

# EXHIBIT 2

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
TYLER DIVISION

BEDROCK COMPUTER TECHNOLOGIES  
LLC,

Plaintiffs,

Case No. 6:09-CV-0029

vs.

SOFTLAYER TECHNOLOGIES, INC.,  
CITIWARE TECHNOLOGY SOLUTIONS,  
LLC, GOOGLE, INC., YAHOO! INC.,  
MYSAPCE, INC., AMAZON.COM INC.,  
MATCH.COM, LLC and AOL LLC.

Defendants.

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RED HAT, INC.,

Plaintiff,

Case No. 6:09-cv-00549

vs.

BEDROCK COMPUTER TECHNOLOGIES,  
LLC,

Defendant.

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HIGHLY CONFIDENTIAL

VIDEOTAPED DEPOSITION OF DR. RICHARD NEMES

New York, New York

Tuesday, August 31, 2010

Reported by:  
AYLETTE GONZALEZ

JOB NO. 144128

1 could.

2 A. Correct.

3 Q. So, my question is: When I  
4 asked you -- what did you understand when I  
14:21:03 5 said, removing expired records from hash  
6 table?

7 A. What is the question?

8 Q. What did you understand that I  
9 meant by removing expired records from a  
14:21:12 10 hash table?

11 MR. CURRY: Objection to form.

12 A. I think I didn't understand the  
13 question, so I can't answer what I thought  
14 you meant by that part of the question.

14:21:24 15 Q. Do you understand that the 495  
16 Patent has to do with removing expired  
17 records?

18 A. Correct.

19 Q. Is there any doubt in your mind  
14:21:32 20 about that?

21 A. No.

22 Q. In your mind, is there a  
23 difference between removing expired records  
24 and deleting expired records?

14:21:41 25 A. No.

1 Q. So, when you talk about  
2 deleting expired records, what does that  
3 mean to you?

4 MR. CURRY: Objection to form.

14:21:50 5 A. Reclaiming the storage occupied  
6 by that record.

7 Q. When you say, reclaiming the  
8 storage occupied by that record, does that  
9 mean making -- sorry. You said, "the  
14:22:13 10 storage." What do you mean by "the  
11 storage"?

12 A. Memory.

13 Q. So, you mean, reclaiming the  
14 storage in memory occupied by that record;  
14:22:27 15 is that right?

16 A. Reclaiming the portion of  
17 memory occupied by that record.

18 Q. Is the case that by reclaiming  
19 the portion of memory occupied by that  
14:22:40 20 record, other non-expired data can be  
21 located in that portion of memory?

22 A. Right. After it's removed,  
23 there can be an insertion of new data into  
24 that portion of memory.

14:22:58 25 Q. Now, that concept of removal of

1 expired records or deletion of expired  
2 records, that was associated with the 495  
3 Patent, is there a different notion of  
4 removal or deletion of expired records in  
14:23:22 5 the 120 Patent?

6 A. Oh, we're talking about the  
7 495? I thought we were talking about the  
8 120. Maybe we should back up.

9 Q. That's all right. I'll take  
14:23:33 10 that. I'll take your answer.

11 When you answered the last  
12 question, you answered associated with the  
13 120?

14 A. Yep.

14:23:39 15 Q. Doctor, you answered with  
16 respect to the 495 or 120, your call.  
17 Which one was it?

18 MR. CURRY: Objection to form.

19 A. I'd be more comfortable going  
14:23:46 20 over that again. Can we back up and I know  
21 it might be a little bit burdensome, but to  
22 keep it accurate.

23 Q. Actually, I'm kind of happy  
24 with the answers. I want to find out, when  
14:23:56 25 you were just answering these questions

1 under oath, did you understand what I was  
2 talking about?

3 MR. CURRY: Objection to form.  
4 He's signaling me to make a form  
14:24:07 5 objection.

6 MR. STERN: I'm appreciate you  
7 conceding that. The witness was  
8 conceivably was doing that.

9 You're client was. Not the  
14:24:11 10 witness.

11 Q. What did you understand when  
12 you just provided, the record will reflect,  
13 an entire list of answers to questions  
14 about the meaning of delete or removal,  
14:24:26 15 with respect to what patent did you think  
16 you were answering questions?

17 A. If you could read it back, I  
18 can identify it better.

19 Q. It just happened. I'm asking  
14:24:36 20 in your mind, what do you recall just  
21 happened within the last three minutes?

22 MR. CURRY: Objection to form.

23 A. I'd be more comfortable --

24 Q. Actually, I appreciate that  
14:24:45 25 phrase, "be more comfortable." But I'm

1 actually asking you a question under oath.

2 What did you understand were  
3 the subject matter of the questions I was  
4 asking?

14:24:54 5 A. At this point, I'm not sure.

6 Q. Were you providing truthful  
7 testimony?

8 MR. CURRY: Objection to form.

9 A. I was providing truthful  
14:25:02 10 testimony.

11 Q. About what?

12 A. I'm not sure anymore.

13 Q. You were providing truthful  
14 testimony about the subject of which you're  
14:25:10 15 not sure?

16 MR. CURRY: Objection to form.

17 A. It seemed to go back and forth  
18 between 120 and 495.

19 Q. The question is the following:  
14:25:19 20 "Do you understand that the 495 Patent has  
21 to do with removing expired records?

22 "Answer: Correct.

23 "Is there any doubt in your  
24 mind about that?

14:25:28 25 "Answer: No.

1 "In your mind, is there a  
2 difference between removing expired records  
3 and deleting expired records?

4 "Answer: No.

14:25:36 5 "So when you talk about  
6 deleting expired records, what does that  
7 mean to you?

8 "Answer: Reclaiming the  
9 storage occupied by that record.

14:25:49 10 "Question: When you say  
11 reclaiming the storage occupied by that  
12 record, does that mean making -- I'm sorry;  
13 you said the storage -- what do you mean by  
14 the storage.

14:25:59 15 "Answer: Memory.

16 "So, you mean reclaiming the  
17 storage in memory occupied by that record;  
18 is that right?

19 "Answer: Reclaiming the  
14:26:06 20 portion of memory occupied by that record.

21 "Question: Is that" -- the  
22 Court Reporter has got a notation I can't  
23 understand.

24 Your answer was: "Right after  
14:26:26 25 it's removed there can be an insertion of



1 new data into that portion of memory."

2 Was that related to the 495 or  
3 the 120?

4 A. 495.

14:26:35 5 Q. Is there doubt in your mind  
6 about that?

7 A. No, there is not.

8 Q. Now, my question is: The  
9 answers that you just provided with respect  
14:26:41 10 to the 495, I could ask you the same with  
11 respect to the 120. Are the answers the  
12 same? You want me to go through them  
13 again?

14 A. Yes. Let's take them one at a  
14:26:51 15 time.

16 Q. Do you understand that the 120  
17 Patent has to do with removing expired  
18 records?

19 A. Yes.

14:27:00 20 Q. Is there any doubt in your mind  
21 about that?

22 A. No, there's not.

23 Q. In your mind, is there a  
24 difference between removing expired records  
14:27:07 25 and deleting expired records?

1 A. No.

2 Q. So, when you talk about  
3 deleting expired records, what does that  
4 mean to you?

14:27:33 5 Your last testimony was  
6 "reclaiming the storage in memory occupied  
7 by that record." That's what you said for  
8 the 495. Is that different for the 120?

9 A. No.

14:27:41 10 Q. Is it the case that after the  
11 expired record is removed, there can be an  
12 insertion of new data into that portion of  
13 memory?

14 A. I'm going to phrase it like  
14:27:56 15 this, that portion of memory can be made  
16 available for storage of new data.

17 Q. So, that is what we talked  
18 about just now, the deletion or removal of  
19 an expired record, the meaning of that, is  
14:28:09 20 common both to the 120 and the 495; is that  
21 right?

22 A. That's correct.

23 Q. Thank you.

24 Now, you also have in front of  
14:28:34 25 you the 499 Patent. Can you take a look at

1 your definition of automatic expiration  
2 include both external conditions and  
3 internal conditions?

4 A. No, it does not include  
16:59:05 5 internal conditions.

6 Q. Does not include internal?

7 A. Does not include internal  
8 conditions.

9 Q. It just includes external  
16:59:12 10 conditions?

11 A. Yes.

12 Q. So, something becomes  
13 automatically expired through the  
14 determination of an external condition; is  
16:59:34 15 that correct?

16 A. Was there a question?

17 Q. Is that correct?

18 A. Say it once again, please.

19 Q. Something becomes automatically  
16:59:40 20 expired through the determination of  
21 whether the portion or contents of record  
22 in comparison to an external condition?

23 A. Correct.

24 Q. You didn't disclose any other  
17:00:00 25 methodology for automatic expiration nor do

1 Q. The 120 uses external chaining.  
2 The 495 uses linear probing, right?

3 A. Correct.

4 MR. CURRY: Counsel, I know you  
15:16:34 5 need to go at 4, but can we take a  
6 quick break?

7 MR. STERN: Quick break.

8 THE VIDEOGRAPHER: The time is  
9 3:16 p.m. We're off the record.  
10 (Whereupon, at this time, a  
11 short recess was held.)

12 THE VIDEOGRAPHER: The time is  
13 3:26 p.m. We're back on the record.

14 BY MR. STERN:

15:26:22 15 Q. Dr. Nemes, we've talked about  
16 Linked List this morning. We talked about  
17 external chaining. I've got some questions  
18 about terminology for you.

19 I think the record will reflect  
15:26:37 20 that you talked about accessing a Linked  
21 List. Does that phrase mean anything to  
22 you, to access a Linked List?

23 MR. CURRY: Objection it form.

24 A. I don't think that's a term  
15:26:56 25 that you would find in a glossary in a

1 computer science textbook, let's say, or in  
2 a technical dictionary of electrical  
3 engineering and computer programming terms.  
4 I don't think it's a term of art. Is  
15:27:15 5 that -- a term of art in that sense.

6 So, I don't think it's got, you  
7 know, official meaning. If you typed it  
8 into Wikipedia, I don't think anything  
9 would come up.

15:27:29 10 Q. Have you done that?

11 A. No.

12 Q. So, what about the phrase,  
13 "traversing a Linked List"?

14 A. Traverse is a technical term in  
15:27:42 15 computer science.

16 Q. What does it mean to you to  
17 traverse a Linked List?

18 A. To traverse a data structure in  
19 general, Lined List being a particular  
15:27:51 20 example of a data structure, to traverse a  
21 data structure, in general, is to visit  
22 each of its nodes, elements, I call them.

23 Q. So, traverse means to visit  
24 each of the nodes or elements; is that  
15:28:11 25 right?

1 automatic expiration is.

2 Are you suggesting that what  
3 you wrote here, when you wrote the 120  
4 Patent, is not automatically expiration?

16:55:32 5 MR. CURRY: Objection to form.

6 A. I don't understand your  
7 question.

8 Q. This section says that the  
9 determination of expiration is made by  
16:55:43 10 comparing some portion of the contents of  
11 record to some external condition?

12 A. Yes, I see that.

13 Q. Is that consistent with your  
14 definition of automatic expiration that you  
16:55:52 15 provided to me a moment ago?

16 A. Yeah, I think it is. Sure.

17 Q. Can you explain how it's  
18 consistent?

19 A. Let's say we have a record and  
16:56:03 20 it identifies a particular passenger. If  
21 we go and see that that passenger is on a  
22 plane still in the air, and not an external  
23 condition, that record is not -- has not  
24 expired. If that passenger is no longer on  
16:56:21 25 a plane in the air, then that record is

1 expired.

2 Q. So, the external condition  
3 you're saying is the person being in a  
4 plane in the air?

16:56:32 5 A. I think in that example you  
6 might be able to say that. You can say  
7 that in that example.

8 Q. Right. In order for the  
9 information to be sent to the system,  
16:56:50 10 whatever system is making a check of this  
11 external condition, there would have to be  
12 some information sent that the person is  
13 either in the plane or deplaned from the  
14 plane; would there not?

16:57:01 15 A. I don't really understand your  
16 question.

17 Q. Well, what's an internal  
18 condition?

19 MR. CURRY: Objection to form.

16:57:14 20 A. You want me to give you an  
21 example of internal condition?

22 Q. Sure.

23 A. Let's say we have the 120  
24 Patent and we have our hash table, we have  
16:57:27 25 our list of records and let's say we store

1 a record in a particular node on a Linked  
2 List. And let's say that we've calculated  
3 a check sum of the contents of that record,  
4 and we store that check sum in the node  
16:57:50 5 along with the record.

6 And let's say that one of the  
7 bits, a portion of the record, is faulty  
8 and a zero should be a one, or a one should  
9 be a zero. When we go to retrieve that  
16:58:08 10 record, we're going to retrieve the  
11 contents of the record, recalculate the  
12 check sum, compare that against the stored  
13 check sum and find that there's a mismatch.  
14 That's how checks are designed to be.

16:58:24 15 You lose a bit -- typically,  
16 you get a different check sum. That's not  
17 some external condition that caused  
18 automatically that causes records to  
19 automatically expire. That's an example of  
16:58:39 20 something that's not in the category of  
21 external condition.

22 Q. That's an internal condition?

23 A. I would call that an internal  
24 condition.

16:58:47 25 Q. Does automatic expiration --



1 is one understanding of the term, "number."

2 There's number theory, and I  
3 could probably give you a definition for  
4 the world of mathematics that, I guess,  
17:21:52 5 would reflect my understanding of it, but I  
6 don't think that's what you really are  
7 after. So, if you could clarify a little  
8 bit, I'll be happy --

9 Q. When you wrote the 120 Patent  
17:22:01 10 and used the word, "number" in various  
11 places, what did you mean by the word,  
12 "number" in the 120 Patent?

13 MR. CURRY: Objection to form.

14 A. If we could take a look at a  
17:22:09 15 couple of spots, maybe that would make it  
16 more exact.

17 Q. Before we take a look at a  
18 couple of spots, I would like you to, to  
19 the best of your recollection sitting here  
17:22:20 20 today, tell me what you meant by the word,  
21 "number" in the 120 Patent?

22 MR. CURRY: Objection to form.

23 A. You didn't like quantity, so  
24 what about how many. How many, number and  
17:22:43 25 how many -- how many is my understanding of

1 the term "number."

2 As I sit here thinking about it  
3 and trying to give you a nonmathematical,  
4 technical definition in terms of set theory  
17:23:01 5 and all of the steps, the best I'm going to  
6 do right now is a phrase "how many" and the  
7 word number go strongly together in my  
8 head.

9 Q. So, one is a number?

17:23:15 10 A. One is a number.

11 Q. Two is a number?

12 A. Two is a number.

13 Q. Three?

14 A. Three is a number.

17:23:59 15 MR. CURRY: Can we take a break  
16 real quick?

17 MR. CHAIKOVSKY: One last  
18 thing, and then we can take a break.

19 Q. You testified earlier that the  
17:24:08 20 -- for example, Claim 1 would cover or  
21 claim the best modes that you disclose in  
22 invention; is that correct?

23 A. I testified to that.

24 Q. Right. That included the  
17:24:23 25 pseudocode of the appendix; is that

1 isn't other pros that also describes it.  
2 I'm just trying to be really careful here  
3 to be very accurate in my answer, but that  
4 does -- that is the pros that is associated  
16:22:04 5 with Claim 2.

6 Q. Can you tell me, sir, in that  
7 pros, what is the means for dynamically  
8 determining the maximum number?

9 A. I think your --

16:22:16 10 MR. CURRY: Objection to form.

11 A. -- asking me to interpret the  
12 claim.

13 Q. You're right. I am.

14 Let's be specific. You didn't  
16:22:21 15 write any code that shows how to do that,  
16 right?

17 A. I didn't write any code that  
18 shows that.

19 Q. You didn't identify any device  
16:22:31 20 that's capable of doing that, right?

21 A. Right.

22 Q. You didn't identify any  
23 software program that's capable of doing  
24 that, right?

16:22:39 25 A. Right.

1 Q. As you sit here today, can you  
2 think of any structure at all, any sort of  
3 physical or nonphysical device or system,  
4 that you described to be able to perform  
16:22:51 5 that means of dynamically determining a  
6 maximum number?

7 MR. CURRY: Objection to form.

8 A. What's a nonphysical device?

9 Q. Software.

16:23:01 10 MR. CURRY: Objection to form.

11 A. Then I guess I don't understand  
12 the question because I don't think of  
13 software as a device.

14 Q. Let's go physical then. Any  
16:23:10 15 physical device that you could identify  
16 that could perform any of that means?

17 A. I could take -- I could program  
18 a computer to perform the tasks described  
19 by that means.

16:23:32 20 Q. Did you ever do that?

21 A. No.

22 Q. It continues to say, "The  
23 record search means" do you see that?

24 A. What column?

16:23:51 25 Q. Claim 2. Talks about the