

1 HAROLD J. MCELHINNY (CA SBN 66781)
 hmcclhinny@mofo.com
 2 MICHAEL A. JACOBS (CA SBN 111664)
 mjacobs@mofo.com
 3 RICHARD S.J. HUNG (CA SBN 197425)
 rhung@mofo.com
 4 MORRISON & FOERSTER LLP
 425 Market Street
 5 San Francisco, California 94105-2482
 Telephone: (415) 268-7000
 6 Facsimile: (415) 268-7522

WILLIAM F. LEE
 william.lee@wilmerhale.com
 WILMER CUTLER PICKERING
 HALE AND DORR LLP
 60 State Street
 Boston, MA 02109
 Telephone: (617) 526-6000
 Facsimile: (617) 526-5000

MARK D. SELWYN (SBN 244180)
 mark.selwyn@wilmerhale.com
 WILMER CUTLER PICKERING
 HALE AND DORR LLP
 950 Page Mill Road
 Palo Alto, California 94304
 Telephone: (650) 858-6000
 Facsimile: (650) 858-6100

7
 8
 9 Attorneys for Plaintiff and
 10 Counterclaim-Defendant APPLE INC.

11 UNITED STATES DISTRICT COURT
 12 NORTHERN DISTRICT OF CALIFORNIA
 13 SAN JOSE DIVISION

14
 15 APPLE INC., a California corporation,
 16 Plaintiff,
 17 v.
 18 SAMSUNG ELECTRONICS CO., LTD., A
 Korean business entity; SAMSUNG
 19 ELECTRONICS AMERICA, INC., a New York
 corporation; SAMSUNG
 20 TELECOMMUNICATIONS AMERICA, LLC, a
 Delaware limited liability company.,
 21 Defendants.
 22

Case No. 11-cv-01846-LHK
**APPLE'S OPENING CLAIM
 CONSTRUCTION BRIEF
 PURSUANT TO PATENT L.R. 4-5**
 Claim Construction
 Hearing: Jan 20, 2012
 Time: 10:00 a.m.
 Place: Courtroom 4, 5th Floor
 Judge: Honorable Lucy H. Koh

TABLE OF CONTENTS

	Page
1	
2	
3	I. INTRODUCTION 1
4	II. ARGUMENT 1
5	A. Legal Standard 1
6	B. The '002 Patent 2
7	1. Background 2
8	2. Disputed term: “the first window region...etc.” 3
9	C. The '381 Patent 6
10	1. Background 6
11	2. Disputed term: “an edge of the electronic document” 6
12	D. The '607 Patent 9
13	1. Background 9
14	2. Disputed term: “glass member” 9
15	E. The '828 Patent 10
16	1. Background 10
17	2. Disputed term: “mathematically fitting an ellipse . . .” 12
18	3. Disputed term: “pixel / pixel groups” 18
19	F. The '915 Patent 19
20	1. Background 19
21	2. Disputed term: “scrolling a window . . .” 20
22	G. The '891 Patent 22
23	1. Background 22
24	2. Disputed term: “starting a timer” 23
25	3. Disputed term: “the first window has been displayed independently...” 24
26	III. CONCLUSION 25
27	
28	

TABLE OF AUTHORITIES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Page(s)

CASES

Abbott Labs. v. Andrx Pharm., Inc.,
473 F.3d 1196 (Fed. Cir. 2007)..... 15, 16

Abbott Labs. v. Sandoz, Inc.,
566 F.3d 1282 (Fed. Cir. 2009)..... 14

Abbott Labs. v. Syntron Bioresearch, Inc.,
334 F.3d 1343 (Fed. Cir. 2003)..... 14

AIA Eng’g Ltd. v. Magotteaux Int’l S/A,
657 F.3d 1264 (Fed. Cir. 2011)..... 9

Brown v. 3M,
265 F.3d 1349 (Fed. Cir. 2001)..... 2

Embrex, Inc. v. Serv. Eng’g Corp.,
216 F.3d 1343 (Fed. Cir. 2000)..... 2

Epistar Corp. v. ITC,
566 F.3d 1321 (Fed. Cir. 2009)..... 13, 14

Helmsderfer v. Bobrick Washroom Equip., Inc.,
527 F.3d 1379 (Fed. Cir. 2008)..... 16

Hoechst Celanese Corp. v. BP Chems. Ltd.,
78 F.3d 1575 (Fed. Cir. 1996)..... 24

Howmedica Osteonics Corp. v. Wright Medical Tech., Inc.,
540 F.3d 1337 (Fed. Cir. 2008)..... 23

Innova/Pure Water, Inc. v. Safari Water Filtration Sys.,
381 F.3d 1111 (Fed. Cir. 2004)..... 5

Linear Tech. Corp. v. Int’l Trade Com’n,
566 F.3d 1049 (Fed. Cir. 2009)..... 4

Markman v. Westview Instruments, Inc.,
52 F.3d 967 (Fed. Cir. 1995) (*en banc*), *aff’d* 517 U.S. 370 (1996) 1, 8, 24

O2 Micro Int’l Ltd. V. Beyond Innovation Tech. Co.,
521 F.3d 1351 (Fed. Cir. 2008)..... 2

Omega Eng’g, Inc. v. Raytek Corp.,
334 F.3d 1314 (Fed. Cir. 2003)..... 4

1	<i>Pfizer v. Teva Pharm.</i> ,	
2	429 F.3d 1364 (Fed. Cir. 2005).....	15, 17
3	<i>Phillips v. AWH Corp.</i> ,	
4	415 F.3d 1303 (Fed. Cir. 2005) (<i>en banc</i>).....	2, 5
5	<i>U.S. Surgical Corp. v. Ethicon, Inc.</i> ,	
6	103 F.3d 1554 (Fed. Cir. 1997).....	2
7	<i>Voda v. Cordis Corp.</i> ,	
8	536 F.3d 1311 (Fed. Cir. 2008).....	14
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		

1 **I. INTRODUCTION**

2 In accordance with Patent Local Rule 4-5 and the Court’s Case Management Order (Dkt.
3 No. 187), Apple submits this opening brief regarding the construction of eight claim terms in the
4 following patents asserted by Apple against Samsung: U.S. Patent No. 6,493,002 (the “’002
5 patent”), U.S. Patent No. 7,469,381 (the “’381 patent”), U.S. Patent No. 7,663,607 (the “’607
6 patent”), U.S. Patent No. 7,812,828 (the “’828 patent”), U.S. Patent No. 7,844,915 (the “’915
7 patent”), and U.S. Patent No. 7,853,891 (the “’891 patent”) (collectively, the “Apple Patents”).¹
8 These Apple Patents largely relate to elegant user interface technologies, including touch screen
9 hardware and software that enable mobile devices to detect multi-touch gestures, that help to
10 create the overall Apple user experience. The intuitive “simplicity” that the user perceives when
11 using an iPhone or iPad is made possible by Apple’s ingenuity and technical wizardry.

12 **II. ARGUMENT**

13 Apple’s proposed claim constructions adhere to the guidelines established by the Federal
14 Circuit. Where a patent defines a disputed claim term, Apple adopts that definition; where that is
15 not the case and the meaning of the claim term is otherwise clear, Apple proposes that the claim
16 term be given its full scope consistent with its ordinary meaning. Samsung’s constructions, in
17 contrast, deviate from explicit definitional language or propose limitations inconsistent with the
18 ordinary meanings of the disputed terms. In both cases, Samsung is attempting to advance its
19 noninfringement and invalidity positions by offering strained, litigation-driven constructions.
20 The Court should adopt Apple’s proposed constructions and reject Samsung’s definitions.

21 **A. Legal Standard**

22 Claim construction is a question of law solely within the province of the Court. *See*
23 *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-971 (Fed. Cir. 1995) (*en banc*), *aff’d*
24 517 U.S. 370 (1996). “The construction of claims is simply a way of elaborating the normally
25 terse claim language in order to understand and explain, but not to change, the scope of the
26

27 ¹ The Apple Patents are Exhibits A-F to the Declaration of Deok Keun Matthew Ahn
28 (“Ahn Decl.”), filed herewith.

1 claims.” *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000). Claim terms
2 “are generally given their ordinary and customary meaning[,]’ . . . [which] is the meaning that
3 the term would have to a person of ordinary skill in the art in question at the time of the
4 invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (*en banc*)
5 (citation omitted).

6 Not every claim limitation requires construction. *See U.S. Surgical Corp. v. Ethicon, Inc.*,
7 103 F.3d 1554, 1568 (Fed. Cir. 1997) (claim construction is appropriate to “clarify and when
8 necessary to explain what the patentee covered by the claims,” but is not an “obligatory exercise
9 in redundancy”). In particular, claim terms that are not technical terms of art may not require
10 construction. *See, e.g., Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001). Though a limitation
11 may require express construction to resolve a genuine, material dispute over its meaning, “district
12 courts are not (and should not be) required to construe *every* limitation present in a patent’s
13 asserted claims.” *O2 Micro Int’l Ltd. V. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed.
14 Cir. 2008). This is especially true here, where many of the limitations are straightforward and do
15 not require construction.²

16 **B. The ’002 Patent**

17 **1. Background**

18 Apple’s ’002 patent, titled “Method and Apparatus for Displaying and Accessing Control
19 and Status Information in a Computer System,” is directed to a computer-controlled system in
20 which a “first window region” that is displayed independently of any application program has a
21 plurality of display areas for showing information associated with a plurality of status and/or
22 control functions. At least one of the display areas and its associated programming module is
23 sensitive to user input. Various dependent claims require that the first window or the individual
24 display areas may be variably or independently sized, may be selected to provide access to
25 control information or additional displays, or may always appear in front of application windows.

26
27 ² Consistent with these precepts of claim construction, Apple proposes that at least five of
28 the eight disputed terms in its patents should be accorded their plain meaning. A sixth term,
“starting a timer” in the ’891 patent, could also be accorded its plain meaning.

1 Mobile device users will be most familiar with this invention as a status bar displayed near the top
 2 or bottom of the screen, as depicted below:



3
4 '002 patent Fig. 2D

5 Although the display areas may provide information about a myriad of status and control
 6 functions, the patent discloses such specific examples as battery status, network connections,
 7 power settings, file sharing, date and time, available memory, currently running programs, and
 8 audio controls. The '002 patent issued on December 10, 2002 and claims priority to a September
 9 30, 1994 application.

10 **2. Disputed term: “the first window region...etc.”**

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
the first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated (claims 1, 25, 26, 50)	No construction necessary.	The first window and the plurality of independent display areas are never obscured by any portion of any application windows that are generated or capable of being generated.

17 The disputed language appears in claims 1, 25, 26 and 50. Claim 1, for example, recites
 18 in pertinent part as follows:

19 An interactive computer-controlled display system comprising:
 20 a processor; a data display screen coupled to the processor;
 21 a cursor control device coupled to said processor for positioning a
 22 cursor on said data display screen;
 23 a window generation and control logic coupled to the processor and
 24 data display screen to create an operating environment for a plurality
 25 of individual programming modules associated with different
 26 application programs that provide status and/or control functions,
 27 wherein the window generation and control logic generates and
 28 displays a first window region having a plurality of display areas on
 said data display screen, wherein the first window region is
 independently displayed and independently active of any application
 program, and wherein each of the plurality of display areas is
 associated with one of the plurality of individual programming
 modules, **the first window region and the plurality of independent**

1 **display areas implemented in a window layer that appears on top**
2 **of application programming windows that may be generated;** and

3 '002 patent, claim 1 (disputed claim term in bold, with additional limitations omitted).

4 Apple proposes that this claim language be given its plain and ordinary meaning, which is
5 evident when the term is read in context. Samsung, in contrast, has proposed that this claim be
6 altered by adding the limitation that a “first window” and the “plurality of independent display
7 areas” displaying status information can “never be obscured by any portion of any application
8 windows that are generated or capable of being generated.”

9 Samsung has not proposed a clarification of any of the words in the claim language, but
10 has instead read out claim language (“window layer”) and grafted on a negative limitation that
11 has no support in the intrinsic record. Such importation violates a basic tenet of claim
12 construction. *See Linear Tech. Corp. v. Int’l Trade Com’n*, 566 F.3d 1049, 1059-60 (Fed. Cir.
13 2009) (ITC erred in construction because there was “no basis in the patent specification for
14 adding the negative limitation,” and the “limitation should be accorded a scope commensurate
15 with the . . . patent's specification”); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322-33
16 (Fed. Cir. 2003) (finding that district court erred in “incorporat[ing] into the claim language a
17 novel negative limitation” because the “additional negative limitation finds no anchor in the
18 explicit claim language” and there was no “express disclaimer or independent lexicography in the
19 written description that would justify adding that negative limitation”).

20 Samsung’s narrowing construction is designed to limit the claim language to a single
21 embodiment (in which a control strip region could never be obscured by an application program
22 window), thereby excluding other embodiments disclosed in the '002 patent. For example, the
23 patent plainly discloses the following embodiment:

24 The user may also hide the control strip. In one embodiment, to
25 make the control strip disappear completely, the user can click the
26 Hide button in the control strip control panel, as described later in
27 conjunction with FIG. 3.

28 '002 patent, at 7:29-32. The user’s ability to hide the control strip is reiterated at 8:44-46, and the
software routine for showing or hiding the control strip is disclosed at 18:12-29. Apple’s

1 proposed “plain meaning” construction of the independent claims is consistent with the full scope
2 of the invention disclosed in the patent, while Samsung’s narrowing limitation is applicable only
3 to a particular embodiment specifically claimed in dependent claims 12 and 13.

4 Samsung violates a central tenet of claim construction by attempting to narrow the
5 independent claims to limit them to a particular embodiment disclosed in the specification, and
6 also runs afoul of the doctrine of claim differentiation. *See Phillips*, 415 F. 3d at 1314, 1323.
7 Samsung cites to the following language in the specification, which expressly discloses “one
8 embodiment” of the invention, in which the “control strip” is implemented in a “private window
9 layer” that corresponds to the claimed “first window region:”

10 In one embodiment, the control strip is implemented in a private
11 window layer that appears in front of the windows of all the
12 application layers. That is, the control strip window appears on top
13 of all the application programming windows that may be generated
14 as part of the execution of an application program. This prevents
15 other windows from obscuring it.

16 ’002 patent, at 6:41-46. Samsung seeks to impose this limitation described in “one embodiment”
17 on *all* the independent claims of the ’002 patent, ignoring the patent’s dependent claims as well as
18 other disclosures in the specification. Dependent claims 12 and 13 recite as follows:

19 12. The display system defined in claim 1 wherein the first window
20 region **always** appears in front of the application windows.

21 13. The display system defined in claim 1 wherein the first window
22 region is implemented in a private window layer that appears in front
23 of windows for all application layers.

24 ’002 patent, claims 12 and 13 (emphasis added). Dependent claims 12 and 13 must be different
25 from and narrower than claim 1, and Samsung’s attempt to graft their narrowing limitations onto
26 the language in claim 1 violates the Federal Circuit’s admonition that courts should not construe
27 an independent claim to require a limitation added by a dependent claim. *See Innova/Pure Water,*
28 *Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1123 (Fed. Cir. 2004) (“[T]he doctrine of
claim differentiation ‘normally means that limitations stated in dependent claims are not to be
read into the independent claim from which they depend’”) (citation omitted).

Samsung has also cited portions of the file history in which Apple distinguished two
references, Takagi and Hansen. In its November 8, 1999 Amendment and Response, Apple noted

1 that the Takagi reference, which merely disclosed function keys for actions such as scanning and
 2 printing for use by a single application program, did not meet several limitations, including the
 3 limitation at issue here. (*See* Ahn Decl. Ex. G at APLNDC 00028058.) In its Response to Final
 4 Office Action and in its Appeal Brief in the USPTO, Apple distinguished the Hansen reference on
 5 several grounds, including that Hansen disclosed a “dashboard” that was visible only when a
 6 button was selected, whereas in Apple’s invention the window “*may be* always visible to the
 7 user.” (Ahn Decl. Ex. H at APLNDC00028084) (emphasis added.)

8 Apple’s arguments during prosecution do not clearly limit the independent claims to the
 9 scope of the dependent claims, nor do they disavow coverage of a system in which one or more
 10 application programs may be permitted to obscure any portion of the “display areas” of the “first
 11 window.” For these reasons, Samsung’s proposed narrowing construction should be rejected and
 12 the term should be given its plain meaning.

13 **C. The ’381 Patent**

14 **1. Background**

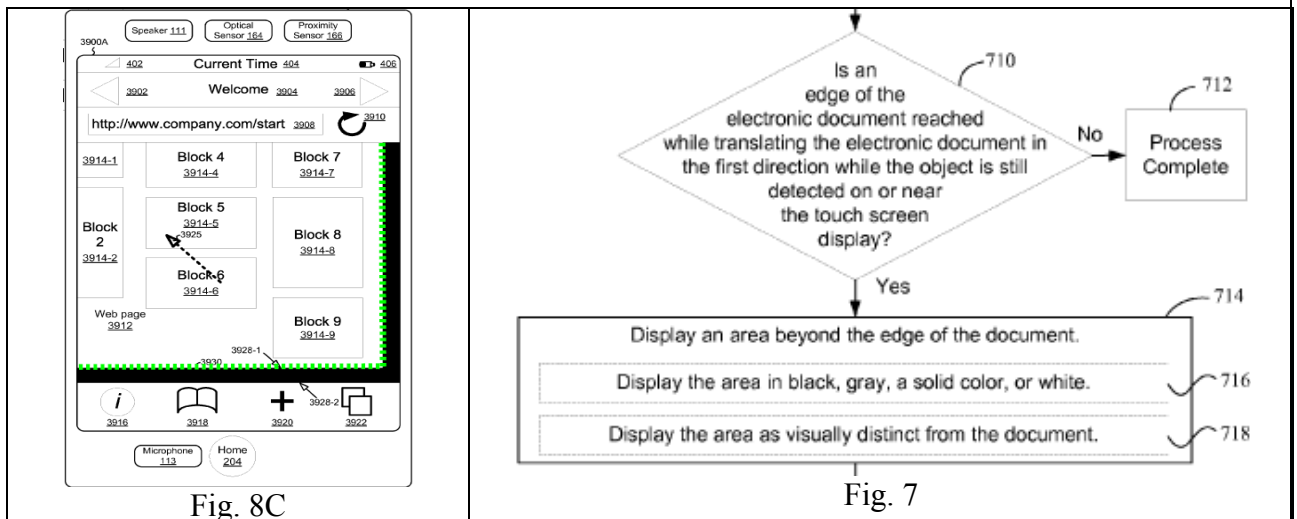
15 Apple’s ’381 patent was a subject of Apple’s Motion for a Preliminary Injunction, and the
 16 Court determined that it was likely that this patent was valid and infringed. This patent is
 17 directed to a system and method for providing feedback to a user that the edge of an electronic
 18 document has been reached. For example, when a user attempts to continue scrolling a web page
 19 past its edge, an area beyond the edge is displayed, and when the user lifts his finger the web page
 20 snaps back into place to fill the screen. The ’381 patent issued on December 23, 2008 and claims
 21 priority to provisional patent applications filed in January 2007.

22 **2. Disputed term: “an edge of the electronic document”**

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
an edge of the electronic document / the edge of the electronic document / the edge of the document / an edge of the document (claims 1, 11, 13, 14, 16-20)	No construction necessary.	A boundary of the electronic document that distinguishes it from another electronic document, other content, or a background area.

1 Apple proposes that this clear, non-technical claim term be given its plain and ordinary
 2 meaning. In an effort to bolster its invalidity contentions, Samsung proposes a definition that is
 3 both superfluous and inaccurate.

4 Consistent with its plain meaning, “an edge of the electronic document” is represented in
 5 the '381 patent, for example, as an external edge of a web page (depicted in green below). The
 6 specification makes clear that “an edge of the electronic document” must be recognized as such,
 7 and cannot simply be an arbitrary “boundary” inside of an electronic document. As described in
 8 the specification, an area beyond the edge of the electronic document will be displayed only when
 9 the system implementing the invention detects that an “edge of the electronic document is
 10 reached.” '381 patent at 27:25-29; Fig. 7.



19 Samsung’s attempt to construe this language to mean essentially any boundary that
 20 demarcates “other content” conflicts with the clear teachings of the specification. Simply calling
 21 an internal content demarcation “an edge of the electronic document” as Samsung proposes does
 22 not make it so. The difference between the actual “edge” of the electronic document and
 23 Samsung’s definition, which requires merely a boundary demarcating “other content,” is
 24 significant. The “edge” of the electronic document depicted above in Figure 8C is clear.
 25 Samsung’s definition, in contrast, could be interpreted to mean that each Block in Figure 8C is
 26 surrounded by “internal edges” (or, for example, that an electronic newspaper page has “internal
 27 edges”), which is neither logical nor supported by the '381 specification.
 28

1 Because of the lack of intrinsic support for its construction, Samsung relies almost
2 exclusively on extrinsic evidence. In doing so, Samsung ignores the Federal Circuit’s admonition
3 that evidence such as testimony from experts should not be used to “vary[] or contradict[] the
4 terms of the claims.” *Markman*, 52 F.3d at 981. Ironically, Samsung’s expert, Andries Van Dam,
5 provided testimony that runs counter to Samsung’s proposed construction and confirms that
6 Apple’s position is correct.

7 Dr. Van Dam explained during his deposition that an edge of an electronic document
8 could be understood by the lack of other information or content beyond its bounds.

9 If you are moving an electronic document in a certain direction, and
10 you scroll it past its edge, **where there is no new information to
come into view**, you are going to be displaying beyond the edge.

11 (Ahn Decl. Ex. I at 30:5-9) (emphasis added.) He went on to state that an edge of an electronic
12 document could also be understood as a border beyond which an electronic document was not
13 meant to go.

14 Q. What do you mean by overpanning?

15 A. **Going beyond the edge**. An attempt to pull the electronic
16 document **further than it should go** and this particular form of
17 visual feedback lets you know that by as soon as you lift up,
snapping the document to another view in which there is no material
beyond the edge visible.

18 (*Id.* at 30:22-31:4) (emphasis added.) In short, Samsung’s own expert agreed that “an edge of the
19 electronic document” indicated an external edge beyond which there was an area with no content,
20 and not simply an arbitrary internal “boundary” that demarcated “other content.”

21 Likewise, Apple’s expert, Ravin Balakrishnan, made clear during his deposition that “an
22 edge of the electronic document” connoted “a defined boundary,” (Ahn Decl. Ex. J at 28:4), and
23 further explained in his expert declaration that such external edges are quite different from lines
24 within an electronic document. (Ahn Decl. Ex. K at ¶ 12.) Samsung has failed to demonstrate
25 why this term requires construction, and its attempt to transform an unambiguous phrase into a
26 self-serving and inaccurate exposition should be rejected.

1 **D. The '607 Patent**

2 **1. Background**

3 Apple's '607 patent, entitled "Multipoint Touchscreen," issued on February 16, 2010,
4 from an application filed on May 6, 2004. The claims of the '607 patent are directed to a
5 transparent capacitive sensing touch screen panel. Just as Apple's '828 patent (discussed below)
6 represents a major advance in software for recognizing and processing multiple touches, Apple's
7 '607 patent represents a breakthrough in hardware capable of accurate and transparent multi-
8 touch functionality on a video screen.

9 **2. Disputed term: "glass member"**

10

<u>Claim Term (relevant claims)</u>	<u>Apple's Proposed Construction</u>	<u>Samsung's Proposed Construction</u>
11 12 13 glass member (claim 10)	Glass or plastic material.	Plain and ordinary meaning.

14 Claim 10 of the '607 patent is directed to a display arrangement including a touch screen
15 panel, where the touch screen panel comprises three "glass members:" "a first glass member
16 disposed over the screen of the display," a "second glass member disposed over the first
17 transparent conductive layer," and a "third glass member disposed over the second conductive
18 layer." The parties dispute the meaning of the claim term "glass member."

19 It is a basic principle of claim construction that a patent applicant can act as his own
20 lexicographer. *AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1276 (Fed. Cir. 2011)
21 (quoting *Phillips*, 415 F.3d at 1316). Here, Apple plainly disclosed in the specification that the
22 "glass member" could be made of any suitable "glass or plastic material," and proposes that exact
23 language for claim construction.

24 Furthermore, each of the layers may be formed with various
25 materials. By way of example, each particular type of layer may be
26 formed from the same or different material. For example, **any**
suitable glass or plastic material may be used for the glass
members.

27 '607 patent at 16:43-47 (emphasis added). This definition in the patent specification is consistent
28 with common usage, where a drinking glass, eyeglasses, and a magnifying glass all could be

1 made of plastic.

2 Samsung contends that the term should be given its “plain and ordinary meaning,”
3 apparently in an effort to argue that it is limited to a member made of glass. This approach is
4 flawed and results in a construction at odds with the express teaching of the specification, which
5 makes clear that the “glass member” may be made of any suitable glass or plastic material.
6 Because Samsung offers no reason for the claim term to be construed to exclude plastic, the Court
7 should adopt Apple’s well-supported construction.

8 E. The ’828 Patent

9 1. Background

10 Apple’s ’828 patent issued on October 12, 2010, and is entitled “Ellipse Fitting for Multi-
11 Touch Surfaces.” The ’828 patent is directed to the field of “multitouch” touchscreen devices and
12 methods. As the patent explains, “[t]o take maximum advantage of multi-touch surface sensing,
13 complex proximity image processing is necessary to track and identify the parts of the hand
14 contacting the surface at any one time.” ’828 patent at 6:23-25. Prior art methods did not
15 adequately solve this problem. Thus, at the time of the invention of the ’828 patent, “there
16 exist[ed] a need in the art for improved means to group exactly those electrodes which are
17 covered by each distinguishable hand contact and to compute a centroid from such potentially
18 irregular groups.” *Id.* at 6:18-22.

19 The ’828 patent addresses the problem by first constructing what it calls a “proximity
20 image.” Figure 13, reproduced below, is described in the patent as “an example proximity image
21 of a hand flattened onto the surface with fingers outstretched.”

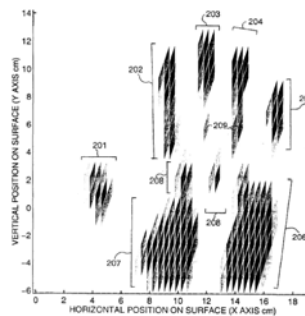
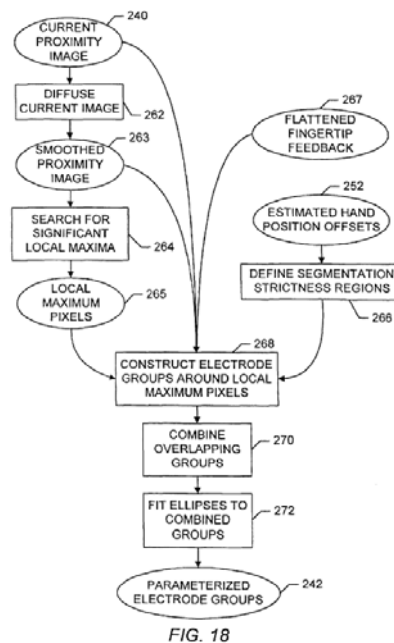


FIG. 13

1 As the patent further explains, Figure 13 was obtained from “a prototype array of
2 parallelogram-shaped electrodes,” where “the proximity data measured at one electrode during a
3 particular scan cycle constitutes one ‘pixel’ of the proximity image captured in the scan cycle.”
4 ’828 patent at 18:3-15.

5 The processing steps that correspond to the claims of the ’828 patent are shown in Figure
6 18 of the specification, which depicts the processing of proximity images. The “proximity
7 image” described in the ’828 patent is constructed from data obtained from a scan of the touch-
8 sensitive surface, which “provide[s] clear indications of where the body contacts the surface.”
9 ’828 patent at 6:25-27.



10
11
12
13
14
15
16
17
18
19
20
21 The image segmentation process shown in Figure 18 “takes the most recently scanned
22 proximity image data 240 and segments it into groups of electrodes 242 corresponding to the
23 distinguishable hand parts of FIG. 13.” *Id.* at 19:2-5. The ellipse fitting step 272 then “extract[s]
24 shape, size, and position parameters from each electrode group.” *Id.* at 25:54-56. These
25 parameters “are used by higher level modules to help distinguish finger, palm, and thumb
26 contacts.” *Id.* at 25:58-60.

2. Disputed term: “mathematically fitting an ellipse . . .”

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
mathematically fit[ting] an ellipse to at least one of the [one or more] pixel groups (claims 1, 10)	No construction necessary.	For at least one of the pixel groups, applying a unitary transformation of the group covariance matrix of second moments of proximity data for all pixels in that pixel group to fit an ellipse.

The disputed language appears in Claims 1 and 10. Claim 1 is representative:

A method of processing input from a touch-sensitive surface, the method comprising:
receiving at least one proximity image representing a scan of a plurality of electrodes of the touch-sensitive surface;
segmenting each proximity image into one or more pixel groups that indicate significant proximity, each pixel group representing proximity of a distinguishable hand part or other touch object on or near the touch-sensitive surface; and

mathematically fitting an ellipse to at least one of the pixel groups.

’828 patent, claim 1 (disputed claim term in bold).

Apple believes that no construction is needed for this term, as the ordinary meaning of the words adequately expresses what is covered by the claim. Samsung agrees with Apple’s position to the extent that it simply reuses every word of the claim term in its construction with the exception of “mathematically.”

In contrast, Samsung has proposed a construction that limits the scope of these terms to a specific set of equations in one embodiment of the ’828 patent. As discussed below, Samsung’s construction should be rejected because it: (i) flies in the face of the plain meaning of “mathematically fitting an ellipse;” (ii) is based on the erroneous conclusion that the specification includes a disclaimer of claim scope; (iii) reads out a preferred embodiment of the specification; and (iv) relies on a prosecution history disclaimer where there is none.

a. Samsung’s Proposed Construction Differs from the Ordinary Meaning

Nothing in the ordinary meaning of the claim term suggests the specific equations set out in column 26 of the ’828 patent. As of the invention of the ’828 patent, mathematically fitting an ellipse was well-known in contexts other than touch screen devices. Indeed, in its invalidity

1 contentions, Samsung cited several prior art references that describe numerous ways to
2 mathematically fit an ellipse. For example, the Davies book “Machine Vision: Theory,
3 Algorithms, Practicalities,” teaches a number of mathematical methods for fitting an ellipse,
4 including the diameter bisection method, the chord tangent method, and the Hough transform
5 method. (Ahn Decl. Ex. L at 271-90.) In addition, U.S. Patent No. 4,618,989 uses two-
6 dimensional “histograms” to define an ellipse for use in “inspecting or assembling machine parts
7 in mass production processes.” (Ahn Decl. Ex. M at 1:15-16, 2:18-32.) U.S. Patent
8 No. 5,734,751 fits an ellipse by “calculating . . . an inscribed and subsequently . . . circumscribed
9 rectangle.” (Ahn Decl. Ex. N at Abstract.)

10 Given these very different techniques for mathematically fitting an ellipse that were well
11 known as of the invention date of the ’828 patent, there can be no dispute that the plain meaning
12 of the claim term “mathematically fitting an ellipse” would not be as limited as Samsung
13 suggests. Indeed, the various methods for fitting an ellipse described above do not include
14 calculating a “unitary transformation of the group covariance matrix of second moments” as
15 Samsung proposes the claim be construed. The ’828 patent describes ellipse fitting consistent
16 with the ordinary meaning for this term: using calculations to determine the parameters of an
17 ellipse that fits data. The specification describes “electrode group data structures 242 which are
18 *parameterized* by fitting an ellipse to the position and proximity measurements of the electrodes
19 within each group.” ’828 patent at 19:8-12 (emphasis added). The ellipse fitting process is
20 identified as step 272 in Figure 18 of the ’828 patent, which results in “*parameterized* electrode
21 groups,” *id.* at Fig. 18 (emphasis added), and the specification refers to “shape, size, and position
22 *parameters.*” *Id.* at 25:54-56 (emphasis added).

23 Samsung’s proposed construction adds limitations that differ markedly from the plain
24 meaning. It must therefore “overcome a heavy presumption that claim terms carry their full
25 ordinary and customary meaning, unless it can show the patentee expressly relinquished claim
26 scope.” *Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). Samsung cannot meet that
27 burden here, and its construction should be rejected.

1 **b. Samsung Cannot Show that the Specification Disclaimed**
2 **the Ordinary Meaning of “Mathematically Fitting an**
3 **Ellipse”**

4 Samsung apparently contends that the ’828 patent specification includes a disclaimer of
5 the full and ordinary scope of the claim term “mathematically fitting an ellipse.” Samsung relies
6 on a single statement in the specification, which states that in one embodiment, “[t]he ellipse
7 fitting procedure requires a unitary transformation of the group covariance matrix...” ’828 patent
8 at 26:17-20. This statement does not contain the type of explicit definitional language that would
9 justify such a restrictive construction. *See Abbott Labs. v. Syntron Bioresearch, Inc.*, 334 F.3d
10 1343, 1354-55 (Fed. Cir. 2003) (rejecting construction that adopted one possible definition in a
11 patent’s specification over an alternative definition in the specification).

12 Under Federal Circuit law, in order to constitute a disclaimer, there must be “expressions
13 of manifest exclusion or restriction, representing a clear disavowal of claim scope.” *Epistar*,
14 566 F.3d at 1335. “Indeed, the specification may reveal an intentional disclaimer, or disavowal,
15 of claim scope by the inventor. However, any such disclaimer must be clear.” *Voda v. Cordis*
16 *Corp.*, 536 F.3d 1311, 1320 (Fed. Cir. 2008) (citations omitted). Even if a patent specification
17 describes only a single embodiment, claim language should not be limited to that embodiment
18 “unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or
19 expressions of manifest exclusion or restriction.’” *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282,
20 1288 (Fed. Cir. 2009) (citation omitted).

21 In this case, the language from the ’828 patent upon which Samsung relies does not
22 constitute a clear disavowal of the ordinary claim scope. The specification merely states that in
23 performing one of the preferred embodiments, “[t]he ellipse fitting procedure requires a unitary
24 transformation of the group covariance matrix G_{cov} of second moments” ’828 patent at
25 26:18-21. Other portions of the specification refer to ellipse fitting more generally. ’828 patent
26 at Fig. 18; 19:8-12; 25:54-56. Moreover, as described above, one of skill in the art would be well
27 aware of many ways of mathematically fitting an ellipse that did *not* include “applying a unitary
28 transformation to a covariance matrix of second moments.”

1 In addition, the “unitary transformation of the group covariance matrix of second
2 moments” upon which Samsung relies does not in fact *fit an ellipse*. It is a step that can be taken
3 *before* fitting an ellipse. The specification clearly notes that in the example selected by Samsung,
4 additional calculations must be performed to “determine the ellipse axis lengths and orientation,”
5 including calculating the square roots of the “eigenvalues . . . of the covariance matrix.” ’828
6 patent at 26:36-45. Wayne Westerman, one of the ’828 patent inventors, confirmed that the
7 ‘unitary transformation of the group covariance matrix of second moments’ takes place *before*
8 fitting an ellipse to rotate the “coordinate system [in order] to align with the long angle of the
9 data.” (Ahn Decl. Ex. O at 129:8-11.) He further explained that “unitary transformation just
10 means rotating a coordinate system . . . [to] match up with the long or major axis of the data.”
11 (*Id.* at 129:15-20.) In sum, the ellipse parameters such as total group proximity, centroid, major
12 axis, minor axis, orientation and eccentricity (’828 patent at 25:54-26:67) are not determined by a
13 unitary transformation of the group covariance matrix of second moments.

14 Moreover, Samsung cannot show disclaimer under Federal Circuit law. In *Pfizer v. Teva*
15 *Pharm.*, 429 F.3d 1364, 1374 (Fed. Cir. 2005), for example, the Federal Circuit rejected the
16 assertion that the claim term “saccharides” must mean “sugars” even though the phrase
17 “saccharides (i.e. sugars)” appeared in the specification. The court reasoned that, “when read in
18 the context of the entire [] patent, the reference to ‘saccharides (i.e., sugars)’ does not constitute a
19 definition of ‘saccharides.’” *Id.* at 1375. The “requires” language in the ’828 patent is similar to
20 the “i.e.” in *Pfizer*, because the ’828 patent specification also describes ellipse fitting in general
21 language, as discussed above, describing the computation of “shape, size, and position
22 parameters.” *See, e.g.*, ’828 patent at 25:54-56. Accordingly, the “unitary transformation of a
23 covariance matrix of second moments” does not constitute fitting an ellipse.

24 Finally, other portions of the ’828 specification that explicitly define terms stand in
25 contrast to Samsung’s purported “definition” of ellipse fitting. Samsung’s reliance on the word
26 “requires” is similar to the error committed by the district court in *Abbott Labs. v. Andrx Pharm.*,
27 *Inc.*, 473 F.3d 1196, 1210-1211 (Fed. Cir. 2007). In that case, the Federal Circuit reversed the
28 trial court’s construction, finding that “the [] patent unambiguously provides definitions of other

1 claim terms, that may be different from the ordinary understanding of a person of skill in the art,
2 by stating that the term has a particular meaning within the patent,” while the “definition”
3 identified by the district court “does not as unambiguously signify that the description provided is
4 definitional.” *Id.* at 1210-11.

5 The '828 patent similarly provides clear explicit definitions of other terms, such as
6 “proximity,” “horizontal,” “vertical,” “inner,” “outer,” and “contact,” but there is no such
7 definition for “mathematically fit(ting) an ellipse.” *See* '828 patent at 14:22-35. For example, the
8 '828 patent states, “The direction ‘inner’ means toward the thumb of a given hand, and the
9 direction ‘outer’ means towards the pinky finger of a given hand.” *Id.* at 14:28-30. The term
10 “mathematically fit(ting) an ellipse” does not appear anywhere in the patent other than the claims,
11 so this is not a case where the inventors have acted as lexicographers. *See Helmsderfer v. Bobrick*
12 *Washroom Equip., Inc.*, 527 F.3d 1379, 1381 (Fed. Cir. 2008) (“[a] patentee may act as its own
13 lexicographer and assign to a term a unique definition that is different from its ordinary and
14 customary meaning; however, a patentee must clearly express that intent in the written
15 description”).

16 **c. Samsung’s Proposal Would Read Out a Preferred**
17 **Embodiment**

18 As discussed above, the '828 patent describes ellipse fitting generally as a process of
19 using calculations to determine the parameters of an ellipse that fits data. *See, e.g.*, '828 patent,
20 Fig. 18 at step 272. The specification describes a set of specific mathematical formulas for an
21 embodiment of ellipse fitting, to compute size (G_z), centroid (G_x and G_y), major axis (G_{major}),
22 minor axis (G_{minor}), orientation (G_θ), and eccentricity (G_ϵ), '828 patent at 26:1-55, which are
23 examples of parameters describing the shape, size, and position of an ellipse. The '828 patent
24 specification further describes another preferred embodiment of ellipse fitting where the “total
25 group proximity G_z ” is used to indicate contact size and finger pressure. *Id.* at 27:1-8. In this
26 embodiment, “the orientation and eccentricity of small contacts are set to default values . . . and
27 total group proximity G_z is used as the primary measure of contact size instead of major and
28 minor axis lengths.” *Id.* at 27:4-8.

1 This portion of the specification refers to the same ellipse parameters (orientation,
2 eccentricity, size, major and minor axis lengths), but equations 12 or 23 are used to compute an
3 indicator of size while equations 15-21 are not used. One of ordinary skill in the art would
4 understand that this paragraph describes a second preferred embodiment of ellipse fitting. Indeed,
5 claim 3 of the '828 patent specifies that among the parameters that can define an ellipse is
6 "position, shape, *size*, orientation, eccentricity, major radius, minor radius, and any combination
7 thereof." ('828 patent, claim 3 (emphasis added).) The alternative embodiment in column 27
8 calculates "total group proximity G_z " and uses it "as the primary measure of contact size" rather
9 than other ellipse parameters.

10 These descriptions and examples are all consistent with the ordinary meaning of
11 mathematically fitting an ellipse, as embodied in Apple's proposed construction. The
12 construction for "mathematically fit(ting) an ellipse" proposed by Samsung would read out the
13 preferred embodiment of column 27, and this is plainly incorrect. As the Federal Circuit has held,
14 "A claim construction that excludes a preferred embodiment . . . is rarely, if ever correct." *Pfizer*,
15 429 F.3d at 1374 (internal quotations omitted).

16 **d. Samsung Cannot Show a Prosecution Disclaimer that**
17 **Supports Its Proposed Construction**

18 The prosecution history is also consistent with Apple's proposed construction. The term
19 "mathematically" was added to the claims after an interview with the examiner. (Ahn Decl. Ex. P
20 at APLNDC00021675-21677.) As stated in the prosecutor's remarks, this amendment was not
21 intended to distinguish prior art or otherwise limit the scope of the ellipse fitting claimed in the
22 '828 patent. (*Id.* at APLNDC00021689-21690.) Instead, during the interview, the prosecuting
23 attorney distinguished Bisset, a cited prior art reference, because Bisset did not fit an ellipse at all:

24 Applicants' representative disagreed with the Office Action's
25 assertion that Bisset's "finger profile" (shown, e.g., in FIG 7B of
26 Bisset), which is simply a series of capacitance values measured
27 when a finger contacts a touchpad, discloses the feature of "fitting an
28 ellipse to . . ." Specifically, paraphrasing the Office Action's
interpretation, merely *obtaining* measured data is the same as *fitting*
an ellipse to the data, so long as the measured data happens to be
measured from an object that is in general ellipse-like. (Office
Action, page 7.) Applicants representative asserted that, under the
plain meaning of the language of the claims, without more, one

1 skilled in the art would not interpret “fitting an ellipse to at least one
2 of the pixel groups” in such a manner. . . .

3 Nonetheless, claim 1 has been amended to recite *mathematically*
4 fitting an ellipse to at least one of the pixel groups. During the
5 interview, the Examiner indicated that the amendment would
6 overcome the rejections.”

7 *Id.* While Samsung apparently contends that these statements in the file history constitute a
8 disclaimer that limits the claims to applying a unitary transformation of the covariance matrix of
9 second moments, there is no basis for this argument because the patentee was not distinguishing
10 “mathematically fitting an ellipse” from other ways of fitting an ellipse. Instead, as the patentee
11 pointed out, Bisset does not disclose any type of ellipse fitting. The distinction in the file history
12 between Bisset and the ’828 patent is consistent with Apple’s construction. Moreover, nowhere
13 in any of the Applicant’s remarks during the prosecution of the ’828 patent is there a statement
14 referring to the “unitary transformation of the group covariance matrix.”

15 **3. Disputed term: “pixel / pixel groups”**

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
pixel / pixel groups (claims 1, 6, 9, 10, 16, 24, 31)	Portion[s] of a proximity image that indicate[s] the proximity data measured at one or more electrodes.	Plain and ordinary meaning.

16 Apple proposes that the Court construe the claim term “pixel” to mean the portion of the
17 proximity image indicating the data measured at an electrode. This definition flows directly from
18 the ’828 patent specification, which expressly defines a “pixel:”

19 In the discussion that follows, the proximity data measured at one
20 electrode during a particular scan cycle constitutes one “pixel” of the
21 proximity image

22 ’828 patent at 18:13-15. This definition is used consistently throughout the specification. Indeed,
23 in every case in which the term “pixel” appears, it is used to refer to data within a *proximity*
24 *image* that has been measured at electrodes. *See* ’828 patent at 23:13-40 (describing grouping of
25 “pixels” within the proximity image); *id.* at 25:63 (“proximity of an electrode or pixel *e*”); *id.* at
26 26:13 (“proximity over each pixel in the group”); *id.* at 26:15-16 (“large hand parts tend to cause
27 groups with more pixels”). A “pixel group” is a group of such “pixels.”

1 Samsung apparently intends to rely on the “plain meaning” of pixel to argue to the jury
2 that the term should mean an element within a display, such as an LCD screen. Such an
3 interpretation cannot be squared with the ’828 patent, which consistently uses the term to mean an
4 element of a *proximity* image, not of an image in a display device. The patent explains that
5 “proximity images provide clear indications of where the body contacts the surface, uncluttered
6 by luminosity variation and extraneous objects in the background.” ’828 patent at 6:25-28. The
7 patent describes methods “for tracking and identifying hand contacts in a sequence of *proximity*
8 *images* in order to support interpretation of hand configurations and activities related to typing,
9 multiple degree-of-freedom manipulation via chords, and handwriting.” ’828 patent at 9:22-26
10 (emphasis added). Thus, the “pixels” are part of “proximity images” made up of data indicating
11 the proximity of portions of the hand to the sensing device. The patent never uses the term
12 “pixel” to refer to the elements of a conventional camera or display device. Apple’s proposed
13 construction follows from the specification and the governing law on claim construction.

14 F. The ’915 Patent

15 1. Background

16 Apple’s ’915 patent, entitled “Application Programming Interfaces for Scrolling
17 Operations” claims methods and an apparatus for responding to user inputs on a touch-sensitive
18 display. In general, the ’915 claims a method and apparatus for distinguishing between a single-
19 input point that is interpreted as a “scroll operation” and two or more input points that are
20 interpreted as a “gesture operation.” The scrolling operation may stop in relation to the user input
21 or may “rubberband” when the scrolling exceeds a window edge by a predetermined maximum
22 displacement. The gesture operation invoked by two or more input points may scale (e.g.
23 zooming when two fingers move apart) or rotate the view. The ’915 patent is one of several
24 asserted patents that protects novel features of the user interfaces of the iPhone and iPad.

2. Disputed term: “scrolling a window . . .”

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
scrolling a window having a view associated with the event object (claims 1, 8)	No construction necessary.	sliding a window in a direction corresponding to the direction of the user input over a view that is stationary relative to the window

Apple proposes that the claim language be given its plain meaning. Samsung proposes a claim construction that is itself ambiguous, does not add clarity to the plain language, and is subject to an interpretation that is at odds with the patent.

The phrase that Samsung has proposed for construction is a segment of independent claims that recite a method (claim 1) and machine readable instructions to perform a method (claim 8) to distinguish between a single-input point that is interpreted as a scrolling operation and two or more input points that are interpreted as a gesture operation. For example, Claim 8 provides:

A machine readable storage medium storing executable program instructions which when executed cause a data processing system to perform a method comprising:

receiving a user input, the user input is one or more input points applied to a touch-sensitive display that is integrated with the data processing system;

creating an event object in response to the user input;

determining whether the event object invokes a scroll or gesture operation by distinguishing between a single input point applied to the touch-sensitive display that is interpreted as the scroll operation and two or more input points applied to the touch-sensitive display that are interpreted as the gesture operation;

issuing at least one scroll or gesture call based on invoking the scroll or gesture operation;

responding to at least one scroll call, if issued, by **scrolling a window having a view associated with the event object**; and

responding to at least one gesture call, if issued, by scaling the view associated with the event object based on receiving the two or more input points in the form of the user input.

’915 patent, claim 8 (disputed term in bold). The “event object” is created in response to the user input and the patented method then determines whether the event object invokes a scroll or a gesture operation. ’915 patent at 6:32-43; Fig. 1. The claim language and the specification make it clear that the single point input is interpreted as a “scroll” operation.

1 Samsung asks the Court to give the jury a confusing definition of “scrolling” that is
2 neither necessary nor warranted by anything in the patent or the prosecution history. The
3 specification makes clear that the term “scrolling” is used in its ordinary manner:

4 Scrolling is the act of sliding a directional (e.g. horizontal or vertical)
5 presentation of content, such as text, drawings or images, across a
6 screen or display window.

7 ’915 patent at 1:39-42. The patent explains: “For example, a single touch that drags a distance
8 across a display may be interpreted as a scroll operation” which results in issuing a “scroll call.”
9 The method responds to the scroll call by “scrolling a window having a view (e.g., web, text or
10 image content) associated with the event object based on an amount of a scroll [...]” *Id.* at 6:32-
11 53. The patent goes on to describe scrolling as including the moving of lists of items or objects
12 on a screen; that scrolling may include a “rubberbanding” or “bounce” effect upon scrolling
13 beyond the terminus of a list or the edge of a display; and that scrolling may include “locking” the
14 scrolling in the horizontal or vertical direction so long as the user input is within a certain angle of
15 a vertical or horizontal direction. *Id.* at 5:25-29; 5:33-40; 7:27-10:42.

16 Samsung’s proposed construction can only introduce ambiguity and confusion by
17 introducing terms found nowhere in the specification. Moreover, depending on how Samsung’s
18 confusing construction is interpreted, it could be inconsistent with the description of “scrolling”
19 in the patent. Samsung’s proposed construction defines “scrolling” as sliding a “window” in the
20 direction of user input over a “view” that is “stationary relative to the window.” Samsung’s
21 construction does not clarify the term. The jury will understand what “scrolling” means from the
22 point of view of the user, as the term is used in the specification, which would allow for the
23 movement of content such as text or images across a display window. Nothing in the patent
24 claims requires that scrolling be accomplished by sliding a window across stationary content
25 rather than by sliding the content within a window.

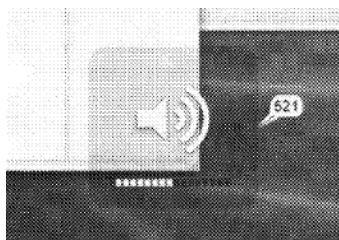
26 In addition, by requiring that the window slide “in the direction corresponding to user
27 input,” Samsung may be attempting to exclude from the scrolling operation the rubberbanding,
28 bounce, and locked scrolling features that are described in the specification and expressly recited
in certain claims, because in each of these embodiments the scrolling direction arguably does not

1 correspond precisely to the “direction of the user input.”³ In the Joint Claim Construction
2 Statement, Samsung cites only the following portions of the ’915 specification: 1:39-47 (a
3 description of “scrolling” as sliding a directional presentation of content across a display or
4 window); 2:1-10 (discussion of a “bounce” opposite a scroll); and 5:25-47 (a general description
5 of windows, views, and scrolling operations that can include bouncing, rubberbanding, and
6 locked scrolling) as support for its proposed construction. These citations, which describe sliding
7 the content rather than the window (so that the view is not “stationary relative to the window”),
8 and teach “scrolling” that is not always in the direction of user input, contradict Samsung’s
9 proposed construction rather than support it. Samsung’s construction should be rejected.

10 **G. The ’891 Patent**

11 **1. Background**

12 Apple’s ’891 patent, titled “Method and Apparatus for Displaying a Window for a User
13 Interface” claims methods and an apparatus for providing a visual overlay of information that
14 automatically disappears. The invention in this patent may be most familiar to mobile device
15 users as a volume adjustment indicator, depicted below.



20 '891 patent Fig. 17

21 After appearing briefly (and always in the same position on the screen) when a user raises
22 or lowers the volume on a device, this type of window then automatically disappears without a
23 user having to, for example, click an “X” button on the corner of the window.

26
27 ³ The specification also states: “In addition, while embodiment 400 illustrates movement
28 414 in a particular direction, in other embodiments movement of the displayed objects may be in
response to movement 414 in one or more other directions [...]”. *Id.* at 8:19-22.

2. Disputed term: “starting a timer”

<u>Claim Term (relevant claims)</u>	<u>Apple’s Proposed Construction</u>	<u>Samsung’s Proposed Construction</u>
starting a timer (claims 1, 21, 26, 46, 51, 71)	Initiating a time keeping process.	Initiation of a timekeeping process that begins at a predetermined value and counts down until zero.

Though Apple does not believe that the unambiguous, non-technical phrase “starting a timer” requires construction, in the spirit of compromise it has essentially agreed to the first part of Samsung’s proposed construction. Samsung, in contrast, attempts to read into the claim a “count down from a predetermined value to zero” limitation on how a timer operates that has no support whatsoever in any of the intrinsic evidence. Samsung apparently seeks to manufacture a non-infringement argument or “design-around” strategy through its proposed construction.

Each of Samsung’s citations to the specification includes merely the same description of a window closing automatically following the expiration of a timer. *See, e.g.*, ’891 patent at 2:29 (“after a timer expires”). Nothing in the specification supports Samsung’s attempt to limit the “timer” claim language to a “count down” embodiment (such as a microwave oven set to cook for 2 minutes) instead of a “count up” embodiment, such as a stopwatch. Indeed, the portion of Samsung’s construction requiring a “predetermined value” conflicts directly with the specification, which contemplates the counting of “a predetermined amount of time, a randomly selected amount of time, a time period determined according to a system condition or other criteria, a time period calculated on the fly, or a time period specified by a user.” ’891 patent at 9:35-39. The disclosure of a “time period calculated on the fly” demonstrates the incongruity of Samsung’s construction, as it would be impossible to count down from a time period that is not yet fixed. Counting up, however, is perfectly in line with the enumerated examples in the specification, and could be executed while an “on the fly” time calculation was taking place.

The only extrinsic evidence identified by Samsung to support its construction is testimony from one of the named inventors of the ’891 patent. Even if the Court were to ignore the well established principle that inventor testimony “cannot be relied on to change the meaning of the claims,” *Howmedica Osteonics Corp. v. Wright Medical Tech., Inc.*, 540 F.3d 1337, 1346 (Fed.

1 Cir. 2008), and that “*Markman* requires [the court] to give no deference to the testimony of the
 2 inventor about the meaning of the claims,” *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d
 3 1575, 1580 (Fed. Cir. 1996), Samsung has still failed to present definitive evidence in support of
 4 its construction. When questioned on this subject, Imran Chaudhri testified that a timer could be,
 5 for example, “something that counts down from a – from a starting value to zero, typically.”
 6 (Ahn Decl. Ex. Q at 70:15-16.) His use of the word “typically” indicates that this was not the
 7 only approach. He made clear that his testimony was merely exemplary: “I understand that the
 8 timer expired. By taking you back to my earlier example, I take to it mean that it's gone to zero.”
 9 (*Id.* at 71:11-13.) Given the broad scope of the timing functionality disclosed in the specification,
 10 this testimony in no way suggests that the only possible way for a timer to function in the context
 11 of the invention must be to count down to zero. Accordingly, the Court should adopt Apple’s
 12 construction or determine that no construction is necessary.

13 **3. Disputed term: “the first window has been displayed**
 14 **independently...”**

<u>Claim Term</u> <u>(relevant claims)</u>	<u>Apple’s Proposed</u> <u>Construction</u>	<u>Samsung’s Proposed Construction</u>
the first window has been displayed independent[ly] from a position of a cursor on the screen (claims 1, 20, 26, 45, 51, 70)	No construction necessary.	There is a mouse pointer or a similar icon that is controlled by a mouse, track ball, or touch pad visible on the screen and the user’s movement of the mouse pointer or similar icon does not affect the location of the first window.

20 This claim language provides that the display of a “first window” (such as the volume
 21 window in Fig. 17 above) is not dependent upon a position of a cursor on the screen. For
 22 example, the window may appear in “a position centered horizontally on the display” independent
 23 of the position of a cursor. ’891 patent at 3:11-12. Because this language is plain and
 24 understandable to a jury, no further construction is necessary.

25 Because Samsung’s proposed construction limits this claim language to a handful of
 26 exemplary embodiments while excluding others, and does not clarify any arguably ambiguous
 27 term, its construction should be rejected. The term “cursor” will be familiar to the jury, and
 28 hence does not require construction. Samsung’s proposed recharacterization of the term “cursor”

1 to “a mouse pointer or a similar icon” introduces ambiguity where there previously was none.

2 Moreover, a “cursor” is not limited to “mouse pointers” or “similar icons,” nor are cursors
3 controlled by only the three devices Samsung lists: a mouse, track pad, or touch pad. Blinking
4 cursors are commonly used in text editing, and the ’891 patent specification expressly refers to
5 input from keyboards. *See, e.g.*, ’891 patent at 4:54-55 (“input/output (I/O) devices which may
6 be mice, keyboards . . .”). Indeed, the specification discloses a large number of user input
7 devices: “e.g., a keyboard, mouse, track ball, touch pad, touch screen, joy stick, button, or
8 others.” *Id.* at 2:45-46; 7:9-10; Figs 1 and 14. Samsung’s attempt to limit the term “cursor” to
9 something that can be manipulated by only three of these seven exemplary devices is in direct
10 conflict with the specification.

11 Samsung’s construction also errs in adding the limitation that “a mouse pointer or similar
12 icon” is visible on the screen. All the claim requires is that if there is a cursor on the screen, the
13 display of the “first window” is independent of the cursor’s position. Samsung also proposes that
14 the “movement” of a “mouse pointer or similar icon” not affect the “location” of the “first
15 window.” This construction muddies or changes the straightforward claim language requiring
16 that the first window is displayed independent of the “position” of a cursor. There is no evidence
17 to support Samsung’s construction, which essentially limits a cursor to a pointer controlled by a
18 mouse, track ball, or touch pad, requires that a cursor be visible on the screen at all times, and
19 substitutes the “movement” of a cursor for its “position.” Because this term presents no
20 ambiguity, the Court should find that no construction is necessary.

21 **III. CONCLUSION**

22 For the foregoing reasons, Apple requests that the Court adopt its proposed constructions
23 and reject Samsung’s unsupported definitions.

24 Dated: December 8, 2011

MORRISON & FOERSTER LLP

25
26 By: /s/Michael A. Jacobs
MICHAEL A. JACOBS

27 Attorneys for Plaintiff
28 APPLE INC.