

EXHIBIT E

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8 UNITED STATES DISTRICT COURT
9 NORTHERN DISTRICT OF CALIFORNIA
10 SAN FRANCISCO DIVISION
11

12 ELANTECH DEVICES CORP.,) Case No. 3:06-CV-01839 CRB
13 Plaintiff,)
14 vs.) **ELANTECH DEVICES CORP.’S OPENING**
15 SYNAPTICS, INC.;) **CLAIM CONSTRUCTION BRIEF FOR U.S.**
16 AVERATEC, INC,) **PATENT NO. 5,825,352**
17 Defendants.)

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1 **I. INTRODUCTION**

2 This patent dispute relates to touchpad or touch-sensing devices, which serve as user-input
3 devices for many consumer electronics products, such as laptop computers, portable music players,
4 and personal digital assistants. Plaintiff Elantech Devices Corp. (“Elantech”) is one of the world’s
5 recognized leaders in touchpad and other user-input devices. Elantech currently owns numerous
6 patents relating to touchpad and interface devices, many of which are implemented in Elantech’s
7 products. Founded in 2003, Elantech acquired significant technology from a group within Logitech,
8 Inc. (“Logitech”) in California, which had focused on the development of user-friendly input
9 devices for years. As a result, Logitech pioneered many technical advances in those devices in the
10 early 1990s. Since its inception in 2003, Elantech has enjoyed healthy growth and its products have
11 gained significant popularity in the market.

12 At issue is whether Defendants Synaptics, Inc. (“Synaptics”) and Averatec, Inc. (“Averatec”)
13 should be allowed to continue their ongoing, unauthorized use of the technical advances achieved
14 by Elantech’s predecessor as reflected in United States Patent No. 5,825,352 (“the ‘352 patent”)
15 now owned by Elantech. Elantech asks that the Court adopt its common sense claims constructions,
16 constructions that are fully consistent with the patent itself. Synaptics would have this Court adopt
17 claim constructions not supported by and, in many instances, contradicted by the patent and the file
18 history.

19 **II. BACKGROUND OF ELANTECH’S ‘352 PATENT**

20 Elantech’s ‘352 patent discloses and claims a significant advance in touchpad devices: the
21 ability to detect the presence of two or more fingers or objects. Declaration of Sean P. DeBruine in
22 Support of Elantech’s Opening Claim Construction Brief (“DeBruine Decl.”), Ex. A (‘352 patent) at
23 2:17-20, 38-41 Touchpad devices, also known as touch sensing devices, are devices that can sense
24 the touch or presence of an object or finger and generate signals reflective of an object- or finger-
25 based operation, which may be used to operate devices such as computers. *Id.* Due to its compact
26 size and its ability to receive user operated motions, such as finger or object movements, touchpad
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1 devices have become popular replacements for or alternatives to computer mice, both of which
 2 serve to control cursor movements and receive user clicks of desktop icon.

3 Before the inventors invented the subject matter of the '352 patent, touchpad devices could
 4 detect the contact or presence of only one finger or one object at a time. Single-finger detection is
 5 generally acceptable for achieving the simple task of cursor movement, but insufficient for
 6 achieving other tasks that can be done by a computer mouse, such as clicking and dragging.
 7 Various kinds of single finger movements or "gestures" were used with touchpads to represent
 8 clicking, dragging, or other commands. However, the additional movements or gestures may
 9 require additional efforts from a user and become not intuitive to many users. *Id.* at 1:41-59.

10 To provide a touchpad device that is easier to operate, the inventors at Logitech, Elantech's
 11 predecessor, pioneered the technical field and invented methods to directly detect the touch or
 12 presence of two or more fingers. Various functions may be associated or customized with one-,
 13 two-, or three-finger presence to simplify the touch-based operation of users. *Id.* at 2:61-4:16 The
 14 innovation is now widely implemented in Elantech's devices and the devices offered by Synaptics
 15 and Averatec.

16 Figures 1 and 3 below are reproduced from the '352 patent. As illustrated in Fig. 1, the
 17 operative coupling of two fingers to a touch sensor may be used to operate the touch sensor. The
 18 information received by or associated with the touch sensor may be examined to detect whether two
 19 fingers are simultaneously present. For various touchpad devices, the touch or presence of fingers
 20 causes changes in the signals that reflect the presence of two or more objects. As shown in Fig. 3,
 21 during the examination of the information, a touchpad device identifies a first maximum or peak 85,
 22 a minimum or lowest value 90 following the peak 85, and a second maximum or peak 95 following
 23 the lowest value. In other words, the two-finger presence may be identified by simply identifying
 24 two peak values and one lowest value between the two peak values. *Id.* at 6:26-38

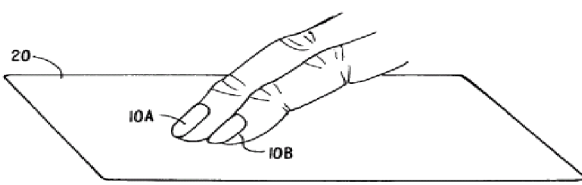


FIG. 1

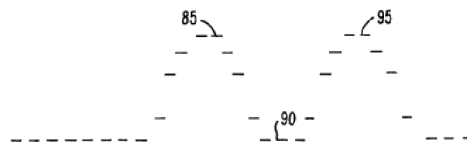


FIG. 3

1 **III. LAW OF CLAIM CONSTRUCTION**

2 The infringement analysis entails a two-step process. First determining correct claim scope
3 and then comparing the properly-construed claim to an accused device to determine whether all of
4 the claim limitations are present. *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1362 (Fed. Cir. 1999).
5 Interpreting the proper meaning and scope of a patent claim is a question of law exclusively for the
6 Court to decide. *Id.*; *see also Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

7 The words of the claims themselves provide the starting point for any claim construction
8 analysis. *See Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116
9 (Fed. Cir. 2004). The meanings of the claim terms are dependent on their usage and context in the
10 patent. *See Resqnet.com, Inc. v. Lansa, Inc.*, 346 F.3d 1374, 1378 (Fed. Cir. 2003). Words of a
11 claim are generally given their ordinary and customary meaning, which is the meaning that a term
12 “would have to a person of ordinary skill in the art in question at the time of the invention.”
13 *Phillips v. AWH Corp.* 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). Such a person “is deemed to read
14 the claim term not only in the context of the particular claim in which the disputed term appears, but
15 in the context of the entire patent, including the specification.” *Phillips* at 1313.

16 As the Federal Circuit has explained, “[i]t is improper for a court to add extraneous
17 limitations to a claim, that is, limitations added wholly apart from any need to interpret what the
18 patentee meant by particular words or phrases in the claim.” *Hoganas AB v. Dresser Indus., Inc.*, 9
19 F.3d 948, 950 (Fed. Cir. 1993). Therefore, “when the meaning of a term used in a claim is
20 sufficiently clear from its definition in the patent specification, that meaning shall apply.”
21 *Intermatic Inc. v. The Lamson & Sessions Co.*, 273 F.3d 1355, 1365 (Fed. Cir. 2001).

22 The Federal Circuit’s *en banc* decision in *Phillips* made clear that Courts are not to use
23 dictionary definitions as the starting point of claim construction, referring “to the specification [only
24 when] determining whether the specification excludes one of the meanings” or when the inventor
25 has “disavowed or disclaimed scope of coverage.” *Phillips* at 1321. The approach of using the
26 specification only “as a check on the dictionary meaning” can result in incorrect or unduly
27 expansive claim construction. *Id.* Rather, *Phillips* held that the Court should “instead focus at the
28

1 outset on “how the patentee used the claim term in the claims, specification, and prosecution
2 history, rather than starting with a broad definition and whittling it down.” *Id.* Indeed, a Court must
3 look to “those sources available to the public that show what a person of skill in the art could have
4 understood disputed claim language to mean,” including the specification and the prosecution
5 history and “cannot look at the ordinary meaning of the term . . . in a vacuum.” *Phillips* at 1313-14.

6 For this reason, the Federal Circuit has “viewed extrinsic evidence in general as less reliable
7 than the patent and its prosecution history in determining how to read claim terms.” *Phillips*, 415
8 F.3d 1303, 1318 (Fed. Cir. 2005). Indeed, extrinsic evidence, such as expert testimony, should not
9 be relied upon to construe a claim term unless an ambiguity in the claim exists after considering the
10 intrinsic evidence. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996).
11 Furthermore, it is improper to allow the public record to be altered or changed by extrinsic
12 evidence. *Id.* At 1583. All of the disputed claim terms of the ‘352 patent can be, and should be,
13 readily construed without the need for extrinsic expert testimony.

14 **IV. CLAIM CONSTRUCTION FOR CLAIMS 1 AND 18 OF THE ‘352 PATENT**

15 As noted above, the ‘352 patent relates to touchpad devices that can detect the presence of
16 two or more fingers or objects. The claims at issue include claims 1 and 18. Elantech did not see a
17 need to construe those claims, as the claims language as written can be well understood. However,
18 Defendant Synaptics, joined by Defendant Averatec, proposed many terms for construction and
19 attempts to limit the claim language not to any particular embodiments in the specification of the
20 ‘352 patent but to peculiar meanings sponsored by Synaptics’ expert and Synaptics’ selective
21 reading of dictionary definitions. *See DeBruine Decl., Ex. B (Jt. CC Stmt)*. To respond to
22 Synaptics’ request for construction and to better assist the Court and the jury in infringement
23 determination, Elantech proposes claim constructions that follow the straightforward language of
24 the claims and are entirely supported by the intrinsic evidence.

25 The subject matter of the claimed invention the ‘352 patent involves examining touch sensor
26 information to identify two peak values with one lowest value therebetween and providing an
27 indication in response to the identification. Claim 1 states (with the disputed terms underlined):
28

1 1. A method for detecting the operative coupling of multiple fingers to a
 2 touch sensor involving the steps of
 3 scanning the touch sensor to (a) identify a first maxima in a signal
 4 corresponding to a first finger, (b) identify a minima following the first
 5 maxima, (c) identify a second maxima in a signal corresponding to a second
 6 finger following said minima, and

7 providing an indication of the simultaneous presence of two fingers in
 8 response to identification of said first and second maxima. DeBruine Decl.,
 9 Exh. A ('352 Patent) at 16:14-23.

10 As the following explanation will illustrate, the intrinsic evidence completely supports Elantech
 11 proposed constructions identified below and the Court should construe them accordingly.

12 **A. “Scanning the Touch Sensor” Means “Examining Information Associated with the**
 13 **Touch Sensor”**

14 Elantech’s proposed construction is based on the meaning of the term in the context of the
 15 ‘352 patent, which discloses various methods of scanning and points out the flexibility of using
 16 various types of devices with the claimed invention. In contrast, Synaptics’ proposed construction,
 17 “sequentially measuring the traces in the touch sensor,” unduly imposes a narrow reading of
 18 “*sequentially* measuring the traces” on the simple term of “scanning.” In essence, Synaptics is
 19 asking the Court to disregard the broad teaching and multiple embodiments disclosed in the
 20 specification and construe the term solely based on Synaptics’ selective reading of dictionary
 21 definitions and Synaptics’ expert testimony. That approach is clearly erroneous.

22 **1) The Intrinsic Evidence Expressly Contradicts Synaptics’ Proposed**
 23 **Construction of “Sequentially Measuring the Traces . . .”**

24 In imposing the “sequentially measuring the traces . . .” limitation on “scanning,” Synaptics
 25 failed to cite to any specification disclosure that uses scanning in such limited manner. DeBruine
 26 Decl., Ex. B at Ex. C, Claim Term 15. In fact, there is none. In the context of the ‘352 patent
 27 specification, “scanning” refers to the process of examining the touch sensor information in general
 28 – a process that occurs before the finger- or object-induced maxima and minimum are identified.
 DeBruine Decl., Exh. A ('352 Patent) at 6:14-34. The specification does not limit the examination
 of touch sensor information to any particular scanning techniques or scanning devices. *Id.* at 2:18-
 27. As such, the intrinsic evidence directly contradicts Synaptics’ proposed construction.

1 The patent specification expressly states touch sensors “may be scanned sequentially *or*
2 *concurrently*, depending on the hardware implementation.” *Id.* at 7:36-37 (emphasis added).
3 Furthermore, the specification also refers to a related patent application entitled “Touch Pad Sensor
4 with *Simultaneous* Sensing” when discussing a touchpad and part of its operation. *Id.* at 5:19-28
5 (emphasis added). In other words, the specification makes perfectly clear to skilled artisans that
6 scanning need not be done only sequentially, it may also be done concurrently or simultaneously.
7 Synaptics is therefore asking the Court to commit the very error in that the Federal Circuit has
8 cautioned should be avoided –the “heavy reliance on the dictionary divorced from the intrinsic
9 evidence.” *Phillips* at 1321. Such reliance “risks transforming the meaning of the claim term to the
10 artisan into the meaning of the term in the abstract, out of its particular context, which is the
11 specification.” *Id.*

12 The intrinsic evidence also contradicts the “measuring” portion of Synaptics’ proposed
13 construction. The ‘352 patent specification states that “...the cycle begins by *scanning* the traces
14 and *measuring* the capacitance on each trace.” *Id.* at 5:60-61. Scanning and measuring are thus
15 separate and distinct operations. Since the claims refer only to “scanning,” Synaptics’ attempt to
16 read “measuring” into the claim definition of “scanning” is contrary to the specification description.

17 Finally, the intrinsic evidence also contradicts the inclusion of “trace values” in Elantech’s
18 proposed construction. Page 3 of Amendment B dated April 6, 1998 of the ‘352 prosecution history
19 states that multiple fingers are detected by “detecting the multiple maxima in the [finger] *profile* on
20 the touchpad.” DeBruine Decl., Ex. C. A similar statement also appears on page 4 of this
21 amendment. *Id.* This language clearly supports Elantech’s proposed claim construction. The
22 reference to “trace values” in Synaptics’ definition, on the other hand, finds no support in the file
23 history.

24 **2) ‘352 Patent Specification Describes “Scanning” as Examining or**
25 **Processing Touchpad Information to Identify Finger Presence**

26 As illustrated by the ‘352 patent specification and Figures 1 and 3 reproduced below, the
27 two-finger presence may be identified by simply identifying two peak values and one lowest value
28 between the two peak values.

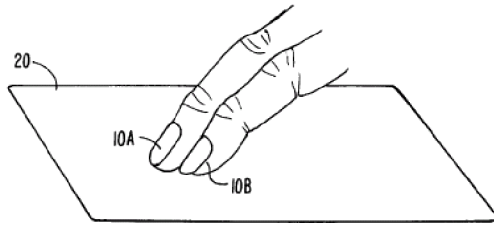


FIG. 1.

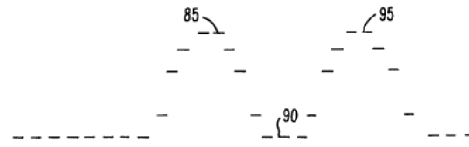


FIG. 3.

Sensing the proximity of multiple fingers to a touch sensor, as illustrated in Figure 1, “may be implemented based on any conventional touch sensing technology,” such as capacitive, resistive, surface wave, strain, pressure, and optical sensing. DeBruine Decl., Exh. A (’352 Patent) at 2:18-22, 1:18-32. Accordingly, the specification does not limit the invention to any particular “scanning” but broadly recites that various technology may be used to obtain and examine touch sensor information. For example, scanning a touch sensor to identify the high and low values as illustrated in Figure 3 includes having “the values of finger-induced capacitance . . . processed” to “detect whether one or more fingers is in operative contact” with a touchpad.” *Id.* at 6:14-17. In addition, as discussed above, any method of scanning, including concurrent or sequential scanning, is included in the patents use of this term.

3) Dictionary Definition from Elantech and Synaptics Similarly Characterizes Scanning as Examining Information and Contradicts Synaptics’ Proposed Construction

In addition to the specification, a dictionary cited by both Elantech and Synaptics also defines scanning as “the process of examining information in a systematic manner.” DeBruine Decl., Ex. D (The IEEE Standard Dictionary of Electrical and Electronic Terms, 947 (6th Ed.)). However, despite the consistency from the specification and the dictionary, Synaptics seeks to impose a narrow reading of “*sequentially* measuring” on the easy-to-understand term “scanning.” DeBruine Decl., Ex. B at Ex. A, pg. 2. Synaptics’ justification for its narrow reading does not come from the context of the specification or similarly-consistent dictionary definition, but from Synaptics’ expert testimony in combination with a dictionary definition of “[t]o examine sequentially using a part-by-part technique.” DeBruine Decl., Ex. C at 5 (citing The Illustrated Dictionary of Microcomputers, 345 (3rd Ed., 1998)). Furthermore, none of the dictionary

1 definitions even equate scanning with “measuring.” DeBruine Decl., Ex. B at Ex. E. Thus,
 2 Synaptics’ attempt to introduce the concepts of “measuring” and “trace values” into a process of
 3 scanning is not even supported by their asserted dictionary definition. Thus, Synaptics is left with
 4 nothing but unsupported testimony of its expert to support its construction. Because that
 5 construction is at odds with the patent and other objective evidence, it must be rejected.

6 **B. “Identify a First Maxima in a Signal Corresponding to a First Finger” means**
 7 **“Identify a First Peak Value in a Finger Profile Obtained from Scanning the Touch**
 8 **Sensor”**

8 Elantech’s proposed construction given above is based on the meaning of the term in the
 9 context of the ‘352 patent, which refers to Figures 3 and 4 below as examples of finger profiles and
 10 describes detecting a first peak value in the finger profile. In contrast, Synaptics’ proposed
 11 construction of “measuring the trace values of the touch sensor corresponding to a first finger and
 12 determining the point at which the measured values cease to increase and begin to decrease” again
 13 imposes unwarranted restrictions and overcomplicates a simple term that, as written, can be easily
 14 understood by the Court and the jury. Again, Synaptics is asking the Court to disregard the intrinsic
 15 evidence and construe the term solely based on expert testimony and Synaptics’ selective reading of
 16 a dictionary.

17 **1) Skilled Artisans Would Understand Identifying a “First Maxima” as**
 18 **Identifying a First Peak Value**

19 As illustrated by the ‘352 patent specification and Figures 3 and 4 reproduced below, the
 20 claimed “First Maxima” simply means a first peak value, which can be derived by examining a
 21 finger profile.



26 In discussing a finger profile indicative of the presence of two fingers, the specification
 27 provides that a circuitry, software or firmware “detects a first maxima [sic] 85 indicative of a first
 28

1 finger in operative proximity to the touchpad . . .” DeBruine Decl., Exh. A (’352 Patent) at 6:27-32.
 2 As illustrated in Figure 3, the “first maxima” as claimed, or more correctly (grammatically
 3 speaking) “first maximum,” simply means a first peak value, which exists in a peak area of the
 4 finger profile and may be followed by a minima and another maxima. *Id.* at Fig. 3, 6:27-38. Figure
 5 4 similarly illustrates a first peak value 105, which is followed by a local minimum or lowest value
 6 and a second peak value. *Id.* at 6:39-47.

7 Other parts of the ’352 patent specification also use the term consistently. Specifically, the
 8 specification uses Xpeak1 – “a variable to store the value of the *first peak X value*” to represent the
 9 first maximum when discussing one way of computing or detecting finger presence. *Id.* at 8:64.
 10 Even the very dictionary Synaptics and its expert cited to support Synaptics’ narrow reading of
 11 “first maxima” offers other definitions consistent with the intrinsic evidence, which include “[t]he
 12 greatest value which a variable may have” and “the highest possible magnitude or quantity of
 13 something attained, attainable, or customary.” DeBruine Decl., Ex. E (The New Shorter Oxford
 14 English Dictionary on History Principles, Volume 1, 1720 (1993)).

15 **2) ’352 Patent Specification and Prosecution History Directly Contradicts**
 16 **Synaptics’ Proposed Construction**

17 As illustrated by Figures 3 and 4 above, the signal corresponding to a first finger is
 18 illustrated as a finger profile – and the first curve at the left can be recognized as the finger profile
 19 corresponding to a first finger. The specification provides that “a finger profile is shown indicative
 20 of the presence of two fingers, spaced apart from one another” in one embodiment and similarly
 21 uses “X PROFILE” and “Y PROFILE” in Figures 7B through 7F-2 to indicate the signals
 22 correspond to one or more fingers. DeBruine Decl., Exh. A (’352 Patent) at 6:26-28.

23 Synaptics’ seeks to construe “a first maxima” as “the point at which the measured values
 24 cease to increase and begin to decrease.” DeBruine Dec.; Ex. B at Exh. A, pg. 2. The Court should
 25 reject it because the specification and prosecution history of the ’352 patent directly contradicts it.
 26 Specifically, on page 8 of Amendment A dated August 18, 1997, Applicants stated that claimed
 27 maxima are “peaks” and also stated that the claimed maxima “could be maximum negative levels,
 28 or troughs, depending upon the circuitry used.” DeBruine Decl., Ex. F.

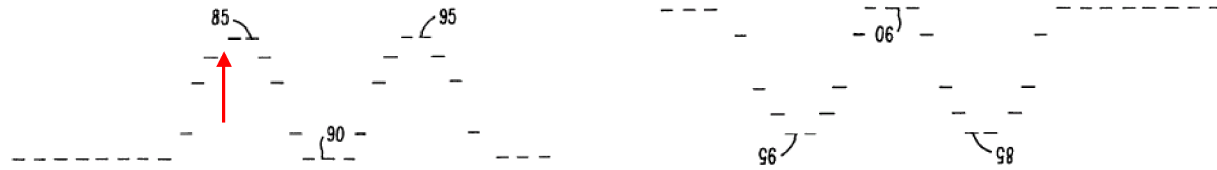


FIG. 3.

Upside-down version of Figure 3

Turning Figure 3 upside down solely as an illustrative example, a maximum negative level or trough, unlike a maximum positive level, may be near an area of a curve where it previously decreases to a local low and later on starts to increase. In other words, the fact that a maximum could be a maximum negative level or negative peak directly contradicts Synaptics’ construction as “the point at which the measured values cease to increase and begin to decrease,” which only occurs when a finger profile remains positive. Therefore, Applicants own statements in the prosecution history contradict Synaptics’ narrow reading of the term “first maxima.”

Additionally, as illustrated in Figure 3, a finger profile may have a flat or nearly flat area at its local peak, which makes Synaptics construction of “the point at which the measured values cease to increase and begin to decrease” inapplicable. For example, the first maximum 85 as illustrated in Figure 3 above may be the point at which values *begin to decrease*, but is first maximum 85 is also the point at which values *ceases to increase*. A point where values “cease to increase” occurs at an area to the left of first maximum 85, which is of the same level as first maximum 85. The values associated with the finger profile cease to increase at a point indicated by an arrow above, not at first maximum 85. The specification teaching therefore contradicts Synaptics’ construction.

Accordingly, the Court should adopt Elantech’s construction and reject Synaptics’ attempt to deviate from the specification and prosecution history and Synaptics’ construction that is solely based on expert testimony and a selective reading of Synaptics’ cited dictionary.

C. “Identify a Minima Following the First Maxima” Means “Identify the Lowest Value in the Finger Profile that Occurs after the First Peak Value, and before Another Peak Value is Identified”

For similar reasons, the Court should adopt Elantech’s proposed construction as above and reject Synaptics’ construction, which construes the phrase of “scanning the touch sensor to . . .

1 identify a minima following the first maxima” as “measuring the trace values of the touch sensor
2 following, in scan order, after the first maxima and determining the point at which the measured
3 values cease to decrease and begin to increase.”

4 **1) The Intrinsic Evidence Mandates Elantech’s Proposed Construction**

5 Elantech’s construction is based on the meaning of the term in the context of the ’352 patent,
6 which refers to Figures 3 and 4 below as examples of finger profiles. DeBruine Decl., Ex. A (’352
7 Patent) at 4:55-59. Skilled artisans would understand that identifying “a minima following the first
8 maxima” as meaning identifying the lowest value in the finger profile that occurs after the first peak
9 value and before another peak value is identified.

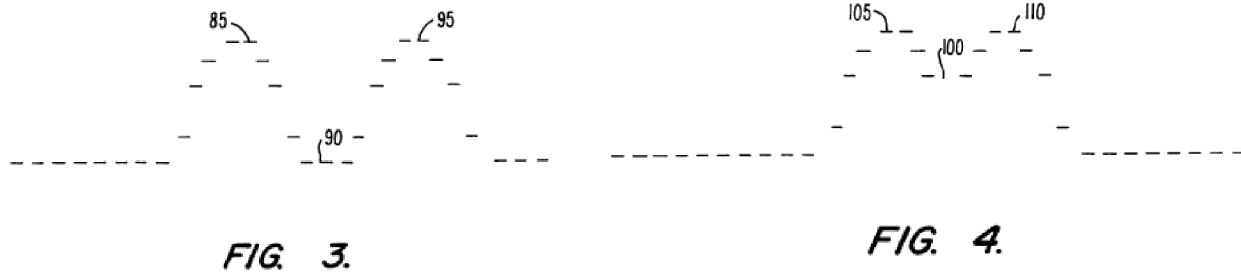
10 As illustrated by the ’352 patent specification and Figures 3 and 4, the claimed “minima”
11 simply means the lowest value, which can be derived by examining a finger profile. The disputed
12 claim term should be read in the context of claim 1, which recites among others “scanning the touch
13 sensor to (a) identify a first maxima in a signal corresponding to a first finger, (b) identify a minima
14 following the first maxima, (c) identify a second maxima in a signal corresponding to a second
15 finger following said minima.” The specification provides that a circuitry, software or firmware
16 “detects a first maxima [sic] 85 indicative of a first finger in operative proximity to the touchpad 30,
17 followed by a minima [sic] 90 indicative of a space between the fingers, and further followed by
18 another maxima [sic] 95 indicative of a second finger operatively coupled to the touchpad 30.” *Id.*
19 at 6:27-35. As illustrated in Figure 3 and the specification, the minimum 90 is the lowest value in
20 the finger profile between the two peak values 85 and 95. Therefore, the claim term “identify a
21 minima following the first maxima” can be properly construed as “identify the lowest value in the
22 finger profile that occurs after the first peak value, and before another peak value is identified.”
23 Figure 4 similarly illustrates a local minimum 100 between two first peak values 105 and 110. *Id.* at
24 6:42-45.

25 **2) ’352 Patent Specification Specifically and Directly Contradicts**
26 **Synaptics’ Proposed Construction**

27 Once again, the very dictionary Synaptics and its expert cited to support Synaptics’ narrow
28 reading of “minima” offers other definitions consistent with the intrinsic evidence, which include

1 “[t]he least value which a variable or a function may have” and “the smallest amount or quantity
 2 possible, usual, attainable, etc.” DeBruine Decl., Ex. E.

3 Additionally, Synaptics’ narrow reading of “minima” as “the point at which the measured
 4 values cease to decrease and begin to increase” contradicts the specification’s teaching of maxima.



10 As illustrated in Figures 3 and 4, a finger profile may have a flat or nearly flat area at or near
 11 a local minimum, which makes Synaptics construction of “the point at which the measured values
 12 cease to decrease and begin to increase” inapplicable. For example, the minimum 90 as illustrated
 13 in Figure 3 and disclosed in the specification is neither “the point at which the values begin to
 14 decrease” nor “the point at which . . . the values begin to increase.” In fact, “the point at which the
 15 values begin to decrease” occurs not at minimum 90, but at an area to the left of minimum 90, at
 16 which the curve level decrease to a level the same as that of minimum 90. Likewise, “the point at
 17 which . . . the values begin to increase” occurs not at minimum 90, but at an area to the right of
 18 minimum 90, at which the curve level begins to increase from a level the same as that of minimum
 19 90. The specification teaching therefore contradicts Synaptics’ construction of “minima.”

20 The specification also contradicts Synaptics’ construction of “measuring the trace values of
 21 the touch sensor following, *in scan order*” DeBruine Decl., Ex. B. at Exh. A, pg. 2 (Jt. CC
 22 Stmt). As discussed above, the specification discloses various touchpad devices and various
 23 scanning techniques, including both concurrent and sequential scanning, as part of the invention.
 24 DeBruine Decl., Ex. A (’352 Patent) at 7:36-37. The clear and unambiguous language of the claim
 25 itself also imposes no particular scanning order limitation in contrast to Synaptics’ narrow reading.

26 Referring to Synaptics’ proposed claim construction, it is unclear as to what it means to
 27 “measure trace values *following, in scan order*, after the first maxima...” Specifically, it is not clear
 28

1 as to what is *following* what. Since the purpose of claim construction is to determine what a claim
2 means to the person skilled in the art, a claim construction that adds confusion to this process
3 should not be adopted.

4 **D. “Identify a Second Maxima in a Signal Corresponding to a Second Finger following**
5 **said Minima” Means “after Identifying the Lowest Value in the Finger Profile, Identify**
6 **a Second Peak Value in the Finger Profile”**

7 For similar reasons as discussed under Section IV-B, the Court should adopt Elantech’s
8 proposed construction as above. First, skilled artisans would understand “second maxima” as being
9 a second peak value from the discussion of Figures 3 and 4, the second peak values 95 and 110
10 illustrated therein, and the use of Xpeak2 as “a variable to store the value of the *second peak X*
11 *value.*” *Id.* at 6:26-47, 9:4. Second, the specification illustrates the claimed “signal corresponding
12 to a second finger” as being a finger profile. Third, the specification illustration in Figures 3 and 4,
13 as well as the Applicants’ prosecution history statement regarding maxima, directly contradicts
14 Synaptics’ proposed construction of reading “maxima” as “the point at which the measured values
15 cease to decrease and begin to increase.”

16 Furthermore, Synaptics proposed construction of this phrase suffers from the same
17 confusion highlighted above with respect to the meaning of the word “following” and thus should
18 not be adopted for this additional reason.

19 **E. Means-Plus-Function Claim Elements Under 35 U.S.C. § 112**

20 In addition to claim 1, the parties also ask the Court to construe claim 18, which recites the
21 two elements of claim 1 using “means for” language. Claim 18 provides:

22 18. A touch sensor for detecting the operative coupling of multiple
23 fingers comprising:

24 means for scanning the touch sensor to (a) identify a first maxima in a
25 signal corresponding to a first finger, (b) identify a minima following the first
26 maxima, and (c) identify a second maxima in a signal corresponding to a
27 second finger following said minima, and

28 means for providing an indication of the simultaneous presence of
two fingers in response to identification of said first and second maxima. *Id.*
at 17:27-37.

1 The parties do not dispute that both elements should be governed by 35 U.S.C. §112, but ask the
2 Court to resolve two issues: (1) the function of “means for scanning . . . ;” and (2) the
3 corresponding structure of “means for providing” DeBruine Decl., Ex. B.

4 **1) The function of “Means for Scanning the Touch Sensor . . .” is**
5 **“Examining Information associated with the Touch Sensor”**

6 Claim 18 shares the same “scanning the touch sensor” limitation as claim 1 discussed above.
7 Therefore, the Court should reach the same construction for the reasons discussed under Section IV-
8 A. Synaptics’ again seeks to impose the narrow reading of “sequentially measuring the traces in the
9 touch sensor” contradicted by the intrinsic evidence. The Court should adopt Elantech’s claim
10 construction and not err through “heavy reliance on the dictionary divorced from the intrinsic
11 evidence.” *Phillips* at 1321.

12 **2) The Corresponding Structure of “Means for Providing an Indication of**
13 **the Simultaneous Presence of Two Fingers in Response to Identification**
14 **of said First and Second Maxima” is Microcontroller 60**

15 The claimed “means” serves to provide the indication of two-finger presence. The ‘352
16 patent specification correspondingly provides that microcontroller 60 receives touch sensor signals
17 and has its output “supplied to an interface to a PC or other device” ‘352 patent, 5:44-55.
18 Accordingly, the Court should find the corresponding structure of “means for providing an
19 indication” as microcontroller 60, which is illustrated in the specification and Figure 2.

20 **V. CONCLUSION**

21 As discussed above, Elantech’s proposed constructions for the disputed terms of the ‘352
22 patent follow the straightforward language of the claims and are supported by the intrinsic evidence.
23 In contrast, Synaptics’ proposed constructions limit the claim language not to any particular
24 embodiments in the specification of the ‘352 patent but to peculiar meanings sponsored by
25 Synaptics’ expert supported only by his selective reading of dictionary definitions, an approach
26 specifically rejected by the Federal Circuit. No explicit or different definitions, or disavowal or
27 disclaimer of claim scope, appears in either the ‘352 patent itself or in its prosecution history that
28 would warrant the unduly narrow claim constructions proposed by Synaptics. Accordingly,

1 Elantech respectfully requests that the Court adopt its constructions and reject those offered by
2 Synaptics.

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