmail.com
seobanseok@gmail.com

Certificate of Translation

23 July 2012

I hereby certify that the Korean to English translation of pages SAMNDCA11112979 and SAMNDCA11112980 of the document with the beginning Bates number SAMNDCA11112967 is an accurate and complete rendering of the contents of the source document to the best of my knowledge, except for the word "TRANSLATION" at the upper right corner of each translated page. I further certify that I am competent in both languages and have twenty years of professional experience in Korean to English translation.

By: _____


Peter Mauro Schroepfer

Research & Study: Competitor's GUI study

Samsung Galaxy S1

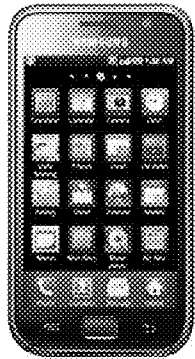
vs.

- Competitor's Android phones,
- (Non-Android) Smart phones &
- Samsung Android Phones for 2 different carriers

Competitors' Product lists for GUI study

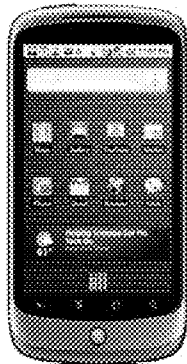
Android Phones

Samsung



Galaxy S1

Google



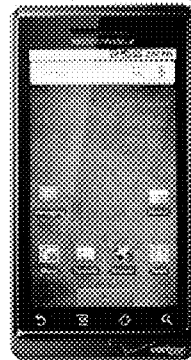
Nexus One

Sony Ericsson

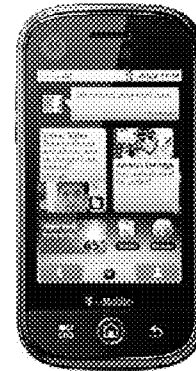


Xperia X10

Motorola



Milestone

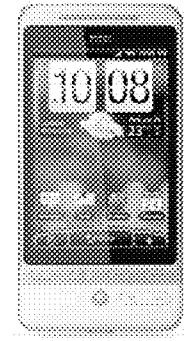


Cliq

HTC



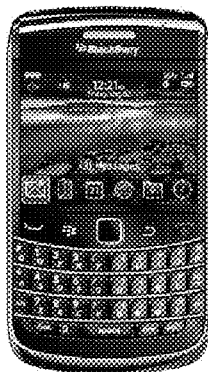
Desire



Hero

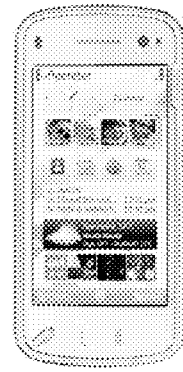
Non-Android Phones

RIM



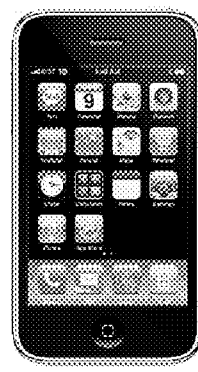
Blackberry Bold9700

Nokia



Nokia N97

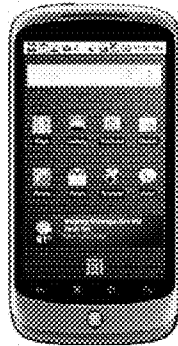
Apple



i-phone 3Gs

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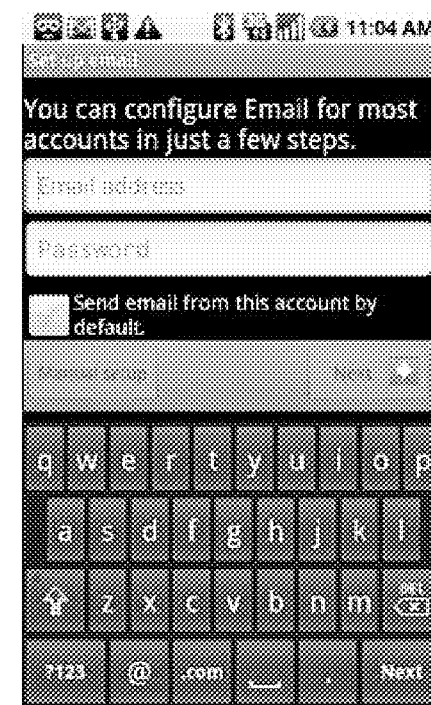
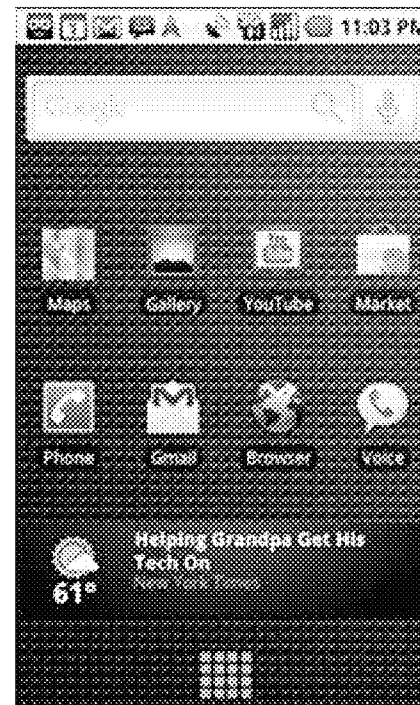
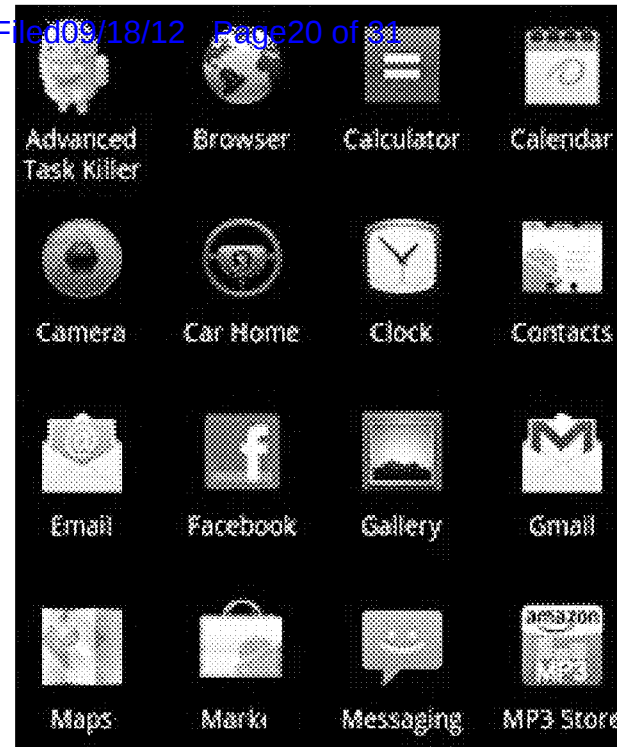
Google Nexus One



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UI	Google(GED)

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Pixel	480X800
Touchscreen	Capacitive
Keyboard	Virtual
Color	2 tone gray

GUI	
Look & Feel:	Not fancy, Convenient, Neat, Grey -> Upgradable Look, old apple GUI feel
Color:	■ ■ ■ ■
Font:	Droid Sans
Icons:	Neat, Standard drawing & type icons



Screen Design

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Sony Ericsson Xperia X10



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Keyboard	Virtual
Color	Black, White

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Look & Feel:	Cold, Sleek, Futuristic, Neat
Color:	■ ■ ■ ■ ■
Font:	*
Icons:	Dimetional, Clean, Sharp / Blue & White
Color ->	Consistent Feel

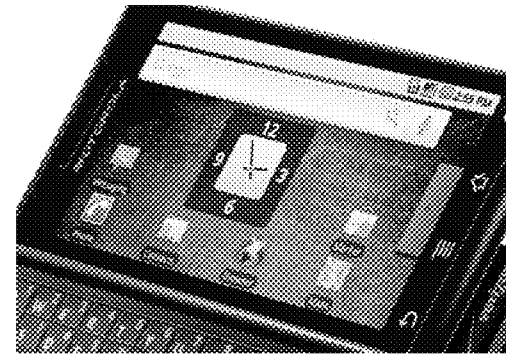
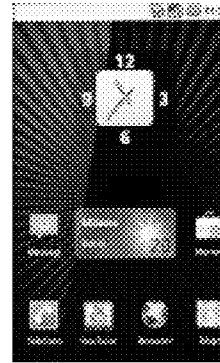
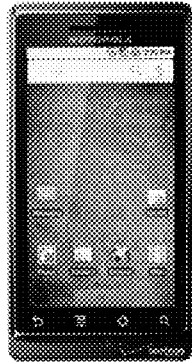


Screen Design

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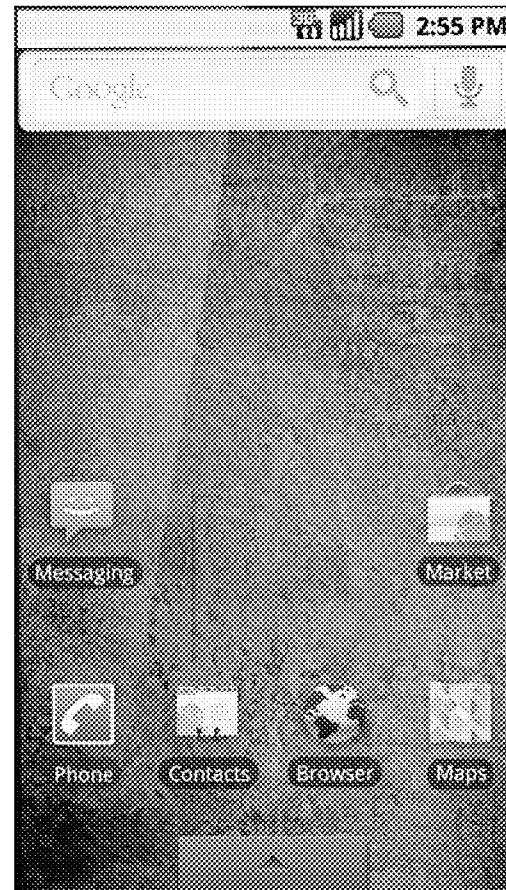
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Motorola Droid Milestone



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Look & Feel:	Hard, Cool, Gray, Neat <- Wallpaper, Clock
Color:	■ ■ ■ ■
Font:	Droid Sans
Icons:	identical GED icons, Neat, Standard

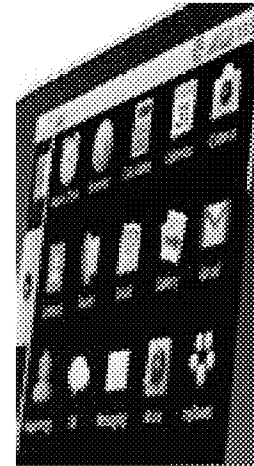
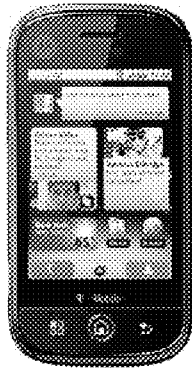


Screen Design

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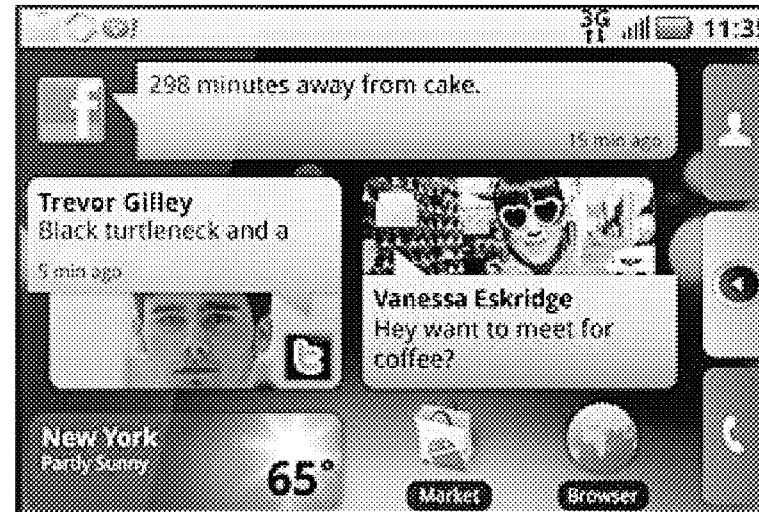
Highly Confidential - Attorneys' Eyes Only

Motorola Cliq



OS	Android 1.5
UI	MOTOBLUR UI
Size	58X114X15.6
Weight	163g
Display	3.1" TFT HGVA
Pixel	320X480
Touchscreen	Capacitive
Keyboard	Slider QWERTY
Color	Titanium, White

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Look & Feel:	Cooler, Younger, a little Cute, Neat
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Font:	Droid Sans
Icons:	some 2.5D icons, Lighter, Softer rendered icons than GED icons

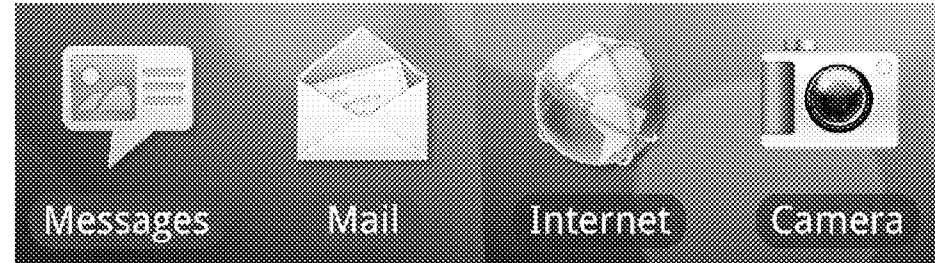
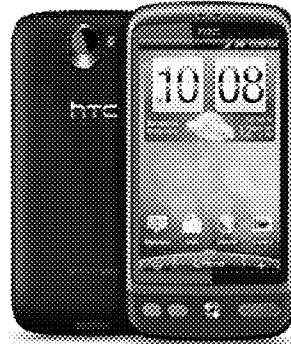


Screen Design

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HTC Desire



OS	Android2.1 (Éclair)
UI	HTC Sense UI
Size	119X60X11.9
Weight	135g
Display	3.7" AMOLED WVGA
Pixel	480X800
Touchscreen	Capacitive
Keyboard	Virtual
Color	Two tone gray



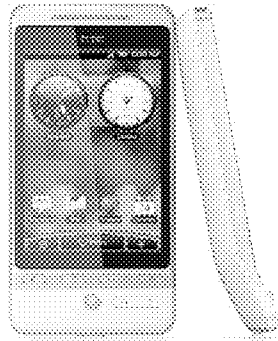
GUI	
Look & Feel:	Crispy, Clear, Light, Comfortable
Color:	■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	Upgraded look of GED icons, Lighter, Softer, Brighter, Dimentional Design

Screen Design

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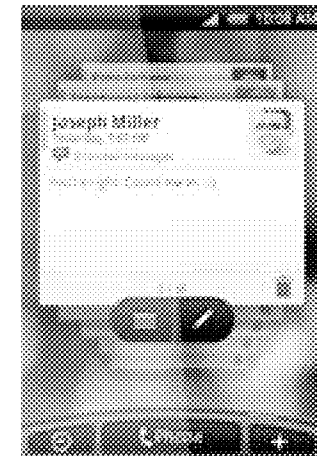
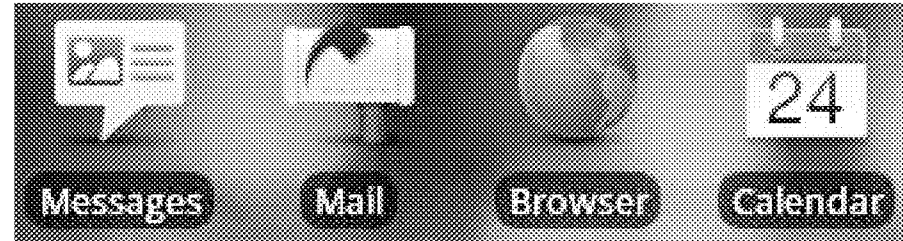
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HTC Hero



OS	Android
UI	HTC Sense UI
Size	112X56.2X14.35
Weight	135g
Display	3.2" TFT HVGA
Pixel	320X480
Touchscreen	Capacitive
Keyboard	Virtual
Color	Black, White

GUI	
Look & Feel:	Smooth Shape & Gray, Cute Gadget
Color:	■ ■ ■ ■ ■
Font:	Droid Sans
Icons:	Identical GED icons, but Upgraded look, Standing objects w Shadow, Neat icons

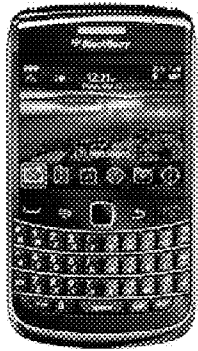


Screen Design

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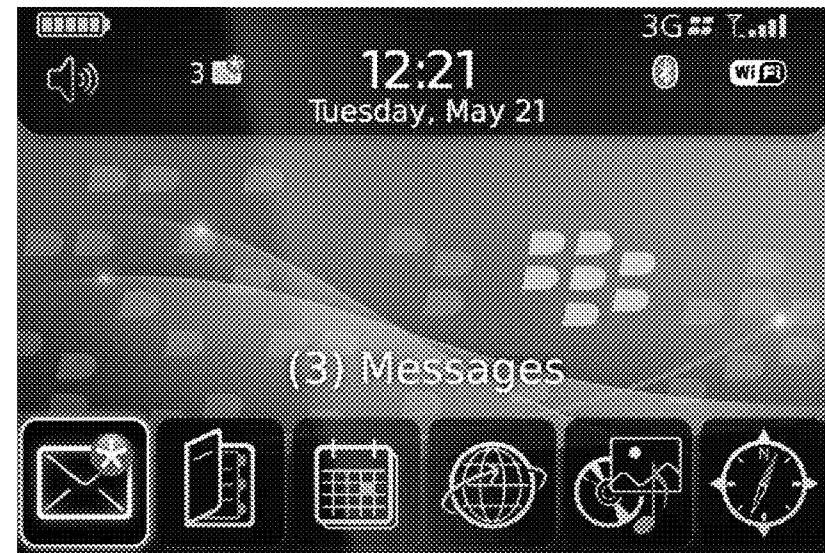
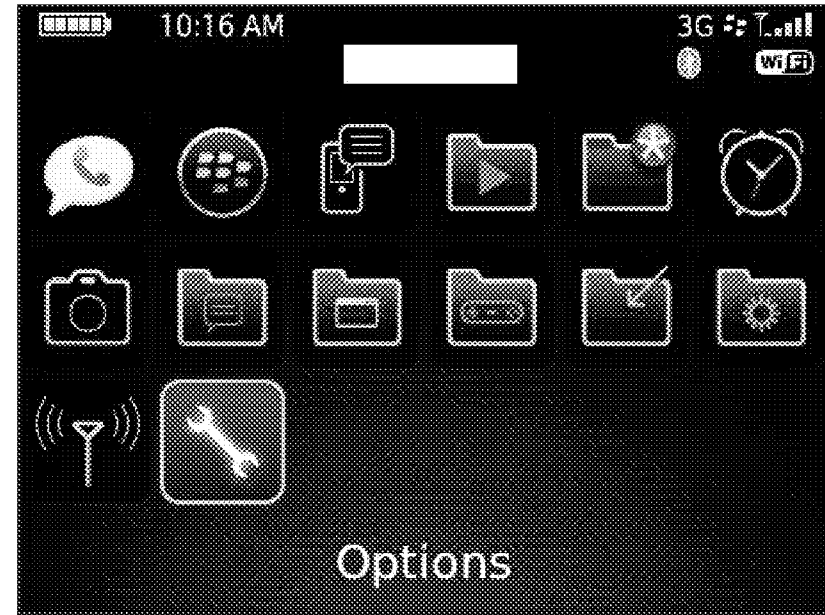
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RIM BlackBerry Bold 9700



OS	Blackberry OS 5.0
UI	Blackberry UI
Size	60 X 109 X 14.1
Weight	122 g
Display	2.44" TFT HVGA
Pixel	480X360
Touchscreen	Disable / Trackpad nav
Keyboard	Full QWERTY keyboard
Color	Black

GUI	
Look & Feel:	Simple, Easy, Empasis
Color:	■ ■ ■ ■ ■ ■ ■ ■
Font:	*
Icons:	LineArt, Rounded, Simple Icons w Strong Promary Colors

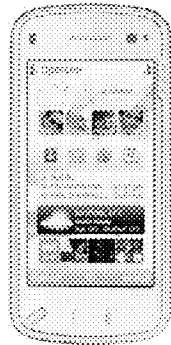


Screen Design

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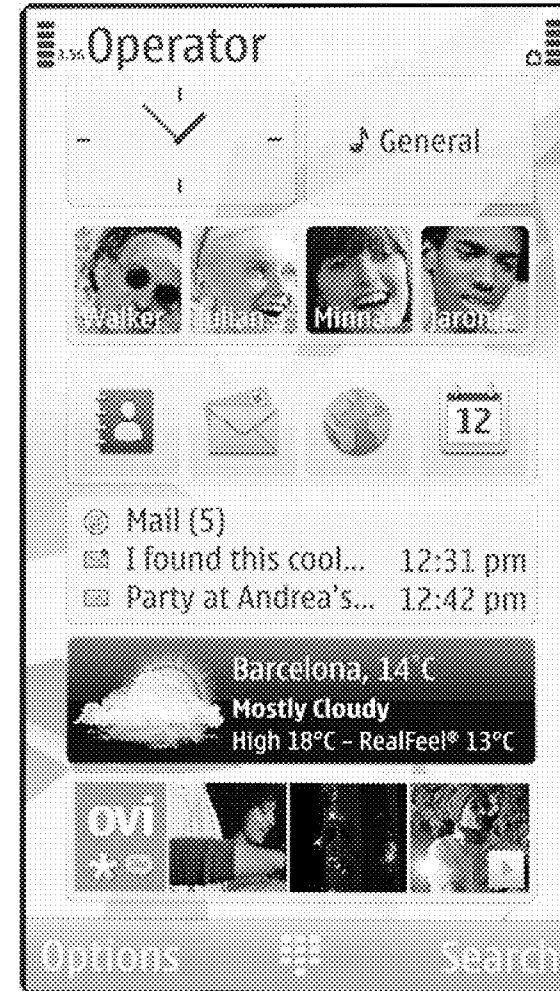
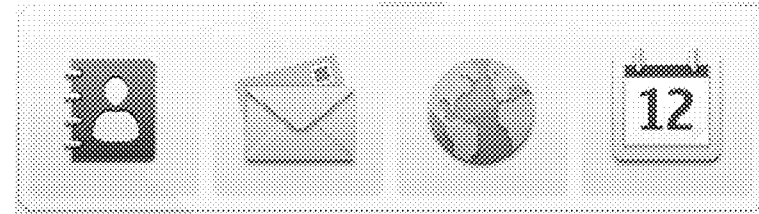
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Nokia **Nokia N97**



OS	Symbian OS9
UI	*
Size	117X55X15
Weight	148g
Display	3.5" TFT
Pixel	360 x 640
Touchscreen	Capacitive
Keyboard	Full QWERTY keyboard
Color	White, Black

GUI	
Look & Feel:	Clean, Sharp, Neat, Light, Feminine
Color:	■ ■ ■ ■
Font:	*
Icons:	Simple, Light, Cut-Out Paper-feel icons
	Pastel Colors

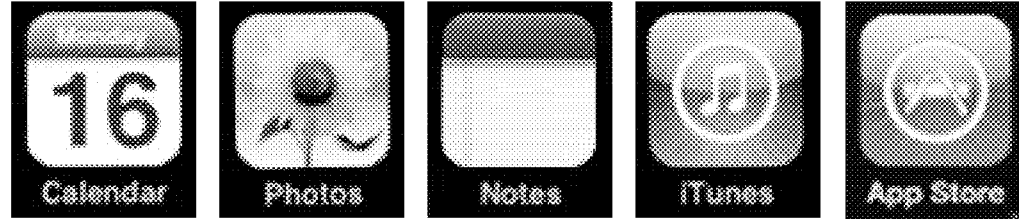
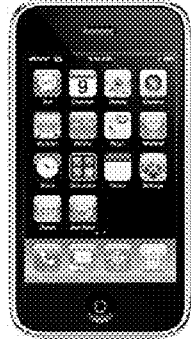


Screen Design

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Apple i - phone 3Gs



OS	Mac OS X v.10.4.11
UI	Apple UI
Size	62.1X115.5X12.3
Weight	134g
Display	3.5" HVGA
Pixel	480X320
Touchscreen	Multi-touch
Keyboard	Virtual
Color	White, Black

GUI	
Look & Feel:	Pure, Clear, Soft, Transparent
	<- Aqua Theme GUI
Color:	■ ■ ■ ■ ■ ■ ■ ■
Font:	*
Icons:	Buttons w Aqua feel



Screen Design

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Current Samsung Android GUI Design

- 경쟁사들과 동일하게 Samsung UI(Touch Wiz)라는 Samsung 고유의 UI/GUI를 시도 함
- Samsung의 Display기술장점을 잘 활용하려함: 경쟁사보다 디테일하고 컬러풀한 GUI
- i-phone의 GUI의 영향: 구글의 GED GUI가 techie한 느낌 / 삼성의 GUI는 애플화된 디자인 느낌
- 특히 미주시장은 *통신 사업자에 따라/ 모델에 따른 차별화된 GUI의 테마를 입히기 원함

Current Competitors GUI Design

- 각 경쟁사들은 구글 GED에서 벗어나 차별화된 아이덴티티의 UI/GUI를 가지려 함
- i-phone의 GUI의 영향: Aqua theme GUI의 인지된 영향력이 크다
- 경쟁사들의 통신 사업자에 따른 GUI변화는 크지 않으며 아이콘 간 약간의 느낌, 디테일 차이

Samsung GUI Differentiation

*통신 사업자에 따라/ 모델에 따른 차별화된 GUI

- **AT&T:** 그대로 유지되는 GUI 선호

case1) Kepler: GUI는 **S1**과 거의 동일하게 구현 / 아이콘 첨가, 파워 애니메이션

⇒ GUI성향의 방향성: 스마트하고 Sleek하고 쿨하지만 T-mobile보다는 우아하고 지적인 방향

- **T Mobile:** 대체로 모델에 따른 차별화된 GUI

case1) Supersonic: 약간 Glossy한 Skin을 첨가 / 모서리를 둥글게 한 Tap Bar

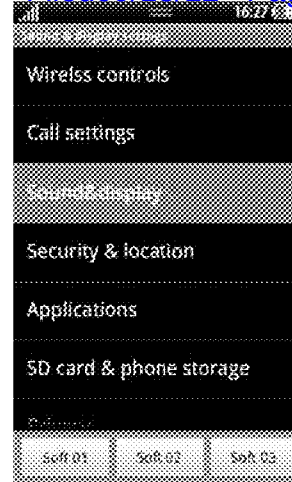
컬러 채도를 낮춰서 좀더 투명하고 쿨한 느낌

case2) SideKick: 독특한 제품 콘셉에 맞게 젊은 취향의 트렌디하고

평키한 그래픽 스타일을 입힌 GUI 경향

⇒ GUI성향의 방향성: 미국 젊은이들이 선호하는 쿨한 GUI

AT&T



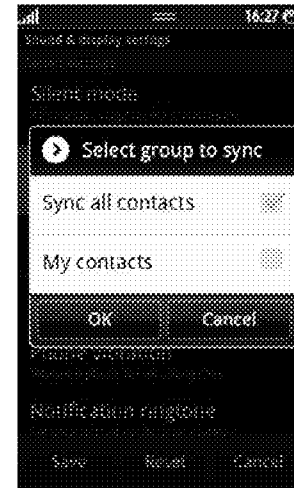
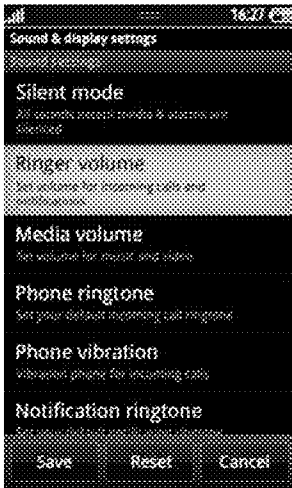
Idle Screen

List view

Tab view

Pop up screen

T-Mobile



Menu

Menu

List view

Tab view

