EXHIBIT 74

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA, SAN JOSE DIVISION

APPLE INC., a California corporation,

Plaintiff,

vs.

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

DECLARATION OF ITAY SHERMAN IN SUPPORT OF SAMSUNG'S MOTION FOR SUMMARY JUDGMENT

I, Itay Sherman, do hereby declare and state as follows:

1. I am over eighteen (18) years of age. The statements made herein are true and correct and are of my own personal knowledge. I submit this declaration in connection Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. and Samsung Telecommunications America, LLC (collectively "Samsung") Motion for Summary Judgment.

2. I have been retained by Quinn Emanuel Urquhart & Sullivan, LLP, attorneys for Samsung, to serve as an expert witness in the above captioned action and to provide opinions regarding the invalidity of certain asserted design patents and trade dress in this action.

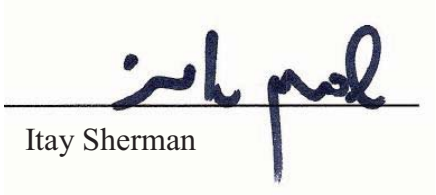
3. I am an independent consultant and have worked in the telecommunication industry for the last 20 years, of which the last 10 years I worked on mobile handsets technology and products.

4. I wrote a report, dated March 23, 2012, detailing my opinions regarding, the invalidity of United States Design Patents Nos. D504,889, D618,677, D593,087, and D622,270 and Apple's claimed trade dress. Attached hereto as **Exhibit A** is a true and correct copy of this report. This report accurately reflected my true opinion when I prepared the report.

5. In my opinion, numerous combinations of primary and secondary references can be combined to invalidate each of Apple’s three patents for the industrial design of electronic devices. These combinations include those shown on the chart attached as **Exhibit B**

I declare under penalty of perjury under the laws the United States that the foregoing is true and correct.

Executed this 17th day of May, 2012 in Hod Hasharon, Israel.



Itay Sherman

GENERAL ORDER ATTESTATION

I, Victoria Maroulis, am the ECF user whose ID and password are being used to file the foregoing document. I hereby attest pursuant to General Order 45.X.B. that concurrence in the electronic filing of this document has been obtained from Itay Sherman.

/s/ Victoria Maroulis

Exhibit A

EXPERT REPORT OF ITAY SHERMAN

I. INTRODUCTION

I was retained by Quinn Emanuel Urquhart & Sullivan, LLP, attorneys for Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. and Samsung Telecommunications America, LLC (hereinafter "Samsung") to provide opinions and testimony pursuant to Federal Rule of Civil Procedure 26(a)(2) about certain design patents and alleged trade dress asserted by Apple Inc. ("Apple") in this action.

II. BACKGROUND/QUALIFICATIONS

I earned a bachelor degree with honors (B.S.) in Electrical engineering from TelAviv University in 1991, and a master degree with honors (M.S.) in Biomedical engineering from Tel Aviv University in 1995. I have worked in the telecommunication industry for the last 20 years, and for the last 10 years I have worked on mobile handset technology and products.

Between 2004 and 2007, I was the Chief Technology Officer for Texas Instruments Mobile Connectivity group that developed key components for mobile handsets. While there, I worked closely with the Nokia, Motorola, and Sony Ericsson to define technology solutions based on their handset design constraints.

Between 2007-2010, I served as the Chief Technology Officer for modu LTD, a handset and accessories manufacture that pioneered the concept of modular handsets. The modu concept revolved around the idea of a modular phone that has a base unit that can operate as a very small form factor handset, but could also be plugged to consumer electronic devices we termed "jackets" that enhance the capabilities and external design of the handset and enable it highlight other functions, such as a wrist watch or music player.

The development of the modu concept required investigation and experimentation with the possible boundaries of handset design electrical circuitry, mechanical design, and industrial design. I led the effort for design of multiple handsets as well as additional consumer devices that

the company had been developing. As CTO of modu, I was also responsible for obtaining and maintaining intellectual property registrations, including the design patents.

The modu handset design has been awarded the Guinness Book of Records certificate for the lightest handset in the world. The modu-T handset design was awarded the Guinness Book of Records certificate for the lightest touch phone.

Along with supervising the industrial and manufacturing design process, I was responsible for ensuring that the company understood the different technologies and components available for handsets. This required analyzing size and placement limitations, defining the parameters for the achievable dimensions of different designs, and studying competing handsets and understanding their design tradeoffs based on observations and commercial available teardowns. As part of my duties as CTO I had been actively involved in marketing discussions with operators and specifically with the leading US operators (T-Mobile, AT&T, Verizon), and had been following the US handset market.

I have also served as the head of the handset cluster of the IMA (Israeli Mobile Association) and lectured on handset technology and design at public seminars.

I am currently providing consulting services to multiple technology companies, mainly concentrating on companies that develop technologies for the mobile market. As part of these services, I am continually monitoring the mobile handset market and the design and technology trends in it.

I am a named inventor on 15 registered patents and more than 60 pending submissions.

A copy of my current *Curriculum Vitae* is attached as **Exhibit A.**

My consulting fee for this case is $220 per hour plus expenses and VAT.

III. MATERIALS CONSULTED

Beyond my credentials and experience, I have also considered the materials listed in attached **Exhibit B** in forming the opinions expressed in this report. However, I am informed that depositions and document productions have not yet concluded, and also that Apple has continued

to produce pertinent documents after the depositions of the inventors, industrial designers, and other witnesses relevant to my analysis. I reserve the right to modify or supplement this report and my opinions based on additional documents, discovery responses, deposition testimony and any other evidence as this matter progresses.

IV. SUMMARY OF OPINIONS

For the reasons set forth in this report, I have formed the following opinions:

(a) United States Design Patent Nos. D504,889, D618,677, D593,087 and D622,270 are anticipated by and/or obvious from the prior art.

(b) United States Design Patent Nos. D504,889, D618,677, D593,087, and D622,270 are each functional as a whole and on an element-by-element basis;

(c) Apple's claimed trade dress, as presented in its Complaint and in its trade dress registrations, is functional and commonplace in the market.

This report serves as a summary of my expert opinions and testimony. I reserve the right to modify or supplement this report and my opinions based on additional documents, discovery responses, deposition testimony and any other evidence as this matter progresses. Moreover, I may be asked to respond to any validity reports submitted on behalf of Apple, and I reserve the right to do so.

V. RELEVANT LEGAL PRINCIPLES

I am not an expert in design patent or trade dress law. However, for the purpose of rendering the opinions set forth in this report, counsel has advised me of certain background legal principles pertinent to my analysis.

Design Patent Functionality

It is my understanding that design patents are fundamentally different from utility patents in that design patents protect the ornamental designs of a given product, while utility patents

protects the way a given product is used and how it works.[1] I also understand that functional designs cannot, as a matter of law, receive design patent protection. If the patented design is primarily functional rather than ornamental, the patent is invalid.[2] I also understand that many designs can be well-constructed or aesthetically pleasing, but still cannot enjoy design patent protection where they are the result of functional considerations or dictated by function.[3]

Counsel has informed me that courts have articulated tests for functionality of design patents in different ways. One is that a design element is functional "if it is essential to the use or purpose of the article or if it affects the cost or quality of the article."[4] Another is that the design is "deemed to be functional when the appearance of the claimed design is 'dictated by' the use or purpose of the article."[5] It is my opinion that United States Design Patent Nos. D504,889, D618,677, D593,087 and D622,270 are functional under any formulation, and I have used that understanding in forming my opinions in this report regarding functionality of Apple's design patents. I further understand that functionality is not only relevant to determining whether a design patent is invalid, but also to the appropriate scope of the patent because "it would indeed be improper to allow" "a claim scope that includes … utilitarian elements."[6]

I also understand that functional trade dress is not protected by law.[7] Trade dress is functional if it is "'essential to the use or purpose of the article [or] affects [its] cost or quality.'"[8] If the feature is essential to the use or purpose of the article or affects its cost or quality, "the inquiry is over—the feature is functional and not protected."[9] If the feature meets that test, there

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[1] *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293(Fed. Cir 2010).

[2] *Id*. at 1293-94

[3] *Lee v. Dayton-Hudson Corp*., 838 F.2d 1186, 1188 (Fed Cir. 1998) ((quoting *In re Carletti*, 328 F.2d 1020, 1022 (CCPA 1964); *Richardson,*, 597 F.3d at 1294.

[4] *Amini Innovation Corp. v. Anthony Cal. Inc.,* 439, F.3d 1365, 1372 (Fed. Cir. 2006).

[5] *L.A. Gear, Inc. v. Thom McAn Shoe Co.,* 988 F.2d 1117, 1123 (Fed. Cir. 1993) (citation omitted).

[6] *Richardson,*, 597 F.3d at 1294.

[7] *See TrafFix Devices, Inc. v. Marketing Displays, Inc*., 532 US 23, 27 (2001).

[8] *Au-Tomotive Gold, Inc. v. Volkswagen of America, Inc.*, 457 F.3d 1062 (9th Cir. 2006) (*quoting TrafFix*, 532 U.S. at 32-33).

[9] *Id.*

is no need to "proceed further to consider if there is a competitive necessity for the feature" or "engage ... in speculation about other design possibilities."[10] Counsel informs me that trade dress can be deemed functional with respect to its utility, as noted above, or "aesthetically functional" where the aesthetics of the trade dress itself drives consumer demand for the product.[11] Aesthetic functionality is present where "use of the feature would put competitors at a significant, non-reputation-related disadvantage."[12] Unless otherwise noted, when I refer to "functionality" in my report, I mean to refer to "utilitarian," not "aesthetic," functionality.

Anticipation and Obviousness

Counsel has informed me that Apple claims the designs of D504,889, D618,677, D593,087, and D622,270 were conceived and reduced to practice on September 3, 2003, April 20, 2006, April 20, 2006, and December 13, 2006, respectively. I have no opinion regarding this accuracy or inaccuracy of these claimed dates, but I have taken them into consideration as part of my analysis of validity. I am also aware that Apple unveiled the first iPhone at Macworld on January 9, 2007, and the first iPad on January 27, 2010.

"Prior art," as used in reference to design patents, is public information, public knowledge and public acts before the claimed design was invented or that occur a year before the application for the design patent application was filed. Prior art can include other patents, journals, Internet publications, systems and products.[13]

Counsel has informed me that a design patent may be invalid as (1) anticipated by prior art; or (2) obvious in light of the prior art:

I understand that an asserted design patent is anticipated by prior art where a single prior art reference discloses all the limitations of a claim.[14] Thus, a design patent is invalid based upon

[10] *TrafFix*, 532 U.S. at 33.
[11] *Au-Tomotive Gold, Inc.*, 457 F.3d at 1068.
[12] *TrafFix*, 532 U.S. at 28-29.
[13] 35 U.S.C. § 102.
[14] *Id.*

anticipation when, "in the eye of an ordinary observer, giving such attention as a purchaser usually gives," the alleged anticipatory reference is "substantially the same" as the patent-in-suit, meaning "the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other."[15]

An asserted design patent is obvious, and therefore invalid, if the "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to the person having ordinary skill in the art to which the said subject matter pertains."[16] In the obviousness context, the role of one skilled in the art lies "in determining whether to combine earlier references to arrive at a single piece of art for comparison with the potential design, or to modify a single prior art reference."[17]

I understand that, for the purposes of evaluating obviousness, "a person skilled in the art" is "a designer of ordinary skill or capability in the field to which the design pertains" who is "presumed to have perfect knowledge of all pertinent prior art."[18] A person of ordinary skill in the art relevant to the asserted design patents would have had experience designing electronic devices, including those with displays.

Counsel has informed me that one of several factors a court may consider in assessing whether a design patent is functional is the presence or absence of alternative designs.[19] I understand that designs that would adversely affect the utility of the device in question cannot be counted as legitimate design alternatives.[20]

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[15] *International Seaway Trading Corp. v. Walgreens Corp.,* 589 F.3d 1233, 1239 (Fed. Cir. 2009).
[16] 35 U.S.C. § 103(a).
[17] 35 U.S.C. § 102.
[18] *LA Gear, Inc. v. Thom McAn Shoe Co*., 988 F.2d 117, 1124 (Fed Cir. 1993).
[19] *Berry Sterling Corp. v. Pescor Plastics, Inc.*, 122 F.3d 1452, 1456 (Fed Cir. 1997).
[20] *PHG Tech., LLC v. St John Companies, Inc., 469 F.3d 1361, 1366 (Fed. Cir. 2006).*

Indefiniteness

I understand that a design patent is indefinite where it does not enable a designer of ordinary skill in the art to make an article having the shape and appearance of the design for which protection is sought.[21] Thus, if the drawings in the patent are inconsistent, or if there are ambiguities in the drawings that leave the scope of the design open to conjecture, it can be rendered invalid due to indefiniteness.[22]

Distinctiveness and Exclusivity of Use of Trade Dress

I understand that in order to be protected, trade dress must be distinctive.[23] Trade dress is considered to be distinctive if it has attained "secondary meaning" which occurs when, "in the minds of the public, . . . [its] primary significance . . . is to identify the source of the product rather than the product itself."[24] I am also informed that courts consider a number of factors in determining whether trade dress has acquired secondary meaning including whether the trade dress has been used exclusively by the plaintiff, or whether the same or similar trade dress has been used by third parties on related products.[25]

Other Legal Points

I understand that invalidity of a design patent based on anticipation, obviousness, functionality or indefiniteness must be shown by clear and convincing evidence.[26] I understand the clear and convincing evidence standard to require evidence that produces an abiding

[21] Manual of Patent Examining Procedure § 1504.04; *id.* § 1503.2 ("As the drawing or photograph constitutes the entire visual disclosure of the claim, it is of utmost importance that the drawing or photograph be clear and complete, and that *nothing* regarding the design sought to be patented is left to conjecture.") (emphasis added).

[22] *See, e.g.*, *Seed Lighting Design Co., Ltd. v. Home Depot*, 2005 WL 1868152, *8 (N.D. Cal. Aug. 3, 2005).

[23] *Wal-Mart Stores, Inc. v. Samara Bros., Inc*., 529 U.S. 205, 210 (2000).

[24] *Id.* At 210.

[25] *Art Attacks Ink, LLC v. MGA Entertainment Inc*., 581 F.3d 1138, 1145 (9th Cir. 2009)

[26] *Titan Tire Corp. v. Case New Holland, Inc*., 566 F.3d 1372, 1376-77 (Fed. Cir. 2009).

conviction that the truth of a factual assertion is highly probable.[27] Thus, my opinions in this report reflect my understanding that anticipation, obviousness, functionality and indefiniteness must be shown by clear and convincing evidence.

I am informed by counsel that Apple has the burden of proving that its unregistered trade dress is both (1) not functional and (2) distinctive by a preponderance of the evidence.[28] I also understand that Apple has a presumption that its registered trade dress is (1) not functional and (2) distinctive, and that Samsung has the burden of introducing sufficient evidence to rebut the presumption of validity.[29] Once the presumption of validity is overcome, Apple bears the burden of proving that its trade dress is (1) not functional and (2) distinctive.[30]

It is my understanding that Apple has not offered a uniform construction of these patents. Rather, different inventors, such as Jonathan Ive, Christopher Stringer, and Douglas Satzger, have offered differing interpretations, and Apple itself has not identified any verbal construction. No matter what claim construction is used, however, my opinion is that Apple's asserted design patents are obvious, anticipated, and functional.

VI. THE ASSERTED INDUSTRIAL DESIGN PATENTS ARE ANTICIPATED AND/OR OBVIOUS

A. The D 504,889 Patent

The D'889 Patent, titled "Electronic Device," shows a rectangular shaped device, was filed on March 17, 2004, and issued on May 10, 2005.

According to Apple, the D'889 patent claims a design for a device that has a large rectangular display, that is surrounded by a relatively narrow rim and an external frame that has four rounded corners and a flat back. Also according to Apple, the front surface of the device is

[27] *Price v. Symsek*, 988 F.2d 1187, 1191 (Fed. Cir. 1993).
[28] 15 U.S.C. § 1115(a).
[29] *See Tie Tech, Inc. v. Kinedyne Corp*., 296 F. 3d 778, 783 (9th Cir. 2002); *Vuitton Et Fils SA v. J. Young Enterprises, Inc*., 644 F. 2d 769, 775 (9th Cir. 1981).
[30] *Tie Tech*, 296 F.3d at 783.

clear and completely flat, and is flush with the thin rim. Apple has described the D'889 design patent using the following construction:

> an overall rectangular shape with four evenly rounded corners;
>
> a flat clear surface covering the front of the device that is without any ornamentation;
>
> a thin rim surrounding the front surface;
> a substantially flat back panel that rounds up near the edges to form the thin rim around the front surface; and
>
> a thin form factor.[31]

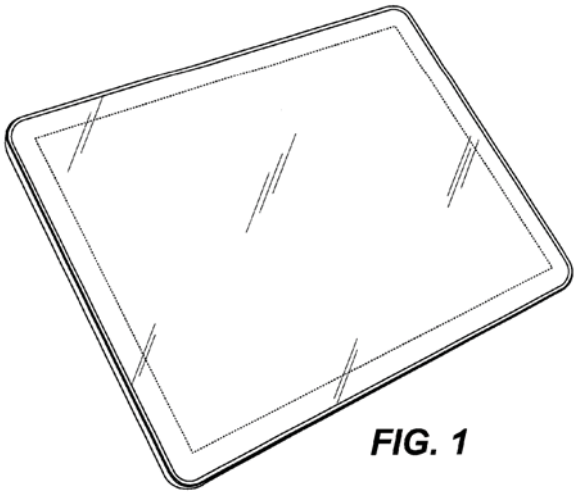


FIG. 1

The prior art analysis below will show that the design has been anticipated by prior art, and all of the design elements that it includes have been demonstrated together and in combination on prior art design patents and devices, and that the design has been obvious in light of these prior arts. Moreover, multiple other designs have been released prior or around the time of the release of the Apple iPad using the same design features claimed by Apple, emphasizing that these features have not been unique and represented no novelty.

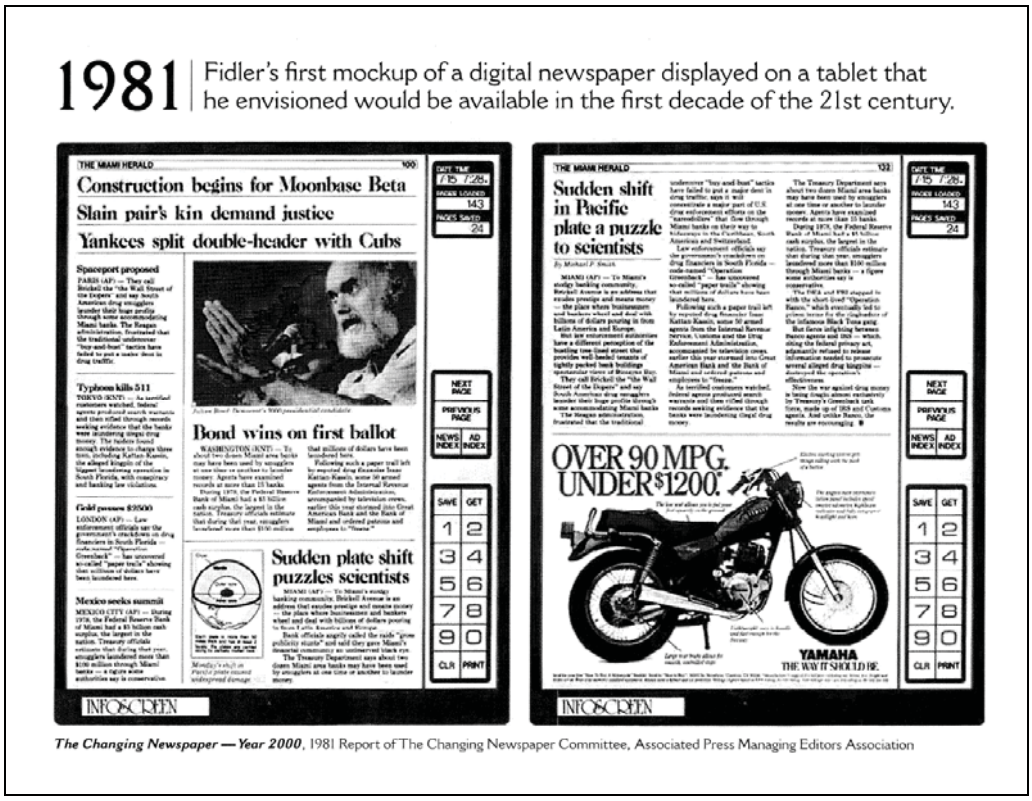
[31] See Apple Inc.'s Motion Preliminary Injunction at 14-15, citing Declaration of Cooper Woodring ¶ 46.

It should be noted that since the D'889 claims a design patent for an "Electronic Device," and although Apples asserted claims for D'889 relate to tablet devices, prior art references do not have to necessarily relate to tablets, but rather to any other electronic device, including but not limited to PDAs, PCs, media players, mobile handsets, etc.,for the reasons discussed further below.

D'889 PRIOR ART

A number of designs incorporating most, if not all, features of the D'889 were published or used before September 3, 2003.

I have reviewed the Declaration of Roger Fidler dated August 16, 2011, as well as the Deposition of Roger Fidler taken September 23, 2011. Mr. Fidler testified in his deposition that he created drawings of a tablet in 1981 of a touchscreen tablet that lacked any physical buttons, had a continuous flat surface on the front of the tablet that ran from edge to edge, and had a thin form factor. *See* September 23, 2011 Deposition of Roger Fidler (hereinafter "Fidler Deposition"), at 290:4 – 293:16. Mr. Fidler further testified that those drawings were depicted on the second page of Exhibit 266 to his deposition. *Id.*



Fidler 1981 Tablet Design, from Exhibit 266 to the Fidler Deposition

Furthermore, it is my understanding that in 1981 Mr. Fidler described in the prior art an electronic reading device consisting of "portable, flat-screen displays." Declaration of Roger Fidler, ¶ 5 (hereinafter "Fidler Decl."). It is also my understanding that Mr. Fidler created a mock-up of the tablet he envisioned, which had an overall rectangular shape, a flat rectangular front surface with no ornamentation, a portable size with a relatively thin depth, and a smooth back surface with no ornamentation. *Id.* at ¶ 7.

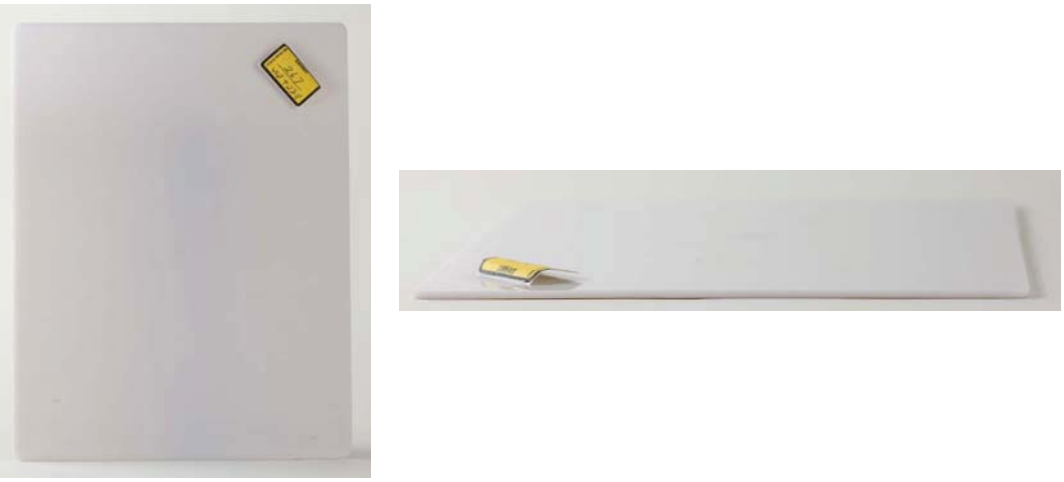
Fidler 1981 Tablet Design

Mr. Fidler also declared that he created another mockup in 1994, which was featured in a film distributed to various newspaper organizations and media outlets. Fidler Dec. ¶¶ 13-14. As such, that design was "in use in the United States," in 1994. That tablet also had an overall rectangular shape, a flat rectangular front surface with minimal ornamentation, a portable size with a relatively thin depth, and a smooth back surface with no ornamentation. In addition, it had four evenly rounded corners. Although the mockup had a raised rim, Mr. Fidler testified in his deposition that "in the drawings that were created [for the manufacturer to be able to create this tablet] I was always attempting to create a device that had a flat screen all the way across that would be flush with the -- the outside." Fidler Deposition, at 48:1-24.

Fidler 1994 Tablet Design

I also understand from Mr. Fidler's deposition that he created another mockup in 1997, which was utilized in a mall-intercept study in 1997. *See* Fidler Deposition, at 303:22 – 311:9.

This tablet mockup, an example of which was marked as Exhibit 267 to Mr. Fidler's Deposition, had an overall rectangular shape, four evenly rounded corners, a flat, clear surface covering the front of the device that lacked ornamentation, a substantially flat back panel, and a thin form factor. *Id.* It is my understanding that the yellow rectangle shown below is an exhibit sticker and not part of Mr. Fidler's design.



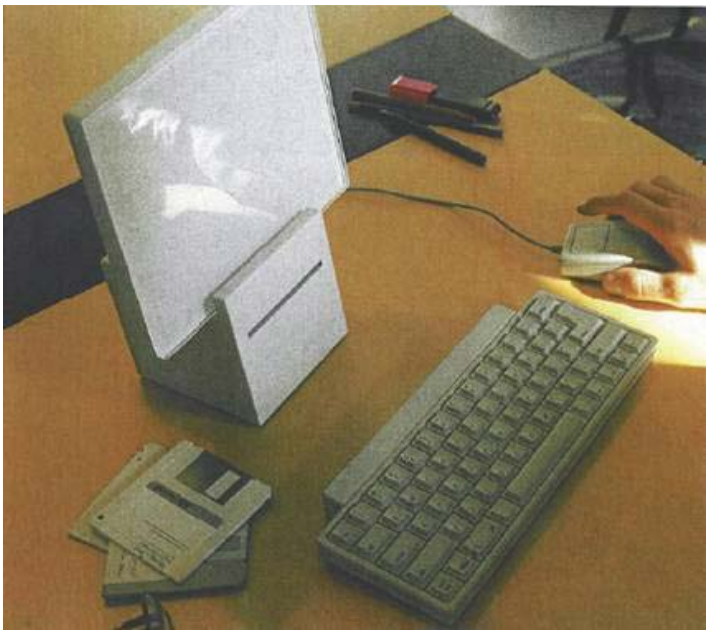
Fidler 1997 Tablet design, Exhibit 267 to Fidler Deposition

On February 1998 a design for a future computer named Tablet was presented by a team of students from the University of Illinois. The design had won a competition sponsored by Apple. The article that describes the features of this future device describes functionality similar to the one embodied in the Apple iPad devices. The article also describes the design of the Tablet, using the following words "The design is simple, yet sleek, roughly the size and weight of a notebook, the machine has no moving parts and resembles the dark, featureless monolith from a well known movie. … Its I/O surface … , puts the user in touch with anyone and anything." The physical mockup that was presented for the device included a rectangular flat transparent front face with narrow black rims around it. Other images in the article show the device rectangular shape having rounded corners. It can be seen that even this very early design concept includes the main features

of the design disclosed by the D'889 design patent. It also emphasizes the fact that the features of the design were very much dictated by the functionality and technology that enables it.

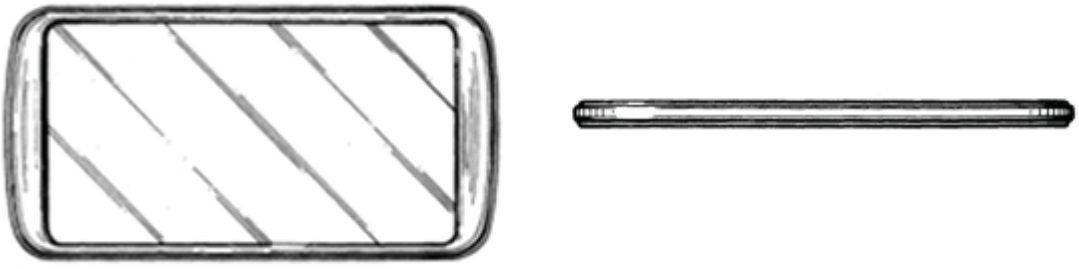
The Tablet Apple Design Contest Winner (1998)

In 1997, an Apple design prototype with a flat panel display associated with a "brain box" was published in a design book. The display is slim, rectangular with evenly rounded corners and has a clear transparent face that is flat and continuous.



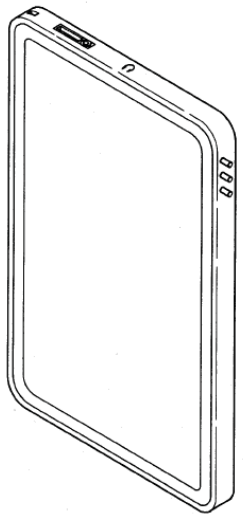
Apple "Brain Box" design

On July 20, 1993, U.S. D337,569 was issued for an "Electronic Notebook for Data Entry." This design disclosed a rectangular shaped electronic device with four evenly rounded corners dominated by a flat surface, with a relatively thin depth, and a largely smooth and continuous back surface. The depth of the device is approximately 1/19 of the overall length.



Front and Side view of D337,569

Korean design patent KR 30-0304213 was issued on July 24, 2002 for a portable audio device. It discloses another electronic device that is rectangular with four evenly rounded corners, a rectangular inset display, a relatively narrow rim and a frame, a relatively thin depth and a smooth continues back surface. The profile of the design is rectangular shape and differs from the D'889.



Perspective view of KR 30-0304213

US D412,157 was issued on July 1999 for a display device. It disclosed a predominantly rectangular device with evenly rounded corners a flat transparent front face with inset display below it and surrounded by a thin rim. The device has a thin profile with a flat back.

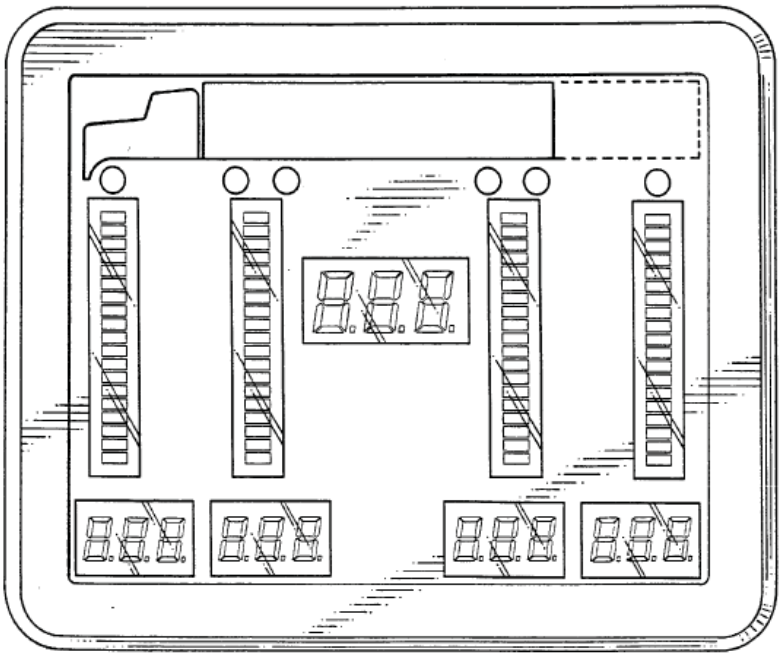


FIG. 2

FIG. 3

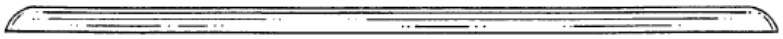
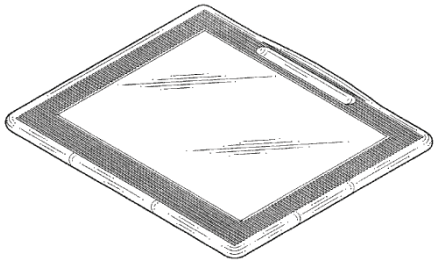


FIG. 4

US D412,157 front and side views

U.S. D461,802 was issued on August 20, 2002 for a "Tablet." It discloses another electronic device that is predominately rectangular with four evenly rounded corners, a rectangular inset screen, a relatively narrow rim and a frame, a relatively thin depth, and a smooth, continuous back surface. Judging from the shape and placement of a thin groove at the top, this design apparently contemplated the use of a stylus, which was a common way of interacting with touch screen technology of the time and would have become naturally unnecessary and obsolete as touch screen technology evolved.



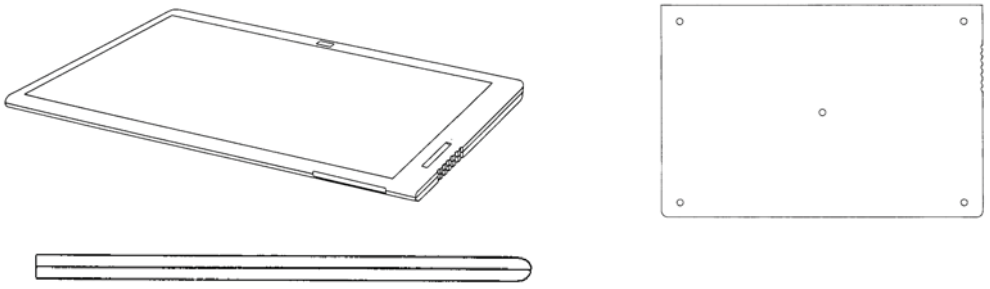
D461,802

The profile of the D461,802 design is similar to the one described in the D'889 Patent, but thinner, and its edge is more gently rounded.

D461,802, Fig. 2.

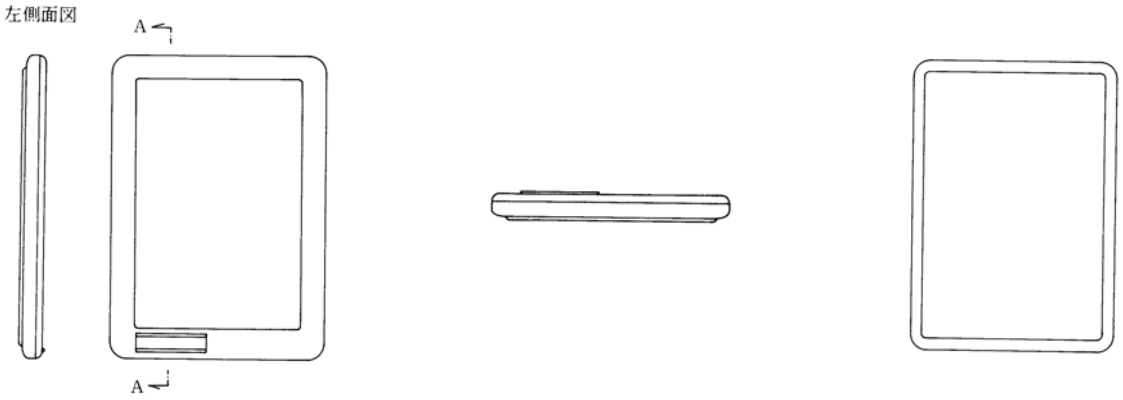
Several other designs were published before March 17, 2003 that feature a rectangular shape dominated by a large flat surface (evidently a screen) with minimal or no additional ornamentation on the surface, and a relatively thin depth.

(a) JP 0921403 for an electronic calculator, published March 9, 1995:



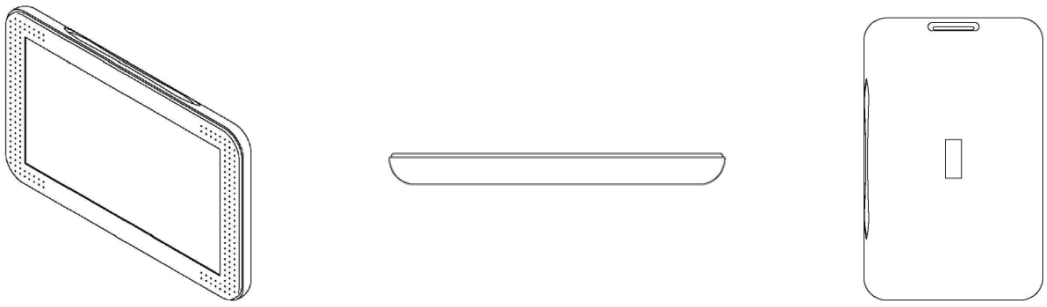
The primary differences between the JP 0921403 and the D'889 are additional features on the left of the bottom border and side edge, along with a small additional button on one of the side borders, asymetrical side edges such that one is verticle and one is curved, with a bull-nosed edge (more similar to the shape of the Galaxy Tab bezel). In addition, the back surface, otherwise free of ornamentation and apparently smooth, has five small circles, which are presumably "feet" for lifting the device off of a flat surface.

(b) JP 0887388 for Memo Input/Output Equipment, published December 21, 1993:



The JP 0887388 appears to share with the D'889 (as claimed by Apple) an overall rectangular shape with four evenly rounded corners, a largely smooth and continuous back surface, and an edge that is perpendicular to the front surface and then curves in toward the bottom of the device. *See* Ex. I to the Declaration of Itay Sherman in Support of Samsung's Opposition to Apple's Motion for a Preliminary Injunction, filed August 22, 2011 (hereinafter "Sherman PI Decl."), Dkt. No. 172-09 (comparing JP 0887388 to respective figures from D'889). The primary difference between the JP 0887388 and the D889, appears to be additional rectangular feature on the lower border of the JP 0887388.

(c) JP D1142127, published May 27, 2002 for an electronic computer:

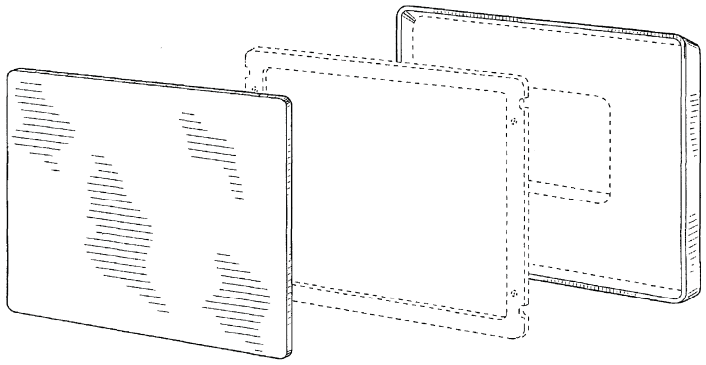


The JP D1142127 design appears to share with the D'889 (as claimed by Apple) a flat smooth surface from end to end on both the front and back, except that the back also has a rectangular shape in the center and what appears to be a docking port set into the slope toward the

back surface, and the appearance of a thin rim surrounding the front surface. *See* Ex. K, Sherman PI Decl., Dkt. 172-11 (comparing JP D1142127 to respective figures from D'889). The JP D1142127 differs most significantly from the D'889 because it includes additional details on claimed borders (whereas Apple claims that the borders in the D'889 are without further design) and a recessed groove inset into the top, presumably as a stylus holder. The side profile of the JP D114127 is also similar to the one disclosed in D'889.

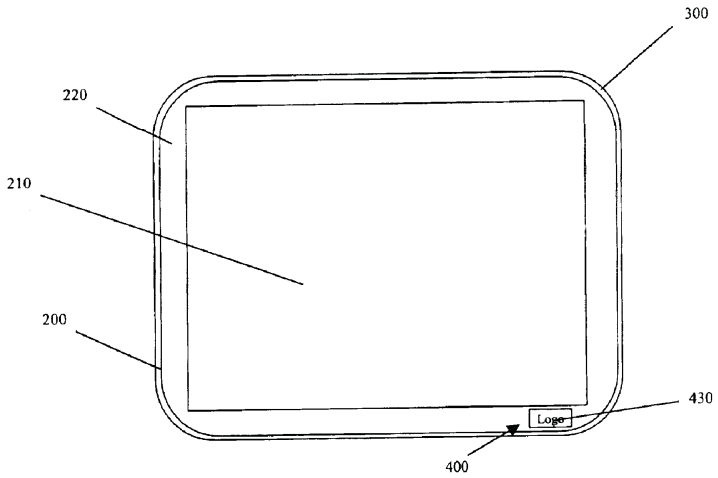
USD500,037 filed Sep 2002 and the utility patent US6919678 by the same inventors disclose a design of a display with flat transparent front face surronded by a frame of rectangular shape with slightly rounded corners. The disply itself is an inset below the transparent surface that runs continuously from edge to edge.

FIG. 3



Exploded front perspective view of D500,037

The device disclosed in US6919678 shares the same continuous, transparent surface above a display, but is shown to have more emphasized rounded corners and a narrow bezel surrounding the front surface.



Front view of device on US6919678 patent

The same design was registered in Europe in June 2003 as design 000048061-0001, and was assigned to Bloomberg Finance.

EU registered design 000048061-0001

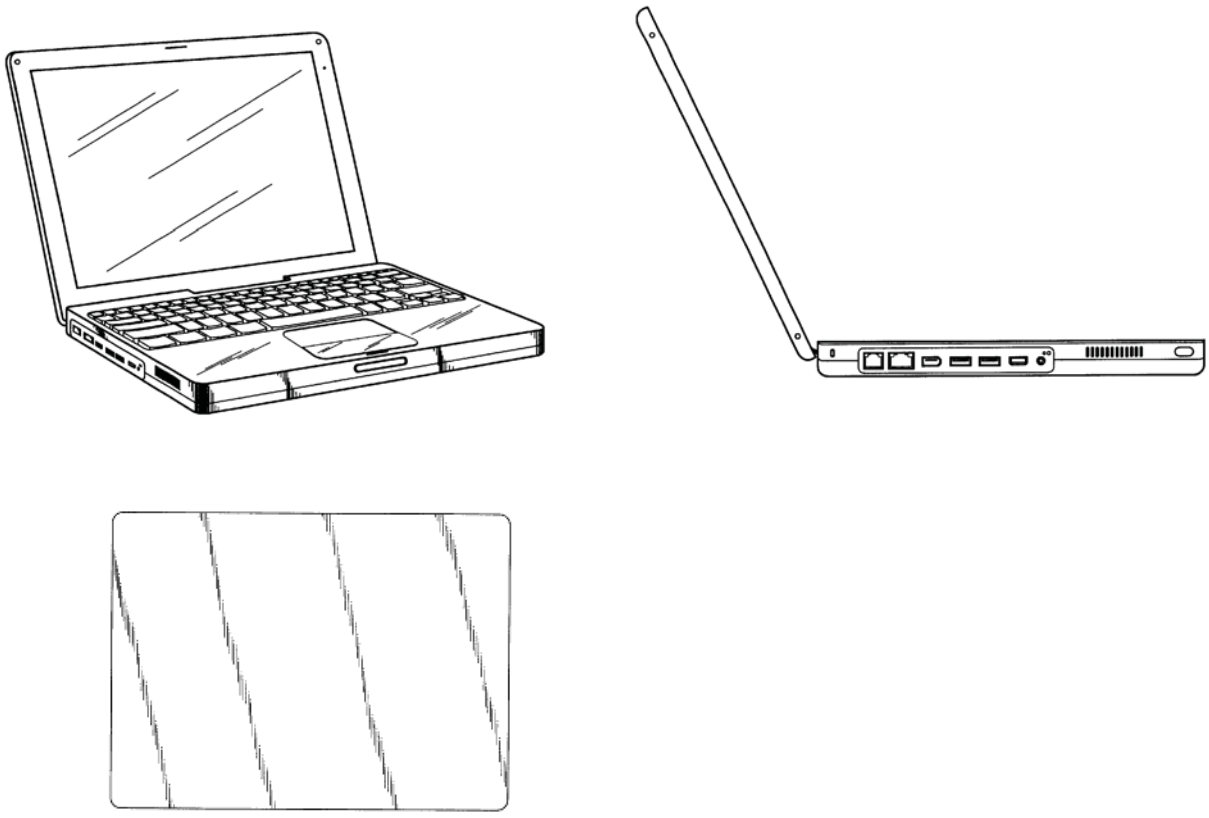
In addition to the designs described above, in 2002 Hewlett-Packard announced the HP Compaq Tablet PC TC1000. Although this was a "convertible" tablet device that also permitted the user to access and use a keyboard, the screen of this device had a flat, clear glass cover that extended past the screen and over a border area, which is referred to and can be seen in the images in Ex. M, Sherman PI Decl., Dkt. 172-13 ("Another neat thing is a sheet of tempered glass that

covers both the digitizer and the bezel."). This glass appears to be flush with the relatively thin rim that surrounds the front face of the device and then slopes down:

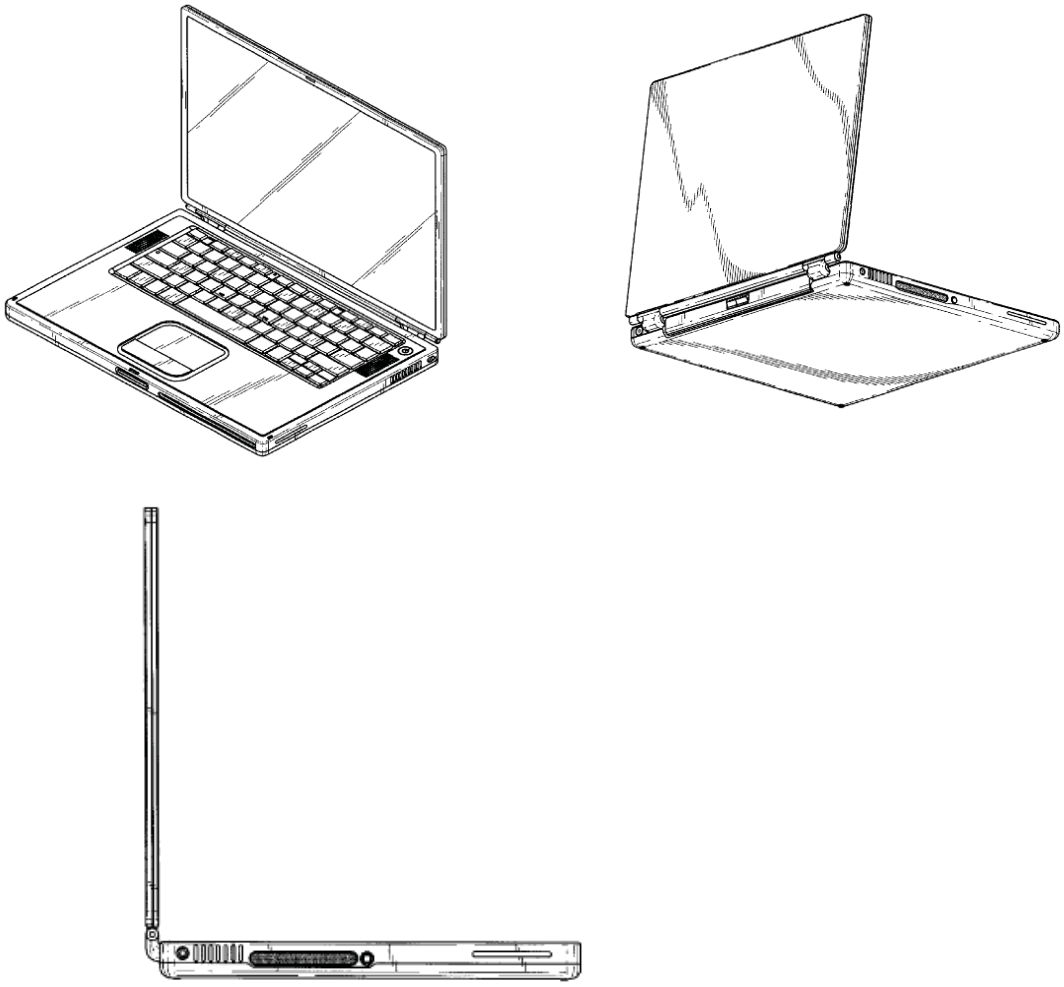
Multiple Views of HP Compaq Tablet PC TC1000

Over a year before Apple filed the D'889 patent application, Apple had been issued patents for several laptop computer designs, the screens of which bear a large resemblance to the D'889 patent. The D464,344 patent was filed May 3, 2001 and issued Oct. 15, 2002. The D463,797

patent was filed July 23, 2001 and issued Oct. 1, 2002. As seen below, the display screens for these patents have a flat front surface free of ornamentation, they both have thin profiles, and they both have flat backs that curve up to the sides. These design elements are further confirmation that the design elements in the D'889 patent were obvious at the time. In fact, an Apple document discussing the Q79 project states the design was based on the Q72 iBook. (APLNDC0000101328.)



Multiple views of the D463,797 patent



Multiple views of the D464,344 patent

A design of an electronic device that is slim with a flat transparent front face above a large inset display and surrounded by black borders has been disclosed in several science fiction movies dating back to 1968.

Below are pictures from the movie Space Odyssey 2001 that was released in 1968 and from the TV series "Tomorrow People" that aired between 1973 and 1979.

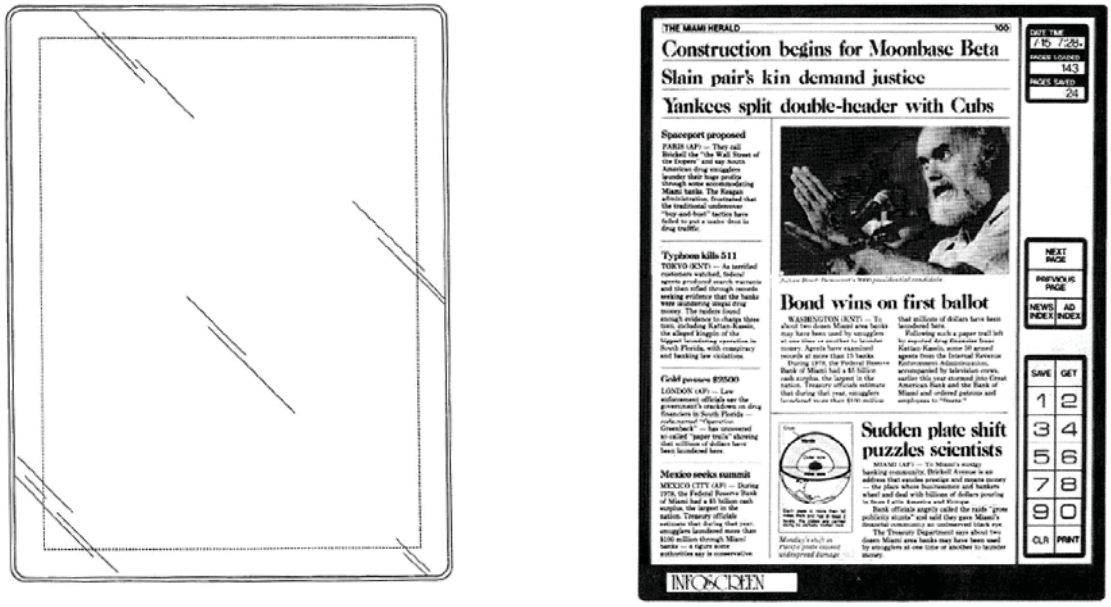
Scene from 2001: A Space Odyssey (1968)

Scene from "Tomorrow People" (1973-1979)

D'889 Is Anticipated

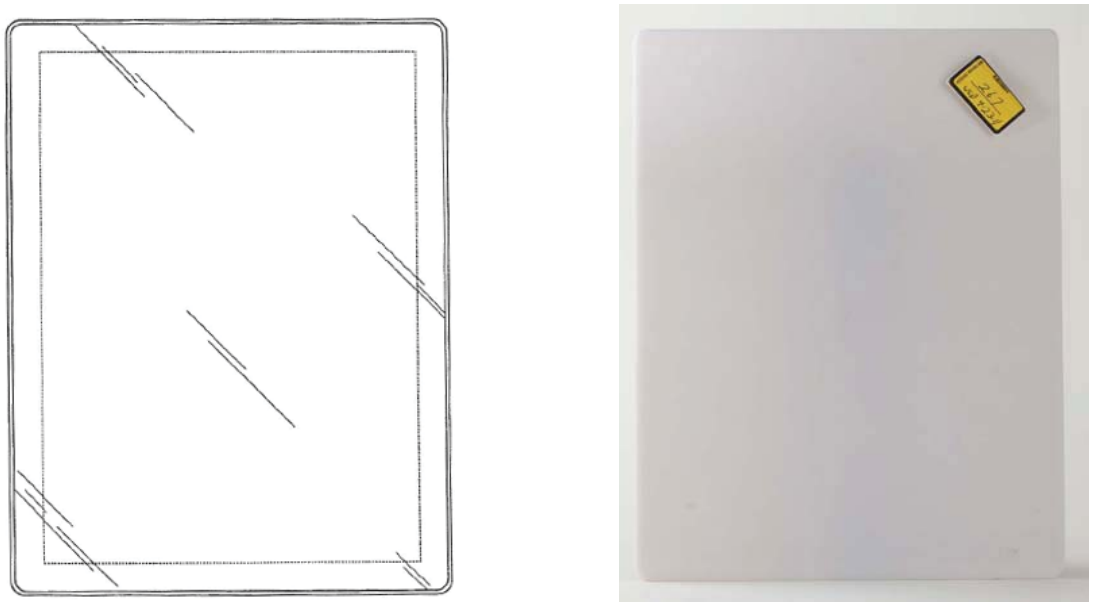
It is my opinion that the D'889 design patent has been anticipated by several prior art design and devices. These designs and devices would be substantially the same in the eyes of an ordinary observer.

The Fidler tablet designs include all the feature of the D'889 design that Apple claims. Beyond having a similar front face, each Fidler design also shares the slim profile and flat back as that shown in the D'889 design. The slight differences in the profile shape are insignificant from the perspective of an ordinary observer. It is my conclusion that the Fidler tablet designs anticipate the D'889 patent. Side-by-side comparisons of the D'889 and the Fidler tablet designs are presented below.



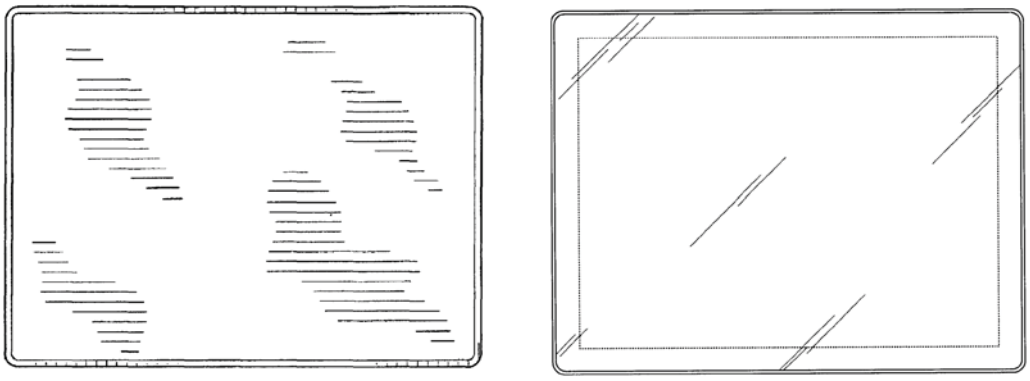
Front view of D'889 and Fidler 1981 tablet design

Front view of D'889 and Fidler 1994 tablet design



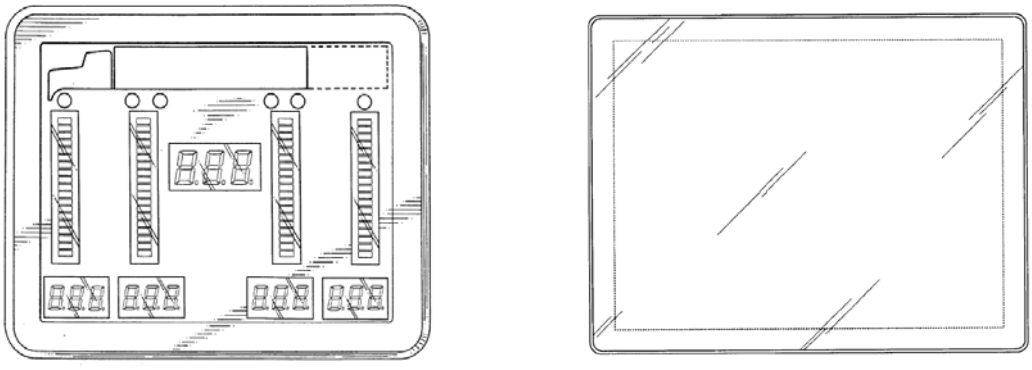
Front view of D'889 and Fidler 1997 tablet design

The D500,037 design patent has disclosed a design that has all the features of the D'889 design as claimed by Apple. The inset display that is marked on the D'889 design in dashed lines also exists on the D500,037 as apparent from it's exploded view. It is my conclusion that the D500,037 anticipates the D'889. Below is a side by side comparison of the D'889 and D500,037.

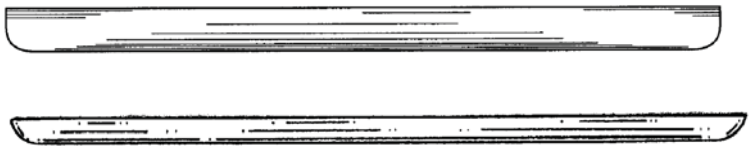


Front view of D500,037 and D'889

The US D412,157 filed on April 1998 has disclosed a design that has all the features of the D'889 design as claimed by Apple. It shows a device with rectangular shape and evenly rounded corners, having a flat and transparent front face above an inset display and surrounded by a thin rim. It is my conclusion that the D'157 anticipates the D'889. Below is a side by side comparison of the D'889 and D'157.



Front view of D'157 and D'889



Side view of D'157 and D'889

D'889 Is Obvious in Light of Prior Art

In addition to being anticipated, it is in my opinion that the D'889 design is obvious in light of prior art. The D'889 design would have been obvious to someone skilled in the art based on the specific prior art designs and devices that are listed below.

Modifications of any of the designs mentioned in the Anticipation section (Fidler tablets, D500,037 and D412,157) to have the identical profile as the D'889, as well as changes in aspect ratios and width of rims, would have been trivial to someone skilled in the art to produce the design of the D'889. It is therefore my opinion that the D'889 is obvious in light of these prior art references.

Japanese design patent JP D1142127 discloses a device that has a thin profile resembling the D'889. The front face of the device is not completely flush, but based on any one of the D500,037, D412,157, or Apple's own "brain box" flat panel design, it would have been obvious to someone skilled in the art to combine these references to produce the design of the D'889.

The D461,802 discloses a tablet design that has flat transparent front face, but its borders are patterned and not flat, and the design is also not completely rectangular. Based on a combination with either D500,037 or D412,157, however, it would have been obvious to someone skilled in the art to modify this design to produce the design of D'889.

The D618,677 Design Patent

The D'677 is entitled "Electronic Device." The original application was filed January 5, 2007, and the patent issued on June 29, 2010. The D'677 patent includes eight figures presenting six projected views and two perspective views. Of these figures, only two actually include claimed features other than a solid line. Figures 2 and 4 contain no elements being claimed. The only significant view for comparison is the front face of the device as it is the only element claimed in this patent. According to the written description of D'677, the disclosed design might be found in a computer, a portable or hand-held electronic device, a media player (music, video or game player), a media storage device, a personal digital assistant, or a communication device such as a cellular telephone.

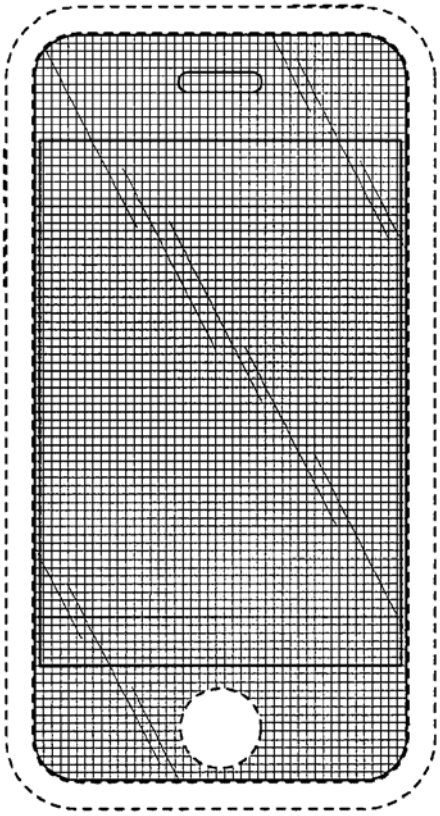


FIG. 3

Front view of the D'677 design patent

Apple has offered the following construction of the D'677 patent:

> a flat, clear, black-colored, rectangular front surface with four evenly rounded corners;
>
> an inset rectangular display screen centered on the front surface that leaves very narrow borders on either side of the display screen and substantial borders above and below the display screen; and
>
> a rounded, horizontal speaker slot centered on the front surface above the display screen, where the rectangular front surface is otherwise substantially free of ornamentation outside of an optional button area centrally located below the display.[32]

The analysis below of these and other prior art references will show that the D'677 design has been anticipated by prior art, and all of the design elements that it includes have been demonstrated alone and in combination in prior art design patents and devices, and that the design is obvious in light of the prior art.

It should be noted that since the D'677 claims a design patent for an "Electronic Device," prior art references do not have to relate to mobile handsets but rather to any other electronic device, including but not limited to PDAs, tablets, media players, etc.

D'677 PRIOR ART

Japanese design patent JP D1241638 ("JP638") was issued to Sharp Electronics Corporation on June 6, 2005. The patent discloses a design for a mobile device. The front and back surfaces can slide one of top of the other. The design has been implemented in Sharp 825SH mobile handset for Softbank. Below are the images of the design patent and the handsets. The design includes rectangular shape with evenly rounded corners, and an inset display (as can be seen from side view of the device) below a transparent front face. The front face is made of a single piece and is substantially flat with slight curvature on the vertical axis on the top and bottom sides.

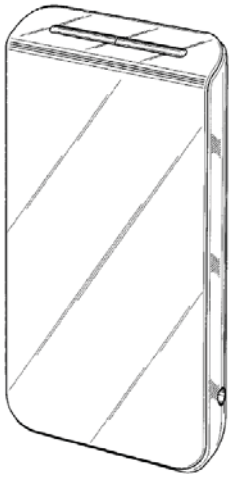
[32] See Preliminary Injunction Motion at 8, citing Declaration of Cooper Woodring ¶¶ 16, 22.

JP638 front view and Sharp 825SH front view

Japanese design patent JP D1204221 ("JP221") was issued on May 10, 2004 and discloses a design for a mobile telephone device. The design has rectangular shape with evenly rounded corners and a flat transparent front face above an inset display. It uses the black color for the rims around the display area. While JP221 depicts a slider-style phone design, the front view is as follows.

Front view of JP D1204221

The design disclosed in United States design patent D514,590, issued February 7, 2006, relates to a digital audio player that has a flat and transparent front face with an inset display located below it. The front face design extends on one of the sides and curves to cover the upper side on the device. This patent is another prior art example of an electronic device that has an inset display below a flat transparent surface and a rectangular frame with rounded corners. There is no ornamentation on the front face.



Front face view of device D514,590

The iRiver U10 is a multimedia player first sold in Asia and subsequently released in the United States on October 18, 2005. It has an overall rectangular shape with rounded corners, a transparent flat front face, a rectangular display below the clear surface and the color black for the front face. The display is centered both horizontally and vertically and is surrounded by narrow borders on two opposing sides and wider borders on the remaining two sides. There is also no ornamentation.

iRiver U10 Media Player

The iRiver U10 is an embodiment of the KR30-0394921 patent. The perspective drawing of the patent below confirms that the front face of the device is a flat, continuous, clear surface extending from edge to edge. The rectangular display is visible through the clear surface.

Perspective view of Korean design patent KR30-034921

The Olympus MR500i multimedia device was presented by Olympus at the 2005 Consumer Electronics Show. It has an overall rectangular shape with rounded corners, a transparent flat front face a large inset display and using a black color for the front face.

Olympus MR500i Media Player

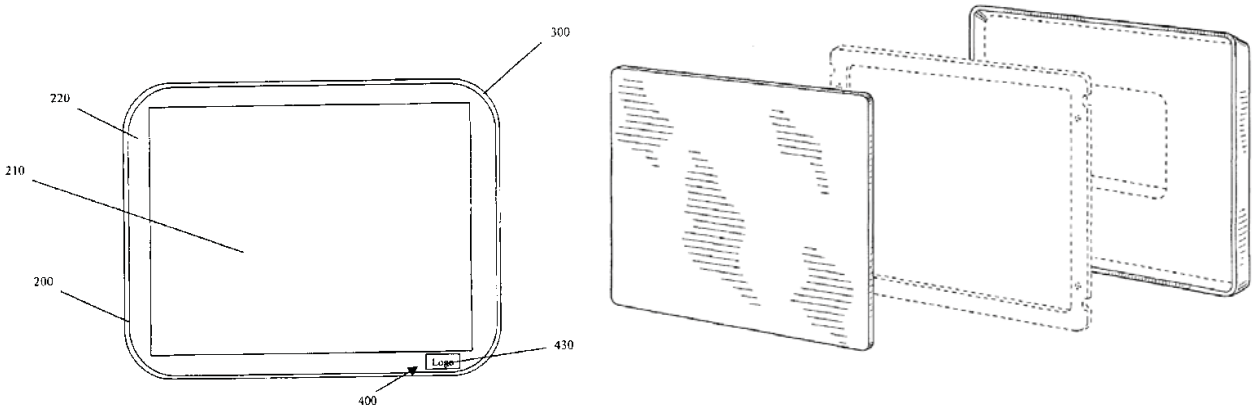
The electronic device designs below were created as part of a Nokia design contest, and the images were publicly released by Nokia in 2004. See Declaration of Ricardo Vilas-Boas dated

January 6, 2012. They show a device with a general rectangular shape and rounded corners having a flat, continuous and transparent front face with a large inset display covering most of the front face. The device also has rounded function elements symmetrically placed above and below the display area. The device's default color was black

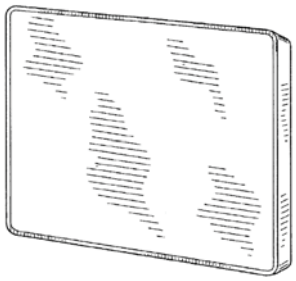
The Nokia contest design demonstrates that many designers have shared the goal of having a clear, flat front face with a large touch display area, but its commercial realization was delayed mainly due to technological issues, not due to novelty of the design concept, as explained in my functionality analysis below.

Nokia Fingerprint concept phones images

In late 2002, Bloomberg LP submitted its utility patent application that resulted in US Patent 6,919,678, as well as applications that resulted in United States design patents D500,037 and D497,364 by the same inventors. The two design patents issued in late 2004, while the utility patent issued in July 2005. These patents all describe an electronic device that has an inset display below a flat transparent surface enclosed in a rectangular frame with rounded corners:



Front perspective and exploded front perspective views of D500,037



Front view of device claimed in US 6,919,678 patent

These, and additional prior art that I discuss below, lead me to conclude that the D'677 design is anticipated.

B. <u>Additional References That Reinforce The Obviousness of D'677</u>

It is also my opinion that a number of additional prior art references reinforce the obviousness of the D'677 design patent. The following references all predate Apple's application for D'677 on January 7, 2007, as well as the initial announcement and disclosure of the iPhone on January 9, 2007. As such, there is no basis to believe they were copied from Apple's designs, and the substantial similarity of these designs is further proof that the D'677 design lacked any novelty.

In December 2006, the month before Apple first announced the iPhone and filed the D'677 application, Samsung filed a design patent application in Korea that ultimately resulted in issuance

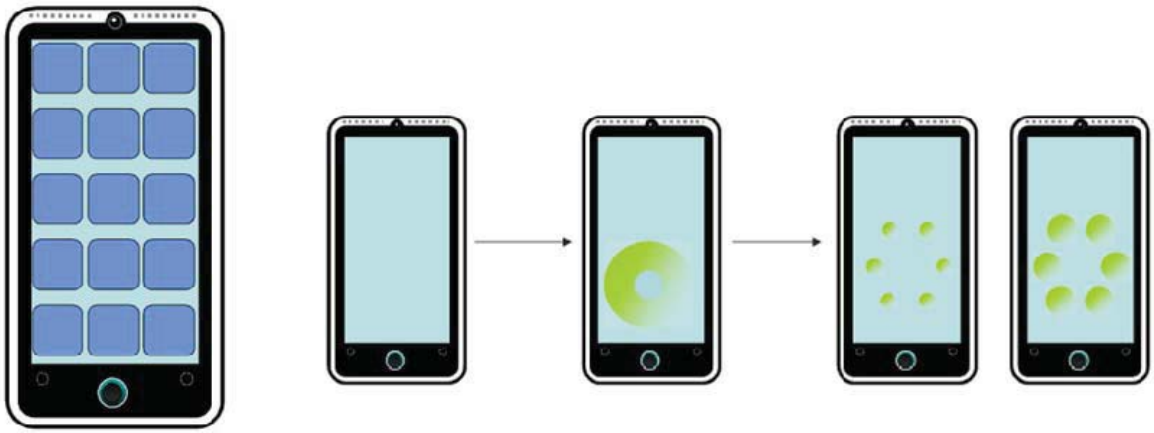
of KR30-0452985. It is my understanding that the design reflected in the KR30-0452985 was created no later than August 2006, several months before the application was filed. March 1, 2012 Deposition of Hyuong Shin Park at 33:7-34:10; 62:7-17. The design has been implemented in the Samsung F700 handset.

The F700, KR30-0452985, and U.S. D560,192 front views

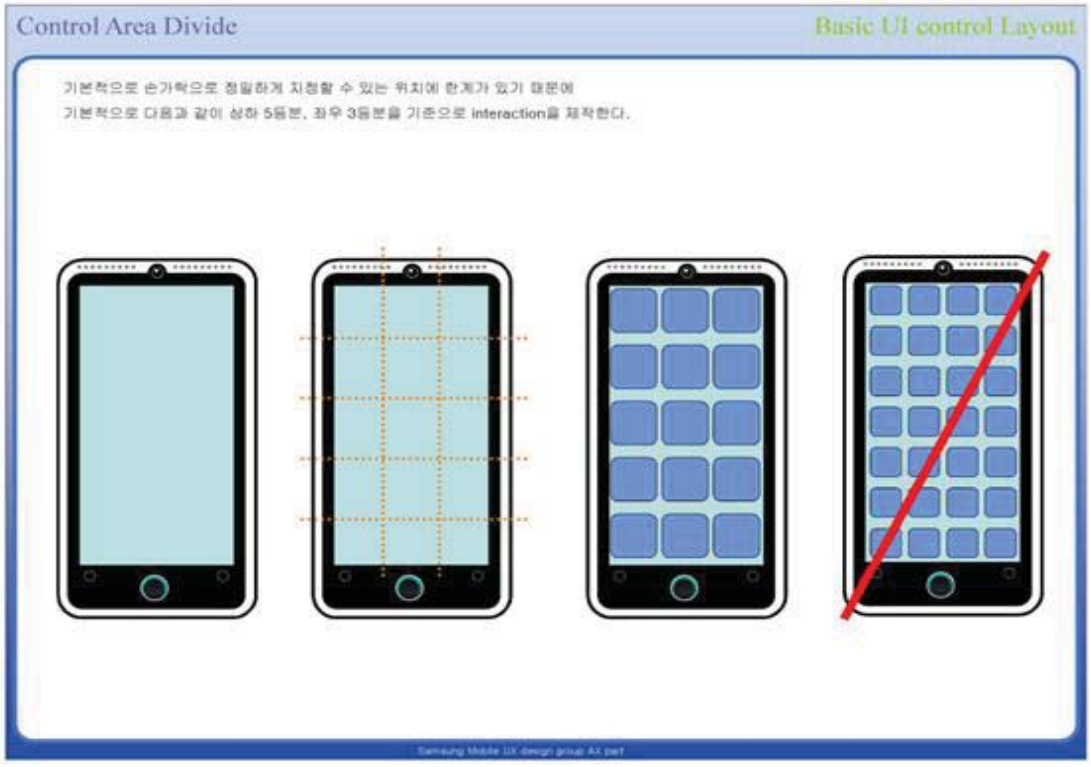
The KR30-0418547 design patent, published July 6, 2006 discloses a flat front face with overall rectangular shape and evenly rounded corners, an oval earpiece hole centered on top of the display, and an inset rectangular display. A similar US design patent US D560,192 was filed on Dec. 22, 2006 (preceding the Apple submission of D'677) disclosing a similar design.

Moreover, the following images were included in several reports and presentations, which I understand Samsung created at between July and September 2006 in connection with the project that yielded the F700. (SAMNDCA00321457-656.) I understand that the reports were designed to create and recommend an interface for a touchscreen mobile phone that was currently in development. The images show a design for a touchscreen phone having a rectangular shape, corners with equal radii, a large rectangular display area covering most of the front surface, a single button below the display screen, a black border surrounding the display area, and a thin,

white, even border on the perimeter of the device. These internal designs were created before the announcement or disclosure of the first iPhone or the filing of the application for the D'677 patent.

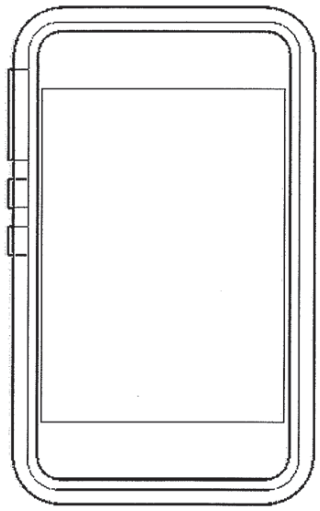


(SAMNDCA00321457-1656)



HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY SAMNDCA00321552

Japanese design patent JP D1241383 ("JP383") was issued on June 6, 2005 and discloses a design for mobile electronic device. The front view of the design patent includes an overall rectangular shape with evenly rounded corners, a flat front face, and a large rectangular display centered both horizontally and vertically on the front face of the device.



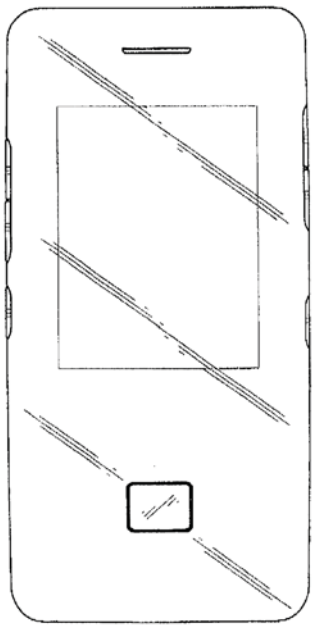
Front View of JP D1241383

The application for European Union design rights registration 000569157-0005 was submitted in September 2006. This reference discloses a flat front face with overall rectangular shape and evenly rounded corners, an oval earpiece hole centered at the top of the device; and an inset rectangular display.

It is also worthwhile to note that the European Union design rights registration 000569157-0005 design was embodied in the LG KE850 Prada, a mobile phone that was released in late 2006 before the iPhone was announced or the D'677 patent application was filed. The KE850 Prada has a rectangular shape with evenly rounded corners a flat and transparent front face with black background for the front face exactly as the D'677. The KE850 Prada won both an iF Design Award and a Red Dot Design Award in Fall 2006.

Front Views of LG KE850 and EU Registration 000569157-0005

Similar to Apple's claims regarding the D'677 patent, United States Design Patent D534,516, issued January 2, 2007, describes an electronic device of a general rectangular shape with rounded corners and a transparent front face above an inset display. The front face also has a single action button at the bottom part of the front face and an elongated earpiece hole on the top part above the display.



Front face view of device in U.S. D534,516

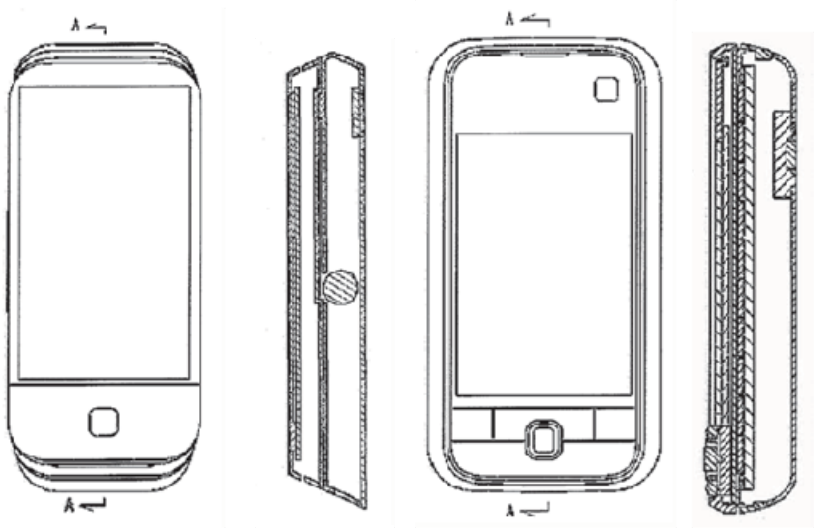
An embodiment of this design patent was released as the LG Chocolate in March 2006 (before the submission of the D'677 or D'087 and even before their claimed conception date), which was one of the highest-selling mobile phones of the time. As can be seen in the photo below the device also has overall rectangular shape with rounded corners and a flat transparent black front face.

LG Chocolate

The Samsung K3 MP3 player design became public in 2006. It had a rectangular shape with rounded corners and a flat transparent front face over an inset display and used black color for the front face.

Perspective image of the Samsung K3 MP3 player

The Japanese design patents JP D1280315 and JP D1295003 submitted in December 2005 and March 2006 respectively, both show flat front faces with inset displays emphasizing that the concept has been known and patented in multiple submissions well before Apple iPhone design was allegedly conceived.

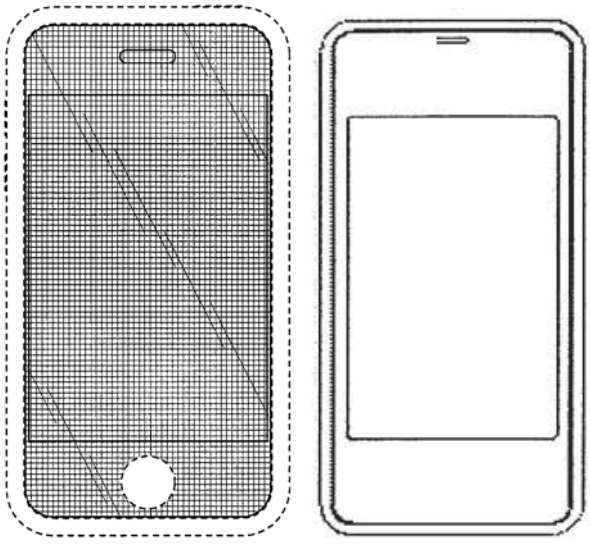


Front and side views of JP D1280315 and JP D1295003

D'677 IS ANTICIPATED

Japanese design patent JP D1241638

While the JP638 shows in some perspectives a slider design, those views are irrelevant to my analysis, because the D'677 patent only claims the front face design and nothing else about the electronic device.



Comparing the front view of D'677 and JP1214638

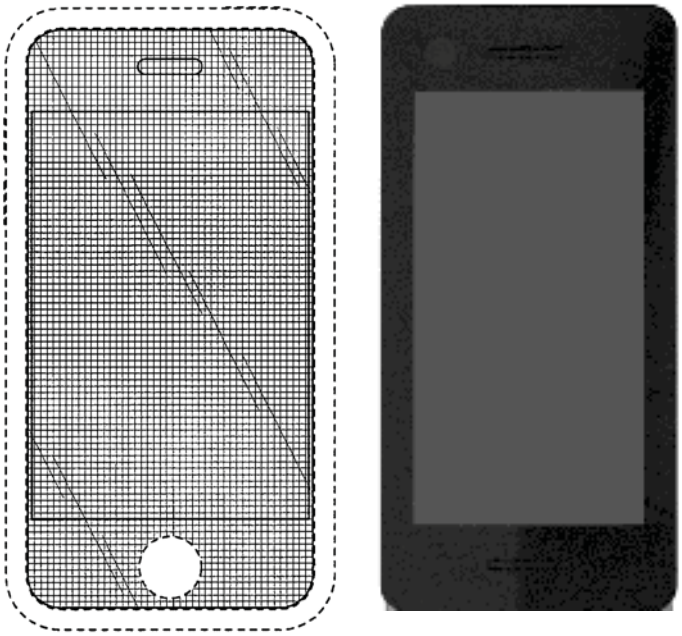
As can be seen from the side-by-side comparison, the relevant portion of JP638 has the same rectangular shape with four evenly rounded corners. The interior rectangle with square corners, defining the area of a display screen, is similarly proportioned, having narrow borders on either side and wider borders at the top and bottom. In addition, the two designs each include a small horizontally-oriented lozenge shaped slot with rounded ends centered side-to-side in the top, reflecting the placement of a earpiece opening.

The front face designs appear substantially the same. I understand the diagonal hash lines across the front face of the D'677 device indicate that the front face surface is transparent, which is consistent with the description as a mobile electronic device with a display screen. The side cut view of JP638 also demonstrates that the display of the disclosed device contains an inset display that resides below a single transparent front face surface.

The JP638 does not disclose the color of the front face and as such it also covers the obvious selection of the black color. The fact that black has been the obvious selection for this design is further emphasized by observing the instantiation of the JP638 in the Sharp 825SH device that uses the black color for its front face.

Sharp 825SH

It is my opinion JP638 anticipates the D'677 because the front face view discloses all claimed elements of the D'677. The front face of JP638 lacks a navigation button, but D'677 expressly disclaims the round button depicted in broken lines. As mentioned the usage of black color on the D'677 design should not be considered as a difference either as the JP638 is not limited in color and therefore covers the trivial choice of black. Although there are differences, such as the relative narrowness of the lozenge shaped slot on JP638, placement of the slot closer to top of the front face, and a slightly narrower overall shape, when compared to the prior art at the time of Apple's design the D'677 and JP638 designs are not significantly different. JP638 is nearly identical to D'677 in every relevant respect, and the ordinary observer giving such attention as a purchaser usually gives would find that JP638 is substantially the same as the D'677 patent.



D'677 and Japanese design patent JP D1204221

As for the JP638,While JP221 depicts a slider-style design, this is irrelevant to my analysis because the D'677 patent only claims the front face design, as discussed previously.

Comparing the front views of D'678 and JP D1204221

As shown in the images above from the two design patents, the relevant front face illustration of JP221 includes all of the elements of the D'677 patent claimed by Apple, and

therefore anticipated the D'677 design by several years. JP221 has the same rectangular shape with four evenly rounded corners, an interior rectangle with square corners, narrow borders on each side of the display, more substantial borders above and below the display, a lozenge-shaped earpiece slot positioned between the top of the device and the top of the display screen.

The display screens in both designs are also centered both vertically and horizontally such that opposing borders are exactly equal in shape and size. Both designs also lack ornamentation.

Both designs use black color for the borders around the display. The JP221 uses dark gray color for the display, while the D'677 shows it as black. Considering the fact that actual displays at the time where of dark gray color, including all those displays in Apple devices, this difference should be considered insignificant. Apple's expert, Cooper Woodring, previously testified to this same effect.

The only elements visible in JP221 that are not included in D'677 are the small, barely visible circle on the top left side of device (representing a front camera sensor), and the small rounded slot at the bottom of the device.

It is my opinion JP221 anticipates the D'677 because the front face view discloses all elements of the D'677 claimed by Apple. The front face of JP221 lacks a navigation button, but D'677 expressly disclaims the round button depicted in broken lines.

The Sony Ericsson W950 Walkman phone was released in 2005. It discloses a mostly rectangular shape with rounded corners and a black front face. It has a silver colored metal frame that surrounds the sides of the unit as a band around the black body. This design and the overall design language of Sony and Sony Ericsson apparently inspired the Apple design team. Apple designers' work on the iPhone designs reflect explicit references to Sony and some of the elements of the Sony Ericsson handset designs of that time. Senior Apple designer Christopher Stringer testified that another Apple designer, Shin Nishibori, created several "Sony style" designs for mobile phones, claiming that the point was "what would Sony do if they were us?" Stringer Dep. at 110:23-113:13. Designer Dennis Satzger testified that these designs were an exercise into Sony

design language, and admitted that Apple built physical models of the Sony style designs. Satzger Dep. at 68:24-73:7.

Images of Sony Ericsson W950 handset

Apple iPhone design mockups (the "Sony style design" is on the left)

"Sony style" CAD drawings

The CAD drawings created by Apple designers demonstrate that the W950 had a major influence on the development of the iPhone. The design shows on its back a clear SONY logo, while the side profile strongly reassembles the W950 with a metal frame surrounding a black body. The connector on the bottom of the device is strikingly similar to Sony Ericsson's very distinct connector that was used in most of their models at that time. The camera hole shape and

styling as well as the flash shape and style are also strikingly similar to the style of Sony Ericsson's best selling camera phone of that time, the K800i.

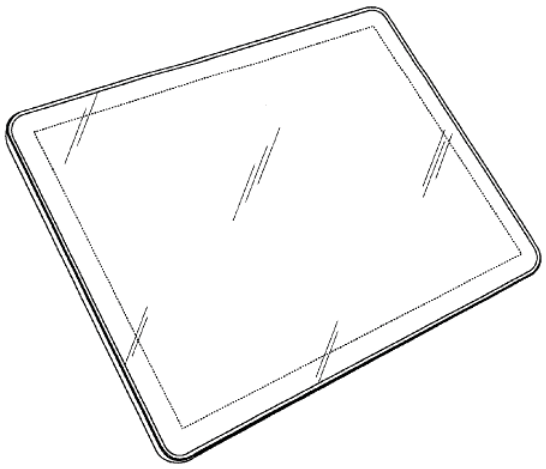
Sony Ericsson K800i

By looking at the side by side photo of the "Sony style" model on the left and the existing iPhone design from April 2006, it is clear that the final design of the iPhone borrowed heavily from the W950 and the design copies it inspired in Apple's Industrial Design Group. Moreover, the design of the iPhone4 seems to trace back to these designs and adopted the metal band profile of the above design and the W950 that inspired it. The fact that these designs were strongly influenced by existing designs and other companies' trade dress further supports my conclusion that the Apple design of the iPhone and the associated design patents are obvious in light of prior art.

Apple's United States Design Patent D504,889

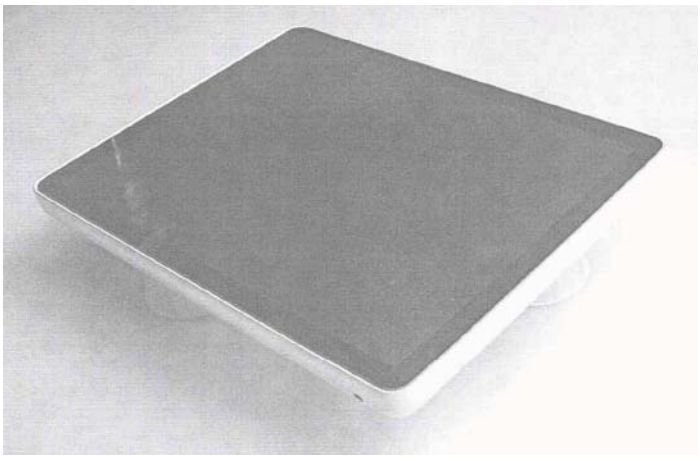
The examiner of the D'677 patent originally rejected the patent application, stating that multiple prior art references included similar features. The examiner specifically identified prior claims regarding the shape of the earpiece opening, the display shape, and the external shape. The patent was only allowed based on Apple's claim of novelty for having the display as inset below a flat transparent surface as opposed to the examiner's cited prior art that included displays that had beveled picture frame surrounds.

As is shown in prior art references cited in this report, however, design patents for electronic equipment having similar features and specifically inset displays below transparent flat surfaces had existed prior to this Apple design and therefore render the D'677 invalid as anticipated and obvious. Apple's design patent D504,889, which was issued in May 2005 and listed as prior art in the patent, constitutes prior art to the D'677 because it showed a flat, continuous, transparent front surface as claimed by Apple:



Perspective view of Apple's U.S. design patent D504,889 (fig. 1)

Furthermore, Apple submitted photographs of a physical mockup of its design as part of the D'889 application. The design as shown in these photographs became public in 2005, when the D'889 patent issued. The mockup, also known as the "035 Proto," disclosed the use of black on the front surface. The following is an image of the 035 Proto obtained from the public file history of the D'889 patent:



APLNDC-X000006124

The next image is a recent color photo taken of the 035 Proto, confirming that the front surface is indeed black, just like the image from the public file wrapper:

APLNDC-X000005854

Because the patent law does not allow for double patenting, 35 U.S.C. § 101, and because the only innovative design element that justified issuance of D'677 — a flat, continuous surface, including the use of the color black — had already been disclosed by D504,889 and the 035 mockup, Apple's own prior patent renders the D'677 anticipated and obvious.

D'677 IS OBVIOUS IN LIGHT OF PRIOR ART

It is also my opinion that the foregoing references and a number of additional prior art references, alone or in combination, render the D'677 design patent obvious.

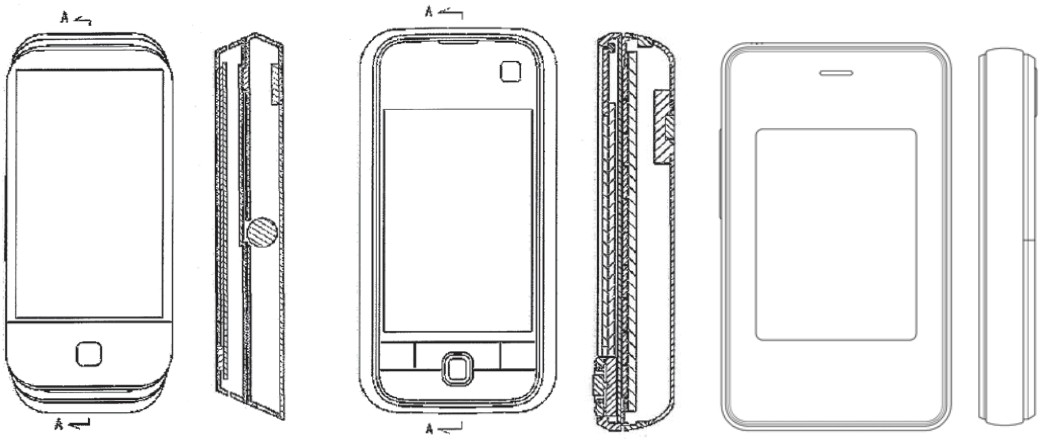
Even if JP D1214638 is not found to anticipate D'677 on its own, it renders D'677 obvious either with variations that would have been obvious to one of skill in the art, or in combination with other prior art references. The front face surface of the design disclosed in JP D1214638 is not shown as completely flat on the long axis, which shows a slight curvature on bottom and top. The variance from flat is not shown as being substantial. Moreover, the two apparent embodiments of JP D1214638 shown below help demonstrate that the surface is continuous from top to bottom and side to side, and largely flat.

Sharp Softbank 825SH ***Sharp Aquos Fulltouch 931SH***

The Aquos Fulltouch on the right seems even more flat, but the overall impression of both embodiments is flat.

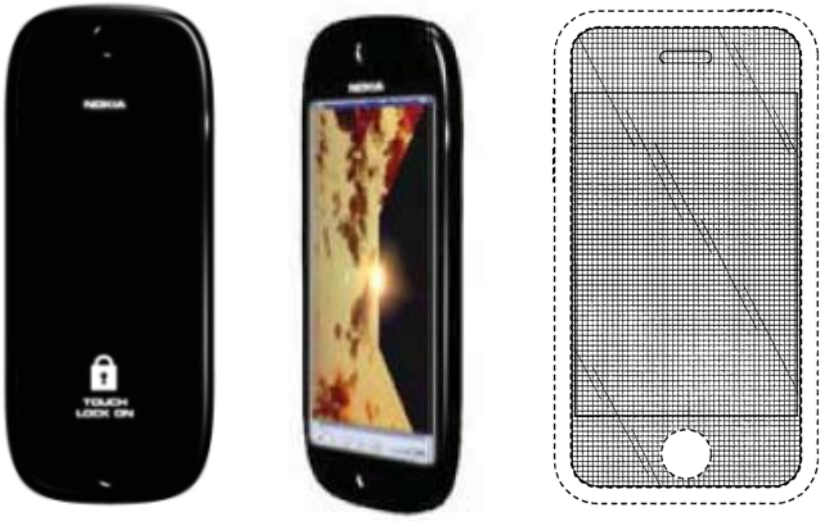
Flattening the front face design from the small amount of curvature on the top surface of JP D1214638 would have been a trivial change for someone skilled in the art. This change would

have been obvious to a designer of mobile electronics in the period following issuance of JP D1214638 in 2005, especially in light of the flat face prior art designs such as Japanese design patents JP D1280315 and JP D1295003, and Korean design patent KR30-0418547.



Front & Left Side Views of JP D1280315, JP D1295003 and KR30-0418547

The Nokia contest design concepts demonstrate that many designers have shared the goal of having a clear flat front face with a large touch display area, but its commercial realization was delayed mainly due to technological issues, not due to novelty of the design concept, as explained in my functionality analysis below.

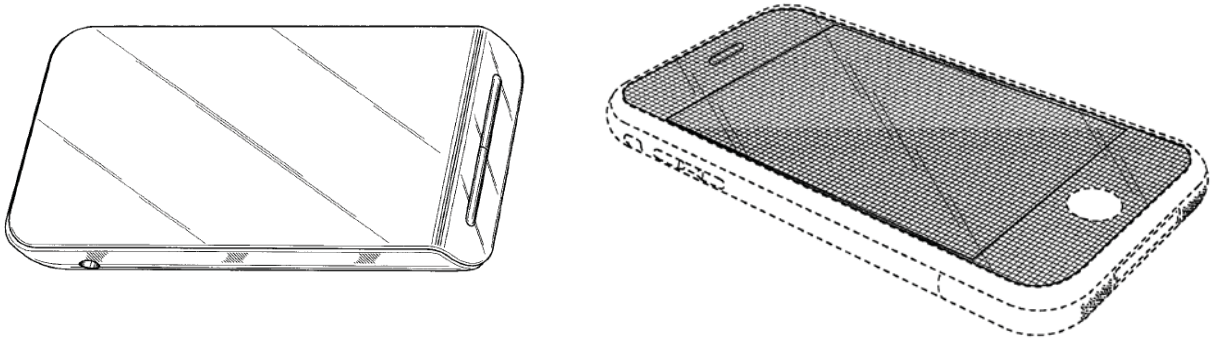


Side by side comparison of Nokia Fingerprint and D'667 front view

These images demonstrate that the similarity of this design, especially where it is shown operating in cinema mode, aka MODO CINEMA, to all elements Apple claims to covered by the D'677. The description of the design by its creator, referenced above, further establishes that the only possible difference in the front face is the circular shape of the horizontally centered earpiece opening. It is my opinion that it would have been obvious to a handset designer to change the design of the earpiece slot to an elongated horizontal lozenge shape, which was common in the prior art at the time. Moreover, the Nokia Fingerprint design combined with either JP638 or JP221, or several other prior art references discussed in this report, would teach the exact or the virtually exact design of D'677 as claimed by Apple and therefore would render it obvious.

The design disclosed in United States design patent D514,590, issued February 7, 2006, relates to a digital audio player that has a flat and transparent front face with an inset display located below it. The front face design extends on one of the sides and curves to cover the upper side on the device. This patent is another prior art example of an electronic device that has an inset display below a flat transparent surface and a rectangular frame with rounded corners. There is no ornamentation on the front face. This device was not intended to function as a mobile

telephone, so it does not include a earpiece slot. It would have been obvious to a handset designer to both add an earpiece slot to modify the design for mobile telephone use.



Side by side comparison of D514,590 and D'667 Perspective views

A side by side comparison of the iRiver U10 device and the D'667 show that they share a flat transparent front face, rectangular shape with rounded corners, inset display below the transparent front face with wider borders on top and bottom and narrower ones on the sides. Both designs use the black color for the front face below the transparent layer.

Side by side comparison of iRiver U10 Media Player and D'667 perspective views

This device was not intended to function as a mobile telephone, so it does not include an earpiece slot. However, it would have been obvious to a handset designer to add an earpiece slot to modify the design for mobile telephone use.

Additional References That Reinforce The Obviousness of D'677

It is also my opinion that a number of additional prior art references reinforce the obviousness of the D'677 design patent. The following references all predate Apple's application for D'677 on January 7, 2007, as well as the initial announcement and disclosure of the iPhone on January 9, 2007. As such, there is no basis to believe they were copied from Apple's designs, and the substantial similarity of these designs is further proof that the D'677 design lacked any novelty.

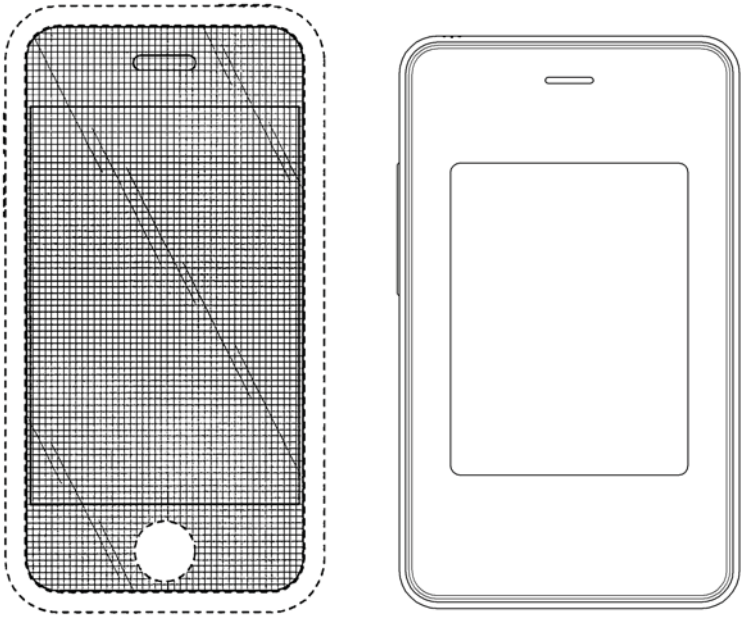
The front view of the KR30-0452985 design patent includes all the major aspects of the D'677 submission, including an overall rectangular shape with evenly rounded corners on all four sides, surrounding a flat front face. It should be noted that the KR30-0452985 is not limited in the color of the front face, but its embodiment in Samusng F700 handset uses the black color.

Comparing the front views of D'677, KR30-0452985 and F700 handset

The face of KR30-0452985 contains a smooth, continuous surface, with the exception of a navigation button at the bottom. A bezel surrounds a screen inset between two narrow side borders and two more substantial top and bottom borders, and a rounded rectangular shape centered at the top of the face, presumably for an earpiece slot. Beyond surrounding bezel and navigation button, which are not claimed in the D'677 patent, the Samsung design differs from Apple's design most notably by the additional element of a circle in its upper right portion, presumably for a camera, and the phone's somewhat more elongated rectangular form. Making these types of adjustments would have been trivial for someone ordinarily skilled in the art.

Korean design patent KR30-0418547

The design of the front face of the KR30-0418547, published July 6, 2006, also strongly resembles the design in D'677 as claimed by Apple. KR30-0418547 discloses a flat front face with overall rectangular shape and evenly rounded corners, an oval earpiece hole centered on top of the display; and an inset rectangular display:

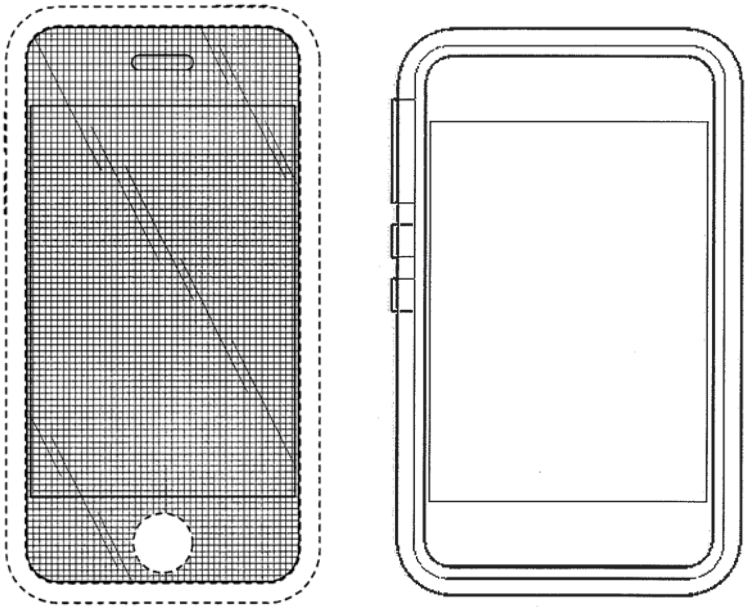


Comparing the front views of D'678 and KR30-0418547

The only differences relate to the somewhat wider proportions of the KR30-0418547 design, the exact aspect ratio of the display and its size compared to the overall device, and the exact size and location of the earpiece slot and specifically using black color. When compared to the prior art at the time of Apple's design of the D'677, these differences are not significant since making these types of adjustments would have been trivial for someone ordinarily skilled in the art.

Japanese design patent JP D1241383

Japanese design patent JP D1241383 ("JP383") includes nearly all aspects of the D'677 patent that Apple claims, including an overall rectangular shape with evenly rounded corners, a flat front face, and a large rectangular display centered both horizontally and vertically on the front face of the device.



Comparing the front views of D'677 and JP D1241383

The face of JP383 contains a smooth, continuous surface. A bezel or casing surrounds a screen inset between two very narrow side borders and two more substantial borders on top and bottom, the front face color is not defined. The peripheral elements around the front face are

different from those of the D'677, but according to Apple , the D'677 claims only the front face within the option bezel area. Thus, the JP383 design reference differs from the industrial design Apple claims only by its lack of an earpiece slot. Adjusting one to the other would have been trivial for someone ordinarily skilled in the art.

The application for European Union design rights registration 000569157-0005 was submitted in September 2006. The front face of European Union design rights registration 000569157-0005 contains all of the features of the D'677 that Apple claims are covered. Specifically, European Union design rights registration 000569157-0005 discloses a flat front face with overall rectangular shape and evenly rounded corners, an oval earpiece hole centered at the top of the device, and an inset rectangular display.

The differences between this design and the claimed features of D'677 relate to the exact ratio of the display size to the size of the overall device, the exact location and size of the earpiece hole, the side keys barely visible from the top perspective and the size of the bottom button, which is claimed in the European Union design rights registration 000569157-0005, not merely optional like the circular button area of the D'677. Again, modifying European Union design rights registration 000569157-0005 to make the bottom button optional and adjust the slight changes in size and ratio would have been trivial for someone of ordinary skill in the art. The front face color of the 000569157-0005 is not defined and is not limited to a specific color, but as can be seen from the phone below, the default color for the design was intended to be black

It is also worthwhile to note that the European Union design rights registration 000569157-0005 design appears to have been embodied in the LG KE850 Prada, a mobile phone that was released in late 2006 before the iPhone was announced or the D'677 patent application was filed. The KE850 also has a black front face, as Apple claims for the D'677.

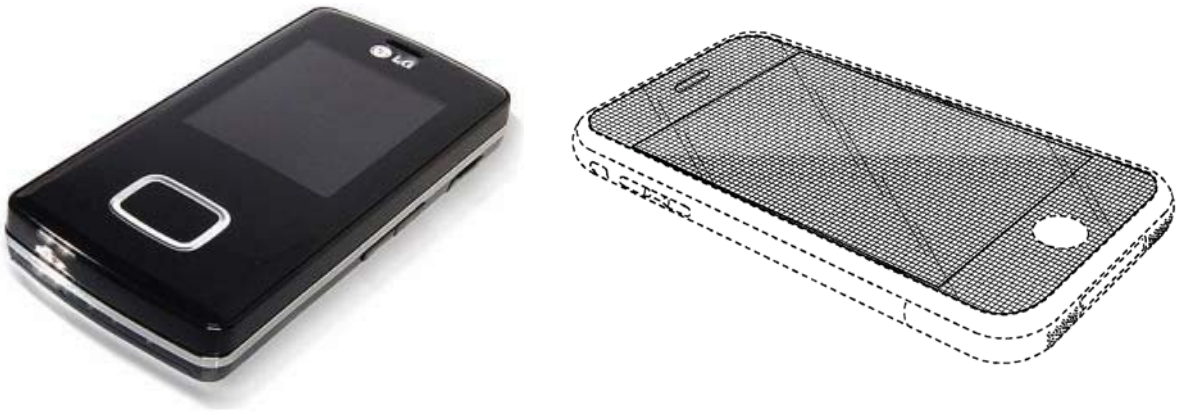
Comparing front views of D'677, LG KE850 and EU 000569157-0005

Disregarding the difference in the navigation button, a feature that was not claimed in D'678, it is my opinion that both the European registration and the LG KE850 device design would anticipate and render obvious the D'678 patent if found to have been created before the priority date for D'677. In any event, these references reinforce the obviousness of D'677 at the time it was filed.

United States Design Patent D534,516

United States Design Patent D534,516 shows an electronic device of a general rectangular shape with rounded corners and a transparent front face above an inset display. The front face also has a single action button at the bottom part of the front face and an elongated earpiece hole on the top part above the display.

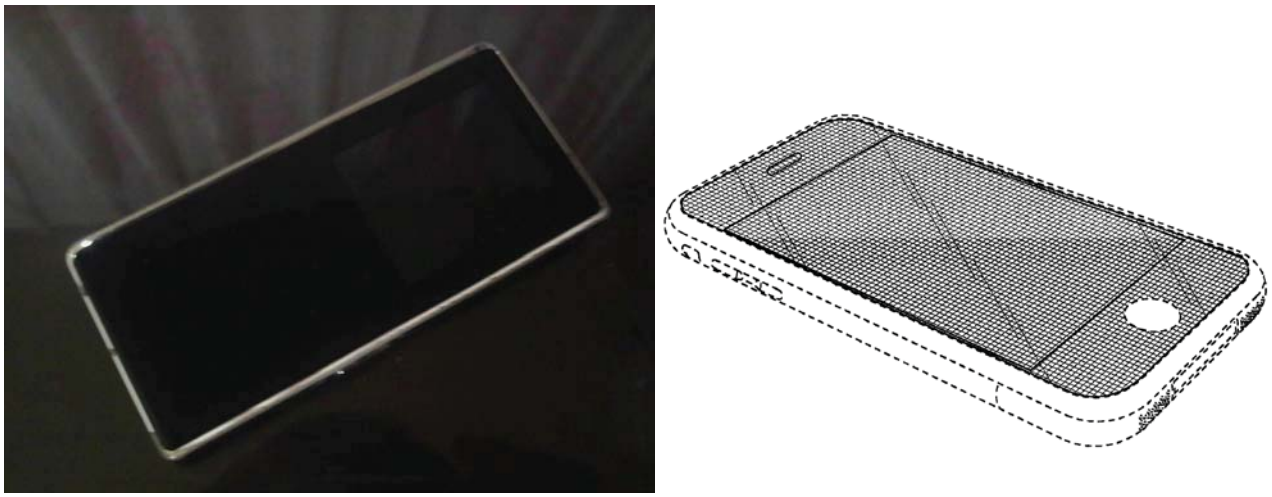
The proportions of the display and the earpiece holes compared to the whole body are different than those found on the D'677, but it would be trivial to someone skilled in the art to perform these changes to derive the D'677 design that Apple claims. An embodiment of this design patent was released as the LG Chocolate in 2006. As can be seen in the photo below the device also has a black front face as the D'677 and is substantially the same design as D'677 and pre-dates it.



Side by side views of LG Chocolate and D'677

Samsung K3 MP3 Player

The Samsung K3 MP3 player design had a rectangular shape with rounded corners and a flat transparent front face over an inset display and used black color for the front face. The device was an MP3 player and therefore did not include an earpiece hole on the front, but it is my opinion that adding this design element would be obvious to someone skilled in the art if the device who was designing a mobile handset.



Side by Side Perspective images of the Samsung K3 MP3 player and D'677

The above prior art devices confirm that the design concept of a flat transparent front face above an inset display and even specificly using black color for front face was not a novel concept at the time the D'677 patent application was submitted to the USPTO, or on April 20, 2006, the claimed conception date of the patent. Rather, it had been reduced to practice in multiple designs before Apple alleges that it invented the design or applied for the patent . The teachings of any of these references in combination with JP638 would disclose all of the elements Apple claims are covered by the D'677 patent. Therefore, D'677 was obvious to a designer of ordinary skill in the field of mobile electronics.

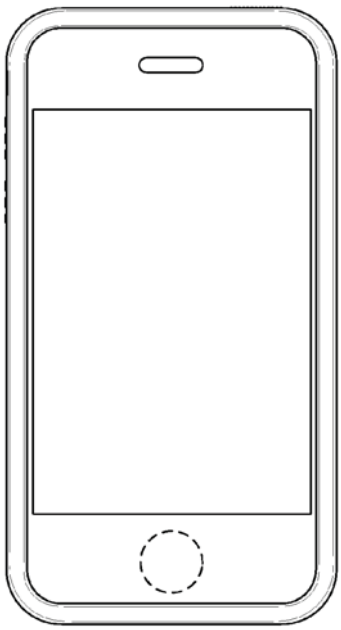
The D593,087 design patent

The D'087 is entitled "Electronic Device." The original application was filed July 30, 2007, and the patent issued on May 26, 2009. The D'087 patent includes forty eight figures of six alternative embodiments presenting each six projected views and two perspective views. Apple has offered the following construction of this patent:

> a flat rectangular front surface with four evenly rounded corners;
>
> an inset rectangular display screen centered on the front surface that leaves very narrow borders on either side of the display screen and substantial borders above and below the display screen;

> a rounded, horizontal speaker slot centered on the front surface above the display screen, where the rectangular front surface is otherwise substantially free of ornamentation outside of an optional button area centrally located below the display; and
>
> a thin, continuous bezel surrounding the rectangular front surface that is substantially uniform in appearance and having an inwardly sloping profile[33]

The numerous variations include one or two elements in combination with the outside rounded rectangular shape that Apple asserts is a bezel structure.



Apple D'087 front view

In considering Apple's infringement claims concerning the D'087 patent, I examined the design patent in comparison to other prior art design patents and handset designs.

The D'087 patent, in one of its variations (see figures 41-46), is the same as the D'677 except that it does not purport to claim a black, smooth front surface and instead it shows a separate element bezel around the front surface, which connects the front part to the back part.

[33] See Apple Inc.'s Motion Preliminary Injunction at 8, citing Declaration of Cooper Woodring ¶¶ 31, 37.

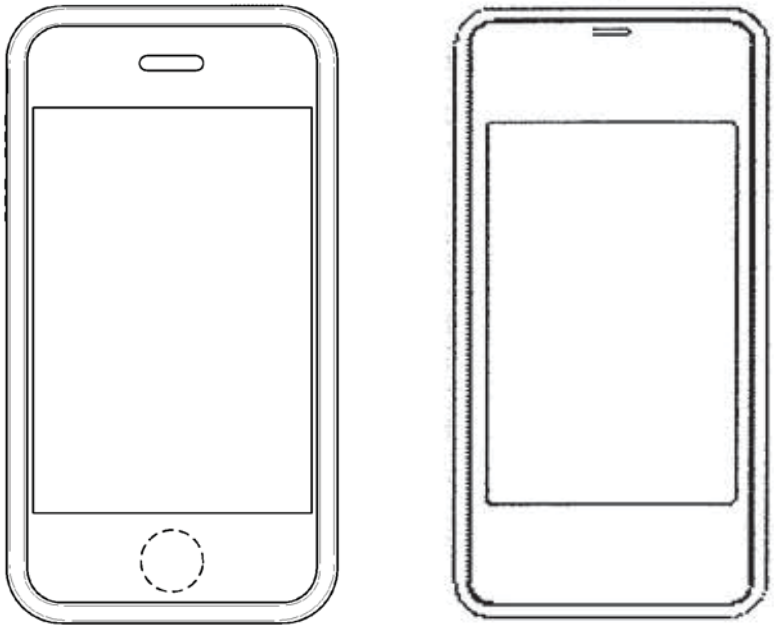
Because of the similarities between D'087 and D'677, the prior art references identified for the D'677 are applicable to the D'087 and will not be repeated. It should be noted that since the D'087 claims a design patent for an "Electronic Device," prior art references do not necessarily have to relate to mobile handset but rather to any other electronic device, including but not limited to PDAs, tablets, media players etc.

The prior art analysis below will show that the D'087 design has been anticipated by prior art, and all of the design elements that it includes have been demonstrated together and in combination on prior art design patents and devices, and that the design has been obvious in light of these prior arts.

The D'087 IS ANTICIPATED

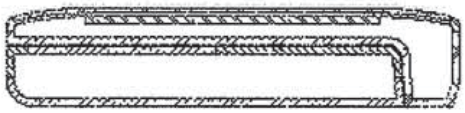
Japanese design patent JP D1241638

Although the JP638 describes a slider design, this is immaterial to my analysis because the D'087 patent only claims the front face design with what Apple claims is a bezel, and alternative embodiments including combinations of earpiece hole, display, and circular control button, and nothing else about the electronic device.



Comparing the front view of D'087 Fig 43 and JP1214638

As can be seen from the side-by-side comparison, the relevant portion of JP638 has the same rectangular shape with four evenly rounded corners. The interior rectangle with square corners, defining the area of a display screen, is similarly proportioned, having narrow borders on either side and wider borders at the top and bottom. In addition, the two designs each include a small horizontally-oriented lozenge shaped slot with rounded ends centered side-to-side in the top, reflecting the placement of a earpiece opening, and a bezel with similar shape surrounding the front face. The JP638 front face is flat with only slight curvature in the top and bottom parts as can be seen from side cut view

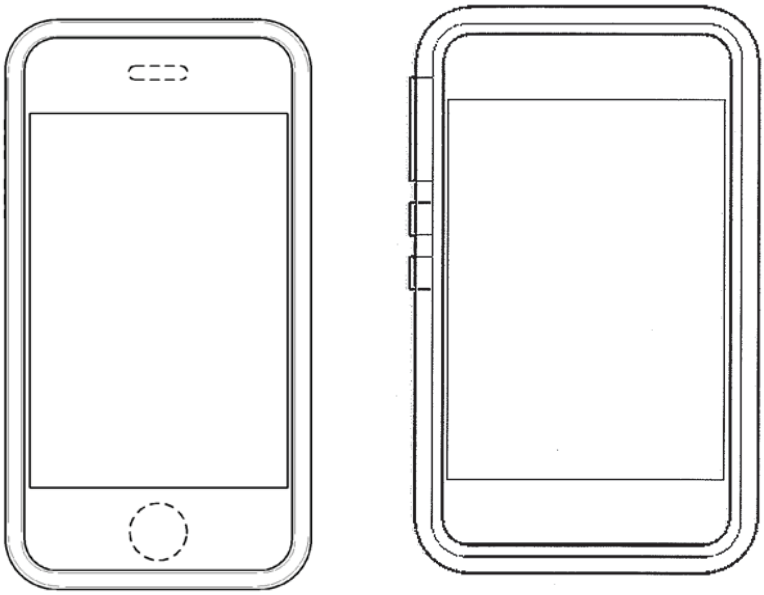


The JP638 does not disclose the circular control button, but that control button is disclaimed on embodiments 2, 3 and 6 of the D'087. The inclusion of such a button would have been obvious for some one skilled in the art.

It is my opinion JP638 anticipates D'087, because the front face view discloses all elements of the D'087 claimed by Apple. Although there are differences, such as the relative narrowness of the lozenge shaped slot on JP638, placement of the slot closer to top of the front face, and a slightly narrower overall shape, when compared to the prior art at the time of Apple's design the D'087 and JP638 designs are not significantly different. JP638 is nearly identical to D'087 embodiments 2, 3 and 6 in every relevant respect, and the ordinary observer would find that JP638 is substantially the same as the D'087 design.

Japanese design patent JP D1241383

Japanese design patent JP D1241383 ("JP383") includes nearly all the major aspects of the D'087 patent that are claimed by Apple, including an overall rectangular shape with evenly rounded corners, a flat front face, and a large rectangular display centered both horizontally and vertically on the front face of the device and a bezel around the front face.



Comparing the front views of D'87 Fig 11 and JP D1241383

The face of JP383 contains a smooth, continuous surface. A bezel or casing surrounds a screen inset between two very narrow side borders and two more substantial borders on top and bottom. The JP383 looks similar to the claimed embodiment 2 of the D'087.

JP383 anticipates D'087, because the front face view discloses all elements of the D'087 claimed by Apple. Although there are differences, such as the additional side buttons on the JP383, the ordinary observer would find that JP383 is substantially the same as the D'087.

D'087 IS OBVIOUS IN LIGHT OF PRIOR ART

It is also my opinion that the foregoing references and a number of additional prior art references, alone or in combination, render the D'087 design patent obvious.

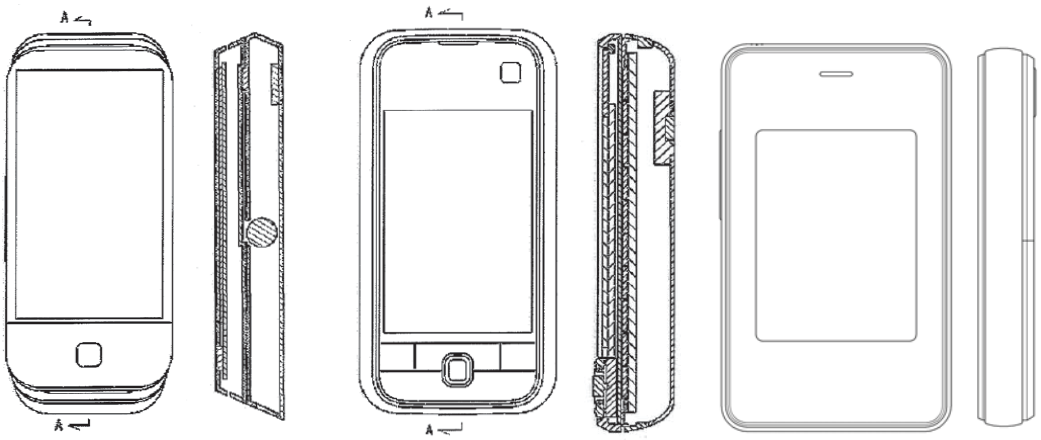
Even if JP D1214638 does not anticipate D'087, it renders that design obvious, either with variations that would have been obvious to one of skill in the art, or in combination with other prior art references. The front face surface of the design disclosed in JP D1214638 is not shown as completely flat on the long axis, which shows a slight curvature on bottom and top. The variance from flat is not shown as being substantial. Moreover, the two apparent embodiments of

JP D1214638 shown below help demonstrate that the surface is continuous from top to bottom and side to side, and largely flat.

Sharp Softbank 825SH ***Sharp Aquos Fulltouch 931SH***

The Aquos Fulltouch on the right seems even more flat, but the overall impression of both embodiments is flat.

Flattening the small amount of curvature on the front surface of JP D1214638 the front face design would have been a trivial change for someone skilled in the art. This change would have been obvious to a designer of mobile electronics in the period following issuance of JP D1214638 in 2005, especially in light of the flat face prior art designs such as Japanese design patents JP D1280315 and JP D1295003, and Korean design patent KR30-0418547.



Front & Left Side Views of JP D1280315, JP D1295003 and KR30-0418547

In relation to variations 1, 4 and 5 of the D'087, the inclusion of a round control button on the front face would have been obvious for a person skilled in art, specifically in light of the above JP D1280315 reference that includes a control button centered on the lower part of the device below the display, and specifically the Nokia Fingerprint design that includes a circular control button below the display area.

The JP D1295003 reference in itself discloses most of the elements of the D'087 as claimed by Apple. It includes a bezel that closely resembles the bezel disclosed in D'087 and an inset display similarly proportioned to the one appearing in the D'087. It also discloses a main control button among other control buttons on the space below the display. It would have obvious for someone ordinarily skilled in the art to combine the design of the D1295003 with the Nokia fingerprint design to produce the D'087 design on all of its embodiments. This type of combination would be natural as it involves combination of prior art relating to mobile handset designs with large displays

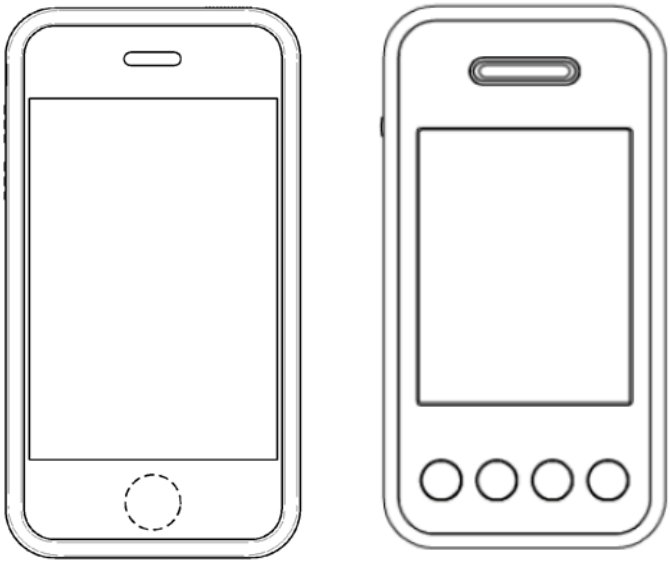
Additional References That Reinforce The Obviousness of D'087

It is also my opinion that a number of additional prior art references reinforce the obviousness of the D'087 design patent. The following references all predate Apple's application for D'087 on July 30, 2007, as well as the initial announcement and disclosure of the iPhone on

January 9, 2007. As such, there is no basis to believe they were copied from Apple's designs, and the substantial similarity of these designs is further proof that the D'087 design lacked any novelty.

Korean design patent KR30-0398307

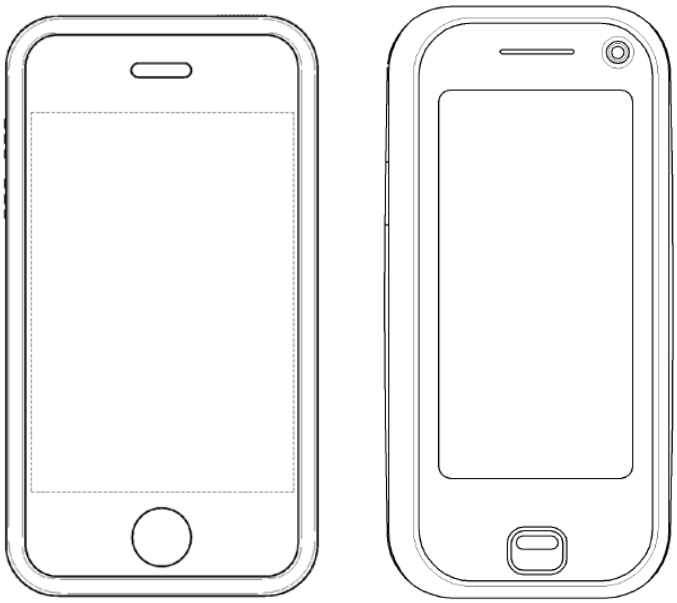
Korean design patent KR30-0398307, issued in 2005 for a PDA design, also discloses a rectangular device with rounded corners having a bezel with identical shape to the bezel disclosed D'087. The design has been embodied in the Bluebird Pidion BM-200 device. The BM-200 used a recessed display due to the touch display technology used in this device, but changing the recessed display to a flat, continuous surface would be an obvious change for someone ordinarily skilled in the art in light of the other prior art referenced. The other changes for the design that include changing of proportions of the earpiece hole and display are also obvious.



D'087 Fig 43 and front view of KR30-0398307

Perspective view of Bluebird Pidion BM-200

The front view of the KR30-0452985 design patent includes all the major aspects of the D'087 submission as claimed by Apple, including an overall rectangular shape with evenly rounded corners on all four sides surrounding a flat front face, a bezel surrounding the front face, a lozenge-shaped earpiece hole and a navigation button on the bottom part below the display area.



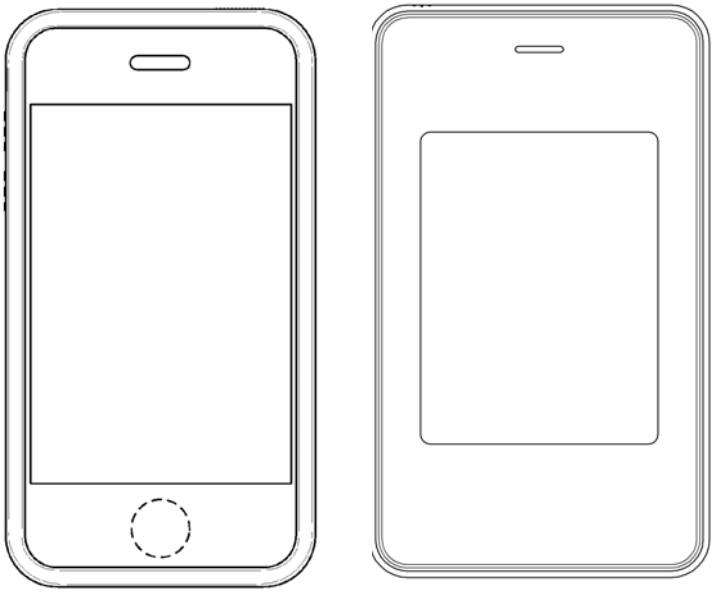
Comparing the front views of D'087 Fig 35, and KR30-0452985

The face of KR30-0452985 has a smooth, continuous surface, with the exception of a navigation button at the bottom. The shape of the button is oval. A bezel surrounds a screen inset between two narrow side borders and two more substantial top and bottom borders, and a rounded rectangular shape centered at the top of the face, presumably for a earpiece slot. The Samsung

design differs from Apple's design most notably by the additional element of a circle in its upper right portion, for a camera, and the phone's somewhat more elongated rectangular form and the slightly different shape of the navigation button. When compared to the prior art at the time of Apple's design of the D'087 these differences are not significant because making these types of adjustments would have been obvious for someone ordinarily skilled in the art. Thus, D'087 is obvious in light of this prior art.

Korean design patent KR30-0418547

The design of the front face of the KR30-0418547, published July 6, 2006, also strongly resembles that disclosed in D'087 as claimed by Apple. KR30-0418547 discloses a flat front face with overall rectangular shape and evenly rounded corners, an oval earpiece hole centered on top of the display; and an inset rectangular display:



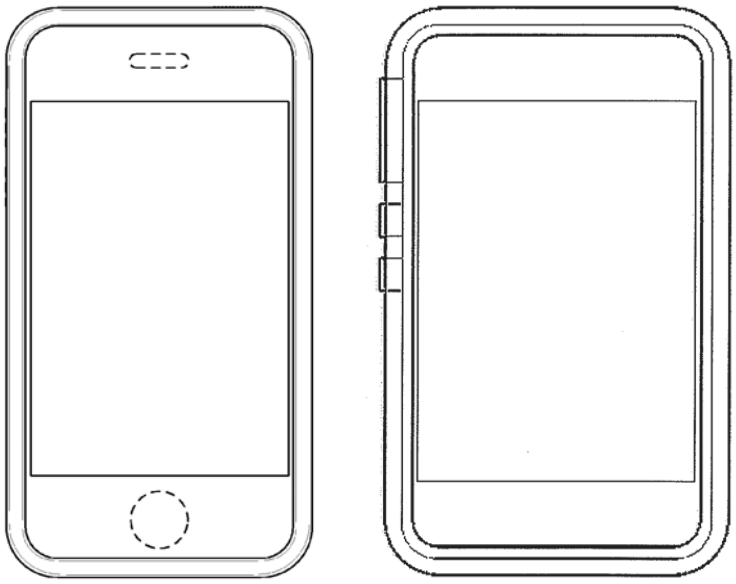
Comparing the front views of D'678 and KR30-0418547

The differences relate to the somewhat wider proportions of the KR30-0418547 design, the exact aspect ratio of the display and its size compared to the overall device, the exact size and

location of the earpiece slot and the exact width of the bezel. When compared to the prior art at the time of Apple's design of the D'087 these differences are not significant because making these types of adjustments would have been trivial for someone ordinarily skilled in the art.

Japanese design patent JP D1241383

Japanese design patent JP D1241383 ("JP383") includes nearly all the features of the D'087 patent Apple claims are covered, including an overall rectangular shape with evenly rounded corners, a flat front face, and a large rectangular display centered both horizontally and vertically on the front face of the device and a bezel around the front face.



Comparing the front views of D'87 Fig 11 and JP D1241383

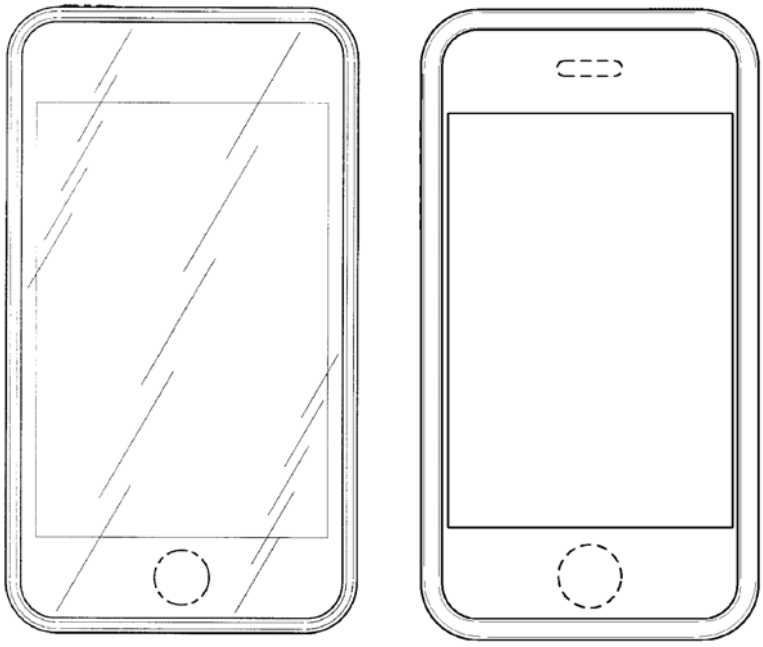
The face of JP383 contains a smooth, continuous surface. A bezel or casing surrounds a screen inset between two very narrow side borders and two more substantial borders on top and bottom. The JP383 looks similar to the claimed embodiment 2 of the D'087 as claimed by Apple. It is lacking the earpiece hole and navigation button that are claimed on the other embodiments, but it would have been obvious for some one ordinarily skilled in the art to include these in the

design as well as remove the side buttons of the JP383 to create D'087 in all of its embodiments as claimed by Apple.

The above prior art devices emphasize that the design concept of a flat front face above an inset display having a rectangular shape with rounded corners and surrounded by a bezel for the front face was not a novel concept at the time the D'087 patent application was submitted to the USPTO, or on April 20, 2006, the claimed conception date of the patent. Rather, it had been reduced to practice in multiple designs that are substantially similar to the D'087 design as claimed by Apple, before the patent application was made or the design was allegedly invented. The teachings of any of these references in combination with JP638 would create the same overall visual appearance shown in the D'087 patent. Therefore, D'087 was obvious to a designer of ordinary skill in the field of electronic devices.

ANALYSIS OF PRIOR ART FOR D'270

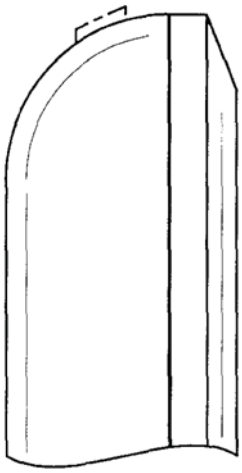
The D'270 patent, as opposed to the D'677 and D'087, depicts an entire electronic device. According to Apple, the design shares similar elements with the D'677 and D'087, such as the rectangular shape with evenly rounded corners, a flat and transparent front surface, and a rectangular area with square corners set inside the overall rounded rectangular shape. In fact, the front face of the D'270 is almost identical to the front face presented in D'087 embodiment 2. The D'270 discloses that the front surface is transparent, which Apple claims is implied in the D'087 and is disclosed in the D'677.



Side by side comparison of D'270 and D'087 front views

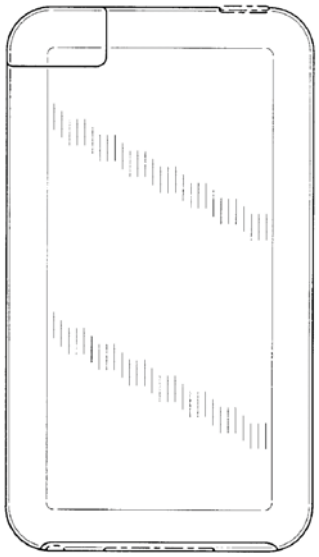
The D'270 design shows at least the following elements:

- A transparent front surface that has a distinct profile having corners cut at approximately 45 degrees on all 4 sides.



Enlarged view of D'270 corner details

- A back cover including a parting line on the back encapsulating a rectangular area on the upper left corner



Back view of D'270

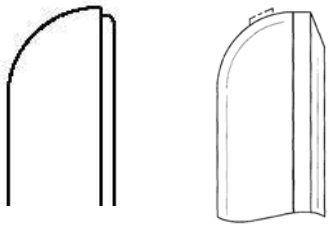
D'270 IS OBVIOUS IN LIGHT OF PRIOR ART

Because D'270 has been shown to be similar to the D'087, the prior art analysis performed for the D'087 and D'677 is also applicable to this design. This includes, specifically, a conclusion that the D'270 front face design is anticipated by JP383 as discussed above.

The D'270 front face design is rendered obvious in light of multiple other prior arts such as KR30-0418547, KR30-0452985 and JP638 as well as the LG KE850 Prada and the Samsung F700 handsets, all of which have an earpiece hole on their front face, but it would be obvious for someone ordinarily skilled in the art to omit the earpiece hole for a design of a media player that does not require it and to perform other modifications to aspect ratio and bezel details to yield the D'270 front face design.

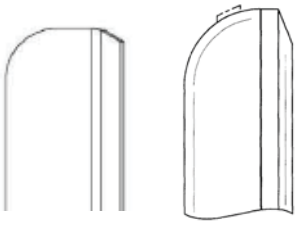
The JP1142127 discloses a rectangular device with rounded corners and a flat front face. The design also discloses a slim profile that curves from the front face to a flat back very similarly to the disclosed profile of the D'270. The front face is a distinct, separate piece from the back

cover. The details of the corner of the JP127 are compared side by side with the details of the D'270 corner:.



Side by side comparison of the JP'127 and D'270 corner details.

The JPD1302929 discloses another rectangular device with rounded corners and a flat front face. The design also discloses a slim profile that strongly reassembles the profile design of the D'270 and specifically the top layer corners being cut in angle. Any differences in the exact thickness and angle of cutting would be obvious modifications for someone ordinarily skilled in the art.



Side by side comparison of the JP'929 and D'270 corner details.

The rectangular shape in the top corner of the back cover of the D'270 design is functional and serves to enable proper reception of the antenna. As such, this feature should not be considered as part of the covered scope of this design patent.

In light of the above, it is my opinion that the D'270 patent is obvious in light of prior art. It would have been obvious for a designer of ordinary skill in the art to combine the design of the JP127 or JP929 with any of the JP383, KR30-0418547, KR30-0452985 or JP638 to produce the design claimed in D'270 to the extent that it may be claimed. These combinations are reasonable as they combine prior arts that are all electronic mobile devices with large displays and include the

expected adaptations to match the specific functionality of the design in hand (a media player as opposed to a mobile cellular handset).

THE ASSERTED TRADE DRESS IS NOT DISTINCTIVE

In the Amended Complaint, Apple describes the trade dress of the iPhone, iPhone3GS, and iPhone 3GS products as having the following characteristics:[34]

- a rectangular product with four evenly rounded corners
- a flat clear face covering the front of the product,
- a large display screen under the clear surface,
- substantial black borders above and below the display screen and narrower black borders on either side of the screen under the clear surface
- a metallic bezel around the flat clear surface

Apple describes similar trade dress for the iPhone 4, with the following modifications:

- The bezel claim is removed
- The color claim is expended to cover either black or white.
- The claims also emphasize the change in the device profile in it being less rounded.

Apple describes the trade dress for the iPad as having the following elements:[35]

- A rectangular product with four evenly rounded corners
- A flat clear face covering the front of the product,
- A large display screen under the clear surface,

[34] Apple also identifies as part of its trade dress "a matrix of colorful square icons with evenly rounded corners and a bottom row (or 'dock') of colorful square icons set off from the other icons, which does not change as other pages of the user interface are viewed." The functionality and lack of distinctiveness of the Graphical User Interface is outside the scope of my analysis and is therefore not addressed in this report.

[35] Apple also identifies as part of the iPad trade dress "a matrix of colorful icons within the display screen" when the device is turned on. Amended Compl. ¶ 44.

- substantial neutral (black or white) borders on all sides of the display screen and under the clear surface;
- a metallic bezel around the flat clear surface

I note that the elements articulated for the iPad trade dress by Apple are very similar, if not identical, to those claimed for the iPhone, iPhone3G, and iPhone 3GS.

Apple's Trade Dress Is Not Distinctive Because it Is Common In the Marketplace

The trade dress elements identified by Apple for the iPhone, iPhone3GS, iPodTouch, iPhone4 and iPad products have been common to consumer electronic devices available in the U.S. both before and since the launch of the first iPhone.

The Asserted iPhone Trade Dress Is Not Distinctive

A number of products designed prior to or contemporaneously with the release of the iPhone contain all elements claimed in the iPhone trade dress. For example, the Samsung F700, which was designed prior to the iPhone and released in 2007, includes all the claimed elements of the iPhone trade dress. Additional devices that were released prior to the iPhone that include all the claimed trade dress elements include the Olympus MRi 500 and the Samsung K3 media player.

Other products that predate the iPhone and contain all of the elements of the trade dress asserted by Apple (except the metallic bezel) include the LG KE850 PRADA, the iRiver U10 media player, and the Philips PET830 media player.

Numerous products have come to market since the release of the iPhone in 2007 containing all or most of the elements of the asserted iPhone trade dress. For example, the Nokia C5-04, Nokia C5-03, HTC Titan, Huawei Mercury, LG Marquee, LG Prime, LG Revolution, Motorola Atrix, Pantech Burst and ZTE Score are phones on the market today that have all or most of the claimed trade dress elements, organized in a similar configuration. Attached as

Exhibit C are examples of contemporary phones containing all or most of the elements of the asserted iPhone trade dress.

The Asserted iPhone4 Trade Dress Is Not Distinctive

The trade dress that Apple claims for the iPhone4 is quite similar to the trade dress that Apple claims for the iPhone, the only difference being that the bezel has been modified to be less rounded. The shape of the bezel on the iPhone 4, however, is neither novel nor distinctive in the marketplace.

For example, a profile similar to that of the iPhone4 has been disclosed in prior art US D337,569. A comparison of the iPhone4 and the D337,569 side view is presented below:

Side views of iPhone 4 and D337,569

A similar if not identical profile as claimed by Apple was also found on the Sony Ericsson Walkman Phone W950, which appeared on the market in 2006. In fact, the design for the Sony Ericsson Walkman was studied by Apple engineers as part of their work on the creation of the first iPhone.

Sony Ericsson Walkman Phone W950

The Asserted iPad Trade Dress Is Not Distinctive

In addition to the devices discussed above, which all contain trade dress elements similar to those of the iPad trade dress as claimed by Apple, a number of tablets or tablet PC devices came to market prior to the release of the iPad in 2010 that utilized all of the same elements of the claimed iPad trade dress.

For example, the JooJoo tablet, which was released in December 2009, contains all of the elements of the iPad trade dress alleged by Apple. Photographs of the Joo Joo tablet are depicted below:

JooJoo Tablet images

The HP Slate 500, announced in January 2010, also contains all of the elements of the iPad trade dress as claimed by Apple. A photograph of the HP Slate 500 is depicted below:

HP Slate 500 image

The LG Flatron Tablet L1530TM, which was released in 2005, also contains all of the elements of the iPad trade dress as claimed by Apple. A photograph of the LG Flatron Tablet L1530TM is depicted below:

LG L1530TM image

Boeye MID700, which was released in November 2009, also contains all of the elements of the iPad trade dress claimed by Apple. A photograph of the Boeye MID700 is depicted below:

Boeye MID700 image

The MSI Android Tablet, which was announced in January 2010, also contains all of the elements of the iPad trade dress as claimed by Apple. A photograph of the MSI Android Tablet is depicted below:

MSI Android Tablet

The Plastic Logic tablet released in 2006, long before the Apple iPad or even iPhone products were released, has rectangular shape with rounded corners, a flat transparent front face above a centered large screen with borders surrounding it, and a thin form factor as the claimed elements of Apple trade dress.

Plastic Logic tablet

Numerous products have come to market since the release of the iPad featuring all or most of the elements asserted in the iPhone trade dress. For example, the Blackberry PlayBook, HP TouchPad 4G, and LG Optimus Pad are tablets on the market today that have all or most of the trade dress elements claimed by Apple, organized in a highly similar configuration. Apple designer Christopher Stringer testified that he believed virtually every tablet shown to him at deposition had the same look and feel in design as Apple's iPad designs.

It is my opinion that the trade dress as articulated by Apple in the Amended Complaint for the iPhone, iPhone3GS, and iPhone 3GS, iPhone 4 and iPad products is not distinctive to Apple. To the contrary, the elements of the claimed trade dress can be found on numerous consumer electronics products available both before and since the release of the iPhone in 2007.

Apple's D'889 Design Patent Is Indefinite

In addition to the testimony of Apple's named inventors that identified several ambiguities and conflicts in the D'889 drawings, the drawings are inconsistent and indefinite in other key respects.

The D'889 design patent includes 9 drawings that provide perspective and frontal, back and side views as well as additional view of the device as held by a user. The views of the drawings are improperly labeled. Figures 1-4 establish the orientation of the claimed design, so

that the product is established as being oriented with the longest dimension in a horizontal position. The remaining views, figures 5 through 8 should be consistent with figures 1-4, yet they are not.

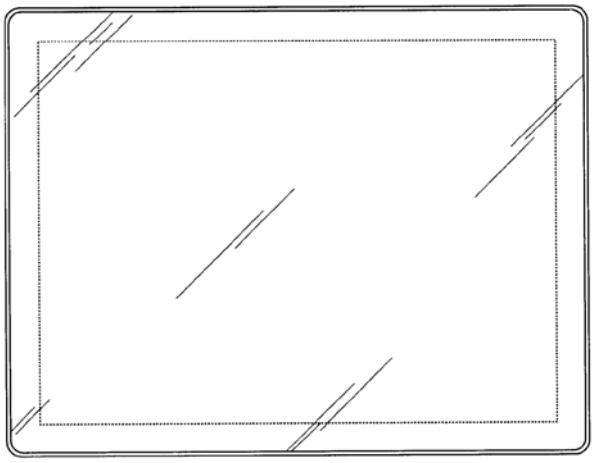


Fig 3. Of D'889 – Establishes the orientation of the whole design patent

Fig. 5 is described as a left side view, which should be of the short side, based on the orientation of Figures 1-4, yet it is drawn as the top side view. In addition the drawing is inverted on the horizontal axis compared to conventional drawing.

Fig 5. Of D'889 – top view shown instead of claimed left side view

Fig. 6 is described as a right side view which should be of the short side, based on the orientation of Figures 1-4, yet it is drawn as the bottom side view.

Fig 6. Of D'889 – bottom view shown instead of claimed right side view

Fig. 7 is described as an upper side view which should be of the long side, based on the orientation of Figures 1-4, yet it is drawn as the left side view.

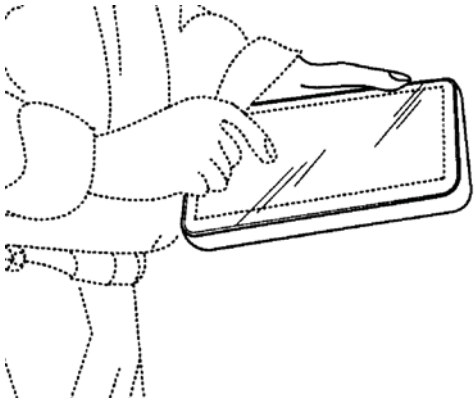
Fig 7. Of D'889 – left side view shown instead of claimed upper side view

Fig. 8 is described as a lower side view which should be of the long side, based on the orientation of Figures 1-4, yet it is drawn as the right side view.

Fig 8. Of D'889 – right side view shown instead of claimed lower side view

Figures 5-8 are oriented improperly, in that they are all facing in the same direction, which they can't be. These figures of the side views should have been orientated as depicted in other patents, for example, U.S. Patent D 593,087.

Figure 9 shows the right side of the device (as Fig. 6 is labeled), but the right side does not contain the earphone jack that is shown in Fig. 6. In addition the shape of the back part of the device on its drawn top side does not match the described structure of the previous figures as it shows the thickness contracting to the far side (upper left corner). This may not be attributed to simple isometric drawing as the contraction is far too high.



Extract from Fig 9. Of D'889 – missing headset hole and inconsistent back side thickness

It is my conclusion based on the above analysis that the D'889 design patent is indefinite as it does not provide a consistent representation of the subject design.

Apple's Design Patents and Trade Dress Are Functional

From a designer's perspective, ornamental features stand in contrast to other product components because they are mostly aesthetic and are not primarily functional. Designers use ornamentation for purely aesthetic reasons. They may place it on a functional object or component, or they may modify the design of the functional component in order to divert from the purely standard form that its functionality requires, and thereby make it ornamental. The three phones shown below provide some examples of ornamental phone design, such as the arbitrary placement of swirls and patterns on the phone on the left, the textured detailing and jewel elements of the bezels around the camera of the phone on the left and the front display on the center phone, and the decorative embossing pattern on the exterior of the phone on the right.



The D'889 Is Functional, Not Ornamental

Having an overall product design that defers entirely to the screen is functional because the screen embodies the very thing that is functional about a tablet computer or smartphone. In addition to the overall functionality of a clean simple design in which everything defers to the display, a review of each of the elements of the D'889 that Apple and its expert, Cooper

Woodring, claimed is distinctive confirms that each of them serves a functional purpose, such as making the product function more efficiently or more comfortably for the user, making the manufacturing process more reliable or cost effective, or making the product more durable.

Rectangular shape

Virtually any device used to view media—newspapers, movies, magazines, or television—has a rectangular shape. This is natural given that the device for viewing media is merely a frame for the content of the media. Thus, the dominant trend for televisions, computer monitors, and electronic readers has long been toward a rectangular shape with a reduced frame, well before the claimed invention of the Apple design patents. As Mr. Woodring testified in his deposition, rectangular screens are commonplace and not proprietary to anyone.[36]

The shape of the screen further dictates the overall shape of the device. Where, as here, the mobile device principally uses a display screen for interaction and consumption of content, the outer hardware for the phone will naturally follow that shape in order to make it as compact and thus as portable as possible. By definition, adding material beyond that which is necessary for the structure to hold the screen and other components results in a bulkier, heavier and thicker design that is less portable and less easy for a user to hold for periods of time.

Rounded corners

Almost all designs of portable consumer devices use some degree of rounding on corners of devices.

Rounded corners are functional because they ensure comfortable, safe, and easy use. Pointed or sharp corners are uncomfortable to hold in one's hands or rest anywhere on the body. Further, they may scratch or puncture the skin of the user, specifically in cases where the device falls. Pointed or sharp corners also may also snag or tear clothing or the material inside a briefcase, backpack, purse, or other carrying case. Rounded corners minimize all of these hazards.

[36] Woodring Dep. Tr. at 28:1-21.

Rounded corner also make the device more durable. Pointed or sharp corners on designs are mechanical weak points and they may bend, snag, or break with the application of relatively little force. Rounded corners, on the other hand, are more robust and less likely to break.

Rounded corners are easier and more reliable to manufacture – specifically, for plastic molds, creating clean and esthetic corners is difficult. Having changes in the thickness of plastic created in molds tends to leave marks on the surface; therefore it better to have a uniform thickness.

Flat surface

Because commercial display screens are flat, devices in which the display screen has primary importance, the front surface of the device will be mostly flat.

As explained, the use of display touch technology allows for removal of physical keys and buttons from the device front face. This helps keep the tablet surface clean and minimizes the chances of dust or water encroachment, which could harm the tablet. Reducing or eliminating physical keys and buttons also allows for a more compact and therefore portable device and reduces the number and complexity of hardware elements that are likely to break or malfunction during manufacture and use.

Having a smooth, continuous surface maximizes the significance of the display screen—which is the primary reason for being of the tablet computer. With no unnecessary ornamentation, no or fewer tactile buttons, and no or reduced contrasting surface materials, there is less to distract from the user's interaction with the display screen. Having a flat, rather than embedded, screen design for a tablet device also makes it easier to keep the device clean, since a flat surface does not accumulate dirt and other debris along the edges of the screen border like an embedded screen does. Furthermore, raised or separate frames around the face of the display screen can impede the use of the device. This is because with touch screen technology where users' fingers activate commands and manipulate content, a physical frame around the face of the display can make areas

of the screen inaccessible to the users' fingers, especially for users with large fingers. A flat, smooth and continuous front surface avoids this.

A clear surface without ornamentation

If a single continuous flat front surface is used on a tablet computer, having that surface be clear best allows unimpeded viewing of the display screen.

The lack of ornamentation that Apple claims as part of its "ornamental design" is, by definition, not ornamental. Also, given the functional purpose of the display screen, adding ornamentation around (or on top of) the display screen would distract from the display screen, thus detracting from the quality of the device's functionality. And, as shown above, there is nothing new or original about electronic device designs with a lack of ornamentation.

Any border around the screen shown in the D'889 is also functional. The display screen includes active components and wiring and a controller is required to activate the display. These wires force the actual size of the display glass to be slightly larger than the active viewable area. The controller for the display may be either located on the glass substrate of the display (COG-Chip on Glass) or on a flexible cable extending from the display (COF – chip on flex). The space of the borders above or below the display screen accommodates the controller wiring. A black border around the screen, such as shown by Apple's iPad devices and many other electronic devices, also serves to hide the internal components from view and is easier and less costly to manufacture.

Rim around the front surface

Having a rim around a clear surface to hold it into place is the most obvious design choice for a mobile electronic device. Theoretically, the clear surface could be glued from underneath or clamped into place by braces that do not surround the entire edge. However, leaving any part of glass edges exposed would expose the front surface to cracking or scratching. Consider what would happen if, for example, the exposed edge of the surface hit the side of a table. For the same

reason that watches have bezels, having a rim surrounding the surface of the tablet is a highly functional choice. Furthermore, as explained above, not having rims or frames around the front surface allows greater access to the display screen for the user.

This is not to say that all outer edges must look the same. For example, as demonstrated by the prior art discussed above, a rim may be raised around the front surface or may be flush with it.[37] A rim may also be a separate ring component (as in the Galaxy Tab 10.1) or the upper part of a shell-like lower body of a device (as in the D'889 and the iPad). As shown in the images throughout this declaration, and the iPad and iPad 2, a rim may have straight sides, slope or curve on the bottom, top or both, or have straight lines at any point along the way.

Standard displays are made of a relatively fragile material that needs to be protected. To be a viable commercial product, a tablet needs to tolerate, to some extent, drops and casual bumps. Maintaining a border between the display and the exterior surface of the device functions to protect the display by absorbing the energy of such impacts directly.

Together, these functions and physical limitations work to force the inclusion of a border between the active area of the display and the edge of the front surface in all four directions.

Thinness of Design

The relative thinness of the tablet's depth is functional. Being thin facilitates the mobility and portability of the tablet. The trend in electronics for the past decade has been to make products thin while still being resilient and usable.

The D'677 Is Functional, Not Ornamental

The D'677 patent disclaims all features other than those found on the front face of the device. The D'677 patent reflects Apple's fundamentally un-ornamental approach to design. Jonathan Ive explained this approach, describing how a user "physically . . . connect[s] to the product." He said: "So for example something like the iPhone, everything defers to the display.

[37] *Compare, e.g.* U.S. D337,569, *with* the HP Compaq Tablet PC.

A lot of what we seem to be doing in a product like that is actually getting design out of the way. And I think when forms develop with that sort of reason, and they're not just arbitrary shapes, it feels almost inevitable. It feels almost undesigned." Jonathan Ive, *Objectified* (2009). As Mr. Ive observes, the primary way of interacting with a smart phone is through the display screen. The D'677 design serves to focus the user on this functionality and not interfere with or distract from the user's interaction with the display screen. Such functional, "undesigned" designs by their nature are not ornamental.

Aside from the fact that function dictates the D'677 design as a whole, the key individual claimed elements of the D'677 are themselves functional. *See Power Controls Corp. v. Hybrinetics, Inc.*, 806 F.2d 234, 240 (Fed. Cir. 1986) ("In determining whether a design is primarily functional, the purposes of the particular elements of the design necessarily must be considered.").

Front surface flatness and transparency

As of January 2006, by default, electronic devices with large display screens had mostly flat surfaces, because commercial display screens were flat. Multiple classical keypad based mobile handset designs, such as the Motorola Razor, attempted to reach an almost flat surface even when a physical keypad was part of the structure.

The introduction of touch technology allowed the removal of keypads and otherwise allowed for the reduction in the number of surface mounted buttons. Early commercial smartphone models used resistive touch technology. Resistive touch technology dictated that the active touch layer would be exposed externally so that the user could apply pressure to it. Because this active layer is not resistant to scratches and since it is activated by pressure, a bezel elevated from its surface typically was used to provide protection from scratches and false triggering.

Later, capacitive touch display technology matured to the point where it could be made available on a commercial scale at a price affordable to some consumers and was adopted by the mobile industry. Capacitive touch technology had been described in articles by E.A. Johnson in

1965, and actual models for advanced mutual capacitance touch displays were demonstrated at CERN (Conseil Européen pour la Recherche Nucléaire) in 1977. But some time was needed for the technology to mature and for reaching price points more suitable for the mobile handset market.

Unlike resistive touch technology, capacitive technology allows placement of the active surface below an externally hardened surface, such as reinforced glass or plastic. The screen therefore could be made flush but still protected against scratches, since an elevated surround was no longer required to protect the exposed touch layer of the screen.

The importance of the capacitive touch technology and its multi-touch variant as the key enabler for the design of large screen smartphones with no buttons has been highlighted by Mr. Ive in his deposition: "Talking about the -- the single display without a numeric keypad. And so by not having a numeric keypad, this display could be large and, as a percentage, occupy a significant part of the product's front elevation. And affording technology that allowed us to get rid of the keypad and any sort of alphanumeric buttons, the affording technology was multi-touch".

The underlying LCD displays have a flat surface and manufacturing a contoured glass surface to place over the LCD touch screen would be challenging and far more expensive that a primarily smooth front surface. The choice of a flat cover is the natural and economical choice. For example, Apple product designer Rothkopf testified that a proposed iPod Touch design with cover glass significantly above the edge of the device was not adopted was because the glass had a higher failure rate than prototypes with cover glass that was flush with or below the edge of the device. Deposition of Fletcher Rothkopf ("Rothkopf Dep.") at 129:15-130:21; 140:4-142:15.

Once the technology reached the maturity level where capacitive touch screens could be made in the right size and form factor for mobile electronic devices, the concept of a continuous flat, transparent surface emerged almost simultaneously from multiple handset vendors. For example, the LG Chocolate and LG Prada designs shown below incorporated touch technology,

and both were released in 2006 before Apple's announcement of the iPhone and the filing of the Apple iPhone design patent in January 2007.

LG Chocolate

LG Prada

Any cover over a display screen must be transparent, otherwise the display screen would have no purpose. Given the choice of a continuous flat surface on the front of the phone, it follows that it must be transparent. Also, it is functional to have the flat surface be continuous and to extend all the way from side to side and top to bottom because having a rim or edge around the touch surface creates limitations on unimpeded access to the touch surface, the amount of surface that is accessible, and other issues.

In my opinion, therefore, the claimed flat, transparent front surface on an electronic device of this type shown in the D'677 is functional, not decorative.

Blackness of Surface

For similar reasons that the display screen mandates a transparent covering, it also is obvious that any single color applied to the front surface would be a shade of black given that display screens only come in shades of black.

In addition, black is a particularly useful color for the surface of a phone. It efficiently hides the wiring and electronic components underlying it, as Apple designer Rothkopf testified: "You wouldn't see that, that cage, because it's concealed by the black mask from the top, and the

rest of the cosmetic part of enclosure from the from the sides and bottom." Rothkopf Dep. at 90:3-6.

The black mask makes it easier to determine if the display of the device is turned on or off; it minimizes the appearance of the phone, making it seem smaller and less prominent than a bright color would; and it provides a sharply-defined contrast to edge of the screen that helps the content of the display screen stand apart from whatever context the smartphone is in. The strong contrast also helps increase the saturation of the colors of the display screen, creating a finer impression of the quality of the display screen, and, given the vast consumer preference for black for electronic products well before January 2006, serves a neutral color choice for consumers, which does not send an overt message of flashiness or frivolity.

Rounded corners

The rounded corners of the claimed rectangular area of the front face of the device are a consequence of the rounded outside corners of the device. Almost all designs of portable consumer devices use some degree of rounding on corners of devices. Rounded corners are functional because of various human factors and ergonomics issues. Rounded corner also make a portable electronic device more durable and easier to manufacture. Pointed or sharp corners on designs are mechanical weak points and they may bend, snag, or break with the application of relatively little force. Rounded corners, on the other hand, are more able to absorb impact and less likely to break. It is also much easier and more reliable to manufacture rounded corners with smooth and accurate finishes, than it is to create sharp corners with clean, accurate and aesthetic joints.

Apple has produced a document containing an email exchange between two Apple designers/inventors, Richard Howarth and Jonathan Ive, which discusses the prior design for the iPhone in comparison with the "Sony style" phone discussed above. In this March 2006 email, Mr. Howarth tells Mr. Ive that the alternative Sony style design with rounded corners is preferable for various ergonomic and cost/efficiency reasons:

> i'm worried about the extrudo shape we're using for P2 etc. [*model on the right below*] looking at what shin's doing with the sony-style chappy [*model on the left below*], he's able to achieve a much smaller-looking product with a much nicer shape to have next to your ear and in your pocket. . . . I agree that the one we did below isn't right, and it looks old next to the extrusion, but it does have the size and shape/comfort benefits i mentioned before and these are hard to ignore with a product we have to carry and use all day, every day. i'm really worried that we're making something that is going to look and be too wide.
>
> i'm also worried that if we start cutting volume buttons on the side, then it removes some of the purity of the extrusion idea and seems like the wrong shape for the job. We can only add so much too it
>
> 
>
>
> before it becomes a style/ a shape, rather than the most efficient construction method and that would be bad. Richard Howarth email dated March 8, 2006, with one of the attached images, APLNDC0003040119-124.

Apple rejected the sharp corner and wider design in favor of the design with rounded corners as shown in the D'677 and D'087 patents according to Apple. Accordingly, it appears that Apple rejected that design, among other reasons, because of functional reasons such as its ergonomics and the fact that it would be uncomfortable for the user to hold by the ear.

Centered rectangular screen

Rectangular screens are virtually mandatory for any use of a display screen. That is not proprietary to Apple, but rather in accord with the longstanding use of rectangular shapes as the

format for viewing any media--movies, television, magazines, newspapers, books, letters, legal briefs, or clay tablets. Available display screen options other than an elongated rectangle would be less efficient for use in a modern mobile electronic device and would be considerably more expensive. The rectangular element with square corners is definitely dictated by the function of the component it depicts and the type of device disclosed.

Inset display screen with narrow borders on the sides and wider borders on the top and bottom of the front surface

The display screen on a phone needs to be inset; it cannot protrude or be directly exposed as part of the surface without increasing the risk of damage to the screen. Nor could it cover the complete front surface in 2006. Display screens then, and now, include active components and wiring and require a controller to activate the display. These wires force the actual size of the display glass to be slightly larger than the active viewable area. The controller for the display may be located either on the glass substrate of the display (COG – Chip on Glass) or on a flexible cable extending from the display (COF – chip on flex). In both cases this yields additional length on top or bottom of screen that needs to be reserved for the controller functionality, as well as some space on the sides to offset the display screen from other components of the edge of the device.

Standard display screens are made of a relatively fragile material and needs to be protected. A mobile handset needs to tolerate, to some extent, drops and casual hits. To avoid having the display absorb the energy of such impacts directly, it is a common practice to maintain a border between the glass of the display screen and the exterior surface of the handset. Apple designer Rothkopf has testified to this point in his deposition: "There will also be challenges around protecting the display. Even if the glass of the display stopped right at the edge of the active area of the display, the display glass is not very strong, so you wouldn't want to expose that to the outside world. You need to build some kind of cage around it." Rothkopf Dep. at 88:17-22.

Narrow borders are preferable to wide borders on the long sides of a screen because significantly widening the borders would reduce the size of the display screen or require a wider

product, which could be awkward to hold in the hand. Handsets are primarily designed to be operated using a single hand, with the thumb being able to press the display/keys, while the device is held on the same hand. This requirement, considering the standard range for human hands, forces designs to have limited width.

The need for left and right borders that are as narrow as possible was also a concern for Apple designers and named inventors. For example, the same email exchange between Apple designers/inventors Richard Howarth and Jonathan Ive quoted above also discussed the width of the device that resulted from its design. According to Mr. Howarth's message to Mr. Ive, a prior design with round sides produced a wider device compared to another design straight sides: "It looks a lot smaller to me and it makes the X a load narrower, which is something i've been going on about for ages because i'm worried that the round sides are so inefficient."

Richard Howarth email dated March 8, 2006, with one of the attached images, APLNDC0003040119-124.

As a practical matter, eliminating the side borders and having the screen extend the width of the product, from one side to the other was not technically feasible in 2006. In addition, having no side border would increase the likelihood that the screen would be damaged if it bumped against anything.

The wider borders on the top and bottom of the display screen are a practical solution to placing earpiece and navigational buttons on the front surface without having to drill through or otherwise interrupt the active area of the display.

In addition to facilitating the placement of the earpiece slots and navigation buttons, the wider borders provide functional space for other components such as the antenna. The display screen operates using high frequency signals, extending over wires which have considerable length. As a result, the display tends to emit radiated noise that may interfere with the operation of other components. It is a common practice to cover the display with a metal shield on its back side. A handset design also must include an antenna to enable its cellular radio operation. The existence of large metal objects in the area of the antenna influences and distorts its radiation pattern. It is therefore a common practice to keep the antenna's area from overlapping with the metal shielded area of the display. Therefore, the antenna is commonly placed behind one of these larger borders.

The effect of metal objects on the antenna design and the need to surround it with a non-metal case has been widely acknowledged by many of the Apple designers in their testimony. Apple designer Rothkopf has testified to the need to isolate the antenna from metal objects. "So because the antenna can't operate through a conductor through metal, we cut a piece of metal out of the stainless steel bottom housing and filled that with plastic. We refer to that as the antenna cap." Rothkopf Dep. at 101:20-23.

Rather than aesthetic choice, the inset display with narrow borders on the sides and larger borders above and below are required elements of the design of a smartphone of the type disclosed in D'677.

Earpiece with horizontally-oriented lozenge shape centered over the display screen

The use of an earpiece is necessary on a smartphone to allow the user to listen to a conversation privately without the use of a separate headphone or ear bud connection. Ever since handsets were invented, the most natural place to put the earpiece of the phone was on the upper portion of the handheld part of the phone, near the ear—on the opposite end from the microphone, which is customarily placed on the end closest to the user's mouth. Centering the earpiece on the vertical axis is required allows user to conveniently align the phone to their ears, and hold the phone in the same alignment relative to the head irrespective of whether it is held in the right or left hand. Placing the earpiece anywhere other than on the upper portion of the phone, such as on the back or side of the phone, would be a highly inefficient choice that would force users to hold the smartphone in an unnatural position when using the phone feature.

Horizontal earpiece slots (as opposed to vertical slots) maximize the area that can be devoted to a receiver without impinging on the display screen size. They also have a larger "sweet spot," when compared to a circle or square shape, that make it easier for the user to place the device in a position where the sound can be heard. The slot shape, with its narrow height, also serves to protect the mesh covering the receiver below it by not having a more expansive area, such as a circle or square, which might allow the mesh to be more easily punctured, torn, or obstructed by dirt or dust. The slot shape also increases the durability of the smartphone surface by not weakening it with a relatively large expanse of less rigid material. In addition, having rounded edges increases the ease of manufacturing by allowing the slot to be created by a drill (the slots created by which are naturally rounded on the edges due to the spinning of the drill).

This is not to say that the precise vertical placement of the earpiece slot on the vertical axis within the upper portion of the phone is purely functional. Likewise, some options exist for styling the horizontal earpiece slot and selecting its length and width. The range of options is not limitless, however, and the overall horizontally symmetrical placement on the upper portion of the front surface as well as the horizontally-oriented lozenge shape of the D'677 patent are functional elements of the device and the earpiece in particular.

In summary, it is my opinion that the D'677 patent design is functional.

The D'087 Is Functional

'087 is similar to the D'677 in terms of functionality. The only difference between the two being that the D'087 does not claim the black color for the front face, but does claim the bezel structure. The D'087 also shows combinations of the 3 front face elements (earpiece hole, inset display and rounded control button). The analysis presented for the D'677 as relating to front surface flatness and transparency, rounded corners, centered rectangular screen, inset display and borders around it and earpiece hole shape and location is directly applicable to this design patent. In addition, the added bezel feature functionality is analyzed.

Bezel

A bezel in a mobile phone handset is a frame that surrounds the front face of the device to provide structural support and to join and hold together the front and back pieces of the device. Apple's US Patent 7,688,574 utility patent covering the bezel for the iPhone, which was filed on the same day as the application for D'757, claims that the bezel "forms a uniform peripheral structure" and "provides structural support." US Patent 7,688,574 at 8:60-63. The '574 patent also states that the housing of the portable electronic device can take any suitable shape, but notes that the device shown in the drawings, which resembles an iPhone housing, has rounded corners where the sides meet "to provide a housing having a comfortable feel (e.g., no hard angles)." Thus, Apple also recognized the function of creating a portable electronic device that is ergonomically correct.

The existence of the bezel in the type of design disclosed in the D'087 patent is a functional necessity, but its exact details could be an ornamental choice. Another approach for a handset's mechanical design would be to use a bottom piece that wraps around to the front surface structure. In these types of designs, a bezel is not required

A bezel also can protect the display screen and cover glass or plastic from side impacts and drops, as Apple acknowledged in its bezel patent: "By their very nature, portable electronic devices are carried around and subject to impacts and inadvertent blows to which static electronic devices are not subject. To protect the electronic systems of these portable devices…there is a need for a hard, easily manufactured and aesthetically pleasing case for portable electronic devices." US Patent 7,688,574 at 1:8-19.

But the existence of a bezel is undeniably functional, as Apple stated in its utility patent for the iPhone bezel. Several Apple witnesses also admitted to the functional nature of a bezel. Apple designers Dinh, Hobson, Rothkopf and Zadesky all testified as to the functionality of the bezel in protecting the display from braking in occasional drops. Mr. Zadesky has characterized the bezel as the "primary structural member of the phone" and elaborated to explain that "[i]t provides structural support and attachment points for the other internal components of the device." Deposition of Steven Zadesky ("Zadesky Dep.") at 85:15-86:6.

In summary, it is my opinion that the claimed elements of the D'087 patent are functional, both as a whole and as to each of the elements Apple claims as protected.

The D'270 is functional

The front face view of the D'270 patent is similar to the one disclosed in D'087 with the exclusion of the earpiece hole. The claimed elements of the front face being rectangular shape with rounded corners, a flat transparent front face with inset display below it surrounded by a bezel.

As discussed for the D'677 and D'087 the rectangular shape is functional, the rounded corners are functional, the flat transparent front face is functional and the bezel is functional.

The slim form factor of the D'270 is functional because it corresponds to a more portable device. The curved side edge are functional because they create a more comfortable feel in the hand than a sharp, unrounded back edge would. They also share the other functional benefits of rounded corners in a more three-dimensional way.

Certain electronic devices, such as the iPod Touch incorporate BT and WLAN radios that require an antenna. If the material of the back cover is made of metal, it is necessary to create some window of non-metal material on the device back cover to allow for proper operation of the antenna. As Apple designer Rothkopf testified, "because the antenna can't operate through a conductor through metal, we cut a piece of metal out of the stainless steel bottom housing and filled that with plastic. We refer to that as the antenna cap." Mr. Rothkopf agreed that the hole cut in the stainless steel housing was designed to facilitate the operation of the antenna. Rothkopf Dep. at 101:20-102:3.

Given the above it is my opinion that the key claimed elements of the D'270 design patent front face as well as it's back cover feature and sides are functional and should be excluded from the scope of coverage of this patent. Therefore, the D'270 design is also functional.

Apple's Claimed Alternative Designs

Apple maintains that the asserted design patents are not functional because alternative designs were available to Samsung that achieve the same functionality as the accused products but have a different accused devices look. This is not the case because, as discussed below, most of the alternative designs identified by Apple do not have comparable functionality as the accused devices, including because they would adversely affect the cost or usability of the devices.

As an example, the modu designs identified by Apple are required to slide into envelopes that extended their functionality. This requirement dictates many of the design choices and specifically the size and overall mechanical structure.

Many other designs identified by Apple are not viable alternatives because they employ different UI interaction technology. For example, a number of the claimed alternative designs use keypads, either at the front face or a sliding keypads (as an example Samsung Blackjack II, Samsung SCH-I830 etc.). These designs can "afford" smaller display size as the display is not the only way that the user can interact with the keyboard. These devices therefore do not address the

same functional requirement as devices that rely exclusively on the display as the sole method of UI interaction.

Many of the other devices offer alternative designs that have clear functional deficiencies compared to the functional solutions represented in the accused designs. As an example, the D624,046 design patent, identified by Apple as being a viable alternative design, shows a design that has much higher implementation complexity then the designs of the accused products. It is composed of multiple pieces were each needs to be shaped with complex patterns of diamonds. The front face diamond patterning requires leaving larger borders on the sides of the device then necessary, thus limiting the effective width of the display.

Several other devices identified by Apple do appear to have comparable functionality to the accused devices, for example, the Nokia N8 or HTC Trophy devices, which both show a flat transparent front face having black color rectangular shape with rounded corners. These devices, however, are just as similar if not more similar to the asserted design patents than the accused devices. It is difficult to understand from a design perspective how Apple could regard these devices as viable alternatives, yet at the same time take the position that the accused devices infringe Apple's design patents.

In conclusion, the proposed alternative designs disclosed by Apple do not alter my opinion as to the functionality of the asserted design patents and Apple's claimed trade dress.

The Asserted Trade Dress Is Functional

As discussed above, Apple articulates a list of product features that it contends make up the elements of trade dress for the iPhone, iPhone3G, iPhone 3GS, iPod touch, iPhone4, and iPad devices.

Each of these asserted elements is functional, taken together and individually, because each serves a specific purpose which is not ornamental in the device. Moreover, each of these individually functional elements are configured on the respective device in order to maximize functionality and performance.

An analysis of the functionality of each of the named elements comprising the trade dress of the iPhone, iPhone 3G, iPhone 3GS, iPod Touch, iPhone 4 and iPad devices is set forth above in connection with my analysis of Apple's design patents.

It is my conclusion that the trade dress asserted by Apple in the Amended Complaint is functional.

Signature executed on March 23, 2012

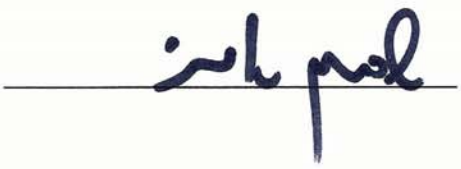


Exhibit B

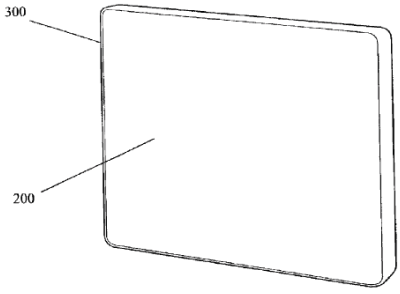
D’889 – Examples of Obviousness Combinations

PRIMARY REFERENCE	SECONDARY REFERENCES
US D500,037 	**Apple “Brain Box” Display** 
	JP 1178470 
	KR-30-0304213 

1981 Fidler Tablet

1994 Fidler Tablet With Flush Cover Glass

U.S. 6,919,678



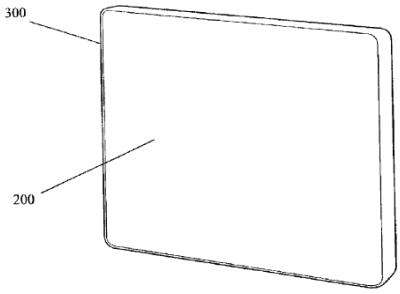
(Fig. 2)

Apple's Brain Box" Display 	**US D500,037** 
	JP 1178470 
	KR-30-03042123 

1981 Fidler Tablet

1994 Fidler Tablet With Flush Cover Glass

U.S. 6,919,678



(Fig. 2)

D’087 – Examples of Obviousness Combinations

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 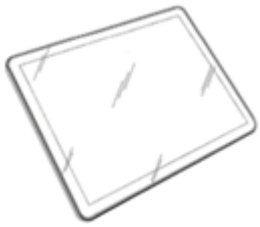 </td></tr>
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	iRiver U10 
	LG Chocolate 
	Nokia Fingerprint 

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iRiver U10

035 Mockup

LG Chocolate

Nokia Fingerprint

D’677 – Examples of Obviousness Combinations

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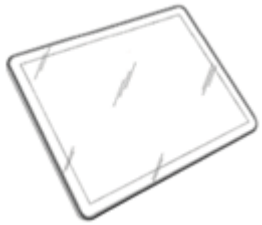
	US D504,889 
	035 Mockup 

iRiver U10 	**JP 1204221** 
	LG Chocolate 
	JP 1202638 

Nokia Fingerprint

JP 1204221

LG Chocolate

JP 1202638

JP 1204221 	**JP 1241638**