# CORRECTED EXHIBIT 2 TO DEFENDANTS' 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

1	have the 495 open and next to you when you
2	were crafting the claims of the 120 Patent?
3	A. I don't remember.
4	Q. Was it more than five seconds?
12:18:58 5	A. Probably.
6	Q. It was more than 60 seconds?
7	A. Probably.
8	Q. It was more than five minutes?
9	A. Probably.
12:19:06 10	Q. I mean, doctor, I could go with
11	you if you'd like, I could go with you
12	let me ask you, who wrote the
13	specifications of the 120 Patent?
14	A. I did.
12:19:17 15	Q. Are you saying that any
16	similarities in the specification of the
17	120 Patent to either the 495 and the 499,
18	is that accidental?
19	MR. CURRY: Objection to form.
12:19:30 20	A. Probably not.
21	Q. Well, is it probably not?
22	A. It's not. It's not accidental.
23	Q. I mean, doctor, you sat there
24	and you either had the 495 or the 499 open
12:19:40 25	in front of you and you copied language

1	from those patents into the specification
2	of the 120, didn't you?
3	A. I used language from those two
4	patents in the 120.
12:19:52 5	Q. But I say "you used," you
6	copied portions of them in the
7	specification of the 120, right?
8	MR. CURRY: Objection to form.
9	A. Yeah, I copied I copied some
12:20:03 10	of the text.
11	Q. Now, what led you to believe
12	that language in the 495 Patent, whether in
13	the specification or the claims, would be a
14	helpful model for the claims that you were
12:20:21 15	writing for the 120?
16	A. The 495 and the 499 and I
17	believe the other what was the other
18	number? It was the 663 Patent were my
19	first exposures to patents in any detail.
12:20:43 20	So, whatever I knew about patents came from
21	those three.
22	So, I had really very little
23	knowledge beyond that. So, what I did is,
24	in composing the 120, I turned to what I
12:21:01 25	had, what I had experience with, and I

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	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.
15:16:40 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 Wickipedia, 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	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

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 story 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	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	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