## CORRECTED

 ExHIBIT 2
## TO DEFENDANTS' <br> JOINT RESPONSE ON CLAIM CONSTRUCTION

## 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., MYSPACE, INC., AMAZON.COM INC., MATCH.COM, LLC and AOL LLC.

Defendants.

RED HAT, INC.,

Plaintiff, Case No. 6:09-cv-00549 vs.

BEDROCK COMPUTER TECHNOLOGIES, LLC,

Defendant.

HIGHLY CONFIDENTIAL
VIDEOTAPED DEPOSITION OF DR. RICHARD NEMES
New York, New York
Tuesday, August 31, 2010
Reported by:
AYLETTE GONZALEZ

JOB NO. 144128

12:19:06 10

12:19:17 15

12:19:30 20

12:19:40 25
have the 495 open and next to you when you were crafting the claims of the 120 Patent?
A. I don't remember.
Q. Was it more than five seconds?
A. Probably.
Q. It was more than 60 seconds?
A. Probably.
Q. It was more than five minutes?
A. Probably.
Q. I mean, doctor, I could go with you -- if you'd like, I could go with you -- let me ask you, who wrote the specifications of the 120 Patent?
A. I did.
Q. Are you saying that any similarities in the specification of the 120 Patent to either the 495 and the 499, is that accidental?

MR. CURRY: Objection to form.
A. Probably not.
Q. Well, is it probably not?
A. It's not. It's not accidental.
Q. I mean, doctor, you sat there and you either had the 495 or the 499 open in front of you and you copied language

12:20:21 15

12:21:01
from those patents into the specification of the 120 , didn't you?
A. I used language from those two patents in the 120.
Q. But I say "you used," you copied portions of them in the specification of the 120 , right?

MR. CURRY: Objection to form.
A. Yeah, I copied -- I copied some of the text.
Q. Now, what led you to believe that language in the 495 Patent, whether in the specification or the claims, would be a helpful model for the claims that you were writing for the 120?
A. The 495 and the 499 and I believe the other -- what was the other number? It was the 663 Patent were my first exposures to patents in any detail. So, whatever I knew about patents came from those three.

So, I had really very little knowledge beyond that. So, what I did is, in composing the 120 , I turned to what I had, what $I$ had experience with, and I

14:21:41 25
could.
A. Correct.
Q. So, my question is: When $I$ asked you -- what did you understand when I said, removing expired records from hash table?
A. What is the question?
Q. What did you understand that I meant by removing expired records from a hash table?

MR. CURRY: Objection to form.
A. I think I didn't understand the question, so $I$ can't answer what I thought you meant by that part of the question.
Q. Do you understand that the 495 Patent has to do with removing expired records?
A. Correct.
Q. Is there any doubt in your mind about that?
A. No.
Q. In your mind, is there a difference between removing expired records and deleting expired records?
A. No.

14:22:58 25
Q. So, when you talk about deleting expired records, what does that mean to you?

MR. CURRY: Objection to form.
A. Reclaiming the storage occupied by that record.
Q. When you say, reclaiming the storage occupied by that record, does that mean making -- sorry. You said, "the storage." What do you mean by "the storage"?
A. Memory.
Q. So, you mean, reclaiming the storage in memory occupied by that record; is that right?
A. Reclaiming the portion of memory occupied by that record.
Q. Is the case that by reclaiming the portion of memory occupied by that record, other non-expired data can be located in that portion of memory?
A. Right. After it's removed, there can be an insertion of new data into that portion of memory.
Q. Now, that concept of removal of

14:23:39 15

14:23:56 25
expired records or deletion of expired records, that was associated with the 495 Patent, is there a different notion of removal or deletion of expired records in the 120 Patent?
A. Oh, we're talking about the 495? I thought we were talking about the 120. Maybe we should back up.
Q. That's all right. I'll take
that. I'll take your answer.
When you answered the last question, you answered associated with the 120?
A. Yep.
Q. Doctor, you answered with respect to the 495 or 120, your call. Which one was it?

MR. CURRY: Objection to form.
A. I'd be more comfortable going over that again. Can we back up and I know it might be a little bit burdensome, but to keep it accurate.
Q. Actually, I'm kind of happy with the answers. I want to find out, when you were just answering these questions

14:24:07

14:24:11 10

14:24:26 15

14:24:36 20

14:24:45 25
under oath, did you understand what I was talking about?

MR. CURRY: Objection to form.
He's signaling me to make a form objection.

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

You're client was. Not the witness.
Q. What did you understand when you just provided, the record will reflect, an entire list of answers to questions about the meaning of delete or removal, with respect to what patent did you think you were answering questions?
A. If you could read it back, I can identify it better.
Q. It just happened. I'm asking in your mind, what do you recall just happened within the last three minutes?

MR. CURRY: Objection to form.
A. I'd be more comfortable --
Q. Actually, I appreciate that phrase, "be more comfortable." But I'm

14:25:02 10

14:25:10 15

14:25:19

14:25:28 25
actually asking you a question under oath. What did you understand were the subject matter of the questions I was asking?
A. At this point, I'm not sure.
Q. Were you providing truthful testimony?

MR. CURRY: Objection to form.
A. I was providing truthful
testimony.
Q. About what?
A. I'm not sure anymore.
Q. You were providing truthful testimony about the subject of which you're not sure?

MR. CURRY: Objection to form.
A. It seemed to go back and forth between 120 and 495 .
Q. The question is the following:
"Do you understand that the 495 Patent has to do with removing expired records?
"Answer: Correct.
"Is there any doubt in your
mind about that?
"Answer: No.

14:25:49 10

14:25:59 15

14:26:06 20

14:26:26 25
"In your mind, is there a
difference between removing expired records and deleting expired records?
"Answer: No.
"So when you talk about deleting expired records, what does that mean to you?
"Answer: Reclaiming the storage occupied by that record.
"Question: When you say reclaiming the storage occupied by that record, does that mean making -- I'm sorry; you said the storage -- what do you mean by the storage.
"Answer: Memory.
"So, you mean reclaiming the storage in memory occupied by that record; is that right?
"Answer: Reclaiming the portion of memory occupied by that record.
"Question: Is that" -- the Court Reporter has got a notation I can't understand.

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

14:26:51 15

14:27:00 20

14:27:07
25
new data into that portion of memory." Was that related to the 495 or
the 120?
A. $\quad 495$.
Q. Is there doubt in your mind
about that?
A. No, there is not.
Q. Now, my question is: The answers that you just provided with respect to the 495, I could ask you the same with respect to the 120 . Are the answers the same? You want me to go through them again?
A. Yes. Let's take them one at a time.
Q. Do you understand that the 120 Patent has to do with removing expired records?
A. Yes.
Q. Is there any doubt in your mind about that?
A. No, there's not.
Q. In your mind, is there a difference between removing expired records and deleting expired records?

14:27:33

14:27:56 15

14:28:09 20

14:28:34 25
A. No.
Q. So, when you talk about deleting expired records, what does that mean to you?

Your last testimony was
"reclaiming the storage in memory occupied by that record." That's what you said for the 495. Is that different for the 120?
A. No.
Q. Is it the case that after the expired record is removed, there can be an insertion of new data into that portion of memory?
A. I'm going to phrase it like this, that portion of memory can be made available for storage of new data.
Q. So, that is what we talked about just now, the deletion or removal of an expired record, the meaning of that, is common both to the 120 and the 495; is that right?
A. That's correct.
Q. Thank you.

Now, you also have in front of
you the 499 Patent. Can you take a look at

15:26:22 15
Q. The 120 uses external chaining. The 495 uses linear probing, right?
A. Correct.

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

MR. STERN: Quick break.
THE VIDEOGRAPHER: The time is
3:16 p.m. We're off the record.
(Whereupon, at this time, a short recess was held.)

THE VIDEOGRAPHER: The time is
3:26 p.m. We're back on the record. BY MR. STERN:
Q. Dr. Nemes, we've talked about Linked List this morning. We talked about external chaining. I've got some questions about terminology for you.

I think the record will reflect that you talked about accessing a Linked List. Does that phrase mean anything to you, to access a Linked List?

MR. CURRY: Objection it form.
A. I don't think that's a term that you would find in a glossary in a

15:27:15

15:27:29 10

15:27:42 15

15:27:51 20

15:28:11 25
computer science textbook, let's say, or in a technical dictionary of electrical engineering and computer programming terms. I don't think it's a term of art. Is that -- a term of art in that sense.

So, I don't think it's got, you know, official meaning. If you typed it into Wickipedia, I don't think anything would come up.
Q. Have you done that?
A. No.
Q. So, what about the phrase, "traversing a Linked List"?
A. Traverse is a technical term in computer science.
Q. What does it mean to you to traverse a Linked List?
A. To traverse a data structure in general, Lined List being a particular example of a data structure, to traverse a data structure, in general, is to visit each of its nodes, elements, 1 call them.
Q. So, traverse means to visit each of the nodes or elements; is that right?

16:22:16 10

16:22:21 15

16:22:31 20

16:22:39 25
isn't other pros that also describes it. I'm just trying to be really careful here to be very accurate in my answer, but that does -- that is the pros that is associated with Claim 2.
Q. Can you tell me, sir, in that pros, what is the means for dynamically determining the maximum number?
A. I think your --

MR. CURRY: Objection to form.
A. -- asking me to interpret the claim.
Q. You're right. I am.

Let's be specific. You didn't write any code that shows how to do that, right?
A. I didn't write any code that shows that.
Q. You didn't identify any device that's capable of doing that, right?
A. Right .
Q. You didn't identify any software program that's capable of doing that, right?
A. Right.

16:23:10 15

16:23:32 20
Q. As you sit here today, can you think of any structure at all, any sort of physical or nonphysical device or system, that you described to be able to perform that means of dynamically determining a maximum number?

MR. CURRY: Objection to form.
A. What's a nonphysical device?
Q. Software.

MR. CURRY: Objection to form.
A. Then $I$ guess $I$ don't understand the question because $I$ don't think of software as a device.
Q. Let's go physical then. Any physical device that you could identify that could perform any of that means?
A. I could take -- I could program a computer to perform the tasks described by that means.
Q. Did you ever do that?
A. No.
Q. It continues to say, "The record search means" do you see that?
A. What column?
Q. Claim 2. Talks about the

16:55:52 15

16:56:03 20

16:56:21
25
automatic expiration is.
Are you suggesting that what you wrote here, when you wrote the 120 Patent, is not automatically expiration?

MR. CURRY: Objection to form.
A. I don't understand your question.
Q. This section says that the determination of expiration is made by comparing some portion of the contents of record to some external condition?
A. Yes, I see that.
Q. Is that consistent with your definition of automatic expiration that you provided to me a moment ago?
A. Yeah, I think it is. Sure.
Q. Can you explain how it's consistent?
A. Let's say we have a record and it identifies a particular passenger. If we go and see that that passenger is on a plane still in the air, and not an external condition, that record is not -- has not expired. If that passenger is no longer on a plane in the air, then that record is

16:56:32

16:57:01 15

16:57:14 20

16:57:27 25
expired.
Q. So, the external condition you're saying is the person being in a plane in the air?
A. I think in that example you might be able to say that. You can say that in that example.
Q. Right. In order for the information to be sent to the system, whatever system is making a check of this external condition, there would have to be some information sent that the person is either in the plane or deplaned from the plane; would there not?
A. I don't really understand your question.
Q. Well, what's an internal condition?

MR. CURRY: Objection to form.
A. You want me to give you an example of internal condition?
Q. Sure.
A. Let's say we have the 120

Patent and we have our hash table, we have our list of records and let's say we store

16:58:08

16:58:47 25
a record in a particular node on a Linked List. And let's say that we've calculated a check sum of the contents of that record, and we story that check sum in the node along with the record.

And let's say that one of the bits, a portion of the record, is faulty and a zero should be a one, or a one should be a zero. When we go to retrieve that record, we're going to retrieve the contents of the record, recalculate the check sum, compare that against the stored check sum and find that there's a mismatch. That's how checks are designed to be.

You lose a bit -- typically,
you get a different check sum. That's not some external condition that caused automatically that causes records to automatically expire. That's an example of something that's not in the category of external condition.
Q. That's an internal condition?
A. I would call that an internal condition.
Q. Does automatic expiration --

16:59:34 15

16:59:40 20

17:00:0025
your definition of automatic expiration include both external conditions and internal conditions?
A. No, it does not include
internal conditions.
Q. Does not include internal?
A. Does not include internal conditions.
Q. It just includes external conditions?
A. Yes.
Q. So, something becomes automatically expired through the determination of an external condition; is that correct?
A. Was there a question?
Q. Is that correct?
A. Say it once again, please.
Q. Something becomes automatically
expired through the determination of whether the portion or contents of record in comparison to an external condition?
A. Correct.
Q. You didn't disclose any other
methodology for automatic expiration nor do

17:22:01

17:22:09 15

17:22:43 25
is one understanding of the term, "number." There's number theory, and I could probably give you a definition for the world of mathematics that, I guess, would reflect my understanding of it, but I don't think that's what you really are after. So, if you could clarify a little bit, I'll be happy --
Q. When you wrote the 120 Patent and used the word, "number" in various places, what did you mean by the word, "number" in the 120 Patent?

MR. CURRY: Objection to form.
A. If we could take a look at a couple of spots, maybe that would make it more exact.
Q. Before we take a look at a couple of spots, I would like you to, to the best of your recollection sitting here today, tell me what you meant by the word, "number" in the 120 Patent?

MR. CURRY: Objection to form.
A. You didn't like quantity, so what about how many. How many, number and how many -- how many is my understanding of

17:23:15 10

17:23:59 15

17:24:23 25
the term "number."
As I sit here thinking about it and trying to give you a nonmathematical, technical definition in terms of set theory and all of the steps, the best I'm going to do right now is a phrase "how many" and the word number go strongly together in my head.
Q. So, one is a number?
A. One is a number.
Q. Two is a number?
A. Two is a number.
Q. Three?
A. Three is a number.

MR. CURRY: Can we take a break
real quick?
MR. CHAIKOVSKY: One last
thing, and then we can take a break.
Q. You testified earlier that the
-- for example, Claim 1 would cover or claim the best modes that you disclose in invention; is that correct?
A. I testified to that.
Q. Right. That included the
pseudocode of the appendix; is that

