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Shamos, Ph.D., Michael I. 05-30-2014

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UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

-----: :  
GSI COMMERCE SOLUTIONS, : :  
 : :  
Petitioner, : :  
 : :  
vs. : Case No.  
 : CBM 2013-00055  
CLEAR WITH COMPUTERS, LLC. : PATENT 8,266,015  
 : :  
Patent Owner, : :  
-----: :

Alexandria, Virginia

Friday, May 30, 2014

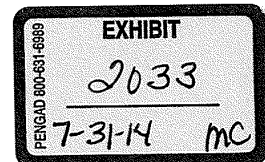
Deposition of:

MICHAEL I. SHAMOS, Ph.D.

called for oral examination by counsel for Patent  
Owner, pursuant to notice, at Oblon, Spivak, Maier,  
McClelland and Neustadt, LLP, 1940 Duke Street,  
Alexandria, Virginia, before Felicia A. Newland,  
CSR, of Capital Reporting Company, a Notary Public  
in and for the Commonwealth of Virginia, beginning  
at 9:00 a.m., when were present on behalf of the  
respective parties:

GSI Commerce Solutions Inc. v.  
Clear With Computers, LLC  
CBM2013-00055 CWC Ex. 2006

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1 A P P E A R A N C E S

2 On behalf of Petitioner

3 SCOTT MCKEOWN, ESQUIRE  
4 Oblon, Spivak, Maier, McClelland  
and Neustadt, LLP  
5 1940 Duke Street  
Alexandria, Virginia 22314  
(703) 413-3000

6 On behalf of Patent Owner

7 TAREK N. FAHMI, ESQUIRE  
8 Ascenda Law Group, PC  
84 West Santa Clara Street, Suite 550  
9 San Jose, California 95113  
(866) 877-4883

10 Also Present:

11 Brad Sheafe

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1 C O N T E N T S

2 EXAMINATION BY:	PAGE
3 Counsel for Patent Owner	4

4 E X H I B I T S

5 EXHIBITS	PAGE
6 CWC Exhibit 2001	5
7 CWC Exhibit 2002	17
8 CWC Exhibit 2003	23

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22 (Exhibits attached to transcript.)

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1 P R O C E E D I N G S

2 WHEREUPON,

3 MICHAEL I. SHAMOS, Ph.D.

4 called as a witness, and having been first duly  
5 sworn, was examined and testified as follows:

6 EXAMINATION BY COUNSEL FOR THE PATENT

7 OWNER

8 BY MR. FAHMI:

9 Q Okay. Would you state your name for the  
10 record, please.

11 A Michael Ian, I-A-N, Shamos, S-H-A-M-O-S.

12 Q Dr. Shamos, we met earlier, but my name  
13 is Tarek Fahmi. And I represent the patent owner,  
14 Clear With Computers. We are here today to take  
15 your deposition in connection with Covered Business  
16 Method Review 2013-00055 relating to U.S. Patent  
17 8,266,015. And you submitted a declaration in  
18 connection with that proceeding. Do you recall  
19 that?

20 A Yes.

21 Q Have you ever been deposed before?

22 A Yes.

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1 Q How many times?

2 A Close to 60.

3 Q Okay. Just real quick ground rules.

4 I'll try not to talk over you when you're answering  
5 the question and would ask that you wait until I  
6 finish a question before answering, that way the  
7 court reporter can keep an accurate record of  
8 what's being said. Is that okay?

9 A Yes.

10 Q Okay. Is there any reason why you can't  
11 give your best testimony today?

12 A No.

13 Q Are you taking any medications that might  
14 affect your memory?

15 A No.

16 Q Any other reason why you couldn't give  
17 your best testimony in this proceeding today?

18 A No.

19 Q I have handed you what I've previously  
20 marked as CWC Exhibit 2001. Do you recognize this  
21 claim?

22 A Well, yes, in a sense.

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1 Q How's that?

2 A Well, in the year 2000, I filed five  
3 provisional patent applications. I don't even  
4 recall whether there were any claims submitted with  
5 the provisionals. Subsequently, those provisionals  
6 were taken over by a different patent firm and the  
7 prosecutors read their applications and claims were  
8 added. And this appears to be one of those claims.

9 Q I'll represent to you that it's claim one  
10 of U.S. Patent 7330839. Are you the inventor of  
11 that patent?

12 A I don't recall it by number, but I  
13 recognize the subject matter of the claim.

14 Q Does this claim recite a law of nature?

15 A I don't think so.

16 Q Why not?

17 A Because I don't know what the law of  
18 nature would be. This is specifying a process for  
19 doing something that's not based on a nonlaw of  
20 nature.

21 Q Does the claim recite a natural  
22 phenomenon?

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1           A     Well, if natural phenomenon means  
2 something that previously occurred in nature that  
3 was merely discovered by the inventors, I don't  
4 think so.

5           Q     Why not?

6           A     Because I'm not sure what the phenomenon  
7 is that one would regard as a natural phenomenon.

8           Q     Does the claim recite a mere abstract  
9 idea?

10          A     Well, I think these days it probably  
11 would -- it might be regarded as reciting an  
12 abstract idea.

13          Q     How did you reach that conclusion?

14          A     Because a lot has happened since the year  
15 2000. The Bilski Decision, for example. The  
16 decisions of the Patent Trial and Appeal Board.  
17 And yeah, maybe today, it would be regarded that  
18 way.

19          Q     How would you conduct an analysis to  
20 decide whether it recites an abstract idea?

21          A     Okay. Your question is whether this  
22 one -- I listed a number of tests in my

1 declaration. One of them would be, would it be  
2 feasible to perform this using pen and paper? And  
3 I think the answer is it would.

4 I create a survey sample, bring a bunch  
5 of people in, keep them in separate rooms. And I  
6 go from one room to another offering them a  
7 particular product at a particular price, and I  
8 could measure the uptake of the -- what fraction of  
9 the time people accept various prices and use that  
10 to make an optimal price determination.

11 So it doesn't recite a computer, other  
12 than through the words "computer-implemented  
13 method." It appears to be the only place in the  
14 claim that even talks about a computer. And so we  
15 know that these days, formal recitations of that  
16 nature are not sufficient to take it out of the  
17 realm of an abstract idea, so I think it is.

18 Q Does the fact that there's a processor  
19 limitation in the determining step (d) change your  
20 opinion at all?

21 A No, I don't think so. I think that's a  
22 formal recitation. It's a -- these days -- well,



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1 there was a time when it was common to add such a  
2 limitation in the hope that it would render the  
3 claim patentable.

4 Q What do you mean there was a time when  
5 that was common?

6 A Well, I think it's recognized now that  
7 merely reciting a processor in a claim is not going  
8 to cause it -- the claim to survive a 101  
9 Examination. There was a time certainly prior to  
10 Bilski when it was relatively common, for example  
11 in the year 2000, to throw the word "processor"  
12 into a claim in the hope that it would tie it to  
13 something physical.

14 Q But it's your understanding that's not  
15 sufficient today?

16 A That certainly by itself is not  
17 sufficient. I mean, there certainly are patentable  
18 inventions that involve processors and there are  
19 processes that are performed that can be performed  
20 on a computer that aren't statutory subject matter.

21 Q So when does a process that can be  
22 performed on a computer become statutory versus not

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1 statutory?

2 A Oh, make me a Supreme Court justice and  
3 I'll be able to tell you. It's influx. And I  
4 think within the next month we're going to have a  
5 lot more guidance from the Supreme Court on that  
6 issue.

7 Q Why is that?

8 A Because with Alice versus CLS case that's  
9 going to come out in the next month.

10 Q So does that mean that you can't make  
11 that determination until that opinion is rendered?

12 A Well, you're asking me a matter of law.  
13 I can give you my understanding of the law.

14 Q So what's your understanding of the law  
15 regarding Section 101?

16 A Well, that's -- there's a lot to it, but  
17 you were asking specifically about abstract ideas.

18 So an abstract idea, there are tests for  
19 determining whether or not the idea is abstract or  
20 not. One of them is that if it -- if it basically  
21 preempts all possible ways of performing the  
22 process, then it's abstract because it's not tied

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1 to any particular mechanism or apparatus. That's  
2 one way.

3 If it is something that can be simply  
4 performed by human beings in tying in the claim to  
5 a computer is essentially formalistic and  
6 meaningless, then it can be regarded as an abstract  
7 idea.

8 Q Is there anything that a computer can do  
9 that a human being can't do?

10 A Yes.

11 Q Like that?

12 A Generate an electrical signal.

13 Q So reciting a generalization of an  
14 electrical signal in a claim would be sufficient to  
15 recite a statutory process?

16 A It mischaracterizes my testimony. You  
17 didn't ask me that question. You asked me whether  
18 there was something a computer could do that a  
19 human couldn't. You didn't ask me whether --  
20 whether that would make it statutory or not.

21 Q Would it?

22 A - It might.

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1 Q Under what conditions?

2 A If one weren't claiming the signals  
3 themselves, for example, then I think it could.

4 Q So would a claim that recites a processor  
5 generating a signal be a statutory process?

6 A If you wanted me to tell you whether a  
7 claim is statutory or not, you have to give me the  
8 whole claim. You can't just give me a piece of the  
9 claim.

10 So what's the claim that you're asking me  
11 about?

12 Q So is it correct, then, that in assessing  
13 whether a claim recites an abstract idea, you must  
14 review the claim language in its totality as it's  
15 written?

16 A Oh, I think so. Yes.

17 Q Okay. And when you're assessing whether  
18 a claim to a computer-implemented invention recites  
19 an abstract idea, you have to read the claim as a  
20 whole. Is that right?

21 A Yes.

22 Q Okay. You have to read the claim

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1 according to its expressed terms. Is that right?

2 A Yes.

3 Q And with the claim that's recited on  
4 Exhibit 2001, is that the analysis you undertook in  
5 order to determine whether it recites an abstract  
6 idea?

7 A You're joking. You threw this in front  
8 of me this morning, I had -- I had 15 seconds to  
9 review the claim and answer the question. I  
10 obviously didn't undertake a thorough review, as  
11 one might have if I were writing a declaration, for  
12 example, in a CBM case.

13 So I can't tell you that I went through  
14 all of the steps. I had a prior familiarity with  
15 the subject matter of the claim. And I'm not sure  
16 I even read every word of it while I was sitting  
17 here.

18 Q How long would it take you to do that  
19 analysis for this claim?

20 A Fifteen minutes. Something like that.

21 Q How long did you spend with the claims in  
22 the Johnson patent?

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1 A Oh, many hours.

2 Q How many?

3 A Probably 20.

4 Q Why don't you take a few minutes and  
5 consider the claim that's on 2001 and let me know  
6 when you're ready to proceed in respect to this  
7 claim.

8 A Proceed in the 101 direction?

9 Q Well, with respect to the 101 analysis,  
10 yes?

11 A Sure.

12 Okay.

13 Q Do you have an opinion about whether or  
14 not the claim recited in Exhibit 2001 is statutory  
15 under 35 U.S.C. 101?

16 A Yes.

17 Q What's your opinion?

18 A I don't think it is.

19 Q Why not?

20 A Because everything that is recited here,  
21 except for the formal mention of computer-implement  
22 method, Internet website and processor, everything

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1 can be performed by humans engaging in a  
2 statistical study. And I already outlined what the  
3 experiment would be in a previous answer.

4           What we talked about in the specification  
5 of this patent was we were relying on the fact that  
6 different visitors to a website don't all have to  
7 be presented with the same price for the product.  
8 Unlike in a retail store, where there's -- either  
9 the product has a price marked on it or on the  
10 shelf, there's a price listed.

11           And so it's not feasible to do  
12 experiments of this kind in the store. One could  
13 do experiments of that kind, however, in an  
14 experimental situation in which one asked or hired  
15 potential subjects to come in and actually  
16 participate in the experiment.

17           Q     Earlier you mentioned that a processor  
18 producing an electrical signal was an example of  
19 something that a computer can do that a human can't  
20 do. Is that right?

21           A     Yeah. I should clarify that. Of course,  
22 the human brain does produce electrical signals,

1 but it can't produce electrical signals to a  
2 specification. So if I say I want a processor that  
3 produces a signal at the following frequency or the  
4 following amplitude, a human can't do that.

5 Q Are there other things that a computer  
6 can do that a human being can't do?

7 A Yes. So a computer can receive inputs of  
8 various kinds. Again, those are always electrical  
9 signals that are received by a computer. A human  
10 being doesn't receive electrical signals, a human  
11 being receives inputs to its sensory system. But  
12 those inputs, in general, are not electrical in  
13 nature. It can do that.

14 There are models that one can imagine  
15 that there's no way of representing in the human  
16 brain. For example, the retina of the human eye  
17 only has a certain resolution palette, only a  
18 certain number of rods and cones in the eye. So a  
19 computer is capable of processing images that have  
20 far more information in them than a human eye can  
21 process.

22 And if that were reflected in a claim



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1 limitation, it may draw a distinction between what  
2 a human can do and what a computer can do.

3 Q Let's look at another example. This  
4 is -- I've handed you what's been previously marked  
5 as CWC Exhibit 2002. This recites another claim.  
6 And I'll give you a minute to look it over.

7 A So these numbers, 2001, 2002, these are  
8 deposition exhibit numbers?

9 Q Yes.

10 A They don't correspond to the exhibits in  
11 the CBM case.

12 Q They haven't been entered in the CBM case  
13 as yet. I'm just marking them for identification  
14 purposes.

15 A No, I understand. I'm just confused,  
16 because there is an Exhibit 2001 in the CBM case.

17 Q I don't think so. That's --

18 A It should be on your computer.

19 MR. MCKEOWN: You may confuse 1001 and --  
20 generally, the petitioner numbers are a --

21 THE WITNESS: I get that.

22 MR. MCKEOWN: Okay.

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1 THE WITNESS: So, however, let's clarify  
2 this then. There is an Exhibit 2001. It's the  
3 involuted decision from the Eastern District of  
4 Texas.

5 MR. MCKEOWN: Okay.

6 THE WITNESS: That's why I was confused,  
7 because there already is a 2001 in the case, and so  
8 this is not that.

9 BY MR. FAHMI:

10 Q Thank you.

11 A I get it. Yes.

12 The pending question?

13 Q Are you done reviewing it?

14 A No. No, I'm not.

15 I've reviewed it.

16 Q Do you recognize this claim?

17 A Yes.

18 Q How do you recognize it?

19 A Well, it's -- it was one of the claims --  
20 I described the process earlier where I wrote some  
21 provisional applications, and later they were taken  
22 over by a firm that drafted claims. I recognize

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1 this as one of the claims from one of the patents  
2 at issue from the provisional that I wrote and that  
3 I was an inventor on.

4 Q Did you have any input into the drafting  
5 of this claim?

6 A I'm not sure. And the reason I'm not  
7 sure is I don't recall whether claims were  
8 submitted with the provisionals or not. If they  
9 weren't, then I had no input in drafting it, other  
10 than having drafted the specification of the  
11 provisional.

12 If this was taken from a claim that I  
13 drafted originally with the application, then maybe  
14 you could say that I had some role in it. I had --  
15 let's put it this way: I had no interaction  
16 whatsoever with the law firm that prosecuted the  
17 provisionals, either at the time or subsequent.

18 Q Why not?

19 A Because the company and I had a  
20 falling-out and they -- they bought out my  
21 interest.

22 Q Okay. Do you have an opinion about

1 whether or not the claim that was recited on what's  
2 been marked as Exhibit 2002 recites a statutory  
3 method under 35 U.S.C. 101?

4 MR. MCKEOWN: Objection.

5 THE WITNESS: I think it's better.

6 Oh, I'm sorry.

7 MR. MCKEOWN: Objection. It calls for a  
8 legal conclusion.

9 THE WITNESS: I think it's better.

10 BY MR. FAHMI:

11 Q Better than the --

12 A Previous --

13 Q -- claim --

14 A Better than 2001, yes.

15 Q Why is it better?

16 A It's better because it's talking about  
17 the receptivity of a person to an advertisement on  
18 a web page. And one can only measure that by  
19 actually presenting the ad on a web page in the  
20 physical context with particular fonts and colors  
21 and things like that.

22 And so if I handed you an ad on a piece

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1 of paper and said, "How do you like this? Would  
2 you buy the product," that scientifically wouldn't  
3 be conducting the same experiment as you would be  
4 conducting by having them actually view a web page.

5 And so that -- it seems to be more  
6 closely tied to a computer than the claim is -- the  
7 claim was in the 2001 exhibit.

8 Q Is there any particular claim language  
9 that you're looking at to help you reach that  
10 conclusion?

11 A Yes. So there's -- this is in Limitation  
12 C at the bottom: "Randomly distributing web pages  
13 comprising the plurality of experimental  
14 advertisements, one of the plurality of  
15 experimental advertisements being output per  
16 received user web page request in the sample of  
17 requests."

18 So it seems to me that you have to -- if  
19 you're doing experiments on web pages, I think you  
20 have to use web pages. I don't know whether that's  
21 going to make it statutory or not. I'm not the  
22 tribunal.

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1 Q I'm just asking for your opinion about  
2 it.

3 A I think it's better. I think I could  
4 make better arguments for 2002 than I could for  
5 2001.

6 Q Anything else about the claim that makes  
7 it better than the one in 2001?

8 A No.

9 Q How would you make the case for the  
10 patentability for the claim in 2002?

11 A I just did. I said if you're doing  
12 experiments on user uptake of web pages, it seems  
13 to me you have to present them with actual web  
14 pages. And I'm not sure how I would conduct that  
15 experiment without using a computer. That's all.  
16 That's -- that's -- right now, that's the best  
17 argument I'm thinking.

18 Q How would that help make the case that  
19 this is a statutory method?

20 MR. MCKEOWN: Same objection.

21 THE WITNESS: It helps make the case  
22 because it's tied -- it's inextricably tied to a

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1 computer. It's not something that could be  
2 performed by a human with pen and paper.

3 BY MR. FAHMI:

4 Q Is that the only test that would be  
5 applicable in analyzing this claim under 101?

6 A No, I don't think so. But that's -- you  
7 asked me for my argument -- what argument I would  
8 give for 2002 that I couldn't give for 2001, that's  
9 the answer.

10 Q Okay. I've got one more example for you.

11 This has been marked for identification  
12 as CWC Exhibit 2003. I'll let you take a few  
13 minutes to review the claim and let me know when  
14 you're done.

15 A Okay.

16 I'm done.

17 Q Do you recognize this claim?

18 A Vaguely, for the same reason. I -- I  
19 definitely know I didn't draft this claim.

20 Q Okay.

21 A But it's a claim that is in an issued  
22 patent in which I'm an inventor.

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1           Q     Do you have an opinion about whether or  
2     not this claim would recite a statutory method  
3     under 101?

4           A     I think it's better than 2001, and I  
5     think it's on par with 2002. The reason being  
6     essentially the same reason, is that I don't know  
7     how to construct an experiment that would measure  
8     what's being measured here without using actual web  
9     pages and a computer.

10          Q     What portion of the claim language are  
11     you looking at that helps you reach that  
12     conclusion?

13          A     Okay. Well, in -- these limitations  
14     aren't labeled, but the third one, the third step,  
15     "Responsive to the particular customer not  
16     interacting with the web marketing site for a  
17     period of time."

18                     Whether a customer interacts with a  
19     website or not over a time interval depends very  
20     sensitively on what's going on on the web page; are  
21     there things there that interest them, are there  
22     things that are moving, are there things that are



1 brightly colored. And it's a dynamic thing.

2 And I don't know how to take that  
3 experiment out of the context of having somebody  
4 physically sit and be presented with things on the  
5 computer screen. In the same way that in 2002, I  
6 couldn't dream of doing it with pen and paper. I  
7 don't think this can be done with pen and paper.

8 Now, whether it preempts an abstract  
9 idea, I haven't considered that. Whether it  
10 preempts all possible methods of doing this  
11 measurement or not, I don't know.

12 Q How would you conduct an analysis for  
13 preemptory?

14 A Oh, I would see if I could think of ways  
15 of coming to the same result that are -- would not  
16 be covered by this claim. And if so, then it --  
17 it's -- you know, it wouldn't preempt all possible  
18 methods of doing it, including methods not invented  
19 by the inventor, me.

20 Q Would you agree, then, that under Section  
21 101, the eligibility of a claim doesn't turn on  
22 whether any individual element of that claim is

1     itself patent eligible?

2                   MR. MCKEOWN:   Objection.   Form.

3                   THE WITNESS:   No, I don't agree with  
4     that.   I think one can throw patent ineligible  
5     limitations into a claim that would cause you to  
6     not have to look at the rest of the claim and say,  
7     "Oh, well, since that's in there, it's obviously  
8     nonstatutory."

9                   Now, for example, I put a step in there  
10    that recites performance of something in the  
11    human brain, or I claim transitory signals, or  
12    something like that, I mean, there are things  
13    that one could put in there that would disqualify  
14    the entire claim, but as a normal matter, one  
15    does have to read the entire claim in order to  
16    make a 101 determination.

17   BY MR. FAHMI:

18           Q     Does every element of an individual claim  
19    have to be novel in order to recite a statutory  
20    claim under Section 101?

21           A     No.

22           Q     Okay.   Does every element of the claim

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1 have to be nonobvious in order to recite a  
2 statutory claim under 101?

3 A No.

4 Q Would you agree a computer is a form of a  
5 machine?

6 A If you're talking about under the Patent  
7 Act, under the statutory classes of invention, a  
8 computer is a machine.

9 Q Would you also agree that a computer  
10 functions through physical manipulations of  
11 switches in order to bring about a result?

12 A The -- you have to clarify the question,  
13 because through physical manipulation of switches  
14 tends to conjure up the image of the human being  
15 flipping switches. On the other hand, a computer  
16 has electrical devices in it which are referred to  
17 as switches and gates. And those devices are  
18 manipulated by the machine itself to perform  
19 certain computations.

20 And so getting away from the human  
21 physically flipping switches, a computer is an  
22 autonomous device that would be statutorily

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1     classified as a machine, yes.

2             Q     Okay. The switches that we're referring  
3     to are really transistors. Right?

4             A     Yes.

5             Q     Okay.

6             A     That's an example, yeah.

7             Q     Okay. And it's the manipulation of  
8     turning those transistors on and off that allows  
9     the computer to perform computations. Right?

10            A     Yes.

11            Q     And it's these computations and series of  
12    computations that are conducted that allow the  
13    computer to arrive at a result. Correct?

14            A     Yes.

15            Q     And the computer can be configured  
16    through programming to perform a variety of  
17    different functions through the manipulation of  
18    those transistors. Is that right?

19            A     Yes.

20            Q     Are you currently employed, Dr. Shamos?

21            A     Yes.

22            Q     What's your employment?

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1           A     I'm employed as a professor by Carnegie  
2 Mellon University. And you would probably also  
3 consider that I'm employed by Expert Engagements,  
4 LLC, which is a company owned by me and my wife.

5           Q     What's the business of Expert  
6 Engagements, LLC?

7           A     It's finding expert witnesses for law  
8 firms, but the principal expert witness they find  
9 is me.

10          Q     Are you compensated in your capacity as  
11 president of the company?

12          A     Not specifically so. That is not because  
13 of my role as president. My -- all of the income  
14 of Expert Engagements, LLC, after deduction of  
15 expenses is distributed to me and my wife. I don't  
16 receive a salary, let's put it that way.

17          Q     Does that compensation vary depending  
18 upon the success of the company's clients?

19          A     No. It -- it -- it -- the only  
20 compensation model that it has is hourly time  
21 billed. And so if we bill a lot of hours in a  
22 year, then we make more money, but it has nothing

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1 to do with the performance of its clients.

2 MR. FAHMI: Let's take a five-minute  
3 pause, if you don't mind.

4 (Recess from 9:36 a.m. to 9:45 a.m.)

5 BY MR. FAHMI:

6 Q Dr. Shamos, we were talking a little  
7 earlier about computers and human beings performing  
8 things by pen and paper. Do you recall that?

9 A Yes.

10 Q Are there circumstances under which it  
11 becomes infeasible, although, perhaps possible, for  
12 a person to do something by pen and paper, but when  
13 done by a computer, that process becomes statutory?

14 A It's conceivable, so if the claim recites  
15 that. So let's consider the realtime control of an  
16 anti-ballistic -- an anti-missile missile. So  
17 there's a target coming in and I have to do the  
18 computations necessary to guide a missile up into  
19 the sky to destroy it, and this all has to happen  
20 within seconds or less. There, even though on --  
21 with pen and paper, given three years, a human  
22 being might be able to do the necessary

1 computation, that wouldn't be sufficient to  
2 accomplish the result within that time.

3 And so if there were a claim limitation  
4 requiring something to be performed, for example in  
5 a fraction of a second, then I think that would  
6 harm the argument that a human could do it with pen  
7 and paper.

8 Q Does that desired result have to be  
9 recited in the claim in order to make the claim  
10 statutory?

11 A Well, I don't know if I can make a  
12 general statement to that effect. But it sounds as  
13 though it would, because otherwise, the claim as  
14 written, would read on a process that could be  
15 performed by a human with pen and paper. And you  
16 have to have things in the claim that would cause  
17 it to not read on that. That's the way it seems to  
18 me.

19 Q So is it correct that your understanding  
20 of the current law is that any process that reads  
21 on something that can be done by a human being with  
22 pen and paper is not a statutory process?

1 MR. MCKEOWN: Objection. Calls for a  
2 legal conclusion.

3 THE WITNESS: Well, I think "anything" is  
4 a really broad word. And I think I would have to  
5 look at the specific claim that was at issue.

6 BY MR. FAHMI:

7 Q So it's possible there are some things  
8 that read on the human being doing something with  
9 pen and paper that would nevertheless be a  
10 statutory process?

11 A When you begin a question with, "Is it  
12 possible that," I have to give you the stock answer  
13 that anything's possible, because I -- I don't know  
14 the entire universe of possibilities. Is it  
15 conceivable? I suppose.

16 Q Would you agree that in analyzing a claim  
17 under 35 U.S.C. 101, it's the standpoint of the  
18 person of ordinary skill in the art that matters  
19 for the analysis?

20 MR. MCKEOWN: Objection. Form.

21 THE WITNESS: I would say that the  
22 standpoint of ordinary skill in the art matters in



1 terms of understanding what the claim says and what  
2 the scope of the claim is. I don't think it's  
3 whether one of ordinary skill in the art would  
4 consider the claim statutory as a matter of law.  
5 It's not what ordinary skill in the art would  
6 consider, it's how ordinary skill in the art would  
7 understand words of the claim.

8 I could imagine, for example, chemical  
9 claims, or something, that are -- that's not  
10 understandable to a layperson and so you would  
11 have to bring in one of ordinary skill in the art  
12 that viewpoint.

13 But I don't -- I don't think it matters  
14 whether one of ordinary skill in the art  
15 considers a claim statutory. I don't think  
16 that's what makes it statutory or not.

17 BY MR. FAHMI:

18 Q So is it correct, then, that one first  
19 construes the claim from the standpoint of a person  
20 of ordinary skill in the art and then analyzes that  
21 claim to determine whether it's statutory under the  
22 law?

1           A     Well, that sounds right. The -- so there  
2     are -- with respect to construing the claim. So  
3     there are expressed constructions, for example, the  
4     Board construed certain claims in arriving at  
5     its -- certain claim language in arriving at its  
6     institution decision. Then there is all the other  
7     words in the claim, though not subject necessarily  
8     to an expressed construction, nonetheless have to  
9     be understood within the context of the claim. And  
10    that's done from the point of view of one of  
11    ordinary skill in the art. And once that's done,  
12    then one can proceed with the legal analysis as to  
13    whether it's statutory.

14           Q     Given that understanding, then, and going  
15    back to your example about the anti-missile  
16    missile --

17           A     Uh-huh.

18           Q     -- if the person of ordinary skill in the  
19    art understood that the activities recited in a  
20    claim to that process had to be done in, I think  
21    you said, fractions of a second, but that literal  
22    fraction of a second language wasn't in the claim,

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1 would the claim nevertheless be statutory?

2 A Well, I'm not sure how they would arrive  
3 at that understanding. They would only arrive at  
4 that understanding from something in the claim.  
5 And since we're not looking yet at a specific  
6 hypothetical claim, I don't know what language that  
7 would be that would get them there.

8 Q If language in the claim existed such  
9 that the person of ordinary skill in the art did  
10 arrive at that understanding, is that sufficient to  
11 make the claim statutory?

12 A Well, I think you have to -- we have to  
13 go back and say what that understanding is.

14 You mean the understanding that it could  
15 not be conceivably performed by a human being?

16 Q Feasibly performed by a human being  
17 within the time required, I think is the way you  
18 constructed the example.

19 A Okay. So the example I did construct was  
20 one very specifically oriented to a very short time  
21 interval within which possibly even less than human  
22 reaction time. So it would be completely

1 impossible for a human to do it, human reaction  
2 time being about a tenth of a second.

3           If the claim recited an anti-ballistic  
4 missile system -- or a method for shooting down a  
5 missile comprising the steps of dot, dot, dot, it's  
6 conceivable in that situation, that one of the  
7 ordinary skill in the art would understand that  
8 it's absolutely impossible for a human being to do  
9 it.

10           That doesn't necessarily make it  
11 statutory. It may still be an abstract idea, but  
12 it's not some -- it wouldn't be disqualified under  
13 the grounds it could be performed by pen and paper.

14           Q     What additional grounds would you have to  
15 consider?

16           A     Well, that's an abstract idea.

17           Q     How do you know whether a claim recites  
18 an abstract idea or not?

19           A     I just said, make me a Supreme Court  
20 justice. We're going to find out within a month  
21 what that means. It's up in the air now.

22           Q     So sitting here today, you don't know.

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1 Is that right?

2 A Don't know what?

3 Q What makes a claim an abstract idea?

4 A I don't know if anybody knows. I think  
5 there are things that definitely do make it an  
6 abstract idea. And I think that there's a line,  
7 and we don't know exactly where that line sits  
8 between ideas that are abstract and ideas that  
9 aren't.

10 Q What definitely makes a claim an abstract  
11 idea, in your opinion?

12 A The computation of a mathematical  
13 formula.

14 Q Can you explain that a little more?

15 A Yeah, sure. I -- I -- I discover a  
16 formula for something, maybe even not previously  
17 known to man, and I write a claim to -- determining  
18 the -- a number of -- comprising the steps of, and  
19 I list the formula in the claim. It's a law of  
20 nature, it's an abstract idea, it's a mental  
21 process, there's all -- there are all kinds of  
22 reasons that that would not be statutory.

1           Q     Any other examples of what would be  
2     definitely an abstract idea?

3           A     I -- I don't have them for you. This is  
4     the kind of thing where if I were to prepare a  
5     lecture for my course on law of computer  
6     technology, it would probably take me 15 hours to  
7     prepare one hour of lecture. I'm not ready to give  
8     you a discourse on the law of abstract ideas.

9           Q     How would you go about preparing that  
10    course?

11          A     I would -- well, I have prepared the  
12    course. How would I prepare that lecture? I would  
13    look at all the current case law, look at the  
14    examples of claims that have been found to be  
15    nonstatutory and claims that had been found to be  
16    statutory and attempt, as legal scholars to, to  
17    find a line that would separate them.

18          Q     Which case law are you referring to?

19          A     Well, there's patent office law, there's  
20    district court law, federal circuit law, supreme  
21    court law.

22          Q     Do any of those matter more than others?

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1           A     Yes. The Supreme Court matters more than  
2 anybody.

3           Q     Any particular Supreme Court cases that  
4 are particularly relevant to this topic?

5           A     There's about -- there's one about to  
6 come out that's particularly relevant, as I  
7 mentioned before.

8           Q     Any others?

9           A     Yeah. Bilski matters. There are --  
10 Ultramercial matters. There are a bunch of cases  
11 that matter.

12                   MR. FAHMI: I don't have any further  
13 questions. Thank you.

14                   MR. MCKEOWN: Nothing further. No  
15 redirect here.

16                   (Deposition concluded at 10:00 a.m.

17                   Signature required.)

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1 CERTIFICATE OF NOTARY PUBLIC

2 I, FELICIA A. NEWLAND, CSR, the officer before  
3 whom the foregoing deposition was taken, do hereby  
4 certify that the witness whose testimony appears in  
5 the foregoing deposition was duly sworn by me; that  
6 the testimony of said witness was taken by me in  
7 stenotype and thereafter reduced to typewriting  
8 under my direction; that said deposition is a true  
9 record of the testimony given by said witness; that  
10 I am neither counsel for, related to, nor employed  
11 by any of the parties to the action in which this  
12 deposition was taken; and, further, that I am not a  
13 relative or employee of any counsel or attorney  
14 employed by the parties hereto, nor financially or  
15 otherwise interested in the outcome of this action.

16

17

18

19

\_\_\_\_\_  
FELICIA A. NEWLAND, CSR  
Notary Public in and for the  
Commonwealth of Virginia

20

21 My commission expires:

May 31, 2017

22 Registration No.: 7569984

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1 A C K N O W L E D G E M E N T O F D E P O N E N T

2

3 I, MICHAEL I. SHAMOS, Ph.D., do hereby  
4 acknowledge I have read and examined the foregoing  
5 pages of testimony, and the same is a true, correct  
6 and complete transcription of the testimony given by  
7 me, and any changes or corrections, if any, appear  
8 in the attached errata sheet signed by me.

9

10

11

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19 DATE \_\_\_\_\_

MICHAEL I. SHAMOS, Ph.D. \_\_\_\_\_

20

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22

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1 Scott McKeown, Esquire  
Oblon, Spivak, Maier, McClelland and Neustadt, LLP  
2 1940 Duke Street  
Alexandria, Virginia 22314

3  
IN RE: GSI Commerce Solutions vs. Clear With  
4 Computers, LLC

5 Dear Mr. McKeown:

6 Enclosed please find your copy of the deposition of  
7 MICHAEL I. SHAMOS, Ph.D., along with the original  
8 signature page. As agreed, you will be responsible  
9 for contacting the witness regarding signature.  
10 Within 21 days of receipt, please forward errata  
11 sheet and original signed signature page to counsel  
12 for Patent Owner, Tarek Fahmi. If you have any  
13 questions, please do not hesitate to call. Thank  
14 you.

15 Yours,  
16 Felicia A. Newland, CSR  
17 Reporter/Notary

18  
19 cc: Mr. Fahmi, Esquire

20

21

22

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3  
E R R A T A S H E E T

4 Case Name: GSI Commerce Solutions vs. Clear With  
5 Computers, LLC

6 Witness Name: MICHAEL I. SHAMOS, Ph.D.

7 Deposition Date: Friday, May 30, 2014

8 Page No. Line No. Change

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