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4   UNITED STATES DISTRICT COURT

5   NORTHERN DISTRICT OF CALIFORNIA

6   SAN JOSE DIVISION

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

14   Plaintiff Apple brings this suit against Samsung Electronics Co., Ltd., Samsung Electronics

15   America, Inc., and Samsung Telecommunications America, LLC (collectively, "Samsung"). Apple

16   asserts, among other things, that several of Samsung's products infringe Apple's patents. Samsung

17   counterclaims that several of Apple's products infringe Samsung's patents. The parties now seek

18   construction of eight[1] disputed terms used in the claims of the following patents-in-suit: U.S. Patent

19   Nos. 7,698,711 ("'711 Patent"); 6,493,002 ("'002 Patent"); 7,469,381 ("'381 Patent"); 7,663,607

20   ("'607 Patent"); 7,812,828 ("'828 Patent"); 7,844,915 ("'915 Patent"); and 7,853,891 ("'891

21   Patent"). The Court held a technology tutorial on January 17, 2012, and a claim construction

22   hearing on January 20, 2012. The Court has reviewed the claims, specifications, and other relevant

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[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.

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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

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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).

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II.   DISCUSSION

A.   "applet"

The disputed term "applet" appears in Samsung's '711 Patent. The '711 Patent, entitled

"Multi-tasking Apparatus and Method in Portable Terminal," discloses "an apparatus and method

capable of performing multiple tasks in a portable terminal . . . in which menu functions of the

portable terminal can be implemented while continuing to play the music." '711 Patent Abstract.

The apparatus includes a controller for implementing "at least one menu function while playing a

music file," and also includes "a display unit for displaying an indication that the music file is

being played during the implementation of the menu function." *Id.* The application for the '711

Patent was filed on July 16, 2007, and the patent issued on April 13, 2010. It is a continuation of a

prior application, which dates back to March 28, 2006. Further, the Patent claims the benefit of a

Korean patent application filed on August 30, 2005.

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"

The term "applet" appears in Claims 1, 9, and 17 of the '711 Patent. For example,

Independent Claim 1 of the '711 Patent recites:

1. A multi-tasking method in a pocket-sized mobile communication device
   including an MP3 playing capability, the multi-tasking method comprising:

   generating a music background play object, wherein the music background play
   object includes an application module including at least one **applet**;

   providing an interface for music play by the music background play object;

   selecting an MP3 mode in the pocket-sized mobile communication device using
   the interface;

   selecting and playing a music file in the pocket-sized mobile communication
   device in the MP3 mode;

   switching the MP3 mode to a standby mode while the playing of the music file
   continues;

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displaying an indication that the music file is being played in the standby mode;

selecting and performing at least one function of the pocket-sized mobile communication device from the standby mode while the playing of the music file continues; and

continuing to display the indication that the music file is being played while performing the selected function.

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

Samsung argues that a person of ordinary skill in the art[2] would understand that an "applet" is a "small application designed to run within another program." Samsung's Opening Br.[3] at 13. Apple argues that an "applet" is "[a]n operating system-independent computer program that runs within an application module." Essentially, the parties dispute[4] whether an "applet" is "operating system-independent," and whether an "applet" runs within "an application module" or within "another program." *See* Apple's Resp. at 3.

1. Claim Language/Specification

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

The term "applet" appears only once in the specification. That portion states:

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[2] With respect to the '711 Patent, Samsung defines a person of ordinary skill in the art as someone with "a Bachelor's Degree in computer science/engineering and several years of experience in multi-tasking systems and computer programming, or a Master's Degree with less relevant experience, or a person with equivalent industry experience." *See* ECF No. 650. Apple defines a person of ordinary skill in the art as having "at least a bachelor's degree in computer science/engineering or similar discipline and several years' relevant industry or academic research experience in the areas of multitasking systems, embedded systems or programming for handheld devices. Alternatively, the ordinary artisan would have had a more advanced degree in computer science/engineering or a similar field with somewhat less additional work or research experience." *See* ECF No. 650. The dispute between the parties appears to center around whether the person of 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.

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

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

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　　　　Thus, both the claim language and specification generally support Apple's construction that

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an "applet" runs within "an application module" rather than within "another program" as urged by

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Samsung. Both the claim language and the specification recite that an "application module"

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includes at least one "applet." In contrast, Samsung has not identified any intrinsic evidence

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establishing that an "applet" must run within "another program." Accordingly, the claim language

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and specification support Apple's construction that an "applet" runs within "an application

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module."

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2.　　　Extrinsic Evidence[5]

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　　　　While extrinsic evidence is often less useful to claim construction than intrinsic evidence,

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Phillips, 415 F.3d at 1317, the Court is not obligated to consider the sources in any particular order.

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Id. at 1324. Because the parties' disagreement over the extrinsic evidence is useful in order to

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understand their arguments about the prosecution history of the '711 Patent, the Court begins by

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considering the extrinsic evidence.

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　　　　The parties rely heavily on extrinsic evidence, particularly the testimony of experts; the

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testimony of the inventor of the '711 Patent, Moon-Sang Jeong; and technical dictionary

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definitions, to support their arguments regarding "the meaning that the term[s] would have to a

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person of ordinary skill in the art in question at the time of the invention," in August 2005. *Id*. at

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1312-13. At the heart of their dispute is whether a person of ordinary skill in the art would have

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understood the term "applet" as requiring operating system-independence.[6]

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

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[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.

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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 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.

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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.

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.

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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

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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

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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**
               windows that may be generated"

8   The disputed term "the first window region . . ." appears in Apple's '002 Patent. The '002

9   Patent, entitled "Method and Apparatus for Displaying and Accessing Control and Status

10   Information in a Computer System," discloses "[a]n interactive computer-controlled display system

11   having a processor, a data display screen, a cursor control device for interactively positioning a

12   cursor on the data display screen, and a window generator that generates and displays a window on

13   a data display screen," where this window region provides status and control information in one or

14   more data display areas. '002 Patent Abstract. While computers were often capable of displaying

15   multiple windows, these windows could become partially or completely obscured. *See generally*

16   '002 Patent col. 1. The '002 patent teaches an invention which allows a window to provide status

17   and control information in a manner more consistently visible to a user. *Id.* The application for the

18   '002 Patent was filed on March 20, 1997, and the patent was issued on December 10, 2002. It is a

19   continuation of a prior application filed on September 30, 1994.

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21 | Apple's Proposed Construction | Samsung's Proposed Construction |
     | --- | --- |
22 | 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." |
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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:

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An interactive computer-controlled display system comprising:

a processor;

a data display screen coupled to the processor;

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

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

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

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

Apple argues that the term should be given its full scope and accuses Samsung of improperly excising "window layer" and importing a negative limitation that requires that the first 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

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[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."

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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
             appears in front of[10] application windows.

22

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

24

25

26   _____

     [9] The parties essentially agree that for this term, a person of ordinary skill in the art would have a
27   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.
28   [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.

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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.

2.   Specification

The specification teaches several embodiments of the invention. In some embodiments, the

first window region is visible, and in other embodiments, it is not. For example, in one

embodiment:

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

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

window region:

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

'002 Patent at 7:29-32.

The specification discloses an invention that allows the first window region, otherwise

known as the "control strip," to either never be obscured by application windows or to be hidden

by the user. To the extent that Samsung's proposed construction, in which the first window region

is "never obscured," is interpreted to preclude a first window region that can be hidden by the user,

such an interpretation reads out one of the embodiments of the claimed invention.

At the *Markman* hearing, urging its own construction of the disputed term, Samsung argued

that it is not uncommon for a claim construction to read out an embodiment disclosed in the

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*

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[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.

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

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

3. Prosecution History

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

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

23   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

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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
     history disclaimer. Samsung's Resp. at 5. Because the Court finds that Apple's position during the

28   prosecution history did not clearly and unmistakably preclude the user from hiding the control
     strip, this additional argument is unpersuasive.

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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.

7

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

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:
        At [sic] a device with a touch screen display:

13

14   displaying a first portion of an electronic document;

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

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

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

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

24 '381 Patent at 35:33-58 (emphasis added).

25   Apple argues that "edge of an electronic document" is a plain, non-technical term that

26 should be given its ordinary meaning, and that this ordinary meaning precludes the possibility of

27 "internal" edges. For example, Apple argues that when images are embedded within a webpage,

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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 ---

    [13] The parties do not agree on precisely who the person of ordinary skill in the art would be with
24 respect to the '381 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
25 experience working on designing and/or implementing user interfaces" while Samsung believes
    such a person would have "a Bachelor's Degree in computer science, and 3-5 years of software
26 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
27 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
28 electrical engineering degree would be comparable) do not materially affect the construction of this
    term. Markman Hr'g Tr. at 24-25.

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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,

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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.

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

21

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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.

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.

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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26   [14] Apple contends that Dr. Balakrishnan was only following the instructions of Samsung's counsel
and not agreeing with Samsung's construction. Apple's Reply at 5. Regardless of whether the
27   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
28   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.

22

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.

23

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:

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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
recognizing multiple touch events that occur at different locations on the touch panel at a

4   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
simultaneously detect and monitor the touch events and a change in capacitive coupling

6   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
transparent conductive layer comprising a plurality of spaced apart parallel lines

10   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
second transparent conductive layer comprising a plurality of spaced apart parallel

13   lines having the same pitch and linewidths, the parallel lines of the second
transparent conductive layer being substantially perpendicular to the parallel lines of

14   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**

26

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.

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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

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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
     Description of the Invention," the Patent makes clear after the heading that the discussion that
27   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
28   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.").

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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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27   _____

[17] Moreover, it is worth noting that "glass member" is not present in the other independent claim
28   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.

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

3. Prosecution History/Extrinsic Evidence

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

The disputed terms "mathematically fitting an ellipse . . ." and "pixel/pixel groups" (*see* Section F, below) are found in Apple's '828 Patent. The '828 Patent, entitled "Ellipse Fitting for Multi-touch Surfaces," discloses an apparatus and methods "for simultaneously tracking multiple finger and palm contacts as hands approach, touch, and slide across a proximity-sensing, multi-touch surface." '828 Patent, Abstract. The invention allows for the integration of various methods of manually inputting data and commands into a touchscreen device, including "typing, resting, pointing, scrolling, 3D manipulation, and handwriting." *Id.* "To take maximum advantage of multi-touch surface sensing, complex proximity image processing is necessary to track and identify the parts of the hand contacting the surface at any one time." *Id.* at 6:22-25. The '828 Patent's specification teaches that a proximity image is obtained from an "array of parallelogram-shaped electrodes." *Id.* at 18:3-4. The proximity image "provide[s] [a] clear indication[] of where the body contacts the surface." *Id.* at 6:25-27. The invention's method of processing proximity images improved upon the prior art methods, which were unable "to group exactly those electrodes which are covered by each distinguishable hand contact." *See id.* at 6:19-20. The application for the '828 Patent was filed February 22, 2007, and the patent issued October 12, 2010. It is a continuation of a series of patents, whose applications date back to January 25, 1999.

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[18] In its Response, Samsung references briefly two inventor depositions. Samsung's Response at 9 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.

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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.

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[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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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.

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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_{eov} 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

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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.

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1	**3. Prosecution History**
2	Samsung argues that Apple disclaimed methods other than applying a "unitary
3	transformation" during the prosecution of the '828 Patent. The Court disagrees.
4	When the '828 Patent's application was originally filed, Claims 1 and 10 did not explicitly
5	require "mathematically fitting an ellipse." Indeed, Claims 1 and 10 recited merely "fitting an
6	ellipse to at least one of the pixel groups," and "fit an ellipse to at least one of the one or more pixel
7	groups," respectively. Briggs Decl. Ex. L at 3-4. The Examiner originally rejected the claims as
8	being anticipated by U.S. Patent No. 5,825,352 A ("*Bisset*"). *Id.* at 9. The Examiner noted that
9	*Bisset*'s "finger profile" disclosed "fitting an ellipse to at least one of the pixel groups," because the
10	"area of contact of the tip of [a] finger with the touch sensor is an ellipse-like shape." *Id.* at 10-11.
11	In response, the applicant amended the claims to recite "mathematically fitting an ellipse . . . ." *Id.*
12	at 21. The Examiner indicated that this amendment would overcome the rejections. *Id.*
13	While it is true that Apple added "mathematically" to "fitting an ellipse" in order to
14	overcome a rejection from the Examiner, Briggs Decl. Ex. L at 21, nowhere in the prosecution
15	history does Apple clearly and unmistakably state that it was disavowing all methods other than
16	those methods that applied a "unitary transformation." *See Omega Eng'g, Inc*, 334 F.3d at 1326
17	(requiring clear and unmistakable disavowal of claim scope for prosecution disclaimer to attach).
18	Indeed, if Apple clearly and unmistakably disclaimed anything by adding "mathematically" to the
19	claims, it disclaimed only the method of fitting an ellipse claimed in *Bisset*, which did not appear to
20	use any mathematical calculations to fit an ellipse to data. Ahn Decl. Ex. P at 18. The Court
21	declines to extrapolate from this prosecution history a clear and unambiguous disavowal of all
22	methods of fitting an ellipse that do not use a unitary transformation.
23	Thus, the prosecution history does not support Samsung's proposed construction.
24	**4. Extrinsic Evidence**
25	The parties cite several pieces of extrinsic evidence, which is generally not dispositive to
26	claim construction. Apple cites a passage from a textbook, the patent inventor's testimony, and
27	expert testimony, while Samsung cites ITC proceedings and the patent inventor's testimony. The
28	Court gives these sources little or no weight.

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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

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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"**

17
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:

22
23 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
24 of electrodes of the touch-sensitive surface; segmenting each proximity image into
one or more **pixel groups** that indicate significant proximity, each **pixel group**
25 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
26 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

37

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."

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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
         executed cause a data processing system to perform a method comprising:

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

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

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

18
         issuing at least one scroll or gesture call based on invoking the scroll or gesture operation;
19
         responding to at least one scroll call, if issued, by **scrolling a window having a view**
20   **associated with the event object**; and

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

     '915 Patent at 23:65-24:21 (emphasis added).
23
         Apple argues that no construction is necessary, whereas Samsung proposes that the term
24
     means "sliding a window in a direction corresponding to the direction of the user input over a view
25
     that is stationary relative to the window." Essentially, the parties disagree about the direction in
26
     which the scroll function uncovers content. Samsung argues that its construction clarifies the plain
27
     meaning of the claim terms by establishing that "scrolling a window having a view" will cause the
28

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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"

24 ---

25 [20] The parties do not agree on precisely who the person of ordinary skill in the art would be with
respect to the '915 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

26 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

27 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

28 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.

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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. S*ee 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.

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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
              cursor on the screen"**
17

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
         comprising:
26
         displaying a first window in response to receiving a first input from a user input device of
27   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;
28

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starting a timer; and

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

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

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

Samsung seeks to impose three additional limitations on the scope of the claim terms. Samsung argues that (1) the proposed construction "the user's movement of the mouse pointer does not affect the location of the first window" should replace "the first window is displayed independent[ly] from a position of a cursor;" (2) "cursor" should mean "a mouse pointer or a similar icon that is controlled by a mouse, track ball, or touch pad;" and (3) the cursor should be "visible on the screen." Apple argues that the claim terms should be given their full scope and that Samsung's proposed limitations should be rejected.[21]

1. Claim Language

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

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

---

[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.

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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

44

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]

25   _____

26   [22] In a footnote, Apple moves to strike Samsung's Exhibit X, which contains excerpts of the
     prosecution history of the '891 Patent as this evidence was apparently not disclosed in the joint
27   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
28   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

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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
         13). In particular, Aoki discloses that "when the user'[s] gesture positions the stylus in

18   contact with the displayed image map 103, directional tips in a pop-up text window 115
         could appear . . . In particular, Aoki discloses that the "pop-up window . . . [indicates] to a

19   user that the . . . active area . . . is "up" and "to the right" of the position at which the stylus
         102 was placed within the displayed image map 103 by the user." (paragraph [0082]). In

20   contrast amended claim 1 refers to displaying <u>the first window independently from a</u>
         <u>position of a cursor on the screen</u>. Aoki fails to disclose closing the first window in

21   response to a determination that the timer expired; wherein the first window does not close
         in response to any input from a user input device of the digital processing system, <u>wherein</u>

22   <u>the first window has been displayed independently from a position of a cursor on the</u>
         <u>screen.</u>

23   *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

26

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.

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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 Industs., 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

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the '891 Patent, and supports Apple's position that a cursor may be something other than a mouse

pointer controlled by a mouse, track ball, or touch pad.

4. Extrinsic Evidence

Finally, Samsung points to the inventor testimony of Imran Chaudri, who testified that a

cursor means "a mouse cursor." Samsung's Resp. at 24. This evidence, however, does not

overcome the construction established by the intrinsic evidence. As explained above, inventor

testimony is given little to no weight in claim construction, *Bell & Howell DMP Co.*, 132 F.3d at

706. *See* Samsung's Resp. at 24.[23]

Based on the claim terms and specification, and in light of the prosecution history and prior

art, the Court construes "the first window has been displayed independent[ly] from a position of a

cursor on the screen" to have its plain and ordinary meaning. Thus, the Court **does not limit the**

term to mean that a cursor must be visible on the screen. The Court construes the term "cursor" to

mean "**an indicator to help a user interact with a display**." Moreover, the Court rejects

Samsung's limitation that a cursor is only "controlled by a mouse, track ball, or touchpad."

IT IS SO ORDERED.

Dated: April 4, 2012
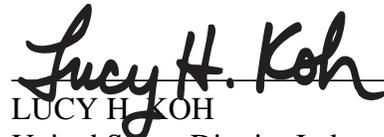
LUCY H. KOH
United States District Judge

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[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.

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