EXHIBIT G

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UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA BEFORE THE HONORABLE CHARLES R. BREYER, JUDGE

ELANTECH DEVICES,

COPY

Plaintiff,

VS.

) NO. C 06-1839 CRB

SYNAPTICS, INC.,

San Francisco, California

Defendant.

Friday, October 5, 2007

3:00 p.m.

TRANSCRIPT OF PROCEEDINGS

APPEARANCES:

For Plaintiff:

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BY: SEAN DEBRUINE, ESQ. MING-TAO YANG, ESQ.

For Defendant:

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BY: KARL J. KRAMER, ESQ.

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For Averatec:

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BY: DAMIR CEFO, ESQ. (By telephone)

Reported by Belle Ball, CSR 8785, RMR, CRR Official Reporter - US District Court

1	OCTOBER 5, 2007
2	3:00 P.M.
3	PROCEEDINGS
4	THE CLERK: Calling Case C-06-1839, Elantech Devices
5	versus Synaptics.
6	Appearances, Counsel?
7	MR. KRAMER: Good afternoon, Your Honor. Karl Kramer,
8	on behalf of Synaptics. With me today is Erika Yawger.
9	MR. DeBRUINE: Good morning, Your Honor, Sean DeBruine
10	for Plaintiffs.
11	THE COURT: I wish it were morning, but actually, it's
12	afternoon.
13	MR. DeBRUINE: I'm sorry. Trying to do too many
14	things at once.
15	Good afternoon, Your Honor. Sean DeBruine for
16	Plaintiff, Elantech Devices Corporation. I will point out that
17	Mr. Wayne Chang from Elantech is here in the courtroom, as are a
18	number of a partner and a number of associates from our law
19	firm, but are not joining me at the counsel table. And I won't
20	introduce all of them.
21	THE COURT: They are certainly welcome to move up if
22	they would like to get a better view. They don't have to sit
23	THE CLERK: There is one Counsel on the line.
24	THE COURT: Yes, could you identify yourself, please?
25	Hung up. Well, that's okay. We have plenty of

1	lawyers here.
2	MR. KRAMER: I think that's Mr. Cefo, representing
3	Averatec. But he will call back.
4	THE COURT: Should we try to get him again?
5	MR. KRAMER: I think so.
6	MR. DeBRUINE: And, Your Honor, Ming-Tao Yang is
7	joining me at Counsel table.
8	THE COURT: Okay. Thank you. Well, I don't know
9	we will see what happens.
10	MR. CEFO: Hello?
11	THE COURT: Hello, this is Judge Breyer.
12	Who am I speaking with?
13	MR. CEFO: Hello.
14	THE COURT: I don't think this is working.
15	Can you hear me? He can't
16	THE CLERK: Mr. Cefo?
17	THE COURT: Could you find out what, what just pick
18	up the phone.
19	THE CLERK: Let me try again.
20	THE COURT: Just pick up the phone.
21	Is he going to participate in some manner? Or he just
22	wants to hear it?
23	MR. KRAMER: He wants to hear. Representing his
24	clients by telephone.
25	THE COURT: Well, this may or may not work, the

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system, but we are not going to postpone the hearing because our
1
      system is broke. And it is not your fault.
 2
 3
                MR. KRAMER:
                             Thank you.
                THE COURT: Let's see. Either of your clients repair
 4
 5
      telephone systems?
 6
                MR. KRAMER: No.
 7
                MR. DeBRUINE: No, sir.
 8
                THE COURT: No?
 9
                MR. DeBRUINE: No.
                THE COURT: No. Well, so much for that idea.
10
                                                                That's
11
      my best idea.
                (Off-the-Record discussion)
12
                            He's on the regular phone, Your Honor.
13
                THE CLERK:
                THE COURT:
                            The regular phone line.
14
15
                THE CLERK:
                            Yes. Land phone, yes.
                THE COURT:
                            Hello?
16
17
                MR. CEFO:
                           Hello.
                THE COURT: Yeah, hi, this is Judge Breyer, and you
18
19
      are --
                MR. CEFO:
                            (Inaudible) on behalf of Averatec.
20
                THE COURT: Okay, we are having some, as they say,
21
      "technical problems."
22
23
                MR. CEFO: Okay.
                THE COURT: And I don't know whether or not you will
24
25
      be able to hear what's going on in the courtroom.
                                                          But, let's
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hope. 1 2 Will you say some words? 3 MR. KRAMER: Mr. Cefo, can you hear me? THE COURT: I'm referring to Counsel who is in court. 4 5 Go ahead, speak. MR. KRAMER: Can you hear me? 6 MR. CEFO: Yes, I can. 7 8 MR. KRAMER: Thank you. THE COURT: Okay, let's proceed. 9 Go ahead. MR. KRAMER: Good afternoon, Your Honor. 10 THE COURT: Yeah. 11 12 MR. KRAMER: I know the Court sent out a series of 13 questions, and I want to address those questions directly. 14 I've organized in a slightly different fashion because I think 15 the heart of the matter is the phrase, quote, "identify value in 16 the finger profile." There are three instances in which the claims require 17 18 that an identification of a particular value in the finger 19 profile must be made. That's really the heart of the matter, and that is your questions, B1 and C1 and C2. 20 There is a secondary argument in this case, which 21 means, it's an additional argument for non-infringement that 22 23 relates to just one certain type of code that's at issue. that's the code version we have been calling the disabled 24

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25

version of the Type 2 code. But that's the Court's questions,

A1 through 7, and D1 and 2.

There's been a lot of confusion, I think, some, on that particular issue, but I don't want that to drive the bus here because it is really a secondary issue relating to an additional non-infringement argument on one of the types of code.

Now, there's an overarching theme here to both parts of the argument. And that, that has to do with, the claims at issue here address the operations of a machine. The accused products are touchpad devices that are programmed to perform specific functions.

A programmed machine does only exactly what it is told. It can't do anything more. It can't imply anything, it can't infer anything from data. It just does exactly what it's told. It can't put two and two together and get four, unless we actually tell it to do that particular step. It is an overarching theme, that's all you need to know in the background, when you are listening to the arguments that go on today.

First, the Court has construed three limitations that are at issue in this case, and that are at issue with respect to this motion. The claims require scanning the touch sensor to

(a) "identify a first peak value in a finger profile obtained from scanning the touch sensor"; (b) "identify the lowest value in the finger profile that occurs after the first peak value,

and before another peak value is identified"; and (c) "after identifying the lowest value in the finger profile, identify a second peak value in the finger profile."

So those are three things that we are going to be talking about, and I'm going to focus on what it is to identify values in the finger profile.

Now, I'm going to try to speak up a little bit as I move away from the microphone but, if you will recall during claim construction, we showed you a series of touch pads with conductors on the touch pads. And the Court has construed the phrase, "scanning the touch sensor," and I think correctly, the Court has said that means measuring the values generated by a touch sensor to detect the operative coupling and determine the corresponding position, positions at which each of the measurements are made.

So scanning means for each one of these conductors or any other electrical feature, you are going to measure the operative coupling, and it's going to have some magnitude, from zero to the highest that it can measure, and it's going to store that information in a corresponding place that represents the location, "positions at which each (of the) measurements are made."

That is what the Court did in its claim construction, and I urge the Court to look at the claim construction order carefully when going through this motion.

Now, in the patent, it says exactly the same thing. It says, "As noted above, the cycle begins by scanning the traces and measuring the capacitance on each trace. Then the portion of each measured capacitance that is induced by the presence of a finger is extracted, and this finger-induced capacitance is stored in RAM" -- which means "random access memory."

9 .

2.0

And then it gives a notation, "as X (1) through X (Xcon)..."

And what that means is, for each of the traces, from 1 to whatever it is, we are going to store a separate value. And that value is the measurement of the operative coupling in, by having the finger touch the touchpad.

So, the claims say, "scanning the touch sensor to," so that is the first part. You have scanned the touch sensor and you have created, in essence, what we call the finger profile, when we are talking about the rest of the claim (Indicating).

And that finger profile has just two qualities, really: The position of each, and the magnitude or the value of the measurement. Those are the only two things that can be obtained from looking at that data.

So a person who looked at that finger profile and was told to identify the features that are claimed could do that.

In fact, my children have gone through the curriculum in California; in fourth and fifth grade, they do exactly this sort

of thing. They give them sets of data and say, "Find the highest value, find the second value."

2.0

So if you go through each of the claim limitations and look at the data in the finger profile, a person can identify the first peak value in the finger profile, and you would circle it, that's 9.

And then it would go to identify the lowest value in the finger profile after the first peak value, and that would be 1, and you would circle it.

And if you are asked to identify the lowest value in the finger profile that occurs -- excuse me, identify the lowest value -- after identifying the lowest value in the finger profile, identify a second peak, you would circle 8.

And I walked through with Dr. MacKenzie, their expert, and asked him exactly to do that. Identify these values in the finger profile. And this is what he did.

Now, a computer isn't a human being; it can't reach out and circle data in a data set like this finger profile. So the patent tells you exactly how to identify this data.

The patent says, at Column 8, spilling into Column 9, in the table, it says there is a variable which will be called Xpeakl, and for that variable for each scan, you will "store the value of the first peak X value."

In other words, you will actually go in and find a peak value and you will store it in that variable, here.

(Indicating).

1.0

It says, for Xvalley, which is the lowest value, it says, "Variable to store the value of a local minimum," the lowest value."

And then it says there is another place we are going to store the second peak value, that's called Xpeak2. So that is how a computer identifies the data from the finger profile; it says, "It is this."

And if we look at -- this is a complicated figure that we have gone through before in the claims construction, but what this says is, the red boxes each correspond to how the system determines where to find that peak value.

The green box says, once I determined that I'm not at a spot where it is the peak value, the Xpeak, which is that variable stored in memory, is going to equal the X, or capacitance value of that last trace conductor.

So it actually goes through, finds where it is, and then stores that value in memory as Xpeak. And the same thing happens for the lowest value and the second value. So that's how a computer, when instructed to do something like identify some piece of data, does it.

So again, if we go through the finger-profile data that we showed before, for one particular scan, the result would be the identification by the program, Xpeak equals 9 (sic), Xvalley equals 1, Xpeak2 equals 8. That is how the patent

explains to identify values.

And as I said, a computer has to be told to go in and identify a specific value. It can't just say, "Well, I know it's there, I could show it to you later." It has to be instructed to do that.

Then the patent explains why you actually reach in and find the particular values in the finger profile that you are interested in. And in fact, the decision as shown in the patent, about whether there is one finger or two fingers on the touchpad, is determined based upon it. It's in response to the identification of the actual values.

And what happens here is, as explained at Column 10, Lines 52 to 63, the values from the finger profile, the highest value, the lowest value and the second peak value, are compared in a division operation, a mathematical operation, that ensures that you have got two fingers rather than one finger.

And the comparison is made of the actual values from the finger profile because it says the comparison described above is provided to ensure that a legitimate valley and two legitimate peaks have been detected, and to avoid artifacts.

And what that means is, we're using the actual highest value, lowest value, highest value from the finger profile as a test measurement in this mathematical operation, to avoid artifacts like noise, interference from other things, to get a true reading. That's the teaching in the patent.

1.8

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Now, you recall, during claim construction there was a dispute between the parties on these claim terms. Both parties agreed that the claims required finding the actual value in the finger profile. That is, the highest value; that is, the lowest value; then the second highest value. Synaptics said no. It's that, plus you have to identify the precise conductor on which that value was found.

The Court said no. Location is not relevant here.

What's relevant here is, you have to identify a first peak value in a finger profile, identify the lowest value in the finger profile, and then the second peak value in the finger profile.

So that is the context of where we're at.

Now, I want to just focus, for brevity's sake, on one limitation, and that is the limitation that is the minima, which is the lowest value in the finger profile which has to be found. None of the accused Synaptics touch pads identify the lowest value in the finger profile that occurs after the first peak value and before another peak value is identified. Because there is a complete absence of that limitation, there can be no infringement.

Now, as I said before, there is two basic types of code. Type 1 Code is shown here. This is a depiction from Dr. MacKenzie's declaration. I'm not going to dispute it, for purposes of this argument, but this represents, the graph does, the measurements that are made on the conductors.

What happens in this particular code version is, each conductor is compared to one particular value. A threshold. If it's above that threshold, it's given a one; if it's below, it's given a zero.

So there is a report for each conductor; a zero or a one. That is the only thing that this algorithm does. This graph doesn't appear to the computer, it doesn't know that it's there.

Dr. MacKenzie, representing Elantech here, has said that successive groups of ones somehow represent a maxima, and successive Os represent a minima.

Of course, there is nothing in here about the Court's claim construction, which requires identification of the value in the finger profile. He's completely ignored them.

And when you look at the data that he's saying identifies or meets this limitation, there is no dispute, it doesn't identify the value in the finger profile.

For example, if you looked at the zeros here, you wouldn't know what the minimum value in the finger profile is.

And I asked him that in his deposition.

I said (As read), "And the same is true for identifying the lowest value in the finger profile and the second peak value in the finger profile after the lowest value, that, in fact, you can't determine from the ones and zeros what those values actually are...at that point in the algorithm;

isn't that correct?"

Answer from their expert (As read), "Knowing only that there is a one and a zero in Line E is insufficient to ascertain the specific value in the finger profile data that was used to generate that one or zero finger profile."

So, the thing they're pointing to doesn't tell you the value. Actually, when you look at it, at best, it suggests a general location. But of course, ironically, that's the one thing the Court said isn't necessary. And in fact, they argued against that.

So, for the Type 1 Code, there's no minima identified because no Synaptics Type 1 Code literally identifies the lowest value in the finger profile.

And the same thing occurs with respect to the Type 2

Code. It is a slightly different problem they have. And it is a little clearer what the problem is when you read the declaration of Dr. MacKenzie.

In this code, each conductor is measured against the last conductor. If it's higher, it gets a zero -- excuse me, it's measured against the next conductor. So if it's higher, if it's higher than the next one, it gets a one. If it's lower than the next one, it gets a zero.

It is a single question: Are you higher or lower than your neighbor?

This set of 0s and 1s (Indicating) was what

Dr. MacKenzie identified as meeting the claim limitation. If we just focus on this row of data (Indicating), he says, "A '1' followed by a '0'" -- "a '1' followed by a '0,'" in this stream of bits (Indicating), "indicates a minima."

1.3

He says, for example, a location where the finger profile ceases to decrease is identified by the "0" in the pattern "10."

But what's interesting here, of course, is he's saying the location, he's not saying the actual value is identified.

You don't know what that value is.

In fact, when you look at the 1s and 0s that he's pointing out as being the thing in this code that meets the limitation, there's nothing in here that identifies the value in the finger profile. And as I say, at best, he's suggesting that there's a location you could determine, if you or I were reading it. And, let's think about that.

Here is the stream of 1s and 0s. And he says, if there is a 1 in that pattern followed by a 0, we can read it and see that, that probably is a location where it changes direction. It might be near where it's lowest.

But I asked him, "Is there any specific notation or report that one or zero has been looked for and found?" In the code.

He says, "Oh, left to right. Okay. Yeah, I don't recall a specific output of a one zero pattern. It may or may

not be the case. I don't recall that."

"Is there anywhere in your declaration where you've called that out, to your knowledge?"

"I'm not aware of that."

So, even though he's saying you and I could maybe look at this and see a location where it exists, there's nothing in the code that actually looks for it. And there's nothing in the code that reports that location.

So, even though the location itself is insufficient, given the Court's claim construction, it doesn't even do that.

So, in the Type 2 Code, it just doesn't operate the way that's required for the claims. You have to reach in and identify the specific value in the finger profile, and neither the Type 1 Code or Type 2 Code does that.

Now, briefly, I want to touch upon the Doctrine of Equivalents. The Doctrine of Equivalents, of course, as you know, requires that each limitation be addressed individually. Is it met by an equivalent or not? And the case law is legion on that point.

Dr. MacKenzie does not address the Doctrine of Equivalents, with respect to the minima for the Type 1 Code at all. At best -- and I quoted the entirety of his Doctrine of Equivalents argument here (Indicating). At best, what he says is, the Type 1 Code examines the finger profile and determines whether a finger is present.

Well, of course, the claims are about two fingers, number one. And number two, you can't treat under the law, the entire claim, comparing it to the entire operation of the accused device. That is just inadequate, as a matter of law.

The second key point here is, with respect to the Type

2 Code, there's no argument and no evidence on the Doctrine of

Equivalents. They haven't presented it.

Now, I've focused strictly on the minima limitation, and that's all we need to escape infringement. But we have also shown, in our papers, that the other values are also not found. It just operates in a completely different fashion.

So now I want to address the Court's questions.

Question B1 is a long question that basically says, you guys
disagree on whether these things meet the claim limitations.

But what I note about this question is, it doesn't include anything from the Court's claim construction order. It doesn't use the words as they have been construed by the Court. And, what our position is, all you have to do is read the claim construction order, and apply those words.

The claims require that the accused device performs a function that identifies the first peak value, the lowest value, and then the second peak value in the finger-profile data.

Now, as I say, the claims are not literally satisfied by data that could be read by a person if we opened up the box and looked inside at that string of data, or that are stored in

memory but is not identified by any operation by the device.

Our position, and I think we have shown when the Court's construction is actually applied, they have not raised a genuine issue of fact. It's literally not met, and the Doctrine of Equivalents case is deficient.

On Court's Questions C1 and C2, the Court is asking what in the intrinsic evidence, or what requires an analysis of any particular value, in the finger profile.

And our response is, all the claims require for this element is that the program actually identifies the first peak value, the lowest value, and the second value. There's a later limitation that says what you do with that. But the program has to actually do this function first.

And, what -- the question also asks, what in the patent shows how to do it. We have already covered that. The patent actually shows identification, like you would expect a program to do. It steps through and actually says: Xpeak1 is this; Xvalley is this; Xpeak2 is this. It actually identifies those values. And it does it with specific instructions, like you would expect a program to do.

And as I say, these are the values that you would expect to find, and the program has to do something to identify them, rather than simply say they're somewhere in there.

And this data that they have pointed to, these are the two data lines that they say identify the information, don't

identify what's required by the Court's claim construction. 1 So, that's our short answer to those questions. 2 3 THE COURT: The short answer. MR. KRAMER: 4 Yes. Okay. And now you have another short 5 THE COURT: 6 answer? MR. KRAMER: 7 Yes, I do. THE COURT: 8 Okay. 9 MR. KRAMER: Most of the questions we got from the Court related to what we think is a secondary argument, and I'm 10 going to address each of them in turn. Hopefully, it won't take 11 long to do that. 12 13 As I said, there's a Type 1 Code and the Type 2 Code. 14 There's another set of code, which is the Type 2 Code, which has 15 the multi-finger capability disabled in the code. This last set of arguments relates only to the last thing I mentioned; it's 16 17 the disabled version of the Type 2 Code. 18 None of these versions meet the claims based upon the identification of the values in the finger profile that I've 19 20 already covered, but there is an additional argument about why 21 this type of code doesn't meet the claim language. 22 The disabled version of the Type 2 Code cannot meet 23 the claim language, quote, "providing an indication of the simultaneous presence of two fingers..." 24 25 We think Elantech has sown great confusion here on two

issues. One is the notion of the "W" value (Indicating quotation marks), and I'll go into some detail about what that is and how it relates to multi-finger detection.

The second question is, what "Providing an indication" means in the context of a computer system.

Now, the "W" value is a value that can be generated by a Synaptics touchpad in some circumstances. It's not available on all models. It's reported only when the host enables a special "W" mode. And I'm getting this from the only document in the Record on how the "W mode" works, which is the Synaptics touchpad interfacing guide. And this is Exhibit 4, to Dr. Wolfe's declaration.

Now, the "W" value may be used, even if there's no information in it relating to multiple-finger detection. And I'll explain that with the chart shortly.

As we said, the "W" mode can be set in some products by the customer. And what the customer here is, is the manufacturer of the computer who is building the touchpad, can reach in and set one particular bit which says, "Please send me the 'W' mode information if you have it."

Now, this is in Figure 2-6 of the Synaptics interfacing guide, which is Exhibit 4 to Dr. Wolfe's declaration. This is a chart that shows you, basically, all you need to know about "W" value and multiple fingers.

On the left-hand column, there is a particular value

which is sent by this "W" value. The "W" value is a four-bit piece of information, and four bits of information can have 16 different states. I think it is, two to the fourth is sixteen. Each of them can be defined as having a correspondence to a capability in the touchpad itself.

For example, when the values 4 through 7, 8 through 14, and 15, all represent a function that tells you whether there is a palm on the touchpad.

The value 2 tells you whether there is a pen being used on the touchpad, if that is a capability that is enabled.

The values 0 and 1 represent whether there are two or three fingers on the touchpad. Those are the values that are possible. However, those values are only available within the "W" value, if the capability is present in the touchpad.

In the second column, "Needed capability," spells out the capability that has to be in the touchpad and working, before that information can be included into "W." And you will note, "capMultiFinger" means you are capable of doing multiple-finger detection.

Down at the bottom, it explains that you, the manufacturer, can figure out what capabilities your touchpad has, by doing an inquiry which is sending a signal to the touchpad, and that's taught somewhere else in the interfacing guide. What this means is, the customer doesn't set this, this is preset by Synaptics.

So, to summarize, the "W" value contains lots of information, if that information is available in a capability from the touchpad itself.

Dr. Wolfe's declaration demonstrates that the disabled version of the Type 2 Code, which we call the current version, is controlled by Synaptics. Synaptics alone controls whether that multi-finger detection option is enabled.

The code that we have presented to the Court and presented to Synaptics, which is the disabled version of the Type 2 Code, that does not have that capability. And the only way to reset it is a capability that is not disclosed or shown to customers. It is only an internal Synaptics operation. That is in Dr. Wolfe's declaration, Paragraphs 18 through 20, and the supplemental declaration from Dr. Wolfe, Paragraph 8.

So, when you put these things together in a chart, to make multiple finger a feature available on a touchpad from Synaptics, the notebook maker has to set the "W" bit, and Synaptics has to make the capMultiFinger enabled. In other words, the option of MultiFinger has to be turned on before you get any multiple-finger detection at all.

This chart explains a lot, which answers many of the questions from the Court. The Type 1 Code does enable multiple finger. And if the customer sets the bit, which we're not really aware of any instance in the U.S., that would contain multiple-finger data.

Same for the Type 2 Code. The disabled Type 2 Code, the code does not enable multiple finger, so no matter what the customer does with that "W" value, the information related to multiple-finger capability will not be present.

And it's just that simple. There's no mystery to this. The capability has been turned off in the code itself. The code is there, and what Elantech has done is not really addressed how the functions of the code work, it's tried to raise issues outside the operation of the code.

We presented code, we want a ruling on that particular design of code.

Now, to the Court's Question A1, the Court asks about the current version of the firmware, and the fact that Elantech went out and bought a notebook computer and did a test and took the touchpad out and sent the right signals to get a multiple-finger detection, does that raise an issue of fact?

Well, the answer is no. The question before the Court is whether the particular code version, which has been disabled, can provide an indication of multiple fingers. And, and it does not.

It can't be modified, because the fact that they ran out and bought a notebook computer with a touchpad that actually has multiple-finger capability enabled, means only that they have got the Type 1 or Type 2 Code that wasn't disabled. And that's not surprising.

What Synaptics does is it provides design to notebook manufacturers who want touchpads in their devices. It takes a lot of steps before the notebook computer actually lands at Best Buy, and you would buy a computer to do a test on. And they notice, we talked about this with them.

Synaptics provides its touchpad object code to the manufacturer, months before the first notebook computer is manufactured. The whole process takes, at a minimum, nine to twelve months. The disabled code which, as of September of 2006, would be showing up, you know, 6 to 12, maybe longer, months in notebook computers in the U.S.

The fact that they go out in January, four months later, and buy a notebook computer, and are surprised to find that if they toggle the "W" bit, it can do multiple finger, is not surprising to us at all.

If they do a check of that code, it would show it is not the disabled version. The code that is at issue is the disabled version.

Questions A2 and A3, which of the touchpads can determine "W", and which can't, the "W" value can be enabled by customers with code versions that are capable of sending the "W," but the multiple-finger detection can only be part of that "W" if, in fact, it's enabled. And it cannot be enabled in the Type 2 Code.

The Code itself, what it does is undisputed, and they

haven't really addressed the code. As I said, Dr. Wolfe has laid this out in his declaration in these paragraphs. Again, it is explained in the chart. And it answers, the Type 2 cannot be enabled to do multiple fingers.

Does Synaptics concede Type 1 does multiple finger?

The answer is, Type 1 can do multiple finger, if the manufacturer sets that bit. Type 2 can do it, if the manufacturer sets the bit. The disabled version cannot.

Questions 4 and 5, A4 and -5: Neither the Type 1 -- meets the claim limitations if the bit is not set.

Let's move on to this, Questions A6 and A7: Is the code sent to customers in source code or object code?

The answer is, it is an object code, it is in the touchpad itself. And I don't think there is any dispute on that issue. We have a declaration from our 30(b)(6) witness that is one paragraph that says that that's true. I can submit that, in the response to the Court's question, but I don't think there is any dispute about that.

Questions D1 and D2, this is the ultimate question about the claim language. What does "providing an indication" mean?

What, in the intrinsic evidence, relates to providing an indication? What, in the claim language, relates to "providing an indication?"

(As read) "The '352 Patent is directed to a touch

sensor that identifies the presence of two fingers and supplies a signal to something other than itself that, in turn, is programmed to understand that the signal means that there are two fingers present."

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In other words, to provide an indication that there are two fingers present, I have to know that there are two fingers present, and the receiver has to understand that that's what's being intended in the data.

"Providing" means simply supplying, of course.

An "indication of the simultaneous presence of two fingers" means that the "signal is defined in the system as meaning 'there are two fingers.'"

The patent title, the patent abstract, and the description of the field of the invention, all show the intent of this patent is to make sure that the touchpad can communicate to another part of the system that there are two fingers present. And that, that has some ramification, that will be defined as a button switch or a scroll option or some other feature, but the system defines it as having been recognized as two fingers.

Now, there is only one reference in the patent to this claimed function providing that indication. Column 5, Lines 52 to 55, says, "Depending on the operation being performed at the particular time, the output of microcontroller 60 is then supplied to an interface to a PC or other device, such as a PS/2

interface, an RS-232 interface, or an Apple Desktop Bus."

In other words, depending on the operation to be performed, the output, the signal, is sent to a host. And I don't think there's any dispute about that.

we have Elantech, during claim construction, saying exactly that. Elantech said that the indication must be sent to the host, quote (As read), "The function of detecting the simultaneous presence of two fingers and reporting that presence to the host is described as being carried out with firmware or software generally consistent with the flow diagram in Figure 5 and algorithm in Figure 6...At various points reports are made when two fingers are detected...A 'report' means information transmitted to the host, which again is the province of microcontroller 60...Thus, the patent clearly teaches that microcontroller 60 is programmed to detect the presence of two fingers and provide an indication of that fact to the host computer."

So that's the intrinsic evidence that shows that, to provide an indication, the sending piece, the touch sensor, has to know what it means, it is defined, and the recipient has to know that what is being sent is intended to mean that there are two fingers present.

Now, there's no signal sent to the host in the disabled Type 2 Code that says there are two fingers present.

And what Elantech has done is, sort of, fall back on a different

argument now, which is that somehow, a feature in the Type 2

Code called "PrimaryFingerTracking," meets the limitation.

First of all, PrimaryFingerTracking is about finger -where one finger is on the touchpad (Indicating). There is no
signal sent to the host, and it is undisputed that it is not
sent to the host, representing the two fingers present.

How it works is -- and this is laid out in Dr. Wolfe's declaration -- during the first scan, there will be a location indication saying the finger is at Location 4. So there will be a report of that location to the host, you're at Location 4.

If, in a second scan, the locations could be at a variety of different places, the system has to know where the finger is. Now, this could be somebody's knuckle, it could be a palm, it could be a pen. It's defined as anything other than the primary finger.

What the PrimaryFingerTracking does is, it eliminates this information (Indicating), and says, "Here is your finger" (Indicating). That is then reported to the host.

So, number one, there's no counting, whatsoever, of any fingers in this profile here (Indicating). If the data comes out this way, it doesn't say there are four fingers by counting through. It says, "Where is my finger?" And it eliminates all the other data. So, there's no count of fingers, there is no signal sent that there are two fingers present.

Elantech's argument is essentially, again, if you look

at this data as raw data, somebody reading them could determine, 1 2 hey, there might be two fingers here. 3 But again, a computer doesn't work that way. computer does exactly what it is told, and this operation is 4 such that it's not told to count the number of fingers. 5 6 not a defined feature at that stage of the operation of the 7 device. So, to summarize that piece of it, there is no signal 8 sent in the Type 2 disabled code that says two fingers. And if 9 10 they dig in and find some other feature like PrimaryFingerTracking, it doesn't count fingers, and it doesn't 11 12 purport to count fingers, so it doesn't meet the limitation of 13 providing an indication that there are two fingers present. So, that's my presentation. I reserve the rest of my 14 15 time. 16 THE COURT: You are out of time. 17 Okay. We're going to take a break now. And we will 18 resume in 15 minutes. We will resume at a few minutes 19 before 4:15. 20 (Recess from 4:00 to 4:15 p.m.) THE COURT: Okay, please be seated. 21 22 Are we ready to proceed? MR. DeBRUINE: We are, Your Honor. 23 24 THE COURT: Okay, you may. 25 MR. DeBRUINE: Your Honor will be happy to know that

there are some areas where Counsel and I agree. We agree on what the important questions are. We agree largely on how our arguments are put together, the order we're taking the questions in. Obviously, we disagree vehemently on the answers to most of those questions, and I would like to explain why.

Starting with the question of whether maxima and minima are identified, and the questions are, what is required of the -- when one is identifying the maxima or identifying the minima. And the questions are, particularly, does it require an indication or analysis of a specific or particular value?

And then we will address the question of, if it is required, what steps are asked -- or satisfy the analysis or the indication.

Now, of course, technically, the claim language is "identify"; there's other claim language, that is, "provide an indication," so there's a difference, perhaps, in the meaning of those two terms.

The next question is whether the identification requires an analysis, and I would say here, the analysis of the values is a precursor. Obviously, if you are going to figure out which of a group of values is the highest, you need to analyze the values, which is the lower. You need to analyze the values, but the identifying takes place after that analysis has taken place.

The question of whether a specific or particular value

is identified. In fact, that is what happens in the accused product. And that is, I think, a reasonable argument of what the claim construction says.

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So again, the claim language here, and this is important, the claim language says identify a first maxima, identify a minima, identify a second maxima.

And what we heard earlier this afternoon, Your Honor, was, "We can't infringe because we don't store that value after the analysis. We don't take a copy of data that is in one place and put it in a different, unique place. We don't move or copy or store that data, and because we don't store a numerical value somewhere, we don't identify.

That is not what the claim requires, in any way, shape, or form. It simply requires that it be identified. And frankly, that is precisely what their products do, and they do it in the exact same way that the patent requires.

How is it identified in the -- in the patent? You compare X(n) to X(n-1), until you find a -- excuse me, a place that is higher than its neighbors. You continue that comparison of the value associated with a particular trace to its neighboring trace, until you find the lowest value. You then continue on your analysis, trace by trace, until you find the trace that has the highest value.

Exactly what they do. Slightly different than the atent. The patent compares X(X-1). In essence, they compare X

to X plus 1. But the outcome is exactly the same. The result of the comparison is, is this bigger than this? Zero. Is this bigger than this? No; 1.

And this series of 1s and 0s identifies the trace where the value, the peak value is stored. This 0 following a 1 identifies the trace where the corresponding minima is stored.

Again, a second peak identifies the trace where the second peak value is stored. And we know that this identification is sufficient to tell the system what that actual value is, because, as we'll discuss a little later, in response to that identification, the program actually goes and retrieves that first peak value.

In the PrimaryFingerTracking module, it retrieves the value that has been identified; it is the peak value. It compares it to a first threshold. It compares it to a second threshold. Mathematical operations on what has been identified as the peak value, to come to a determination of, "Is this a valid touch that I need to worry about? Is it a finger on the touchpad?"

That is what an identification is. It is information sufficient that the system knows what that value is. And that is exactly what they do.

Similarly, in the Type 1 Code, called the Centroid

Code in the declarations that we submitted, what we have here is
a crude, fairly crude but effective, finger profile. The finger

profile here, keep in mind, these are not -- well, learn how to use my own technology -- the values in the Type 2 Code in this finger profile, keep in mind, are not the raw capacitance values taken straight off of the traces. There's filtering done, in order to create this nice, monotonic curve, to throw out extraneous information and do this. And the patent is very specific, that you would intend one to do this in the -- to create the finger profile.

Similarly, in the Type 1 Code, you do what is a much less sophisticated filtering. You take the value, and if it's high enough, you consider that a value of 1; if it's not high enough, you consider that a 0.

So what you have is a series of bits in the finger profile, where a group of 1s is a maxima, the group of 0s is a minima, the group of 1s is a maxima. Again, fully within the teaching of the patent.

So, getting on to the indication for analysis of a specific or particular value, there does have to be an identification of a particular value. We will concede that. But that identification does not mean taking the value from one where it's stored in one register and putting it in a different one. Copying it, storing it, again. If the system is given the information necessary to determine what that value is, that value has been identified.

I already talked about that (Indicating).

1 So again, despite what Counsel would say, the 2 identification does not require the storage, manipulation, or analysis of any value. 3 And again, what we are talking about here is, 4 5 essentially, claim construction, the IEEE dictionary, about as 6 close as I could find, in software an identifier is the name, 7 the address, the label, the distinguishing index of an object in 8 a computer program. MR. KRAMER: Could I have Counsel point out where in 9 10 the Record that exists? 11 MR. DeBRUINE: It doesn't exist in the Record. If 12 Your Honor would like to take judicial notice of the dictionary, 13 because we have entered into areas of claim construction after 14 the claim construction has taken place. 15 We don't believe there's any dispute here that what 16 happens is an identification. It gives the system the location 17 where that value is stored. 18 Now, what has to happen, as far as providing an 19 indication? First, what in the claim language requires that 20 that indication be provided to the host? 21 Nothing. The claim language says, "provide an 22 indication." It doesn't say, "provide an indication to the 23 host," it doesn't say, you know, "report this to the host." 24 The patent, in what it calls consistently "the

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exemplary embodiment," takes the indication of two fingers, uses

that to set a button state, and reports that button state out to the host. But that is not what's required in the claims. That is an exemplary embodiment of an intended use.

In fact, the patent -- and the patent, again, is very clear, as a lot of patents are, that exemplary embodiments are not meant to be limitations. There's no -- nothing in this patent that would permit the importation of such a claim limitation into the claim. Nothing's been pointed out by Counsel.

In fact, the patent uses the word, the verb,
"indicate," once, to my knowledge, in the specification. That
is at Column 8, Line 16 to 19, where a report of particular data
to the microcontroller to -- within the touchpad, indicates a
cursor movement.

So, if an internal data report providing an indication to the microcontroller indicates an event providing information to the microcontroller in the claims is an indication of an event, the presence of two fingers.

Where Counsel already talked, the word "report" was used in there to say when something is sent to the host.

According to the intrinsic evidence, what steps or acts must be performed to provide an indication?

Again, we just saw it. Give some data to the host, that tells it -- I mean, excuse me, not to the host, to the microprocessor within this software -- that this has happened.

Now, we're talking about the PrimaryFingerTracking, and if the result is more than 1, 1, in the bit vector output, each of those is indicates the presence of a finger. Synaptics's own expert agrees, that if you have two fingers on the touchpad, and the result of their PrimaryFingerTracking module puts two 1s in that bit vector, those 1s are indicative of those two fingers. It indicates that there are two fingers. What -- and again, in software, an indicator is "a device or variable that can be set to a pre-prescribed state, based on the results of a process or the occurrence of a specified condition." Precisely what their -- the accused devices do. Now, keep in mind how the PrimaryFingerTracking module works. there's no dispute on this. The finger profile is generated. Data are ascribed, indicating where the maxima, where the minima is, where the maxima.

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That is an indication of those values. Those values are retrieved and analyzed to come up with that indication -- excuse me, come up with that identification.

After the identification, the only subsequent process that is required by the claim is to provide an indication of two fingers in response to the maxima. The identified maxima.

And that is exactly what PrimaryFingerTracking does.

It takes the indication of two maxima, it pulls the values

stored at those trace locations. So, in fact, it does identify

the specific values, and we know that because the program retrieves them from memory, and compares them to threshold values. Not once, but twice.

So, two mathematical operations are performed on the actual value that's been identified as the maxima, and in response to that identification, a bit vector. A series of where one bit represents each trace. And if there are two fingers, if they survive the -- the thresholding, there will be a 1 for each trace that has a finger on it.

And is that an indication of the presence of two fingers, if there are two 1s in that bit value? Absolutely. It is an indication to the touchpad, in this instance, to go and determine which trace that has a finger, which of these two traces are we going to use to track. And which one are we not going to worry about, as far as tracking.

So, as much as Synaptics would like to have the claim limitations read "storing a maximum value, storing a minimum value," there again, and then counting the number of fingers, those are not limitations of this claim.

The claim simply requires that you identify the maxima and minima, and in response to the identification of the maxima alone, provide an indication of the presence of two fingers.

And in our view, as we've set out, that is absolutely met.

Now, there were a number of issues about the "W" value. Unless the Court has any questions about Section C

and D.

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Now, the "W" value is what is actually reported to the host. So, here's where I'm in agreement with Counsel, it is a secondary issue. Nothing in this claim that requires that "W" value be reported to the host.

As the intrinsic evidence shows, providing an indication, indicating means -- can mean indicating to the -- internally to the touchpad, to the microcontroller that controls the touchpad. And there's nothing else in the record from which -- other than the exemplary embodiment, that would allow the claim to be read more narrowly.

So, we're down to which products actually do report a finger count to the host and which do not. Our view, as in Counsel's view, a secondary issue. What we know, as Counsel said, some of their products, the Type 1 products do it, some of the Type 2 products do, some of the Type 2 products don't.

What we don't know, because their motion was filed before we could take the discovery that we propounded, was which models and which versions and which source code were actually shipped to which particular customers. And, which of these are, you know, what sort of volume. We simply don't know.

I do want to address briefly the point that Counsel says, that, they're -- the Type 2 disabled is incapable of providing finger counting. I think it's slightly misleading. It's capable of doing that, if a particular bit is set. And

that bit can be set from a command from the host.

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The claim is, they never tell anybody about it. He cites to his own expert to support their statement of fact that no one else in the world has learned this. I'm not sure how Mr. Wolfe would know, or not know, every communication between Synaptics and its customers.

But again, that is an issue for further discovery.

It's not an issue for summary judgment. Which ties to fact that Counsel's asking for summary judgment on a code version in the abstract and not the code as it's actually implemented in the real world.

We -- Your Honor, there's some evidence, they claim that what we tested in the real world was not current code.

Again, we haven't had sufficient discovery to determine, for that particular model of computer, what code shipped with it.

We simply don't know.

I just want to make sure I've answered all of Your Honor's questions.

I heard Counsel say that the firmware for the touchpad ships as object code. I'm not aware anywhere in the record that says whether the driver software that actually runs on the individual computers and interfaces with the touchpad that could possibly send the commands, ships in source code or object code. That was one of the questions that I don't believe got answered.

And I believe that's -- that's what we have,

1	Your Honor.
2	THE COURT: Thank you.
3	MR. DeBRUINE: You're welcome.
4	MR. KRAMER: Very briefly, Your Honor.
5	THE COURT: Very, very briefly.
6	MR. KRAMER: It's Friday afternoon at 4:35. I know I
7	don't have much time.
8	THE COURT: Five minutes.
9	MR. KRAMER: We object, for the Record, to
10	introduction at this point in the slides at the oral argument of
11	a summary judgment motion, to new evidence on claim
12	construction.
13	THE COURT: You are talking about the dictionary
14	definition.
15	MR. KRAMER: Yeah, the dictionary definition.
16	We are in this spot precisely because Elantech did not
17	disclose its infringement contentions until it opposed our
18	summary judgment motion. And I request that the Court consider
19	our objection to that as grounds for a summary judgment as well.
20	With respect to discovery, they took the 30(b)(6)
21	deposition of our person, they asked him whatever they wanted to
22	ask him. I'm not sure what he's complaining about.
23	He talked about identification, but still, the only
24	thing they could point to is a location. When he showed slides
25	about what was a maxima, what was a minima, he did not use the

Court's language, which is "identifying a particular value in the finger profile." He didn't discuss anywhere where the minima value is identified, somehow later on. He didn't discuss that at all.

I did hear him say the following: "If the system is given enough information, that value is identified somehow."

I didn't hear him say that there's a particular routine that actually does identify the value that it's supposed to be identifying, by the claims.

Lastly, he's cited from Dr. Wolfe's deposition, and I have to read the rest of the testimony, which you will find at Page 52 (As read):

Question, "With respect to the types of code that only run the PrimaryFingerTracking module and do not run the 1 axis module" -- in other words, just the PrimaryFingerTracking -- "would the 1s in the bit vector be indicative two of two fingers?"

Answer, "No. They indicate that only to the 1 axis module, because that's where the fingers are calculated."

And, in other words, if there are two bits or three bits or four bits in the PrimaryFingerTracking, that doesn't mean there are a number of fingers there unless somebody comes by and counts them. And there's some code of ours that does that, and there's some other code that doesn't. The code that doesn't is the Type 2 Code that's been disabled.

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I have, Your Honor, the answer on the object code.
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      thought I answered that. Everything we ship is in object code.
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      I've got a one-paragraph declaration here from David Gillespie
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      that says exactly that. And I don't think that is disputed
 5
      here.
                THE COURT: Okay. Thank you very much.
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                MR. KRAMER: Thank you, Your Honor.
                THE COURT: Submitted.
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                MR. DeBRUINE: Thank you, Your Honor.
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                           (Proceedings concluded at 4:40 p.m.)
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CERTIFICATE OF REPORTER

I, BELLE BALL, Official Reporter for the United States Court, Northern District of California, hereby certify that the foregoing proceedings in C 06-1839 CRB, Elantech Devices v. Synaptics, were reported by me, a certified shorthand reporter, and were thereafter transcribed under my direction into typewriting; that the foregoing is a full, complete and true record of said proceedings as bound by me at the time of filing.

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Belle Ball, CSR 8785, CRR, RMR

Friday, March 21, 2008

BelleBull