

United States District Court
For the Northern District of California

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

APPLE, INC., a California corporation,)	Case No.: 11-CV-01846-LHK
)	
Plaintiff and Counterdefendant,)	
v.)	ORDER CONSTRUING DISPUTED
)	CLAIM TERMS OF U.S. PATENT NOS.
SAMSUNG ELECTRONICS CO., LTD., A)	7,698,711; 6,493,002; 7,469,381;
Korean corporation; SAMSUNG)	7,663,607; 7,812,828; 7,844,915; and
ELECTRONICS AMERICA, INC., a New York)	7,853,891
corporation; SAMSUNG)	
TELECOMMUNICATIONS AMERICA, LLC,)	
a Delaware limited liability company,)	
)	
Defendants and Counterclaimants.)	

Plaintiff Apple brings this suit against Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (collectively, “Samsung”). Apple asserts, among other things, that several of Samsung’s products infringe Apple’s patents. Samsung counterclaims that several of Apple’s products infringe Samsung’s patents. The parties now seek construction of eight¹ disputed terms used in the claims of the following patents-in-suit: U.S. Patent Nos. 7,698,711 (“711 Patent”); 6,493,002 (“002 Patent”); 7,469,381 (“381 Patent”); 7,663,607 (“607 Patent”); 7,812,828 (“828 Patent”); 7,844,915 (“915 Patent”); and 7,853,891 (“891 Patent”). The Court held a technology tutorial on January 17, 2012, and a claim construction hearing on January 20, 2012. The Court has reviewed the claims, specifications, and other relevant

¹ Initially, the parties identified ten claim terms to be construed. In the course of claim construction briefing, Apple and Samsung stipulated to the construction of the term “symbol” in Samsung’s U.S. Patent No. 7,200,792. See Apple’s Responsive Claim Construction Br. at 2 (“Apple’s Resp.”). Accordingly, the Court construes the term “symbol” to mean, as the parties stipulated: “a modulated signal representing a number of bits specified according to the modulation technique.” Additionally, after the tutorial, but before the Claim Construction hearing, the parties reached an agreement regarding the term “starting a timer” in the ’891 Patent. Accordingly, the Court construes “starting a timer” to mean, as the parties have stipulated, “initiating a time keeping process.” See ECF No. 650.

1 evidence, and has considered the briefing and arguments of the parties. The Court now construes
2 the terms at issue.

3 I. LEGAL STANDARD

4 Claim construction is a question of law to be determined by the court. *Markman v.*
5 *Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370 (1996).
6 “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full
7 understanding of what the inventors actually invented and intended to envelop with the claim.”
8 *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (internal quotation marks
9 omitted). Accordingly, a claim should be construed in a manner that “stays true to the claim
10 language and most naturally aligns with the patent’s description of the invention.” *Id.*

11 In construing disputed terms, the court looks first to the claims themselves, for “[i]t is a
12 ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the
13 patentee is entitled the right to exclude.’” *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari*
14 *Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Generally, the words of a claim
15 should be given their “ordinary and customary meaning,” which is “the meaning that the term[s]
16 would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at
17 1312-13. In some instances, the ordinary meaning to a person of skill in the art is clear, and claim
18 construction may involve “little more than the application of the widely accepted meaning of
19 commonly understood words.” *Id.* at 1314.

20 In many cases, however, the meaning of a term to a person skilled in the art will not be
21 readily apparent, and the court must look to other sources to determine the term’s meaning. *Id.*
22 Under these circumstances, the court should consider the context in which the term is used in an
23 asserted claim or in related claims, bearing in mind that “the person of ordinary skill in the art is
24 deemed to read the claim term not only in the context of the particular claim in which the disputed
25 term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313.
26 Indeed, the specification is “‘always highly relevant’” and “[u]sually [] dispositive; it is the single
27 best guide to the meaning of a disputed term.” *Id.* at 1315 (quoting *Vitronics Corp. v.*
28 *Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Where the specification reveals that the

1 patentee has given a special definition to a claim term that differs from the meaning it would
2 ordinarily possess, “the inventor’s lexicography governs.” *Id.* at 1316. Likewise, where the
3 specification reveals an intentional disclaimer or disavowal of claim scope by the inventor, the
4 inventor’s intention as revealed through the specification is dispositive. *Id.*

5 The court may also consider the patent’s prosecution history, which consists of the
6 complete record of proceedings before the United States Patent and Trademark Office (“U.S. PTO”
7 or “PTO”) and includes the cited prior art references. The court may consider prosecution history
8 where it is in evidence, for the prosecution history “can often inform the meaning of the claim
9 language by demonstrating how the inventor understood the invention and whether the inventor
10 limited the invention in the course of prosecution, making the claim scope narrower than it
11 otherwise would be.” *Id.* at 1317 (internal citations omitted).

12 Finally, the court is also authorized to consider extrinsic evidence in construing claims,
13 such as “expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at
14 980 (internal citations omitted). Expert testimony may be particularly useful in “[providing]
15 background on the technology at issue, [explaining] how an invention works, [ensuring] that the
16 court’s understanding of the technical aspects of the patent is consistent with that of a person of
17 skill in the art, or [establishing] that a particular term in the patent or the prior art has a particular
18 meaning in the pertinent field.” *Phillips*, 415 F.3d at 1318. Although the court may consider
19 evidence extrinsic to the patent and prosecution history, such evidence is considered “less
20 significant than the intrinsic record” and “less reliable than the patent and its prosecution history in
21 determining how to read claim terms.” *Id.* at 1317-18 (internal quotation marks and citation
22 omitted). Thus, while extrinsic evidence may be useful in claim construction, ultimately “it is
23 unlikely to result in a reliable interpretation of patent claim scope unless considered in the context
24 of the intrinsic evidence.” *Id.* at 1319. Any expert testimony “that is clearly at odds with the claim
25 construction mandated by the claims themselves, the written description, and the prosecution
26 history” will be significantly discounted. *Id.* at 1318 (internal quotation marks and citation
27 omitted).

28

1 **II. DISCUSSION**

2 **A. “applet”**

3 The disputed term “applet” appears in Samsung’s ’711 Patent. The ’711 Patent, entitled
 4 “Multi-tasking Apparatus and Method in Portable Terminal,” discloses “an apparatus and method
 5 capable of performing multiple tasks in a portable terminal . . . in which menu functions of the
 6 portable terminal can be implemented while continuing to play the music.” ’711 Patent Abstract.
 7 The apparatus includes a controller for implementing “at least one menu function while playing a
 8 music file,” and also includes “a display unit for displaying an indication that the music file is
 9 being played during the implementation of the menu function.” *Id.* The application for the ’711
 10 Patent was filed on July 16, 2007, and the patent issued on April 13, 2010. It is a continuation of a
 11 prior application, which dates back to March 28, 2006. Further, the Patent claims the benefit of a
 12 Korean patent application filed on August 30, 2005.
 13
 14

Samsung’s Proposed Construction	Apple’s Proposed Construction
“A small application designed to run within another program”	“An operating system-independent computer program that runs within an application module”

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 18 The term “applet” appears in Claims 1, 9, and 17 of the ’711 Patent. For example,
 19 Independent Claim 1 of the ’711 Patent recites:

- 20 1. A multi-tasking method in a pocket-sized mobile communication device
 21 including an MP3 playing capability, the multi-tasking method comprising:
 22 generating a music background play object, wherein the music background play
 23 object includes an application module including at least one **applet**;
 24 providing an interface for music play by the music background play object;
 25 selecting an MP3 mode in the pocket-sized mobile communication device using
 26 the interface;
 27 selecting and playing a music file in the pocket-sized mobile communication
 28 device in the MP3 mode;
 switching the MP3 mode to a standby mode while the playing of the music file
 continues;

1 displaying an indication that the music file is being played in the standby mode;
 2 selecting and performing at least one function of the pocket-sized mobile
 3 communication device from the standby mode while the playing of the music
 4 file continues; and
 5 continuing to display the indication that the music file is being played while
 6 performing the selected function.

7 '711 Patent at 7:1-23 (emphasis added).

8 Samsung argues that a person of ordinary skill in the art² would understand that an “applet”
 9 is a “small application designed to run within another program.” Samsung’s Opening Br.³ at 13.
 10 Apple argues that an “applet” is “[a]n operating system-independent computer program that runs
 11 within an application module.” Essentially, the parties dispute⁴ whether an “applet” is “operating
 12 system-independent,” and whether an “applet” runs within “an application module” or within
 13 “another program.” See Apple’s Resp. at 3.

14 **1. Claim Language/Specification**

15 As the above exemplar from the claim language shows, the claims themselves do not define
 16 the term “applet.” Thus, the Court turns to the specification for further guidance.

17 The term “applet” appears only once in the specification. That portion states:

18 ² With respect to the '711 Patent, Samsung defines a person of ordinary skill in the art as someone
 19 with “a Bachelor’s Degree in computer science/engineering and several years of experience in
 20 multi-tasking systems and computer programming, or a Master’s Degree with less relevant
 21 experience, or a person with equivalent industry experience.” See ECF No. 650. Apple defines a
 22 person of ordinary skill in the art as having “at least a bachelor’s degree in computer
 23 science/engineering or similar discipline and several years’ relevant industry or academic research
 24 experience in the areas of multitasking systems, embedded systems or programming for handheld
 25 devices. Alternatively, the ordinary artisan would have had a more advanced degree in computer
 26 science/engineering or a similar field with somewhat less additional work or research experience.”
 27 See ECF No. 650. The dispute between the parties appears to center around whether the person of
 28 ordinary skill in the art must have experience with embedded systems or handheld devices. Apple
 has not supported its more narrow definition of a person of ordinary skill in the art with evidence or
 argument as to why more specialized skills are necessary. The Court therefore adopts Samsung’s
 definition of a person of ordinary skill in the art. In any event, it does not appear that the definition
 of a person of ordinary skill in the art necessarily impacts the construction of the disputed term.

³ When referencing the '711 Patent, Samsung’s Opening Claim Construction Brief will be referred
 to as “Samsung’s Opening Br.”; Apple’s Responsive Claim Construction Brief will be referred to
 as “Apple’s Resp.”; and Samsung’s Reply Claim Construction Brief will be referred to as
 “Samsung’s Reply.”

⁴ Additionally, the parties disputed whether an “applet” must also be “small,” as Samsung urged in
 its proposed claim construction. However, Samsung’s expert, Mr. Cole, subsequently
 acknowledged that he did not know what the term “small” means in the context of an applet. See
 Cole Dep. at 57-58. Indeed, the parties agreed at the *Markman* hearing that the additional
 limitation that an applet be “small” was not supported by the evidence.

1 FIG.1 is a block diagram of a portable terminal according to an exemplary embodiment of
 2 the present invention, in which an MP3 music control processor is not included.
 3 Application modules of the portable terminal include at least one **applet** and each of the
 4 application modules, that is each menu of the portable terminal, independently performs
 5 multi-tasking.

6 '711 Patent at 3:8-14 (emphasis added).

7 Thus, both the claim language and specification generally support Apple's construction that
 8 an "applet" runs within "an application module" rather than within "another program" as urged by
 9 Samsung. Both the claim language and the specification recite that an "application module"
 10 includes at least one "applet." In contrast, Samsung has not identified any intrinsic evidence
 11 establishing that an "applet" must run within "another program." Accordingly, the claim language
 12 and specification support Apple's construction that an "applet" runs within "an application
 13 module."

14 **2. Extrinsic Evidence⁵**

15 While extrinsic evidence is often less useful to claim construction than intrinsic evidence,
 16 *Phillips*, 415 F.3d at 1317, the Court is not obligated to consider the sources in any particular order.
 17 *Id.* at 1324. Because the parties' disagreement over the extrinsic evidence is useful in order to
 18 understand their arguments about the prosecution history of the '711 Patent, the Court begins by
 19 considering the extrinsic evidence.

20 The parties rely heavily on extrinsic evidence, particularly the testimony of experts; the
 21 testimony of the inventor of the '711 Patent, Moon-Sang Jeong; and technical dictionary
 22 definitions, to support their arguments regarding "the meaning that the term[s] would have to a
 23 person of ordinary skill in the art in question at the time of the invention," in August 2005. *Id.* at
 24 1312-13. At the heart of their dispute is whether a person of ordinary skill in the art would have
 25 understood the term "applet" as requiring operating system-independence.⁶

25 ⁵ Apple moved to strike from the record certain extrinsic evidence relied upon by Samsung's expert
 26 Mr. Cole. *See* ECF No. 627. For the reasons stated on the record at the January 20, 2012 hearing,
 27 Apple's Motion to Strike is DENIED.

28 ⁶ Dr. Givargis describes an operating system-independent application as: "[t]hat is, in software
 systems where a first application executes within the context of a second 'host' application, the
 first application can be run independent of the platform on which the host application is executing.
 The host application provides the complete execution environment for the first application
 independently of the platform, including the operating system." Givargis Decl. ¶ 20.

1 In support of its broad construction of “applet” as including both operating system
2 dependent and independent applets Samsung offers the declaration of its expert, Joe Tipton Cole.
3 Mr. Cole stated that “the term *applet* is used in conjunction with many different programming
4 languages, and some of those *applets* are operating system dependent.” Cole Decl. ¶ 65. Cole
5 went on to explain that “[a]t best it can be said that Java *applets* can be operating system
6 independent, but there are instances where that is not the case. . . . One skilled in the art would not
7 so limit the term *applet* as to *require* operating system independence.” Cole Decl. ¶ 66.

8 Mr. Cole relies on dictionary definitions, including Wiley’s Electrical and Electronics
9 Engineering Dictionary (2004), to support his conclusion that an “applet” is “a small application
10 designed to run within another program.” Cole Decl. ¶ 43. Moreover, Mr. Cole supports his
11 conclusion with evidence that in 2005, operating system-dependent “applets” were known to
12 persons skilled in the art. For example, Microsoft control panel tools appeared to have been
13 “applets” that were operating system-dependent. Cole Decl. ¶ 51. Similarly, the named inventor,
14 Mr. Jeong,⁷ testified that he was familiar with the operating system-dependent applet because he
15 had previously worked on such applets for the Qualcomm platform. Briggs Decl. Ex. R.

16 In support of its narrow construction of “applet” as an application which is operating
17 system-independent, Apple submitted the expert declaration of Dr. Tony Givargis. Dr. Givargis
18 explained that as of August 2005, a person of ordinary skill in the art would have understood
19 “applet” to be “an operating system-independent program.” Givargis Decl. ¶ 55. Dr. Givargis
20 testified that a person of ordinary skill in the art understood that most applets are Java applets,
21 because they are the most common types of applets. Givargis Dep. at 30-31. Java applets are
22 almost exclusively operating system-independent. *See* Givargis Decl. ¶¶ 43-44; Cole Dep. at 70.
23 Dr. Givargis supports this opinion with a number of publications that define “applet” generally as a
24 program or an application “typically written in Java,” and thus independent of an operating system.

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27 ⁷ The Court recognizes that little weight is given to named inventor testimony. *Bell & Howell*
28 *DMP Co. v. Altek Sys.*, 132 F.3d 701, 706 (Fed. Cir. 1997). However, the inventor testimony does
provide some context for the expert’s opinion that an “applet” can include both operating system-
dependent and independent applications.

1 See Givargis Decl. ¶¶ 42-54. However, Dr. Givargis also admitted that as a general matter, applets
2 may be operating system-dependent or independent. See Givargis Dep. at 29.

3 The extrinsic evidence establishes that in 2005, there was no universally agreed upon
4 definition of the term “applet.” While “applets” could have been either operating system-
5 independent or operating system-dependent, it appears as though both experts agreed that the most
6 common “applet” was a Java applet, which is operating system-independent. Nonetheless, there is
7 no intrinsic evidence that the “applet” in the ’711 Patent was a web-based applet, a Java applet, or
8 otherwise operating system-independent. Nor is it clear that a person of ordinary skill in the art
9 would limit his or her understanding of the term “applet” to *only* operating system-independent
10 applets. Therefore, it is inappropriate to include the limitation of operating system-independence
11 urged by Apple.

12 3. Prosecution History

13 “The court must always consult the prosecution history, when offered in evidence, to
14 determine if the inventor surrendered disputed claim coverage.” *SanDisk Corp. v Memorex Prods.,*
15 *Inc.*, 415 F.3d 1278, 1286 (Fed. Cir. 2005). When a patentee amends the language of the claims in
16 order to overcome a rejection because of prior art, the patentee disclaims what was eliminated from
17 the patent. See *Omega Eng’g, Inc., v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). Thus,
18 “[w]hile there are times that the prosecution history ‘lacks the clarity’ of other intrinsic sources, the
19 prosecution history may be given substantial weight in construing a term where that term was
20 added by amendment.” *Bd. of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp.*, 533 F.3d
21 1362, 1369 (Fed. Cir. 2008) (internal citations omitted). Nevertheless, “[a] disclaimer must be
22 ‘clear and unmistakable,’ and unclear prosecution history cannot be used to limit claims.” *Cordis*
23 *Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009) (citing *Free Motion Fitness,*
24 *Inc. v. Cybex Int’l, Inc.*, 423 F.3d 1343, 1353 (Fed. Cir. 2005)).

25 In its briefing, and at the *Markman* hearing, Apple argued that the prosecution history
26 supports its position that the term “applet,” as it is used in the ’711 Patent, is limited to only
27 operating system-independent applets.
28

1 During the prosecution of the '711 Patent, the U.S. Patent and Trademark Office Examiner
2 (“Examiner”) initially indicated that the claims of the '711 Patent were obvious in light of U.S.
3 Patent No. 7,123,945 (“*Kokubo*”). *Kokubo* disclosed “a task display switching method, a portable
4 apparatus and a portable communications apparatus which, when a plurality of application software
5 are activated and processed in parallel, make it possible to switch a display between each of the
6 application software with ease.” *Kokubo* Abstract. The Examiner rejected Independent Claims 1,
7 9 and 17 because the Examiner believed that “a music background play object” was disclosed by
8 *Kokubo*. Ex. O at 6. In response, the Patentee amended the patent, changing the language of the
9 claims to include the limitation “wherein the music background play object includes an application
10 module including at least one applet” as suggested by the Examiner to overcome the *Kokubo* prior
11 art. *Id.* at 8. The Patentee did not believe that *Kokubo* disclosed a “background play object” as
12 used in the '711, *id.* at 6, but nonetheless adopted the claim language suggested by the Examiner.
13 *Id.* at 7.

14 Apple argues that because the claim language was amended in order to overcome the prior
15 art, and the claim was subsequently allowed, the limitation of operating system-independence can
16 be *implied* based on the Examiner’s claim allowance. Apple’s Resp. at 8-9. In support of its
17 argument, Apple explains that *Kokubo* teaches operating system-dependent application programs.
18 *See Kokubo* 6:52-7:2; 10:54-62. In contrast, an “applet,” as explained above, is often operating
19 system-independent. Apple argues that construing the term “applet” as being operating system-
20 independent gives meaning to the claim amendment incorporated by Samsung. Apple’s Resp. at 9.
21 Conversely, Apple contends that, were the Court to adopt Samsung’s construction of “applet,” the
22 Examiner’s allowance in light of the amended language would be meaningless. *Id.*

23 Apple’s theory, however, requires a construction that strays too far from the text of the
24 prosecution history. Indeed, Apple has failed to identify any reference to operating system-
25 independence or operating system-dependence in *Kokubo*, the communications between Samsung
26 and the Examiner, or any other part of the prosecution history. The Court cannot assume that the
27 Examiner used the term “applet” in its proposed amendment to imply system-independence simply
28 because “applets” were *often* operating system-independent in 2005. *See Cordis Corp.*, 561 F.3d at

1 1329 (“However, the examiner did not say so, and we cannot simply suppose that the claims were
2 allowed based on an assumed identity of numbering systems.”); Givargis Dep. at 29; Givargis
3 Decl. ¶¶ 42-54. Apple’s argument is also inconsistent with Federal Circuit precedent, “which holds
4 that courts may presume the patent examiner gave terms the broadest reasonable interpretation
5 consistent with the specification.” *CNET Networks, Inc. v. Etilize, Inc.*, 547 F. Supp. 2d 1055,
6 1071 (N.D. Cal. 2008) (citing *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1347 (Fed. Cir.
7 2001)). The Examiner did not explicitly require the proposed limitation in granting the claim
8 allowance. It is safe to assume that “if the examiner wanted to hinge patentability upon [operating
9 system-independence], he would have said so.” See *Rexnord*, 274 F.3d at 1347. Thus, the
10 prosecution history falls short of the “clear and unmistakable” disclaimer needed to limit the scope
11 of the claim term. See *Cordis Corp.*, 561 F.3d at 1328-29; cf. *Dealertrack, Inc. v. Huber*, ___ F.3d
12 ___, 2012 WL 164439, at *6 (Fed. Cir. Jan. 20, 2012) (an examiner’s amendment, without an
13 explicit reason for the amendment, is not a sufficient basis for a waiver of claim scope).

14 Moreover, Apple’s argument is not the only reasonable interpretation of the prosecution
15 history. The Examiner rejected the independent claims at issue because the Examiner believed that
16 *Kokubo* disclosed “an icon [which] reads on Applicant’s background music play object.” Ex. O at
17 9. In the Patentee’s response to the Examiner’s rejection, the Patentee explained that it believed
18 that the amended claim language was distinguishable from the *Kokubo* reference:

19 The generating of the icon by *Kokubo* is not a disclosure of generating a music
20 background play object, wherein the music background play object includes an
21 application module including at least one applet. That is, **Kokubo makes no disclosure that the icon includes an application module**, or that the application
module includes at least one applet as [is] instantly claimed.

22 Ex. O at 9-10 (emphasis added). The Patentee believed that the *Kokubo* reference did not disclose
23 an object which includes an application module. Thus, even accepting Apple’s arguments
24 regarding the nature of an “applet,” it is not clear that the claim was allowed based on the term
25 “applet.” Based on the statements made by the Patentee, an alternative interpretation of the
26 prosecution history is that the language “wherein the music background play object includes an
27 application module” was added to overcome the *icon* generated by *Kokubo*. Under that
28 interpretation, the additional limitations were added to distinguish a “music background play

1 object” from an icon. Thus, the term “applet” may not have been, in and of itself, necessary to the
 2 claim allowance. Because the prosecution history is amenable to multiple interpretations, it is not
 3 the type of “clear and unmistakable” disclaimer which can limit the claims. *See Cordis Corp.*, 561
 4 F.3d at 1328-29.

5 Accordingly, the Court construes “applet” to mean “**An application designed to run**
 6 **within an application module.**”

7 **B. “the first window region . . . that appears on top of application programming**
 8 **windows that may be generated”**

9 The disputed term “the first window region . . .” appears in Apple’s ’002 Patent. The ’002
 10 Patent, entitled “Method and Apparatus for Displaying and Accessing Control and Status
 11 Information in a Computer System,” discloses “[a]n interactive computer-controlled display system
 12 having a processor, a data display screen, a cursor control device for interactively positioning a
 13 cursor on the data display screen, and a window generator that generates and displays a window on
 14 a data display screen,” where this window region provides status and control information in one or
 15 more data display areas. ’002 Patent Abstract. While computers were often capable of displaying
 16 multiple windows, these windows could become partially or completely obscured. *See generally*
 17 ’002 Patent col. 1. The ’002 patent teaches an invention which allows a window to provide status
 18 and control information in a manner more consistently visible to a user. *Id.* The application for the
 19 ’002 Patent was filed on March 20, 1997, and the patent was issued on December 10, 2002. It is a
 20 continuation of a prior application filed on September 30, 1994.

Apple’s Proposed Construction	Samsung’s Proposed Construction
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.”

25 The term “the first window region and the plurality of independent display areas
 26 implemented in a window layer that appears on top of application programming windows that may
 27 be generated” appears in independent claims 1, 14, 21, 25, 26, 39, 46, and 50 of the ’002 Patent.
 28 Independent Claim 1, for example, recites:

1 An interactive computer-controlled display system comprising:

2 a processor;

3 a data display screen coupled to the processor;

4 a cursor control device coupled to said processor for positioning a cursor on said
5 data display screen;

6 a window generation and control logic coupled to the processor and data display
7 screen to create an operating environment for a plurality of individual programming
8 modules associated with different application programs that provide status and/or
9 control functions, wherein the window generation and control logic generates and
10 displays a first window region having a plurality of display areas on said data
11 display screen, wherein the first window region is independently displayed and
12 independently active of any application program, and wherein each of the plurality
13 of display areas is associated with one of the plurality of individual programming
14 modules, **the first window region and the plurality of independent display areas
15 implemented in a window layer that appears on top of application
16 programming windows that may be generated;** and

17 an indicia generation logic coupled to the data display screen to execute at least one
18 of the plurality of individual programming modules to generate information for
19 display in one of the plurality of display areas in the first window region, wherein at
20 least one of the plurality of display areas and its associated programming module is
21 sensitive to user input, and further wherein the window generation and control logic
22 and the indicia generation logic use message-based communication to exchange
23 information to coordinate activities of the indicia generation logic to enable
24 interactive display activity.

25 '002 Patent at 22:11-43 (emphasis added).

26 Apple argues that the term should be given its full scope and accuses Samsung of
27 improperly excising “window layer” and importing a negative limitation that requires that the first
28 window “never be obscured” by any portion of any application windows. Apple’s Opening Br.⁸ at
4. Samsung, on the other hand, argues that the claim language requires that the control panel

⁸ When discussing the Apple Patents (the '002 Patent, the '381 Patent, the '607 Patent, the '828 Patent, the '915 Patent, and the '891 Patent), Apple’s Opening Claim Construction Brief will be referred to as “Apple’s Opening Br.”; Samsung’s Responsive Claim Construction Brief will be referred to as “Samsung’s Resp.”; and Apple’s Reply Claim Construction Brief will be referred to as “Apple’s Reply.”

1 always appear on top of any application windows and that Apple explicitly disclaimed its
2 construction of the term in the prosecution history of the '002 Patent.⁹ Samsung's Resp. at 3-5.

3 **1. Claim language**

4 First, Samsung offers no argument as to why "a window layer" should be read out of the
5 claim language. Given that "[c]laims must be interpreted with an eye toward giving effect to all
6 terms in the claim," *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1257
7 (Fed. Cir. 2010) (internal quotation marks omitted), the Court declines to read "a window layer"
8 out of the claim.

9 Second, the claim language supports Apple's argument that the claim term should be given
10 its full scope, without a limitation that the application programming windows never obscure the
11 first window and the plurality of independent display areas. Indeed, the words "never obscured by
12 any portion of any application windows" do not appear in the claims of the '002 Patent.

13 Samsung argues that the claim language states that the "first window" is "implemented in a
14 window layer that appears on top of application programming windows that may be generated."
15 *See* Samsung's Resp. at 2. Thus, Samsung argues, the claim language implicitly requires that the
16 "first window" must appear on top of both presently generated application windows or any
17 application windows that are generated in the future. According to Samsung, if application
18 windows that are generated in the future may appear above the "first window," the term "appears
19 on top of" is effectively read out of the claim language.

20 However, dependent claims 12 and 13, which depend from claim 1, recite:

21 12. The display system defined in claim 1 wherein the first window region always
22 appears in front of¹⁰ application windows.

23 13. The display system defined in claim 1 wherein the first window region is
24 implemented in a private window layer that appears in front of windows for all
25 applications [sic] layers.

26 _____
27 ⁹ The parties essentially agree that for this term, a person of ordinary skill in the art would have a
28 bachelor's degree in computer science (or equivalent industry experience) and at least two years of
experience in the area of computer programming and/or operating systems. *See* ECF No. 650.

¹⁰ The parties have not argued that there is a difference between "on top of" and "in front of." Nor
have they argued that such a difference, if any, is material to the construction of the disputed term.

1 '002 Patent at 23:4-9. Under the claim differentiation doctrine, there is a presumption that
2 dependent claims are narrower than the independent claims from which they depend. *Phillips*, 415
3 F.3d at 1314-15. Dependent claims 12 and 13 require that the first window region *always* appear
4 in front of application windows. Conversely, then, the claim differentiation doctrine supports
5 Apple's construction of the independent claim that the first window region need not *always* appear
6 in front of application windows.

7 2. Specification

8 The specification teaches several embodiments of the invention. In some embodiments, the
9 first window region is visible, and in other embodiments, it is not. For example, in one
10 embodiment:

11 [T]he control strip¹¹ is implemented in a private window layer that appears in front of the
12 windows of all the application layers. That is, the control strip window appears on top of
13 all [the] application programming windows that may be generated as part of the execution
14 of an application program. This prevents other windows from obscuring it.

15 '002 Patent at 6:41-46. In contrast, another embodiment discloses that the user may hide the first
16 window region:

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

20 '002 Patent at 7:29-32.

21 The specification discloses an invention that allows the first window region, otherwise
22 known as the "control strip," to either never be obscured by application windows or to be hidden
23 by the user. To the extent that Samsung's proposed construction, in which the first window region
24 is "never obscured," is interpreted to preclude a first window region that can be hidden by the user,
25 such an interpretation reads out one of the embodiments of the claimed invention.

26 At the *Markman* hearing, urging its own construction of the disputed term, Samsung argued
27 that it is not uncommon for a claim construction to read out an embodiment disclosed in the
28 specification. However, as a general rule, "there is a strong presumption against a claim
construction that excludes a disclosed embodiment." *See In re Katz Interactive Call Processing*

¹¹ The parties agree that the "first window region" refers to a control strip as shown in figures 2A and 2B of the '002 Patent. *See* Apple's Opening at 2-3; Samsung's Resp. at 2.

1 *Patent Litig.*, 639 F.3d 1303, 1324 (Fed. Cir. 2011). Nonetheless, several exceptions to this
2 presumption apply. For example, a claim may be interpreted to exclude embodiments “where
3 those embodiments are clearly disclaimed in the specification . . . or prosecution history.” *Oatey*
4 *Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008). Similarly, where the disputed term is not
5 present in the other independent claims of the patent-in-suit, it is permissible to construe the term
6 so as to exclude an embodiment. This is because the other claim terms “leave[] open the
7 possibility that claims not at issue in [the claim construction] encompass omitted embodiments.”
8 *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008). Otherwise,
9 “where claims can reasonably to [sic] interpreted to include a specific embodiment, it is incorrect
10 to construe the claims to exclude that embodiment, absent probative evidence on [sic] the
11 contrary.” *Oatey Co.*, 514 F.3d at 1277.

12 In this case, Apple’s construction of the disputed claim term is not plainly inconsistent with
13 the disclosed embodiment that allows the control strip to be hidden by the user. It is not
14 unreasonable that “the first window region . . . that appears on top of application programming
15 windows that may be generated” may also be hidden from the user’s view. Moreover, the disputed
16 term “the first window region and the plurality of independent display areas implemented in a
17 window layer that appears on top of application programming windows that may be generated”
18 appears in each of the independent claims. Because the disputed claim term appears in all of the
19 independent claims, the embodiment Samsung seeks to read out of the specification cannot be
20 covered by another independent claim. Given that the claim language can reasonably be
21 interpreted to include the disclosed embodiment that allows the user to hide the control strip, the
22 Court turns to the prosecution history to determine if the prosecution history supports Samsung’s
23 argument.

24 3. Prosecution History

25 The prosecution history of a patent is instructive because it can establish “whether the
26 inventor limited the invention in the course of prosecution, making the claim scope narrower than it
27 otherwise would be.” *Phillips*, 415 F.3d at 1317 (internal citations omitted). Federal Circuit
28 precedent requires that the alleged disavowing actions or statements made during prosecution be

1 both “clear and unmistakable.” *Omega Eng’g, Inc.*, 334 F.3d at 1326. Samsung argues that in
2 distinguishing prior art, the Patentee narrowed the scope of the disputed term to require that the
3 first window region is *never* obscured by any portion of any application windows. *See* Briggs
4 Decl. Ex. C at APLNDC00028083.

5 Samsung points to the Patentee’s Response to Final Office Action, in which the Patentee
6 distinguished the *Hansen* patent, a prior art reference with a “dashboard interface” that could be
7 obscured by application windows. *See* U.S. Patent No. 5,659,693 (“*Hansen*”), FIG. 18, Briggs
8 Decl. Ex. D. *Hansen* “only allow[ed] the user an unobstructed view of the system if a button is
9 selected.” *See* Apple’s Resp. to Final Office Action, Briggs Decl. Ex. C at APLNDC00028084;
10 *see also Hansen* 4:45-51 (“Currently, box 97 shows that the dashboard interface will toggle
11 between going to the front of all other windows on the display and going to the back of all other
12 windows on the display. Another possibility that may be selected is that the dashboard interface
13 will always go to the front of all other windows on the display when the short cut key is selected or
14 when the mouse shortcut is performed.”). In distinguishing *Hansen*, the Patentee argued that:

15 [T]he present invention as claimed includes having a window region with its
16 independent display areas in a window that appears on top of application window
17 programs that may be generated. Therefore, by implication, those window areas
18 that are generated after the generation of the window layer will still not appear on
19 top of the control/status window in the present invention as claimed when they are
20 active. This allows the user to have an unobstructed view of the system/controller
21 area regardless of the window that’s selected as being active (even when the
22 windows overlap each other). Thus, the **window may be always visible to the
23 user**. The Examiner believes that this is clearly shown in *Hansen*, specifically
24 referring to the dashboard interface. However, *Hansen* only allows the user an
25 unobstructed view of the system if a button is selected (col. 4, lines 45-51). Thus,
26 Applicant believes that one familiar with the art would not look to *Hansen* to
27 arrive at the present invention because the present invention is directed at using
28 individual programming modules that generate displays that are always visible on
a top layer.

Patentee’s Response to Final Office Action, Briggs Decl. Ex. C at APLNDC00028083-84.

24 The Patentee took the position that either the *Hansen* dashboard feature was either obscured
25 by application windows that were subsequently opened, or the user could select a button to
26 maintain an unobstructed view of the dashboard feature. *See also* Ahn Decl. Ex. R at
27 APLNDC00028976 (“However, *Hansen* only allows the user an unobstructed view of the system if
28 a button is selected.”). In other words, the dashboard function in *Hansen* was either sometimes

1 obstructed by application windows, or it was never obstructed by application windows. In
 2 comparison, the Patentee argued that the claimed invention in the '002 Patent allowed the view of
 3 the first window region to be unobstructed by subsequently opened application windows.
 4 However, the Patentee appears to have left open the possibility that the user could completely
 5 obscure or hide the first window region when it argued that the “window *may be* always visible to
 6 the user.” Taken as a whole, in light of this ambiguity, it does not appear that the Patentee clearly
 7 disavowed the scope of the claim coverage asserted by Samsung.¹² *York Prods., Inc. v. Central*
 8 *Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1575 (Fed. Cir. 1996).

9 The claim language and specification favor Apple’s view that “the first window region . . .
 10 that appears on top of application programming windows that may be generated” need not be
 11 limited in the manner proposed by Samsung. Moreover, there was no clear and unmistakable
 12 disavowal of claim coverage such that the first window region of the patented invention must
 13 always appear on top of application windows and may never be hidden from view. Accordingly,
 14 the Court construes the term “the first window region . . . that appears on top of application
 15 programming windows that may be generated” to have its plain and ordinary meaning and **does**
 16 **not limit the term** to mean “the first window region and the plurality of independent display areas
 17 are never obscured,” as is urged by Samsung.

18 C. “edge of [an or the] electronic document”

19 The disputed term “edge of [an or the] electronic document” appears in Apple’s ’381
 20 Patent. The ’381 Patent, entitled “List Scrolling And Document Translation, Scaling, And
 21 Rotation On A Touch-Screen Display,” discloses a method for displaying when a user has gone
 22 beyond the edge of an electronic document. ’381 Patent Abstract. The application for the ’381
 23 Patent was filed on December 14, 2007, and the patent issued on December 23, 2008.

24 Users of portable electronic devices frequently need to view electronic documents at a
 25 magnification such that the entire document cannot be displayed. Thus, in order to view off-screen

26
 27 ¹² Samsung also argues that the claim differentiation doctrine is overridden by the prosecution
 28 history disclaimer. Samsung’s Resp. at 5. Because the Court finds that Apple’s position during the
 prosecution history did not clearly and unmistakably preclude the user from hiding the control
 strip, this additional argument is unpersuasive.

1 portions of the electronic document, a user needs a way to scroll the display window. However,
 2 conventional user interfaces were awkward because the display did not necessarily reflect the
 3 user's intent. '381 Patent col 2. The '381 Patent reduces user interface limitations by "provid[ing]
 4 for easy and intuitive scrolling of lists and translating of electronic documents on a device with a
 5 touch screen display." '381 Patent at 8:26-28. The claims at issue concern a method for responding
 6 to a user's scroll beyond the edge of an electronic document.

Apple's Proposed Construction	Samsung's Proposed Construction
No construction necessary.	"A boundary of the electronic document"

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 8
 9
 10 The term "edge of the electronic document" or "edge of the document" appears in Claims 1,
 11 11, 13, 14, and 16-20 of the '381 Patent. For example, Claim 1 recites:

12 A computer-implemented method, comprising:
 13 At [sic] a device with a touch screen display:

14 displaying a first portion of an electronic document;

15 detecting a movement of an object on or near the touch screen display;
 16 in response to detecting the movement, translating the electronic document displayed on the
 17 touch screen display in a first direction to display a second portion of the electronic
 18 document, wherein the second portion is different from the first portion;

19 in response to an **edge of the electronic document** being reached while translating the
 20 electronic document in the first direction while the object is still detected on or near the
 21 touch screen display:

22 displaying an area beyond the **edge of the document**, and
 23 displaying a third portion of the electronic document wherein the third portion is
 24 smaller than the first portion; and

25 in response to detecting that the object is no longer on or near the touch screen
 26 display, translating the electronic document in a second direction until the area
 27 beyond the **edge of the electronic document** is no longer displayed to display a
 28 fourth portion of the electronic document, wherein the fourth portion is different
 from the first portion.

'381 Patent at 35:33-58 (emphasis added).

Apple argues that "edge of an electronic document" is a plain, non-technical term that
 should be given its ordinary meaning, and that this ordinary meaning precludes the possibility of
 "internal" edges. For example, Apple argues that when images are embedded within a webpage,

1 the webpage is the electronic document. In that context, the images within the webpage cannot
2 also be electronic documents.

3 In contrast, Samsung urges the Court to construe the term as “boundary of an electronic
4 document.” Samsung originally argued that the edge of an electronic document was “[a] boundary
5 of the electronic document that distinguishes it from another electronic document, other content, or
6 a background area.” Samsung’s Resp. at 5. However, at the *Markman* hearing, Samsung agreed to
7 change its proposed definition to “boundary of the electronic document” in light of dependent
8 claim 14. *Markman Hr’g Tr.* at 88, 94. Dependent claim 14 discloses the “method of claim 1,
9 wherein the area beyond the edge of the document is visually distinct from the document.” ’381
10 Patent 36:25-27. Thus, the dispute centers around whether “edge of an electronic document” can
11 refer to edges that are within an electronic document or whether “edge of an electronic document”
12 refers only to an external boundary.¹³

13 At the *Markman* hearing, Apple suggested that the dispute over the scope of the claim term
14 at issue should be resolved by a jury. It is clear from the briefing and the discussion at the hearing
15 that there is a fundamental dispute over the scope of the claim term. The Court is bound by Federal
16 Circuit precedent to resolve the dispute because the issue is one of claim construction. *See O2*
17 *Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361-62 (Fed. Cir. 2008).
18 Called on to resolve the dispute between the parties, the Court agrees with Samsung that an
19 electronic document can be embedded in another electronic document, and therefore that “edge of
20 an electronic document” is not limited to “external” edges.

21 1. Claim Language

22
23
24 ¹³ The parties do not agree on precisely who the person of ordinary skill in the art would be with
25 respect to the ’381 Patent. Apple believes a person of ordinary skill would have “a Bachelor’s
26 degree in computer science or electrical engineering or an equivalent, and one or more years
27 experience working on designing and/or implementing user interfaces” while Samsung believes
28 such a person would have “a Bachelor’s Degree in computer science, and 3-5 years of software
design and implementation experience, including experience with graphical user interface design,
or would have equivalent educational and work experience.” The parties agree that their arguments
do not turn on the definition of a person of ordinary skill in the art, and the Court agrees that the
differences between the two definitions (the number of years of work experience and whether an
electrical engineering degree would be comparable) do not materially affect the construction of this
term. *Markman Hr’g Tr.* at 24-25.

1 As an initial matter, Samsung’s replacement of the term “edge” with the term “boundary”
2 does not clarify the term in a way that justifies deviation from the plain language of the claims.
3 Accordingly, the Court declines to adopt Samsung’s proposed change.

4 Samsung argues that the doctrine of claim differentiation and the express language of the
5 claims support its proposed construction. The Court does not agree that the doctrine of claim
6 differentiation helps Samsung, but agrees that Apple’s proposed construction is in tension with the
7 express language of the claims.

8 *Claim Differentiation.* Dependent claim 13 states “[the] computer-implemented method of
9 claim 1, wherein the area beyond the edge of the document is black, gray, a solid color, or white.”
10 ’381 Patent at 36:23-25. Samsung argues that under the doctrine of claim differentiation,
11 independent claim 1 must encompass more than dependent claim 13, suggesting that additional
12 content, such as a webpage, can appear beyond the edge of the electronic document. Samsung’s
13 Resp. at 6 (citing *Phillips*, 415 F.3d at 1303). Although independent claim 1 is broader than
14 dependent claim 13, it is not clear that claim 1 is broader in the way that Samsung proposes. For
15 example, the area beyond the edge of the electronic document could be something other than black,
16 gray, a solid color, or white, such as stripes, or dots, or some other pattern. It does not necessarily
17 follow that claim 1 encompasses content beyond the edge of the document such as “another
18 electronic document, other content, or a background area,” as proposed by Samsung. *See Netcraft*
19 *Corp. v. eBay, Inc.*, 549 F.3d 1394, 1399-1400 (Fed. Cir. 2008) (rejecting plaintiff’s claim
20 differentiation arguments because another difference between the dependent and independent claim
21 already distinguished the two).

22 *Express Claim Language.* Under the express language of the claims, webpages and digital
23 images are examples of electronic documents. *See* ’381 Patent at 36:4-7 (claims 6 and 7). Noting
24 that a webpage can contain multiple embedded digital images, Samsung argues that an electronic
25 document can include other embedded electronic documents. Samsung’s Resp. at 7. Thus,
26 according to Samsung’s reasoning, an edge of an electronic document can be internal. At the
27 hearing, Apple disagreed that a digital image within a webpage would be an “electronic
28 document.” However, Apple has not offered a limiting principle, rooted in the intrinsic evidence,

1 to establish why an electronic document may not be nested in another electronic document and
2 why an “edge of an electronic document” therefore may not be internal to the document in light of
3 Samsung’s example. Thus, the claim language supports Samsung’s position. With this
4 understanding, the Court looks to other evidence for guidance.

5 **2. Specification**

6 Apple argues that the specification demonstrates that an electronic document may not be
7 embedded inside another electronic document, and thus an “edge” may not be internal to an
8 electronic document. In support of its argument, Apple points to the embodiments described in
9 Figures 7 and 8C. Apple’s Opening Br. at 7-8; Apple’s Reply at 3. The flowchart in Figure 7
10 describes displaying a gray, black, or solid white area beyond the edge of the document if the edge
11 of the electronic document is reached, and otherwise taking no action. Similarly, Figure 8C depicts
12 “Blocks” embedded within a webpage. When the user scrolls past the edge of the webpage (an
13 electronic document), Figure 8C shows the device displaying a black color beyond the edge of the
14 webpage. Figure 8C does not display a black area beyond the edge of the Blocks when the user
15 scrolls past the edge of the Blocks. Thus, Apple argues, the specification only teaches “an edge of
16 an electronic document” as being an “external” edge, not an internal edge. *See id.*

17 Apple’s reliance on the embodiments described in Figures 7 and 8C to limit the scope of the
18 claim is contrary to Federal Circuit precedent. The Federal Circuit has warned against limiting a
19 claim to an embodiment disclosed in the specification. *Falana v. Kent State Univ.*, ___ F.3d ___,
20 Case No. 11-1198, 2012 WL 171550, at *4 (Fed. Cir. Jan. 23, 2012); *Phillips*, 415 F.3d at 1323.

21 In Figure 8C the electronic document to which the snap back function is applied is the
22 webpage as a whole. Accordingly, the flowchart in Figure 7 teaches a response to reaching the
23 edge of the electronic document in this particular embodiment. Similarly, the specification is silent
24 as to whether any Block in Figure 8C could also be an electronic document. Thus, while none of
25 the Blocks in Figure 8C is an electronic document on which the snap back function is applied in
26 this specific embodiment, nothing in the specification precludes any Block from being an
27 electronic document in another embodiment. *Phillips*, 415 F.3d at 1323 (noting that “persons of
28 ordinary skill in the art rarely would confine their definitions of terms to the exact representations

1 depicted in the embodiments”). Indeed, at the *Markman* hearing, Apple accepted the notion that a
2 display window could contain two adjacent electronic documents for purposes of the ’381 Patent
3 when each document scrolled independently from the other. *Markman Hr’g Tr.* at 99-101.
4 Apple’s position with respect to the two adjacent electronic documents is inconsistent with its
5 position that the scope of “electronic document” is strictly limited to the embodiments disclosed in
6 Figure 8C.

7 Further, as Samsung also noted, nothing in the specification establishes the “external edge”
8 versus “internal edge” distinction argued by Apple. *Samsung’s Resp.* 7. Finding no such
9 distinction in the specification, the Court looks to other evidence.

10 **3. Prosecution History**

11 Neither party relies on evidence from the prosecution history for the interpretation of this
12 term. As such, the Court turns to the extrinsic evidence.

13 **4. Extrinsic Evidence**

14 While often less useful than intrinsic evidence, extrinsic evidence can be helpful in claim
15 construction. *Phillips*, 415 F.3d at 1317. Both Apple and Samsung point to the opposing experts’
16 depositions as support for their proposed constructions of “edge of an electronic document.”
17 Samsung argues that Apple’s expert, Dr. Balakrishnan, recognized that the edge of an electronic
18 document could include edges internal to the screen.¹⁴ Apple argues that Samsung’s expert, Dr.
19 Van Dam, recognized that an edge of an electronic document indicates a boundary separating the
20 electronic document from an area “further than [the electronic document] should go,” and that past
21 the edge “there is no new information to come into view.” *Apple’s Reply* at 4; *Van Dam Dep.* at
22 30.

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24
25
26 ¹⁴ Apple contends that Dr. Balakrishnan was only following the instructions of Samsung’s counsel
27 and not agreeing with Samsung’s construction. *Apple’s Reply* at 5. Regardless of whether the
28 drawings made at pp. 157-58 of the deposition transcript indicate agreement with Samsung’s
position, other passages clearly indicate that Dr. Balakrishnan believed that an electronic document
could have edges internal to the screen, and that the primary consideration was what the relevant
program considered to be an electronic document. *Balakrishnan Dep.* at 154.

1 Ultimately, the Court is not persuaded by Dr. Van Dam’s construction of “edge of [an or
2 the] electronic document.” For one, expert opinions are less reliable than intrinsic evidence, and
3 the Court gives the testimony little weight. *See Phillips*, 415 F.3d at 1318.

4 Moreover, Dr. Van Dam has not explained why a webpage beyond the edge of an
5 embedded digital image is “new information,” such that the snap back feature does not apply,
6 while a wallpaper image beyond the edge of a digital image is not “new information,” such that the
7 snap back feature does apply. *See* ’381 Patent at 27:36-39 (specification expressly discloses
8 embodiments that display a “wallpaper image such as a picture or pattern” beyond the edge of the
9 electronic document). Nor has Dr. Van Dam explained why this distinction would be apparent to a
10 person skilled in the art.

11 Apple has not justified adopting a construction that would limit the claims to one
12 embodiment in the specification. Alternatively, Samsung’s construction is in harmony with the
13 claim language and the specification. Accordingly, the Court construes “edge of [an or the]
14 electronic document” to have its plain and ordinary meaning. Thus, the Court **does not limit the**
15 **term** “edge of [an or the] electronic document” to mean only an external edge as is urged by
16 Apple. An “edge” of an electronic document may be internal.

17 **D. “glass member”**

18 The disputed term “glass member” appears in Apple’s ’607 Patent. The ’607 Patent,
19 entitled “Multipoint Touchscreen,” discloses a “touch panel having a transparent capacitive sensing
20 medium configured to detect multiple touches or near touches that occur at the same time and at
21 distinct locations in the plane of the touch panel.” ’607 Patent, Abstract. The application for the
22 ’607 Patent was filed on May 6, 2004, and the patent issued on February 16, 2010.

Apple’s Proposed Construction	Samsung’s Proposed Construction
“glass or plastic material”	Plain and ordinary meaning.

26 The term “glass member” appears in Claims 4, 5, and 10 of the ’607 Patent. Of these, the
27 only asserted claim is Claim 10, which recites:

1 10. A display arrangement comprising:

2 a display having a screen for displaying a graphical user interface; and

3 a transparent touch panel allowing the screen to be viewed therethrough and capable of
4 recognizing multiple touch events that occur at different locations on the touch panel at a
same time and to output this information to a host device to form a pixilated image;

5 wherein the touch panel includes a multipoint sensing arrangement configured to
6 simultaneously detect and monitor the touch events and a change in capacitive coupling
associated with those touch events at distinct points across the touch panel; and

7 wherein the touch panel comprises:

8 a first **glass member** disposed over the screen of the display;

9 a first transparent conductive layer disposed over the first **glass member**, the first
10 transparent conductive layer comprising a plurality of spaced apart parallel lines
having the same pitch and linewidths;

11 a second **glass member** disposed over the first transparent conductive layer;

12 a second transparent conductive layer disposed over the second **glass member**, the
13 second transparent conductive layer comprising a plurality of spaced apart parallel
14 lines having the same pitch and linewidths, the parallel lines of the second
transparent conductive layer being substantially perpendicular to the parallel lines of
the first transparent conductive layer;

15 a third **glass member** disposed over the second transparent conductive layer; and

16 one or more sensor integrated circuits operatively coupled to the lines.

17 '607 Patent at 22:23-55 (emphasis added).

18 Samsung argues that the plain and ordinary meaning of the term “glass member” is clear.

19 Samsung’s Resp. at 8. Apple, in contrast, argues that it acted as its own lexicographer and defined

20 the term “glass member” to mean any suitable “glass or plastic material.” Apple’s Opening Br. at

21 9. The Federal Circuit “generally assigns claim terms their ordinary and customary meaning,” and

22 for the reasons explained below, the Court finds that Apple has not met its burden to overcome the

23 ordinary meaning of “glass member.”¹⁵ *Agilent Techs., Inc. v. Affymetrix, Inc.*, 567 F.3d 1366,

24 1376 (Fed. Cir. 2009).

25 1. Claim Language

27
28 ¹⁵ The parties essentially agree that for this term, a person of ordinary skill in the art would have a
bachelor’s degree in electrical engineering, physics, computer engineering, or a related field and at
least two years of experience working with input devices. *See* ECF No. 650.

1 The ordinary meaning of the term “glass member” limits such members to those made of
2 glass. *See Phillips*, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as
3 understood by a person of skill in the art may be readily apparent even to lay judges . . .”). The
4 claim language itself does not suggest that the term “glass member” also refers to plastic members.
5 Apple argues that the common usage of the term “glass” includes objects that can be made of
6 plastic. Apple’s Opening Br. at 9-10. For example, eye glasses and wine glasses can commonly be
7 made of either glass or plastic.

8 The Court, however, finds this reasoning unpersuasive. First, there is no indication in the
9 claim language itself that Apple intended to use the term “glass” as a modifier in this way. Second,
10 as Samsung notes, Apple’s examples of the term “glass” used to describe plastic objects each use
11 “glass” as a noun. In contrast, the claim language here uses “glass” as an adjective modifying the
12 noun “member.” Samsung’s Resp. at n.7; Apple’s Opening Br. at 9.

13 “Although the term . . . is a commonly understood word, [the Court must] still look to the
14 intrinsic evidence for the proper construction.” *Boss Indus., Inc. v. Yamaha Motor Corp. U.S.A.,*
15 *Inc.*, 333 Fed. App’x 531, 541 (Fed. Cir. 2009) (unpublished). Thus, the Court must turn to the
16 specification to determine whether Apple provided an alternative definition that alters the plain
17 meaning of the claim language.

18 **2. Specification**

19 Apple argues that it acted as its own lexicographer and “disclosed in the specification that
20 the ‘glass member’ could be made of any suitable ‘glass or plastic material.’” Apple’s Opening Br.
21 at 9. An inventor is permitted to act as his own lexicographer and to assign a unique meaning to a
22 claim term used to describe his own invention. The inventor, however, must do so “with
23 reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir.
24 1994); *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1383 (Fed. Cir. 2011)
25 (citing *Abbott Labs. v. Syntron Bioresearch Inc.*, 334 F.3d 1343, 1354 (Fed. Cir. 2003));
26 *Helmsderfer*, 527 F.3d at 1381 (concluding that in order to act as his own lexicographer, the
27 patentee’s intent to do so must be clear). The Court finds that Apple’s disclosure within the ’915
28

1 Patent's specification does not make adequately clear that Apple intended to redefine the term
2 "glass" for purposes of the invention.

3 Apple relies on an excerpt from its description of Figure 10 in the specification:

4 "Furthermore, each of the layers may be formed with various materials. By way of example, each
5 particular type of layer may be formed from the same or different material. For example, any
6 suitable glass or plastic material may be used for the glass members." '607 Patent at 16:43-47.

7 Apple is correct that this statement provides a precise description of what a glass member may be.
8 Nonetheless, Apple's attempt to redefine the term "glass member" lacks the other requirements of
9 clarity and deliberateness necessary to establish that Apple was acting as its own lexicographer in
10 defining the term "glass member" in the claim language.

11 First, the language Apple identifies falls within a description specifically labeled as just
12 "one embodiment of the present invention."¹⁶ '607 Patent at 15:25-26. The language chosen by
13 the patentee of the '607 Patent does not carry the hallmarks of definition, such as quotations or the
14 verb "is." See *Sinorgchem Co., Shandong v. Int'l Trade Comm'n*, 511 F.3d 1132, 1136 (Fed. Cir.
15 2007); cf. *TransWeb, LLC v. 3M Innovative Properties, Co.*, No. 10-cv-4412, 2011 WL 5825782
16 (D.N.J. Nov. 16, 2011) (finding that a patentee acted as his own lexicographer when he used the
17 term "i.e." to define a term). Indeed, the language chosen "*for example*" and "*may be used*" do not
18 strongly suggest that the patentee was redefining the term.

19 Second, in a description of another embodiment of the invention, the specification clearly
20 states that: "In either case, the glass member is a relatively thick piece of clear glass." '607 Patent
21 at 12:38-39. Although it does not appear that either phrase is definitional, the phrase "the glass
22 member is a relatively thick piece of glass" is closer to meeting the Federal Circuit's lexicography
23 test. In any event, even taking Apple's assertion as true, the patent has put forth two definitions
24 within the same patent. Accordingly, Apple did not, with reasonable clarity, deliberateness, and
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26 ¹⁶ Although the heading of the section in the patent in which the language was found is "Detailed
27 Description of the Invention," the Patent makes clear after the heading that the discussion that
28 follows refers to embodiments of the invention. '607 Patent at 4:10-14 ("Embodiments of the
invention are discussed below with reference to FIGS. 2-19. However, those skilled in the art will
readily appreciate that the detailed description given herein with respect to these figures is for
explanatory purposes as the invention extends beyond those limited embodiments.").

1 precision redefine “glass member.” *Cf. Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322,
2 1329 (Fed. Cir. 2009) (adopting a definition that is different from the ordinary meaning when the
3 specification uses the disputed term consistently).

4 As explained above with respect to the ’002 Patent, the Federal Circuit has warned against
5 reading an embodiment disclosed in the specification out of the scope of a claim. However, in this
6 case it would be inappropriate to adopt the broader construction of “glass member” because doing
7 so expands upon the limits of a claim term that otherwise has an unambiguous ordinary meaning.
8 *See Rolls-Royce, PLC v. United Techs., Corp.*, 603 F.3d 1325, 1334-35 (Fed. Cir. 2010)
9 (construing a claim that reads out an embodiment where there were two embodiments in the
10 specification and a claim construction that embraced both alternative embodiments was
11 “unreasonable” in light of the unambiguous claim term). While the specification is useful to
12 understand the claims, it is the claims, and not the specification, that map the metes and bounds of
13 the claimed invention.¹⁷ *See, e.g., Kara Tech. Inc. v. Stamps.com, Inc.*, 582 F.3d 1341, 1347-48
14 (Fed. Cir. 2009); *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir.
15 2008) (the mere fact that a construction excludes an alternative embodiment “does not outweigh
16 the language of the claim, especially when the court’s construction is supported by the intrinsic
17 evidence”).

18 Finally, to find that a reference referring to one embodiment is sufficient to inflate the
19 meaning of “glass member” beyond its plain and ordinary meaning would undermine the public
20 notice function of patents. *Cf. Halliburton Energy Sers., Inc. v. M-I LLC*, 514 F.3d 1244, 1253-54
21 (Fed. Cir. 2008) (“We note that where a claim is ambiguous as to its scope we have adopted a
22 narrowing construction when doing so would still serve the notice function of the claims. . . . [A
23 contrary] construction would undermine the notice function of the claims because it would allow
24 [the patentee] to benefit from the ambiguity, rather than requiring [the patentee] to give proper
25 notice of the scope of the claims to competitors.”). If the Patentee had wanted to expand the scope
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28 ¹⁷ Moreover, it is worth noting that “glass member” is not present in the other independent claim
of the patent-in-suit. In similar situations, the Federal Circuit has found it permissible to construe
disputed terms so as to exclude a disclosed embodiment. *Helmsderfer*, 527 F.3d at 1383.

1 of its claims, it could have done so through clearer drafting, *see Hogan AB v. Dresser Indus.,*
 2 *Inc.*, 9 F.3d 948, 951 (Fed. Cir. 1993), or clearer lexicography in the specification.

3. Prosecution History/Extrinsic Evidence

4 Neither party relies heavily on evidence from the prosecution history or extrinsic evidence
 5 for the interpretation of this term.¹⁸ Because a court generally gives a term its plain and ordinary
 6 meaning, *see Agilent Techs.*, 567 F.3d at 1376, and the specification does not evidence a clear
 7 intent to act as a lexicographer, *see In re Paulsen*, 30 F.3d at 1480, the Court gives “glass member”
 8 its plain and ordinary meaning: **“a member made of glass.”**

E. **“mathematically fitting an ellipse to at least one of the pixel groups” . . . “mathematically fit an ellipse to at least one of the one or more pixel groups”**

9 The disputed terms “mathematically fitting an ellipse . . .” and “pixel/pixel groups” (*see*
 10 Section F, below) are found in Apple’s ’828 Patent. The ’828 Patent, entitled “Ellipse Fitting for
 11 Multi-touch Surfaces,” discloses an apparatus and methods “for simultaneously tracking multiple
 12 finger and palm contacts as hands approach, touch, and slide across a proximity-sensing, multi-
 13 touch surface.” ’828 Patent, Abstract. The invention allows for the integration of various methods
 14 of manually inputting data and commands into a touchscreen device, including “typing, resting,
 15 pointing, scrolling, 3D manipulation, and handwriting.” *Id.* “To take maximum advantage of
 16 multi-touch surface sensing, complex proximity image processing is necessary to track and identify
 17 the parts of the hand contacting the surface at any one time.” *Id.* at 6:22-25. The ’828 Patent’s
 18 specification teaches that a proximity image is obtained from an “array of parallelogram-shaped
 19 electrodes.” *Id.* at 18:3-4. The proximity image “provide[s] [a] clear indication[] of where the
 20 body contacts the surface.” *Id.* at 6:25-27. The invention’s method of processing proximity
 21 images improved upon the prior art methods, which were unable “to group exactly those electrodes
 22 which are covered by each distinguishable hand contact.” *See id.* at 6:19-20. The application for
 23 the ’828 Patent was filed February 22, 2007, and the patent issued October 12, 2010. It is a
 24 continuation of a series of patents, whose applications date back to January 25, 1999.
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27 ¹⁸ In its Response, Samsung references briefly two inventor depositions. Samsung’s Response at 9
 28 n.7. Apple objects to these references in its reply. Apple’s Reply at 5 n.2. The Court need not
 consider Apple’s objection because the Court gives little to no weight to inventor testimony. *Bell
 & Howell DMP Co.*, 132 F.3d at 706.

Apple's Proposed Construction	Samsung's Proposed Construction
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 terms "mathematically fitting an ellipse to at least one of the pixel groups" and "mathematically fit an ellipse to at least one of the one or more pixel groups" appear in Claims 1, and 10, respectively. The use of the term in Claim 1 is representative:

1. 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 at 9:5-15 (emphasis added).

Apple argues that the term requires no construction, as the ordinary meaning of the words adequately expresses what is covered by the claims. Apple states that the ordinary meaning of "mathematically fitting an ellipse" is "using calculations to determine the parameters of an ellipse that fits data." Apple's Opening Br. 13.

Samsung, on the other hand, proposes a construction that, as Apple notes, uses all of the words in the term with the exception of "mathematically." The question for the Court, therefore, is whether "mathematically" in the context of this claim term means "using [any] calculations to determine the parameters of an ellipse," or whether these calculations must include "applying a unitary transformation." Apple argues that Samsung's proposed construction improperly limits the scope of the term to one embodiment of the '828 Patent, which uses a set of equations, including some equations for applying a "unitary transformation." See '828 Patent at col. 26. Samsung argues that specification and prosecution history disclaimers properly limit the scope of the term to this embodiment.¹⁹ The Court agrees with Apple.

¹⁹ The parties are close to agreeing upon the definition of a person of ordinary skill in the art with respect to the '828 Patent. Essentially, the parties agree that such a person would have a Bachelor's degree in computer science, electrical engineering, or mathematics and several years of experience in the area of signal processing, human-computer interaction, or the design, use, or evaluation of touch-sensitive input devices. Apple's proposal also includes a degree in physics as being an equivalent degree. See ECF No. 650. In any event, the parties agree that their arguments do not turn on the definition of a person of ordinary skill in the art, and the Court agrees that the

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28**1. Claim Language**

Language from the '828 Patent's other claims suggests that "mathematically fitting an ellipse," defines certain parameters of an ellipse, including "position, shape, size, orientation, eccentricity, major radius, [and] minor radius." '828 Patent at 60:19-22. However, both parties recognize that there are several methods of mathematically fitting an ellipse to data. *See* Apple's Opening Br. at 13; Samsung's Resp. at 11. The claim language is unclear as to whether, in the context of the '828 Patent, a particular method must be used to determine the ellipse parameters for a given pixel group. The Court therefore turns to the specification for further guidance.

2. Specification

The term "mathematically fitting an ellipse" does not appear in the specification. Nevertheless, each party supports its arguments by citing to language in a section of the specification entitled "Description of the Preferred Embodiments." '828 Patent at 12:58-59. In this section, at column 26 of the '828 Patent, the specification lists several equations for mathematically fitting an ellipse. The parties agree that equations 12 through 14 are used to compute the size and the centroid parameters of the ellipse. *Id.* at 26:1-12. Equations 15-18 calculate a unitary transformation of the group covariance matrix of second moments. *Id.* at 26:24-33. Equations 19-21 use the eigen values of the covariance matrix to compute the major and minor axes and orientation parameters of the ellipse. *Id.* at 26:40-44. Equation 22 calculates the eccentricity parameter of the ellipse. *Id.* at 54. At column 27, the specification states that "if proximity images have low resolution, the orientation and eccentricity of small contacts are set to default values rather than their measured values, and total group proximity G_z is used as the primary measure of contact size instead of major and minor axis lengths." *Id.* at 27:1-8.

Samsung argues that the specification teaches only one preferred embodiment of mathematically fitting an ellipse and that a specification disclaimer properly limits the scope of this disputed claim term to the preferred embodiment. Samsung's Resp. at 12. Alternatively, Samsung argues that the '828 Patent's inventor acted as his own lexicographer and gave "mathematically

difference between the two definitions (whether a physics degree is an equivalent degree) does not materially affect the construction of this term. Markman Hr'g Tr. at 24-25.

1 fitting an ellipse” a special, more limited definition. Samsung cites a sentence in the specification,
2 which states, “The ellipse fitting procedure requires a unitary transformation of the group
3 covariance matrix G_{cov} of second moments Q_{xx} [sic], Q_{xy} [sic], G_{yy} .” ’828 Patent at 26:18-20.
4 Samsung argues that this sentence supports construing the disputed term to mean: “For at least one
5 of the pixel groups, applying a unitary transformation of the group covariance matrix of second
6 moments of proximity data for all pixels in that pixel group to fit an ellipse.”

7 Apple acknowledges the sentence Samsung cites, but points to other language in the
8 specification that suggests “mathematically fitting an ellipse” should be given its broader, ordinary
9 meaning; that is, using *any* calculations to determine the shape, size, and position parameters of an
10 ellipse that fits data. Apple’s Opening Br. at 13 (citing ’828 Patent at 19:8-12; 25:54-56 & Fig.
11 18). Apple maintains that Samsung’s proposed construction does not actually fit an ellipse because
12 merely applying a unitary transformation does not calculate sufficient parameters to define an
13 ellipse. *See id.* at 15. Finally, Apple argues that the specification teaches two embodiments of
14 mathematically fitting an ellipse and that Samsung’s proposed construction would improperly read
15 out the second embodiment. *Id.* at 16-17 (citing ’828 Patent at 27:1-8).

16 As an initial matter, the Court agrees with Apple that Samsung’s proposed construction
17 cannot be correct because “applying a unitary transformation” alone does not appear to be
18 sufficient to calculate all parameters of an ellipse. Specifically, “applying a unitary
19 transformation” does not calculate the centroid, major and minor axes, orientation, or eccentricity
20 parameters of an ellipse. To remedy this defect, the Court slightly tweaked Samsung’s proposed
21 construction of the disputed term and instead proposed the following at the *Markman* hearing: “For
22 at least one of the pixel groups, applying a unitary transformation of the group covariance matrix of
23 second moments of proximity data for all pixels in that pixel group *as part of mathematically*
24 *fitting an ellipse to that pixel group*” (new proposed language in italics). At the hearing, Samsung
25 found the Court’s proposed change acceptable, and Apple acknowledged that the Court’s proposed
26 change would remedy the technical defect in Samsung’s proposed construction. Nevertheless,
27 Apple argued that the Court’s suggested construction still would be legally impermissible because
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1 it would improperly limit the scope of the claims to one preferred embodiment while excluding a
2 second preferred embodiment.

3 The Court agrees with Apple that the '828 Patent's inventor did not act as his own
4 lexicographer to give "mathematically fitting an ellipse" a special definition. An inventor is
5 permitted to act as his own lexicographer and to assign a unique meaning to a claim term used to
6 describe his own invention. The inventor, however, must do so "with reasonable clarity,
7 deliberateness, and precision." *In re Paulsen*, 30 F.3d at 1480. Although column 26 states that
8 "[t]he ellipse fitting procedure requires a unitary transformation of the group covariance matrix . . .
9 ," this statement does not clearly define the term "mathematically fitting an ellipse." Moreover,
10 where the inventor sought to define particular claim terms in the '828 Patent, he did so with
11 "clarity, deliberateness and precision," *id.* at 1480, by, for example, placing the term in quotes and
12 providing a clear definition. *See, e.g.*, '828 Patent at 14:28-29 ("The direction 'inner' means
13 toward the thumb of a given hand.").

14 Whether column 26 contains a specification disclaimer, however, is a closer question.
15 Where the specification reveals an intentional disclaimer or disavowal of claim scope by the
16 inventor, the inventor's intention as revealed through the specification is dispositive. *Phillips*, 415
17 F.3d at 1316. "[E]ven where a patent describes only a single embodiment, claims will not be read
18 restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using
19 words or expressions of manifest exclusion or restriction." *Innova/Pure Water, Inc. v. Safari*
20 *Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (quotation marks and citations
21 omitted); *see also Abbott Labs v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009); *Liebel-*
22 *Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 905 (Fed. Cir. 2004). The Court need not determine
23 whether column 27 of the '828 Patent teaches a second embodiment, as Apple argues, because,
24 even assuming there is only one embodiment, reading the limitation of the only embodiment onto
25 the claim terms would still be improper in the absence of "words or expressions of manifest
26 exclusion or restriction." *Innova/Pure Water, Inc.*, 381 F.3d at 1117.

27 The Court disagrees with Samsung's argument that the specification language disclaims all
28 methods of mathematically fitting an ellipse that do not apply a unitary transformation of the group

1 covariance matrix. The case on which Samsung primarily relies, *ImageCUBE LLC v. Boeing Co.*,
2 431 Fed. App'x 905 (Fed. Cir. 2011), is inapposite.

3 In *ImageCube*, the Federal Circuit found that the use of the word “requires” in the
4 specification limited the scope of the claim to the feature required by the specification. *Id.* at 908.
5 Specifically, the specification of the patent at issue in *ImageCube* stated that “‘homogenization’ for
6 purposes of the invention *requires* intimate mixing of at least two components with resultant
7 formation of an alloy between the components.” *Id.* (citing U.S. Reissue Patent No. 37,875, at
8 4:10–13) (emphasis added). The court concluded that the term “components” excluded
9 metallurgical phases of a single alloy. *Id.*

10 In *ImageCube*, the word “requires” explicitly limited a claim term “for purposes of the
11 invention.” *Id.*; accord *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1348 (Fed. Cir.
12 2004) (limiting claim scope because “statements, some of which are found in the ‘Summary of the
13 Invention’ portion of the specification, are not limited to describing a preferred embodiment, but
14 more broadly describe the overall invention[. . .]”); *Aguayo v. Universal Instruments Corp.*, 356
15 F. Supp. 2d 699, 727 (S.D. Tex. 2005) (Where the “specification calls an embodiment ‘the
16 invention’ or the ‘present invention,’ it is appropriate to limit the claims to that embodiment.”)
17 (citations omitted). Here, by contrast, the word “requires” merely describes a procedure that is
18 required in *one* preferred embodiment of the invention rather than a procedure that is required in
19 the invention itself. *Atmel Corp. v. Silicon Storage Tech., Inc.*, 76 Fed. App'x 298, 308-09 (Fed.
20 Cir. 2003) (“While the specification may well indicate that certain embodiments are preferred,
21 particular embodiments appearing in a specification will not be read into the claims when the claim
22 language is broader than such embodiments.”). This interpretation is supported by the fact that the
23 term “requires” and the description of the procedure that is required appears under the heading
24 “Description of the Preferred Embodiments.” Additionally, the parties agree that mathematically
25 fitting an ellipse is broader than the embodiment disclosed in column 26.

26 Accordingly, the Court declines to limit “mathematically fitting an ellipse” to require a
27 “unitary transformation,” solely based on the preferred embodiment disclosed in column 26. The
28 Court turns to the prosecution history to determine whether the term should be so limited.

3. Prosecution History

Samsung argues that Apple disclaimed methods other than applying a “unitary transformation” during the prosecution of the ’828 Patent. The Court disagrees.

When the ’828 Patent’s application was originally filed, Claims 1 and 10 did not explicitly require “mathematically fitting an ellipse.” Indeed, Claims 1 and 10 recited merely “fitting an ellipse to at least one of the pixel groups,” and “fit an ellipse to at least one of the one or more pixel groups,” respectively. Briggs Decl. Ex. L at 3-4. The Examiner originally rejected the claims as being anticipated by U.S. Patent No. 5,825,352 A (“*Bisset*”). *Id.* at 9. The Examiner noted that *Bisset*’s “finger profile” disclosed “fitting an ellipse to at least one of the pixel groups,” because the “area of contact of the tip of [a] finger with the touch sensor is an ellipse-like shape.” *Id.* at 10-11. In response, the applicant amended the claims to recite “mathematically fitting an ellipse” *Id.* at 21. The Examiner indicated that this amendment would overcome the rejections. *Id.*

While it is true that Apple added “mathematically” to “fitting an ellipse” in order to overcome a rejection from the Examiner, Briggs Decl. Ex. L at 21, nowhere in the prosecution history does Apple clearly and unmistakably state that it was disavowing all methods other than those methods that applied a “unitary transformation.” *See Omega Eng’g, Inc.*, 334 F.3d at 1326 (requiring clear and unmistakable disavowal of claim scope for prosecution disclaimer to attach). Indeed, if Apple clearly and unmistakably disclaimed anything by adding “mathematically” to the claims, it disclaimed only the method of fitting an ellipse claimed in *Bisset*, which did not appear to use any mathematical calculations to fit an ellipse to data. Ahn Decl. Ex. P at 18. The Court declines to extrapolate from this prosecution history a clear and unambiguous disavowal of all methods of fitting an ellipse that do not use a unitary transformation.

Thus, the prosecution history does not support Samsung’s proposed construction.

4. Extrinsic Evidence

The parties cite several pieces of extrinsic evidence, which is generally not dispositive to claim construction. Apple cites a passage from a textbook, the patent inventor’s testimony, and expert testimony, while Samsung cites ITC proceedings and the patent inventor’s testimony. The Court gives these sources little or no weight.

1 Apple's citation to E.R. Davies, *Machine Vision: Theory, Algorithms, Practicalities* (2d. ed.
2 1997), merely reinforces that upon which the parties agree: at the time the '828 Patent was
3 invented, a person of ordinary skill in the art would understand that there are several ways of
4 mathematically fitting an ellipse to data. Ahn Decl. Ex. L at 5-15 (describing the diameter
5 bisection method, the chord tangent method, and the Hough transform method). Thus, the Court
6 need not give this evidence any weight in order to construe the disputed term.

7 Both parties cite inventor testimony in support of their proposed constructions. Inventor
8 testimony is entitled to little or no consideration. *Bell & Howell DMP Co.*, 132 F.3d at 706.

9 Apple cites the testimony of Mr. Westerman, one of the '828 Patent's inventors, to support
10 its argument that applying a "unitary transformation" takes place before fitting an ellipse and does
11 not actually fit an ellipse. Apple's Opening Br. at 15. As discussed above, the Court agrees that
12 Samsung's proposed construction, as originally formulated, did not actually fit an ellipse. The
13 Court altered Samsung's proposed construction to address this defect.

14 Samsung cites Mr. Westerman's deposition and hearing testimony in ITC proceedings to
15 support its argument that the equations in column 26 of the specification constitute the only
16 embodiment of mathematically fitting an ellipse. As discussed above, the Court need not and does
17 not determine whether column 27 discloses a second embodiment, because importing the
18 limitations of the only embodiment is improper in the absence of "words or expressions of manifest
19 exclusion or restriction." *Innova/Pure Water, Inc.*, 381 F.3d at 1117. Accordingly, the Court gives
20 no weight to Mr. Westerman's testimony, which is unnecessary to the Court's construction of the
21 disputed terms.

22 Likewise, the Court gives no weight to the testimony of Apple's expert, Dr. Balakrishnan,
23 which merely supports Apple's position that lines 1-8 of column 27 describes a second
24 embodiment of mathematically fitting an ellipse. Apple's Reply at 9 (citing Ahn Reply Decl. Ex.
25 U at APLNDC0001229687-688). As the Court does not decide whether column 27 is a second
26 embodiment, it gives no weight to this citation to Dr. Balakrishnan's testimony.

27 Samsung also cites an ITC staff report to support its proposed construction, arguing that the
28 ITC staff has adopted the construction Samsung proposes here in a case between Apple and

1 Motorola before the ITC. Samsung’s Resp. at 15. ITC rulings are not binding, and a court “can
 2 attribute whatever persuasive value to the prior ITC decision that it considers justified.” *Am.*
 3 *Honda Motor Co., Inc. v. Coast Distrib. Sys., Inc.*, No. C 06-04752-JSW, 2007 WL 672521, at *2
 4 (N.D. Cal. Feb. 26, 2007) (citing *Tex. Instruments, Inc. v. Cypress Semiconductor Corp.*, 90 F.3d
 5 1558, 1569 (Fed. Cir. 1996)). Given that Samsung cites a staff report and not an ITC *decision*, the
 6 Court gives this extrinsic evidence no weight.

7 Having considered the claim language, the specification, the prosecution history, and the
 8 extrinsic evidence, the Court declines to adopt Samsung’s proposed construction or adopt a
 9 construction that requires applying a unitary transformation as part of “mathematically fitting an
 10 ellipse.” The parties agree that, at the time of invention, a person of ordinary skill in the art would
 11 have been aware of many ways of mathematically fitting an ellipse to data. Samsung has failed to
 12 show that Apple clearly disclaimed, either in the specification or in the prosecution history,
 13 methods that did not use unitary transformations. The Court therefore gives “mathematically
 14 fitting an ellipse” its plain and ordinary meaning: **“using calculations to determine the
 15 parameters of an ellipse that fits data.”**

16 **F. “pixel”/ “pixel groups”**

Apple’s Proposed Construction	Samsung’s Proposed Construction
Portion(s) of a proximity image that indicate(s) the proximity data measured at one or more electrodes.	Plain and ordinary meaning.

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 20 The term “pixel” or “pixel group” is used in claims 1, 4, 5, 6, 9, 10, 14, 16, 24, and 31 of
 21 the ’828 Patent. For example, claim 1 recites:

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 23 A method of processing input from a touch-sensitive surface, the method
 24 comprising: receiving at least one proximity image representing a scan of a plurality
 25 of electrodes of the touch-sensitive surface; segmenting each proximity image into
 26 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**.

27 ’828 Patent at 60:5-15 (emphasis added).
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1 At the hearing, the parties agreed that it is unnecessary for the Court to construe the term
2 pixel group and that it is sufficient for the Court to construe only the term “pixel.” The Court
3 agrees that the “ordinary and customary” meaning of “group” would be well understood by a jury.
4 *See Liquid Dynamics Corp. v. Vaughan Co.*, 355 F.3d 1361, 1367-68 (Fed. Cir. 2004).
5 Accordingly, the Court will construe only the term “pixel.”

6 Samsung contends that the ordinary meaning of pixel is “the smallest discernible part of an
7 image.” Samsung’s Resp. at 16. Samsung argues that there is no clear definition of pixel in the
8 specification, and thus that the ordinary meaning of pixel should control. *Id.* Apple argues, on the
9 other hand, that it acted as its own lexicographer in the ’828 Patent, defining “pixel” as an element
10 of a proximity image. Apple’s Opening Br. at 18. Apple argues that its special definition excludes
11 the meaning of pixel as an element of a screen, camera, or other display device. *Id.* at 19. At the
12 hearing, Samsung conceded that in the context of the ’828 Patent pixel referred to an element of a
13 proximity image. As explained below, the Court finds that Apple acted as its own lexicographer
14 and therefore adopts Apple’s construction of this term.

15 1. Claim Language

16 Neither side contends that the claim language explicitly provides or implies a definition of
17 pixel.

18 2. Specification

19 “[T]he specification may reveal a special definition given to a claim term by the patentee
20 that differs from the meaning it would otherwise possess. In such cases, the inventor’s
21 lexicography governs.” *Phillips*, 415 F.3d at 1316. The inventor, however, must do so “with
22 reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d at 1480.

23 When discussing the word “pixel” for the first time, the ’828 Patent states: “In the
24 discussion that follows, the proximity data measured at one electrode during a particular scan cycle
25 constitutes one ‘pixel’ of the proximity image.” ’828 Patent at 18:12-14. Setting a term off by
26 quotation marks is often a strong indication of a definitional phrase. *See Sinorgchem Co.*,
27 *Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007) (citing *Cultor Corp. v.*
28 *A.E. Staley Mfg. Co.*, 224 F.3d 1328, 1331 (Fed. Cir.2000)). Further, Apple consistently uses

1 quotations in the '828 Patent when defining other terms. *See* '828 Patent at 14:22-35 (defining
 2 “proximity,” “horizontal,” “vertical,” “inner,” “outer,” and “contact,” using quotations around the
 3 defined words). Thus, there is strong evidence in the specification that Apple sought to act as its
 4 own lexicographer and define “pixel” as an element of a proximity image. This presumption is
 5 bolstered by the consistent use of “pixel” throughout the specification as elements of a proximity
 6 image. *See* '828 Patent at 23:13-40; 25:63, 26:13; 26:15-16.

7 Thus, the Court finds that Apple clearly defined the term “pixel” in the specification, and
 8 that this definition overrides the term’s plain and ordinary meaning. *See Phillips*, 415 F.3d at 1316.

9 3. Prosecution History

10 Neither side contends that there is relevant prosecutorial history. Accordingly, the Court
 11 turns to the extrinsic evidence for further guidance.

12 4. Extrinsic Evidence

13 Samsung cites several cases that define the word pixel, and argues that these cases reveal a
 14 plain and ordinary meaning of the term consistent with the specification—namely, “the smallest
 15 discernible part of an image.” Samsung’s Resp. at 16. However, extrinsic evidence is a less
 16 reliable guide than intrinsic evidence such as the specification. *See Phillips*, 415 F.3d at 1319.
 17 Moreover, at the hearing, Samsung abandoned these other courts’ plain and ordinary definition of
 18 “pixel” and instead proposed the following more limited construction: “the smallest discernible
 19 part of a proximity image.” In light of the clear lexicography in the '828 Patent’s specification, the
 20 Court finds other courts’ definitions of “pixel” unpersuasive. Accordingly, the Court construes
 21 “pixel” as **“portion of a proximity image that indicates the proximity data measured at one
 22 electrode.”**

23 G. “scrolling a window having a view associated with the event object”

24 The disputed term “scrolling a window having a view . . .” is found in Apple’s '915 Patent.
 25 The '915 Patent, entitled “Application Programming Interfaces For Scrolling Operations,”
 26 discloses a method for operating through an application programming interface (API) that provides
 27 scrolling operations. '915 Patent, Abstract. “The API interfaces between the software applications
 28 and user interface software to provide a user of the device with certain features and operations.”

1 '915 Patent at 1:34-36. The invention discloses APIs which “transfer function calls to implement
 2 scrolling, gesturing, and animating operations for a device.” '915 Patent at 1:65-67. The
 3 application for the '915 Patent was filed January 7, 2007, and the patent issued November 30,
 4 2010.

Apple's Proposed Construction	Samsung's Proposed Construction
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”

8 This term appears in Independent Claims 1, 8 and 15 of the '915 Patent. Independent
 9 Claim 1 recites a method, and Independent Claim 8 recites machine readable instructions to
 10 perform a method to distinguish between a scrolling operation and a gesture operation. Claim 8 of
 11 the '915 Patent is representative of how this claim term is used:

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

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

16 creating an event object in response to the user input;

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

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

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

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

26 '915 Patent at 23:65-24:21 (emphasis added).

27 Apple argues that no construction is necessary, whereas Samsung proposes that the term
 28 means “sliding a window in a direction corresponding to the direction of the user input over a view
 that is stationary relative to the window.” Essentially, the parties disagree about the direction in
 which the scroll function uncovers content. Samsung argues that its construction clarifies the plain
 meaning of the claim terms by establishing that “scrolling a window having a view” will cause the

1 content viewed through the window to move in the same direction as the user input. Samsung’s
2 Resp. at 18. In other words, “a finger swipe that is horizontal to the right should cause the next-
3 rightmost portion of the content to appear under the window.” Samsung’s Resp. at 18. Apple
4 disagrees and argues that the scroll function will perform in exactly the opposite manner: a finger
5 swipe to the right will reveal the next-leftmost content.²⁰ See Apple’s Reply at 11.

6 For the reasons explained below, the Court rejects Samsung’s proposed construction, as the
7 construction is not required by the claim language and is directly contradicted by the specification.

8 **1. Claim Language**

9 The claim language itself contains no reference to the direction of scrolling or the direction
10 that the content is uncovered in relation to the user input. Nor do the terms that Samsung adds to
11 its proposed construction appear in the claim language. Accordingly, the Court looks to the
12 specification for guidance.

13 **2. Specification**

14 The specification teaches that “scrolling” is “the act of sliding a directional . . . presentation
15 of content, such as text, drawings, or images, across a screen or display window.” ’915 Patent at
16 1:39-41. Moreover, a “window” is “a display region” that may have at least one “view (e.g., web,
17 text, or image content.)” ’915 Patent at 5:25-30. Samsung argues that because the claim language
18 is “scrolling a window having a view” instead of “scrolling a view,” the scroll function *must* slide
19 the window instead of the content. In order to reach this conclusion, Samsung requires the term
20 “window” to be “thought of as a small, see-through pane of glass sitting above a large piece of
21 paper containing the window’s content (‘view’).” Samsung’s Resp. at 18. According to Samsung,
22 “[s]crolling the window is simply the act of moving the window pane over the view in the direction
23 of the scroll.” *Id.* Because the claim term is “scrolling a window” instead of “scrolling a view”

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25 ²⁰ The parties do not agree on precisely who the person of ordinary skill in the art would be with
26 respect to the ’915 Patent. Apple believes a person of ordinary skill would have “a Bachelor’s
27 degree in computer science or electrical engineering or an equivalent, and one or more years
28 experience working with electronic devices with touch screen displays” while Samsung believes
such a person would have “a Bachelor’s Degree in computer science (or equivalent industry
experience), and at least two years of experience in the area of computer programming and/or
operating systems.” The parties agree that their arguments do not turn on the definition of a person
of ordinary skill in the art, and the Court agrees that the differences between the two definitions do
not materially affect the construction of this term. Markman Hr’g Tr. at 24-25.

1 Samsung argues that its interpretation is the correct interpretation. Thus, Samsung argues that the
2 content is stationary below the window, and as a result, a scroll to the left will reveal content to the
3 left of the window.

4 Samsung's construction, however, reads out several embodiments of the claimed invention.
5 One embodiment demonstrates precisely the opposite of Samsung's construction. The
6 specification teaches that "[a] user performs a vertically downward swipe gesture to scroll toward
7 the top of the list." '915 Patent at 9:16-18. "As a result of detecting the vertically downward
8 gesture in FIG. 6B the displayed emails have shifted down, such that the previous bottom displayed
9 email from Kim Brook is no longer displayed, the previous top displayed email from Bruce Walker
10 is now second from the top, and the email from Aaron Jones, which was not displayed in FIG. 6A,
11 is now displayed at the top of the list." '915 Patent at 9:22-28 (internal references to figures
12 omitted); *see also* FIGS. 4-6D. Thus, the specification teaches that content appears in the opposite
13 direction of the user input.

14 Additionally, the specification also teaches that "while embodiment 400 illustrates
15 movement 414 in a particular direction, in other embodiments movement of the displayed objects
16 may be in response to movement 414 in one or more other directions, or in response to a scalar
17 (i.e., a determined or detected movement independent of the direction)." '915 Patent at 8:20-25.
18 Thus, additional disclosed embodiments do not appear to limit the direction in which the content is
19 disclosed.

20 As with the '002 Patent, Samsung also argued at the *Markman* hearing that it was not
21 improper to read out these disclosed embodiments from the '915 Patent. As previously explained,
22 "there is a strong presumption against a claim construction that excludes a disclosed embodiment."
23 *See In re Katz*, 639 F.3d at 1324. The Court cannot find that Samsung has overcome this
24 presumption. Samsung has offered no evidence that the embodiments were clearly disclaimed in
25 the specification or the prosecution history. *See Oatey Co.*, 514 F.3d at 1277. Moreover, the
26 disputed claim term is present in each of the Independent Claims of the '915 Patent. Therefore, it
27 is unlikely that claims not at issue encompass the potentially omitted embodiments. *See*
28 *Helmsderfer*, 527 F.3d at 1383.

1 Unlike the term “glass member” described above, the term “scrolling a window having a
2 view” does not have an unambiguous ordinary meaning. The disputed claim term can be
3 reasonably interpreted to include uncovering content in the manner described by both Apple and
4 Samsung. Therefore, it would be incorrect to adopt Samsung’s proposed construction and to
5 exclude several disclosed embodiments. *Oatey Co.*, 514 F.3d at 1277.

6 Additionally, Samsung’s reading is at odds with the definition of “scrolling.” “Scrolling,”
7 in the section entitled “Background of the Disclosure” is defined as “the act of sliding a directional
8 . . . presentation of content, such as text, drawings, or images, across a screen or display window.”
9 ’915 Patent at 1:39-41. The specification’s definition of “scrolling” contradicts Samsung’s
10 construction because in Samsung’s construction the content does not slide, but rather is stationary
11 below the display window.

12 Accordingly, the Court construes “scrolling a window having a view associated with the
13 event object” to have its plain and ordinary meaning. Thus, the Court **does not limit the term** to
14 mean content viewed through the window must move in the same direction as the user input as is
15 urged by Samsung.

16 **H. “the first window has been displayed independent[ly] from a position of a
17 cursor on the screen”**

Apple’s Proposed Construction	Samsung’s Proposed Construction
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.”

22 The term “the first window has been displayed independent[ly] from a position of a cursor
23 on the screen” appears in Claims 1, 20, 26, 45, 51, and 70 of the ’891 Patent. For example, Claim
24 1 reads:

25 A method to display a user interface window for a digital processing system, the method
26 comprising:

27 displaying a first window in response to receiving a first input from a user input device of
28 the digital processing system which is capable of displaying at least a portion of a second
window concurrently with the first window on a screen;

1 starting a timer; and

2 closing the first window in response to a determination that the timer expired;

3 wherein the first window does not close in response to any input from a user input device of
4 the digital processing system, wherein **the first window has been displayed
independently from a position of a cursor on the screen.**

5 '891 Patent at 10:5-18 (emphasis added).

6 Samsung seeks to impose three additional limitations on the scope of the claim terms.

7 Samsung argues that (1) the proposed construction “the user’s movement of the mouse pointer does
8 not affect the location of the first window” should replace “the first window is displayed
9 independent[ly] from a position of a cursor;” (2) “cursor” should mean “a mouse pointer or a
10 similar icon that is controlled by a mouse, track ball, or touch pad;” and (3) the cursor should be
11 “visible on the screen.” Apple argues that the claim terms should be given their full scope and that
12 Samsung’s proposed limitations should be rejected.²¹

13 1. Claim Language

14 First, Samsung proposes to construe the disputed terms to mean that “the user’s movement
15 of the mouse pointer or similar icon does not affect the location of the first window.” Samsung has
16 not offered a sufficient reason to adopt this alternative construction over the claim language, and
17 indeed, the proposed construction appears to be contradicted by the claim language itself.
18 According to the plain language of the claim term, the first window is “displayed independent[ly]
19 from a position of a cursor,” not from the user’s movement of the cursor. Therefore, the Court
20 declines to adopt Samsung’s proposed clarifying language.

21 Second, the claim language in the '891 Patent does not support the limitations that Samsung
22 seeks to import into the claim terms. Nothing in the claim language defines “cursor” or otherwise

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²¹ The parties do not agree on precisely who the person of ordinary skill in the art would be with respect to the '891 Patent. Apple believes a person of ordinary skill would have “a Bachelor’s degree in computer science or electrical engineering or an equivalent, and one or more years experience working on designing and/or implementing user interfaces” while Samsung believes such a person would have “a Bachelor’s Degree in computer science (or equivalent industry experience) and at least two years of experience in the area of computer programming and/or operating systems.” ECF No. 650. The parties agree that their arguments do not turn on the definition of a person of ordinary skill in the art, and the Court agrees that the differences between the two definitions do not materially affect the construction of this term. Markman Hr’g Tr. at 24-25.

1 indicates that “cursor” means “a mouse pointer” or “a similar icon” that must be controlled by a
2 “mouse, track ball or touchpad.”

3 Third, the claim language does not explicitly require a “cursor” to be “visible on the
4 screen.” Instead, the claim language “the first window has been displayed independently from a
5 position of a cursor on the screen,” is open to multiple interpretations. ’891 Patent at 10:17-18.
6 The term “window is displayed independently of a position of a cursor on the screen,” may mean
7 that the window’s location does not depend on where the cursor is on the screen, implying that a
8 cursor must be present on the screen. Alternatively, the term may mean that the window is
9 displayed independently of a cursor; in other words, the window does not depend on the existence
10 or location of a cursor. In light of this ambiguity, the Court examines the terms’ meanings with the
11 assistance of the specification.

12 2. Specification

13 As it is used in the specification, the term “cursor” refers to an indicator that appears on a
14 display through a user input device. *See* ’891 Patent at 1:56-60. Samsung argues that the
15 specification requires that a “cursor” must be a pointer or similar icon. Samsung points to Figures
16 16-18 and argues that “there is no blinking caret for text editing” disclosed in the specification.
17 *See also* ’891 Patent FIG 3; 1:56-60. Samsung, however, reads the specification too narrowly.
18 Although the specification and figures establish that a pointer may be a “cursor,” this does not
19 preclude other symbols or indicators that may appear on a display screen from being a “cursor.”
20 Samsung’s argument attempts to impermissibly import limitations into the claims from the
21 specification. *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009).

22 Similarly, Samsung argues that the specification limits a “cursor” to something that is
23 controlled by “a mouse, track ball, or touch pad.” Samsung’s Resp. at 24. In support of its
24 argument, Samsung identifies several places where the specification teaches that a “cursor” can be
25 controlled by a mouse, track ball, or touch pad. Samsung’s Resp. at 24. The language cited by
26 Samsung, however, establishes that a mouse, track ball, or touch pad are *examples* of cursor control
27 devices. ’891 Patent at 2:16-19; 9:11-12; 1:41-43; 1:60-62; 7:55-60. A cursor control device may
28 be a mouse, track ball, or touch pad, but the explicit language of the specification establishes that

1 the list of cursor control devices is not exhaustive. Therefore, the Court declines to further limit
2 the term cursor to mean only cursors controlled by “a mouse, track ball, or touch pad.”

3 The specification also does not require that the cursor “must be visible on the screen.”
4 Illustrative figures to which the ’891 Patent refers indicate that there are several embodiments of
5 the patent in which a cursor is not visible. ’891 Patent FIGS. 7-11, 16-21. As explained above,
6 when there are two reasonable interpretations of a claim term, the terms should not be construed in
7 such a way as to read out an embodiment. *Oatey Co.*, 514 F.3d at 1277. As explained above, there
8 are two reasonable interpretations regarding whether the cursor must be visible on the screen.
9 Because Samsung’s construction would read out an embodiment, but Apple’s construction would
10 not, there is a presumption that Samsung’s construction is incorrect.

11 3. Prosecution History

12 Samsung argues that the prosecution history supports its argument that the term “the first
13 window has been displayed independent[ly] from a position of a cursor on the screen” requires that
14 a cursor be visible on the screen and that a cursor must be “something that can be moved around
15 the screen to select a target.” Samsung’s Resp. at 23. The Court disagrees that the prosecution
16 history requires such a narrow construction of the disputed claim term.

17 Samsung has identified U.S. Patent App. No. 2003/0016253 A1 (“*Aoki*”) as a prior art
18 reference that the Patentee distinguished in order to obtain claim allowance during the prosecution
19 of the ’891 Patent. *Aoki* discloses a feedback mechanism for use with graphical user interface
20 systems where a user may locate and select a hyperlink target within an image map. *See Aoki*
21 Abstract. *Aoki* teaches a feedback mechanism for cursor-less graphical user interfaces. *See Aoki*
22 Abstract. The Examiner found that *Aoki* further teaches “applying conventional graphical user
23 interface systems using a cursor control device, such as a mouse, a joystick, a keyboard, a touch
24 pad, a trackball, or the like in place of a touch-screen.” APLNDC00028805, Briggs Decl. Ex. X.²²

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26 ²² In a footnote, Apple moves to strike Samsung’s Exhibit X, which contains excerpts of the
27 prosecution history of the ’891 Patent as this evidence was apparently not disclosed in the joint
28 claim construction statement. First, justice favors deciding issues on the merits. *See Martinez v.*
Stanford, 323 F.3d 1178, 1182 (9th Cir. 2003). Excluding this prosecution history which
illuminates the construction of the term at issue would likely lead to an incomplete and incorrect
construction. Second, it is not clear how introduction of Apple’s own prosecution history would

1 The Examiner rejected the Patentee's claims in the '891 Patent because *Aoki* teaches
2 displaying a first window in response to receiving a first input from a user input device, starting a
3 timer for a predetermined time, and closing the first window in response to a determination that the
4 timer has expired without any direction from a user input device. *See* APLNDC00028804-5,
5 Briggs Decl. Ex. X.

6 The Examiner identified Figure 13 in *Aoki*, which shows "an exemplary pop-up text
7 window with textual directional tips," *Aoki* at 0082, as establishing that *Aoki* anticipates the claims
8 of the '891 Patent. Figure 13 shows the user's stylus touching the displayed image map, and in
9 response a pop-up window appearing near the stylus point on the display screen. *See also*
10 ALPND00028804, Briggs Decl. Ex. X (Examiner's statement that "in response to receiving a first
11 input from a user input device (e.g. as a result of the user's gesture of touching the stylus 102 to the
12 displayed image map 103 displayed on display 104)"). To distinguish *Aoki*, the Patentee included
13 the disputed claim language "wherein the first window has been displayed independently from a
14 position of a cursor on the screen." APLNDC00028844, Briggs Decl. Ex. X. The Patentee further
15 explained that:

16 Aoki discloses displaying an image map 103 and a pop-up window 115 that provides
17 textual directional tips 114 to guide a user to a desired area in the image map 103 (Figure
18 13). In particular, Aoki discloses that "when the user's gesture positions the stylus in
19 contact with the displayed image map 103, directional tips in a pop-up text window 115
20 could appear . . . In particular, Aoki discloses that the "pop-up window . . . [indicates] to a
21 user that the . . . active area . . . is "up" and "to the right" of the position at which the stylus
22 102 was placed within the displayed image map 103 by the user." (paragraph [0082]). In
23 contrast amended claim 1 refers to displaying the first window independently from a
24 position of a cursor on the screen. Aoki fails to disclose closing the first window in
25 response to a determination that the timer expired; wherein the first window does not close
26 in response to any input from a user input device of the digital processing system, wherein
27 the first window has been displayed independently from a position of a cursor on the
28 screen.

Id. (emphasis in original).

24 Contrary to Samsung's arguments, the disputed claim language was added to distinguish
25 the '891 Patent from *Aoki* because the first window's position in *Aoki* was in response to the

27 prejudice Apple. This intrinsic evidence is part of the public record and has been available to both
28 parties. Similarly, Apple had the opportunity to respond to this evidence in its Reply. Accordingly,
the Court DENIES Apple's motion.

1 location of the user input on the screen. In *Aoki*, the user input was a stylus. The Patentee
2 overcame the rejection not because a cursor was not visible, but rather because the position of the
3 window was in direct response to the position of the user input. Thus, this amendment does not
4 require that a cursor appear on the screen.

5 *Aoki* also informs the parties' dispute regarding what devices constitute "cursor control
6 devices," and what the definition of a cursor is. "[T]he record before the Patent and Trademark
7 Office is often of critical significance in determining the meaning of the claims." *Vitronics Corp.*,
8 90 F.3d at 1582. "[P]rior art references are of record in the prosecution history and may be
9 consulted in the process of claim construction for what they indicate about the state of the prior
10 art." *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 345 F.3d 1318, 1330 (Fed. Cir. 2003)
11 (citing *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1371 n.4 (Fed.
12 Cir. 2002) ("Prior art cited in the prosecution history falls within the category of intrinsic
13 evidence.")).

14 For example, the Examiner stated that *Aoki* "further teaches applying conventional
15 graphical user interface systems using a cursor control device, such as a mouse, a joystick, a
16 keyboard, a touch pad, a trackball, or the like." APLNDC00028805, Briggs Decl. Ex. X; *see also*
17 *Aoki* ¶ 6 (describing a cursor control device as including "a mouse, a joystick, a keyboard, a touch
18 pad, a trackball, or the like"). This additional evidence from the prosecution history suggests that
19 the term "cursor," at the time of invention, was more broadly defined than merely "a mouse pointer
20 or a similar icon that is controlled by a mouse, track ball, or touch pad." Moreover, *Aoki* itself
21 provides guidance as to what the term "cursor" meant at the time of the '891 Patent's invention.
22 *Aoki* suggests that the term was a general computing term that means an "indicator[] to help a user
23 interact" with a display. *Aoki* ¶ 5 (describing a typical "cursor-based graphical user interface
24 system" as providing "indicators to help a user interact with a displayed image"). *Aoki* and the
25 prosecution history of the '891 Patent discussing *Aoki* support Apple's arguments regarding what a
26 person of ordinary skill in the art would understand the term "cursor" and "cursor control device"
27 to mean. This understanding is not inconsistent with the claim language and the specification of
28

1 the '891 Patent, and supports Apple's position that a cursor may be something other than a mouse
2 pointer controlled by a mouse, track ball, or touch pad.

3 **4. Extrinsic Evidence**

4 Finally, Samsung points to the inventor testimony of Imran Chaudri, who testified that a
5 cursor means "a mouse cursor." Samsung's Resp. at 24. This evidence, however, does not
6 overcome the construction established by the intrinsic evidence. As explained above, inventor
7 testimony is given little to no weight in claim construction, *Bell & Howell DMP Co.*, 132 F.3d at
8 706. See Samsung's Resp. at 24.²³

9 Based on the claim terms and specification, and in light of the prosecution history and prior
10 art, the Court construes "the first window has been displayed independent[ly] from a position of a
11 cursor on the screen" to have its plain and ordinary meaning. Thus, the Court **does not limit the**
12 **term** to mean that a cursor must be visible on the screen. The Court construes the term "cursor" to
13 mean "**an indicator to help a user interact with a display.**" Moreover, the Court rejects
14 Samsung's limitation that a cursor is only "controlled by a mouse, track ball, or touchpad."

15 **IT IS SO ORDERED.**

16 Dated: April 4, 2012

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18 LUCY H. KOH
19 United States District Judge

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28 ²³ Although Samsung cites this evidence in its brief, it appears that this page is missing from their exhibits. Even if Samsung had attached the exhibit, the extrinsic evidence would not overcome the intrinsic evidence provided by the specification and prosecution history.