

EXHIBIT G

BRIAN VON HERZEN, Ph.D.

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

ELAN MICROELECTRONICS
CORPORATION,

Plaintiff,

vs.

CASE NO:
C-09-01531 RS (PVT)

APPLE, INC.,

Defendant.

AND RELATED COUNTERCLAIMS. /
/

DEPOSITION OF BRIAN VON HERZEN, Ph.D.

Thursday, April 1, 2010

Pages 1 - 120

REPORTED BY JOANNE ICHIKI, CSR #11660

1 for a particular case?

2 A. From time to time, clients ask that I
3 prepare a background of my C.V. so that we can
4 discuss working on a new project together.

5 Q. And when you prepare such a C.V., do you
6 take -- make every effort to make sure that that
7 C.V. is correct?

8 A. No. I don't make every effort. I make
9 reasonable efforts.

10 Q. Okay. And in your mind, what is a
11 reasonable effort?

12 A. My reasonable effort is I open up the
13 C.V., I take a look at it. If it looks like it's
14 accurate, I save it and send it off.

15 Q. Okay. If we can turn to Exhibit 1,
16 please, your declaration. The bottom of the second
17 page, you begin your opinion regarding the level of
18 ordinary skill in the art with reference to the '352
19 patent; is that correct?

20 A. Yes.

21 Q. And it is your opinion that such a person
22 of ordinary skill in the art would have a bachelor's
23 degree in computer science, electrical engineering,
24 or mathematics, and three to five years in the area
25 of signal processing or the design of touch

1 sensitive input devices, or a master's or Ph.D. and
2 one to three years of experience in those fields; is
3 that correct?

4 A. Yes.

5 Q. Okay. What is your basis for that
6 opinion?

7 A. The basis for my opinion is based on my
8 personal experience. It's also based on the levels
9 of education and skill working in the field, and
10 the speed at which the field changed and
11 innovations were made in the field.

12 Q. Okay.

13 A. As well as sophistication of the
14 technology and the prior art.

15 Q. Okay. We talked about your personal
16 experience, which is your employment at Synaptics;
17 correct?

18 A. We did discuss my employment at
19 Synaptics.

20 Q. And that and the consulting work 15 years
21 ago for Synaptics is the total of your experience in
22 working on touch pads; correct?

23 MS. MEHTA: Objection. Mischaracterizes
24 his testimony.

25 THE WITNESS: As I stated previously, I

1 patents-at-issue in this case?

2 Q. My question is as stated: One of
3 ordinary skill in the art in January of 1996 would
4 have known how to calculate a period of time during
5 which a user -- an object is in contact with a touch
6 pad; is that correct?

7 A. One of ordinary skill in the art at the
8 time of -- time frame of January 1996 would be able
9 to calculate time intervals based on the time
10 duration of particular events.

11 Q. And the time duration of particular
12 events being the beginning and ending of contact
13 with the touch pad?

14 A. Depending on how that's defined, one
15 could certainly measure time intervals of such
16 events.

17 MR. DeBRUINE: Okay. We've been going
18 for about an hour. Do you want to take a quick
19 break?

20 MS. MEHTA: Sure.

21 THE VIDEOGRAPHER: Off the record at
22 10:25.

23 (Recess taken.)

24 THE VIDEOGRAPHER: We are back on the
25 record at 10:41.

1 A. There may be fewer sensors than
2 coordinates, so I don't believe that would be
3 correct.

4 Q. Okay. So a native sensor coordinate may
5 fall in between the physical sensors; correct?

6 A. In general, a coordinate system could
7 comprise more coordinates than the intersections of
8 X and Y sensors; that is correct.

9 Q. Well, in general, in the context of the
10 terms "native sensor coordinates," it's your
11 opinion, is it not, that the native sensor
12 coordinates is not limited to the physical locations
13 of the conductive sensors in the touch pad; is that
14 correct?

15 A. Please repeat the question.

16 (Record read.)

17 THE WITNESS: Every native sensor
18 coordinate corresponds to a physical location.
19 There may be more sensor coordinates than there are
20 sensors in the sense that interpolation enables the
21 inference of many coordinates for any particular
22 pair of sensors.

23 So in summary, the mapping of a touch
24 pad surface into native sensor coordinates involves
25 the mapping of a two-dimensional surface into a

1 coordinate system that can comprise many values.
2 And those values, in general, can be more or less
3 than the number of intersections of a set of wires
4 or lines.

5 Q. Okay.

6 A. Nonetheless, they correspond to the
7 sensor coordinates of the touch pad.

8 Q. So let's take a look at the top of
9 Page 44 in your declaration, Exhibit 1, please, and
10 the first full sentence that begins at Line 2. It
11 says, "To one of ordinary skill in the art, this
12 would have been understood to mean that the sensors
13 are configured to map the touch pad into the
14 physical - or native - coordinates of the sensors."

15 Do you see that?

16 A. Yes, I do.

17 Q. Just to confirm, you don't mean that to
18 be limited to the physical coordinates of the actual
19 conductive lines?

20 A. No. It's meant to be part of the
21 coordinate system, as it states in Line 1. And
22 rewinding here to the beginning of that sentence,
23 "Here, the claim recites that these sensors are
24 configured to map the touch pad surface into a
25 specific coordinate system, namely, into 'native

1 Q. Okay. And do you understand that the
2 portions of the specification that you cite there
3 refer to an exemplary embodiment of the invention?
4 Do you understand that in arriving at your opinion?

5 A. Yes, these are examples.

6 Q. Okay. Let's talk about the term
7 "identify."

8 Can you -- what, in your opinion, is the
9 proper construction of the term "identify"?

10 A. "Identify" means to recognize a value to
11 be.

12 Q. And in the context of the claim, you
13 recognize the value to be what?

14 A. A maxima or a minima, for example.

15 Q. Okay. Now, you give a different
16 definition of that term -- well, all right. You
17 initially don't, I guess.

18 I guess what I'm looking for here on
19 Page 7, the sentence from -- beginning on Line 8,
20 you say that "One of ordinary skill would have
21 understood in the context of these claims that
22 'identify' or 'identifying' values would typically
23 involve setting corresponding variables (such as
24 'first maxima' variable) to the recognized values."

25 Do you see that sentence?

1 A. Yes, I do.

2 Q. And just so we're clear, in your opinion,
3 does the term -- should the term "identify" be
4 construed to require setting a variable to the
5 recognized value?

6 A. Well, this is really an engineering
7 context of Patent '352. It's referring to
8 recognizing a value to be a maximum or a minimum,
9 for example. And then there are examples such as
10 figures of the '352 that then assign a variable to
11 the maximum or minimum, for example -- let's see if
12 I can find it here.

13 Figure 9 shows the setting of a variable
14 to valleys or peaks corresponding to minima or
15 maxima respectively.

16 Q. In your opinion, sir, does the step of
17 identifying or identify as used in the claims of the
18 '352 patent require the setting of a variable? Is
19 it limited to the setting of a variable, in your
20 opinion?

21 A. The '352 patent describes setting
22 corresponding variables to recognize values, and in
23 fact shows an example of that, for example, in
24 Figure 9.

25 Q. I don't mean to interrupt, but I think

1 we're about to run out of the tape.

2 Are you done with your answer?

3 A. I was still considering the full,
4 complete response.

5 Q. Can we take a quick break to change the
6 tape and then let you continue to consider and we'll
7 come back to that question?

8 A. Yes.

9 THE VIDEOGRAPHER: This is the end of
10 Volume I, Videotape No. 2 in the deposition of
11 Brian Von Herzen on April 1, 2010. The time is
12 2:44. We are off the record.

13 (Recess taken.)

14 THE VIDEOGRAPHER: This is the beginning
15 of Volume I, Videotape No. 3 in the deposition of
16 Brian Von Herzen on April 1, 2010. The time is
17 2:48. We are back on the record.

18 BY MR. DeBRUINE:

19 Q. Do you have more to add to your answer?

20 A. Yes. I construed "identify" to be
21 recognize a value to be. That recognition process
22 could involve setting of a variable in order to
23 recognize that value.

24 I have not fully considered whether
25 setting a variable would be required in all

1 circumstances. However, given the claim
2 limitations that require sequentially identifying
3 maxima and minima, some state information would be
4 preserved in order to sequentially identify such
5 elements.

6 So the answer would really depend upon a
7 variable in the context of state information and
8 how that would be applied.

9 Q. None of that is discussed in your
10 declaration, is it?

11 A. I believe my declaration does discuss
12 many embodiments that involve setting a state
13 variable to identify a maximum or minimum.

14 Q. Okay. Can I have that answer read back,
15 please?

16 (Record read.)

17 MR. DeBRUINE: Actually, I needed the
18 answer before that.

19 (Record read.)

20 BY MR. DeBRUINE:

21 Q. Is there any discussion in your
22 declaration about sequentially identifying maxima
23 and minima?

24 A. Yes.

25 Q. And where do you express an opinion that

1 Q. I think this would be a good time to take
2 a break.

3 THE VIDEOGRAPHER: Off the record at
4 2:59.

5 (Recess taken.)

6 THE VIDEOGRAPHER: We are back on the
7 record at 3:12.

8 BY MR. DeBRUINE:

9 Q. Okay. Let's turn to the phrase "in
10 response to."

11 In your opinion, what does the -- how
12 should the phrase "in response to" be construed?

13 A. After and in reaction to.

14 Q. Okay. In your opinion, is there an
15 additional limitation that "in response to" must be
16 immediately after and in direct reaction to?

17 A. It must be in direct reaction to.

18 Q. Okay. But that's not -- so your opinion
19 is "after and in direct reaction to"?

20 A. "In direct reaction to," yes.

21 Q. That's not -- I just want to clarify.
22 That's not what -- that's the opinion you expressed
23 here.

24 And what is the basis for requiring that
25 the word "response" require a direct reaction?

1 A. As discussed in Page 10, Lines 16
2 through 21, "based on the claim language,
3 specification, and file history, one of ordinary
4 skill would have understood 'in response to' to
5 mean that the indication of two fingers is based
6 directly on the identification of the first and
7 second maxima, that is, identification of the first
8 and second maxima is determinative of the
9 indication being provided."

10 Q. How does the fact that the identification
11 of the first and second maxima is determinative of
12 the presence of two fingers require that the
13 indication be provided in direct reaction to that
14 identification?

15 A. Can you read back the question, please?

16 (Record read.)

17 THE WITNESS: Well, in the file history
18 of this patent, in the April 8, 1999 -- correction
19 -- 1998 amendment and response, Exhibit H at
20 Page 4, I believe that it describes this in detail
21 in saying that the indication of two fingers is
22 determined by the two maxima.

23 BY MR. DeBRUINE:

24 Q. And where in the file history does it say
25 that?

1 MS. MEHTA: Okay. We're happy to end
2 early.

3 MR. DeBRUINE: Thought you might.

4 THE VIDEOGRAPHER: This is the end of
5 Volume I, Tape Number 3. This concludes the
6 deposition of Brian Von Herzen. The original
7 videotapes will be retained by Dan Mottaz Video
8 Productions, LLC, 182 Second Street, Suite 202, San
9 Francisco, California 94105. (415) 624-1300. The
10 time is 3:33. We are off the record.

11 (Whereupon, the April 1, 2010 deposition
12 of BRIAN VON HERZEN, Ph.D. ended at 3:33 p.m.)

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BRIAN VON HERZEN, Ph.D.

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