

In The Matter Of:

*UMG RECORDINGS v.
MARIE LINDOR*

*DOUGLAS JACOBSON
February 23, 2007*

*FINK & CARNEY REPORTING AND VIDEO SERVICES
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[1]
[2] UNITED STATES DISTRICT COURT
[3] EASTERN DISTRICT OF NEW YORK
[4] _____X
[5] UMG RECORDINGS, INC., et al,
[6]
[7] Plaintiffs, 05 CV 1095
[8] (DGT)(RML)
[9] vs.
[10] MARIE LINDOR,
[11] Defendant.
[12] _____X

[12] February 23, 2007
[13] 9:30 a.m.

[15] DEPOSITION of Expert Witness,
[16] DR. DOUGLAS W. JACOBSON, held at the offices
[17] of Vanderberg & Feliu, LLP, 110 East 42nd
[18] Street, New York, New York, pursuant to
[19] Notice, before ELIZABETH SANTAMARIA, a
[20] Notary Public of the State of New York.

[24] Reported by:
ELIZABETH SANTAMARIA
[25] JOB NO. 54123

[2] Appearances:
[3]
[4] HOLME ROBERTS & OWEN LLP
[5] Attorneys for Plaintiffs
[6] 1700 Lincoln Street
[7] Denver, Colorado 80203-4541
[8] BY: RICHARD L. GABRIEL, ESQ.

[10] VANDENBERG & FELIU, LLP
[11] Attorneys for Defendant
[12] 110 East 42nd Street
[13] New York, New York 10017
[14] BY: RAY BECKERMAN, ESQ.

ALSO PRESENT: ZI MEI

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[3]
[4] IT IS HEREBY STIPULATED AND AGREED
[5] that the filing and sealing of the within
[6] deposition be, and the same are hereby
[7] waived;
[8]
[9] IT IS FURTHER STIPULATED AND AGREED
[10] that all objections, except as to the form
[11] of the question, be and the same are hereby
[12] reserved to the time of the trial;
[13]
[14] IT IS FURTHER STIPULATED AND AGREED
[15] that the within deposition may be sworn to
[16] before Notary Public with the same force and
[17] effect as if sworn to before a Judge of this
[18] Court;
[19] IT IS FURTHER STIPULATED that the
[20] transcript is to be certified by the
[21] reporter.
[22]
[23]
[24]
[25]

[1]
[2] DOUGLAS W. JACOBSON,
[3] called as a witness, having been duly sworn
[4] by the Notary Public, was examined and
[5] testified as follows:
[6] EXAMINATION BY
[7] MR. BECKERMAN:
[8] Q: Please state your name for the
[9] record.
[10] A: Dr. Douglas W. Jacobson.
[11] Q: What is your business address?
[12] A: 2215 Coover Hall, Iowa State
[13] University, Ames, Iowa 50011.
[14] Q: Dr. Jacobson, are you yourself an
[15] engineer?
[16] A: Yes.
[17] Q: By what body are you certified as an
[18] engineer?
[19] A: By no professional society.
[20] Q: No professional society? Is there
[21] any organization that has certified you as an
[22] engineer?
[23] A: No.
[24] Q: Are you part of any peer regulatory
[25] body?

Jacobson

- [1]
[2] **A:** I don't quite understand what you
[3] mean by —
[4] **Q:** Are you part of any body the members
[5] of which are peer-regulated?
[6] **A:** Can you give me an example of what
[7] you are —
[8] **Q:** A lawyer, an architect, an
[9] accountant.
[10] I thought an engineer had to be
[11] certified by a peer-regulated body.
[12] **A:** To be called a professional engineer
[13] they do.
[14] **Q:** So are you not a professional
[15] engineer?
[16] **A:** I do not have a PE license.
[17] **Q:** You are the founder of the Palisade
[18] Systems?
[19] **A:** That's correct.
[20] **Q:** What other titles do you hold within
[21] that organization?
[22] **A:** Chief technology officer.
[23] **Q:** And are you a member of the board of
[24] directors?
[25] **A:** Yes.

Jacobson

- [1]
[2] **Q:** Are you a shareholder?
[3] **A:** Yes.
[4] **Q:** What percentage of the shares of that
[5] company do you own?
[6] **A:** I believe it's about 3 percent.
[7] **Q:** Palisade Systems sells software
[8] products to universities, businesses and other
[9] institutions that maintain networks; is that
[10] correct?
[11] **A:** Yes.
[12] **Q:** Do these products include products
[13] which are intended to combat file sharing through —
[14] we are going to be using that term a lot.
[15] Withdrawn.
[16] These products include products that
[17] are intended to combat peer-to-peer file sharing of
[18] copyrighted works; is that correct?
[19] **MR. GABRIEL:** Objection to form.
[20] You can answer the question.
[21] **A:** Yes.
[22] **Q:** Is one of the reasons that these
[23] organizations buy these products the avoidance of
[24] lawsuits?
[25] **MR. GABRIEL:** Objection to form.

Jacobson

- [1]
[2] Lack of foundation.
[3] **A:** I don't — since I'm not on the
[4] marketing side, I really can't testify to why a
[5] particular client buys the product.
[6] **Q:** Have you been quoted in press
[7] releases issued by the company as to reasons to buy
[8] the product?
[9] **A:** Yes.
[10] **Q:** And in those press releases have you
[11] stated that one of the reasons to buy the product is
[12] to avoid lawsuits?
[13] **A:** I very well could have. I do not —
[14] without seeing one of the press releases.
[15] **Q:** Is one of the reasons to buy these
[16] products to avoid copyright infringement lawsuits?
[17] **MR. GABRIEL:** Objection to form.
[18] **A:** That would be a reason to buy one of
[19] the products.
[20] **Q:** And have you specifically referred to
[21] lawsuits by the RIAA as one of the types of lawsuits
[22] that they could avoid by buying these products?
[23] **A:** To my recollection, I have not.
[24] **Q:** Is it true that the RIAA backs the
[25] software that was co-licensed between your company

Jacobson

- [1]
[2] and Audible Magic?
[3] **MR. GABRIEL:** Objection to form.
[4] Lack of foundation.
[5] **A:** I do not know what arrangement
[6] Audible Magic and the RIAA have entered into.
[7] **Q:** Are you aware that an officer of
[8] Audible Magic was introduced to government officials
[9] in Washington by representatives of the RIAA?
[10] **A:** No.
[11] **MR. BECKERMAN:** I would like to
[12] mark as Defendant's 1 a press release from
[13] Palisade Systems, Inc. bearing the
[14] headline "Peer-to-Peer File Sharing
[15] Struggles Intensify in Universities."
[16] (Defendant's Exhibit 1, press release
[17] from Palisade Systems, Inc. bearing the
[18] headline "Peer-to-Peer File Sharing
[19] Struggles Intensify in Universities," marked
[20] for identification, as of this date.)
[21] **Q:** Is this press release genuine?
[22] **A:** It was released by the company.
[23] **MR. BECKERMAN:** I would like to
[24] mark as Exhibit 2 a one-page press release
[25] of Palisade Systems, Inc. dated April 21,

[1] **Jacobson**

[2] 2004. The headline is "Instantly Stop

[3] Illegal P2P With PacketSure 3."

[4] (Defendant's Exhibit 2, one-page

[5] press release of Palisade Systems, Inc.

[6] dated April 21, 2004, marked for

[7] identification, as of this date.)

[8] **Q:** Is this press release genuine?

[9] **A:** Yes. It was released by the company.

[10] **Q:** Going down to the third paragraph,

[11] which purports to have a quotation from you, would

[12] you tell us if that quotation is accurate?

[13] **A:** Yes.

[14] **MR. BECKERMAN:** I would like to

[15] mark as Exhibit 3 a two-page article dated

[16] April 19, 2004 by David Chappelle entitled

[17] "Newest PacketHound release eliminates

[18] illegal trading of copyrighted files."

[19] (Defendant's Exhibit 3, two-page

[20] article by David Chappelle dated April 19,

[21] 2004, marked for identification, as of this

[22] date.)

[23] **Q:** Who is Steven Brown?

[24] **A:** Steven Brown, what was his title? He

[25] was our marketing individual at Palisade. I don't

[1] **Jacobson**

[2] remember his exact title.

[3] **Q:** Was he authorized to speak for

[4] Palisade Systems to the press?

[5] **A:** Yes.

[6] **Q:** I direct you to the fifth paragraph

[7] and ask you whether that is an accurate statement of

[8] something that was said by Steven Brown.

[9] **MR. GABRIEL:** Objection. Lack of

[10] foundation.

[11] **A:** I have no way of knowing firsthand

[12] that Steven Brown said that.

[13] **Q:** Do you agree with the statement "Some

[14] P2P applications can evade certain security tools"?

[15] **A:** Yes.

[16] **Q:** Do you agree with the statement of

[17] Mr. Chappelle contained in the third paragraph that

[18] "Detecting and stopping copyrighted materials from

[19] being shared illegally eliminates the liability

[20] faced by organizations associated with file

[21] sharing"?

[22] **MR. GABRIEL:** Objection to form.

[23] Lack of foundation.

[24] **A:** Can you repeat the question?

[25] (Record read.)

[1] **Jacobson**

[2] **A:** Since I'm not a lawyer, I'm not sure

[3] I can comment on being a liability and the absolute

[4] elimination of it.

[5] **Q:** I call your attention to the ninth

[6] paragraph, starting with the word "instead."

[7] **A:** Okay.

[8] **Q:** Do you agree with that paragraph?

[9] **MR. GABRIEL:** Objection to form.

[10] Lack of foundation.

[11] **A:** Yes, I would agree with that.

[12] **MR. BECKERMAN:** I would like to

[13] mark as Exhibit 4 an article dated

[14] April 21, 2004, of C/net News.Com.,

[15] entitled "New Tool Designed to Block Song

[16] Swaps."

[17] (Defendant's Exhibit 4, C/net

[18] News.com article dated April 21, 2004,

[19] marked for identification, as of this date.)

[20] **Q:** Do you agree with the statement in

[21] the second paragraph, the first paragraph that's not

[22] in bold, which says that the song filtering software

[23] is backed strongly by the Recording Industry

[24] Association of America, RIAA?

[25] **MR. GABRIEL:** Objection to form.

[1] **Jacobson**

[2] Lack of foundation.

[3] **A:** I have no firsthand knowledge of

[4] whether or not the RIAA has strongly backed Audible

[5] Magic software.

[6] **Q:** Do you have any reason to believe

[7] that they have?

[8] **MR. GABRIEL:** Object to the form.

[9] **A:** Could you rephrase the question?

[10] **Q:** What is the problem with the

[11] question?

[12] **A:** Restate the question and then I will

[13] tell you.

[14] **Q:** You said you had no firsthand

[15] knowledge. Now I am asking you whether you have any

[16] reason to believe that the RIAA did, in fact, back

[17] the software strongly.

[18] **A:** I have no firsthand knowledge that

[19] they have.

[20] **Q:** Did you ever see this article?

[21] **A:** I don't recall seeing the article on

[22] the web.

[23] **Q:** Did you see any articles or press

[24] releases saying that the RIAA backed the software

[25] strongly?

Jacobson

[1] **A:** I don't recall seeing any.
[2] **Q:** So this is the first you've heard of
[3] it? Is that your testimony?
[4] **MR. GABRIEL:** I object to the form.
[5] He said what he said.
[6] **A:** I have no firsthand knowledge that
[7] they have strongly backed — I don't have any
[8] firsthand knowledge that they strongly backed the
[9] software, Audible Magic software.
[10] **Q:** Do you have any other knowledge that
[11] they backed it?
[12] **A:** Not to my recollection.
[13] **Q:** Going down to the second paragraph
[14] that's not in bold and the sentences which purport
[15] to quote you, would you tell me whether those are
[16] accurate quotes.
[17] **A:** Yeah.
[18] **Q:** Now, going down to the fourth
[19] paragraph starting with the word "during," is it
[20] your testimony that you have no knowledge of RIAA
[21] executives helping to guide Audible Magic CEO Vance
[22] Ikezoye around federal government offices advocating
[23] the song blocking technology as a tool for stopping
[24] copyright infringement on file swapping networks?
[25]

Jacobson

[1] **MR. GABRIEL:** Object to the form of
[2] the question.
[3] **A:** Could you please read the question
[4] back again.
[5] (Record read.)
[6] **A:** I have no knowledge that that took
[7] place.
[8] **Q:** What is the relationship, if any,
[9] between the RIAA and Palisade Systems, Inc.?
[10] **A:** There is no relationship.
[11] **Q:** Has Palisade Systems, Inc. had any
[12] dealings with any agents of the Recording Industry
[13] Association of America?
[14] **A:** I believe that our chief operating
[15] officer had discussions with the RIAA back in the
[16] early 2000s.
[17] **MR. BECKERMAN:** I would like to
[18] mark as Exhibit 5 a press release from
[19] ZDNet entitled "File-Swap Killer Grabs
[20] Attention."
[21] (Defendant's Exhibit 5, press release
[22] from ZDNet entitled "File-Swap Killer Grabs
[23] Attention," marked for identification, as of
[24] this date.)
[25]

Jacobson

[1] **Q:** Do you know what ZDNet is?
[2] **A:** Yeah.
[3] **Q:** What is ZDNet?
[4] **A:** It is an online publication, is my
[5] understanding.
[6] **Q:** Have you ever used ZDNet for anything
[7] other than reading?
[8] **A:** Personally, not to my knowledge I
[9] haven't.
[10] **Q:** You've never downloaded any software
[11] from ZDNet?
[12] **A:** Not that I can recall.
[13] **Q:** Have you never heard of ZDNet as a
[14] source of software?
[15] **A:** Not that I recall.
[16] **Q:** And what is ZDNet News?
[17] **A:** My understanding is it's an online
[18] publication that I believe they send out to e-mails
[19] to the subscribers.
[20] **Q:** Have you ever had any dealings with
[21] the University of Rochester?
[22] **A:** Define the university.
[23] **Q:** Excuse me?
[24] **A:** I don't quite understand when you say
[25]

Jacobson

[1] the university.
[2] **Q:** Have you ever had any dealings with
[3] officials of the University of Rochester?
[4] **A:** Personally I have not, no.
[5] **Q:** Has Palisade Systems?
[6] **A:** Personally I have no knowledge of
[7] that.
[8] **Q:** What do you mean personally you have
[9] no knowledge of that? Do you have some other kind
[10] of secondhand knowledge of it?
[11] **A:** Not that I recall, but I do not keep
[12] close tabs of what the marketing or the sales force
[13] does.
[14] **Q:** Has Palisade Systems had any dealings
[15] with the University of Rochester?
[16] **A:** Not that I recall.
[17] **Q:** Did the provost of the University of
[18] Rochester attend a demonstration of the Audible
[19] Magic software at RIAA headquarters in January of
[20] 2004?
[21] **A:** Not that I know of, but ...
[22] **Q:** Do you agree or disagree with the
[23] statement that the RIAA has helped the company,
[24] meaning Audible Magic, gain entree to official
[25]

[1] **Jacobson**

[2] Washington circles?

[3] **MR. GABRIEL:** Object to form. Lack

[4] of foundation.

[5] **A:** I have no knowledge of what the RIAA

[6] has done to help Audible Magic.

[7] **Q:** Is it a fact that Audible Magic

[8] entered into a cross-licensing agreement with

[9] Palisade Systems, Inc.?

[10] **A:** That's correct.

[11] **Q:** What was the software designed to do?

[12] **A:** What software?

[13] **Q:** Song filtering software created by

[14] Audible Magic, software that was mentioned in the

[15] press releases I just showed you.

[16] **A:** Audible Magic's software is designed

[17] to examine audio data and determine if it matches a

[18] database of copyrighted materials.

[19] **MR. BECKERMAN:** Would you read back

[20] the question.

[21] (Record read.)

[22] **Q:** Do you feel you have answered that

[23] question?

[24] **A:** I answered the question of what

[25] Audible Magic software was designed to do.

[1] **Jacobson**

[2] **Q:** Is it song filtering software?

[3] **MR. GABRIEL:** Object to the form.

[4] **A:** Define what you mean by filtering.

[5] **Q:** What is filtering? Withdrawn.

[6] Is it your testimony here under oath

[7] you do not know what the word "filtering" means?

[8] **MR. GABRIEL:** Object to the form.

[9] Argumentative.

[10] **A:** The term has many different uses.

[11] I'm trying to —

[12] **Q:** Is the audio designed by Audible

[13] Magic designed for song filtering?

[14] **MR. GABRIEL:** Object to the form.

[15] Lack of foundation.

[16] **A:** Will you repeat the question.

[17] (Record read.)

[18] **A:** I can't testify to what their design

[19] team chose to design their software to do.

[20] **Q:** So is it your testimony that you do

[21] not know if this software has any application to

[22] blocking song trades on peer-to-peer file sharing

[23] networks?

[24] **MR. GABRIEL:** Object to the form.

[25] That's a different question.

[1] **Jacobson**

[2] You can answer the question.

[3] **A:** Which application?

[4] **Q:** The same one we've just been talking

[5] about. The application designed by Audible Magic,

[6] which was cross-licensed to Palisade Systems.

[7] **A:** The Audible Magic code that was

[8] licensed by Palisade does not block traffic.

[9] **Q:** What does it do?

[10] **A:** It identifies traffic content.

[11] **Q:** Is it able to identify song files?

[12] **A:** It is able to identify — it is able

[13] to identify —

[14] It is able to analyze files and

[15] determine if those files match the signatures that

[16] are stored in their database.

[17] **Q:** And was it marketed by Palisade

[18] Systems as something that could identify and stop

[19] illegal file trades in real time without any

[20] requirement for individual users to be identified?

[21] **A:** Yes, their code coupled with our

[22] code.

[23] **Q:** And was it marketed by Palisade

[24] Systems as something that could block specific

[25] illegal file trades?

[1] **Jacobson**

[2] **A:** Yes.

[3] **Q:** Now, you are the chief technology

[4] officer of Palisade?

[5] **A:** That's correct.

[6] **Q:** So you would be knowledgeable about

[7] technology work between your company and Audible

[8] Magic, is that not true?

[9] **MR. GABRIEL:** Object to the form.

[10] **A:** Define what you mean by technology

[11] work.

[12] **Q:** Development of computer programs.

[13] **A:** I am knowledgeable as to how our

[14] software operates and how the application interfaced

[15] between our software and Audible Magic software

[16] operates.

[17] **Q:** Did your company work jointly with

[18] Audible Magic to develop the first network

[19] appliances that identified copyrighted works on the

[20] fly combined with the ability to block individual

[21] trades?

[22] **A:** Our company worked with Audible Magic

[23] to develop a product to stop peer-to-peer traffic as

[24] identified by Audible Magic's proprietary code.

[25] **Q:** And you are testifying here today

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Jacobson

[1] that you have no idea how the RIAA reacted to this
[2] work that you are doing?
[3] **A:** That's correct.
[4] **Q:** Have the press releases issued by
[5] Palisade Systems referred to the RIAA?
[6] **MR. GABRIEL:** I object to the form.
[7] Lack of foundation.
[8] **A:** I'm sure that some of our press
[9] releases have probably mentioned the RIAA.
[10] **Q:** In what capacity?
[11] **MR. GABRIEL:** Same objections.
[12] **A:** I don't recall any direct quotes out
[13] of any of the press releases.
[14] **Q:** Did you ever meet with the CEO of
[15] Audible Magic?
[16] **A:** I recall meeting him in just a short
[17] meeting when he visited Palisade, but I was not part
[18] of the negotiations.
[19] **Q:** Did you discuss the software?
[20] **MR. GABRIEL:** The question is
[21] whether Dr. Jacobson talked to the CEO
[22] about the software? I'm just clarifying
[23] the question.
[24] **Q:** Did you discuss the software?
[25]

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Jacobson

[1] **MR. GABRIEL:** I object to the form.
[2] **A:** I can't recall whether I did or
[3] didn't.
[4] **Q:** Have you formed an opinion as to
[5] whether Marie Lindor personally uploaded any
[6] copyrighted files to anyone?
[7] **A:** The computer whose IP address has
[8] been identified as being registered to Ms. Lindor
[9] has been shown to have made songs available,
[10] copyrighted material available to the internet
[11] community through peer-to-peer software.
[12] **MO MR. BECKERMAN:** I move to strike the
[13] answer as nonresponsive.
[14] Would you read back the question.
[15] (Record read.)
[16] **MR. GABRIEL:** Is there a question
[17] pending?
[18] **MR. BECKERMAN:** Yes, I'm waiting
[19] for an answer to the question. It calls
[20] for a "yes" or "no" answer.
[21] **MR. GABRIEL:** I object. It does
[22] not. He answered the question.
[23] **MR. BECKERMAN:** Are you directing
[24] him not to answer the question?
[25]

Page 23

Jacobson

[1] **MR. GABRIEL:** No, no.
[2] **THE WITNESS:** Would you repeat the
[3] question.
[4] (Record read.)
[5] **MR. GABRIEL:** My objection was he
[6] just answered.
[7] You can answer it again.
[8] **A:** Again, the computer registered to
[9] Marie Lindor had made available songs through
[10] peer-to-peer software, therefore making them
[11] available.
[12] **MR. BECKERMAN:** I am going to say
[13] this once and I am not going to repeat it.
[14] We are here, we have a limited
[15] time. I am on page 1 of about 40 pages
[16] of notes. If this kind of gamesmanship
[17] is going to be continued, we will never
[18] get through even a fraction of this
[19] deposition and we will just have to
[20] continue it. But I have no intention of
[21] accepting that type of answer.
[22] If that's the way you are going
[23] to play this, then we will be here all
[24] day. It calls for a "yes" or "no"
[25]

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Jacobson

[1] answer and there is no reason to be
[2] playing games in answering a question
[3] that was not asked. He will be asked
[4] questions that may relate to what his
[5] answer was, but he has not answered the
[6] question that was asked of him and it
[7] calls for a "yes" or "no" and I expect
[8] an answer to it.
[9] **MR. GABRIEL:** It is a nice speech,
[10] Ray. The witness answered the question.
[11] I object to the characterization of
[12] gamesmanship. Because you don't like the
[13] answer doesn't mean it is gamesmanship.
[14] The witness has answered, he has his
[15] opinions. And if you want to argue with
[16] me or the witness, we will be here all day
[17] or we will leave.
[18] **MR. BECKERMAN:** I am going to ask
[19] the question one more time and if I do not
[20] get an answer to it, we will eventually
[21] seek a ruling on that and we are going to
[22] seek a ruling on all questions that we do
[23] not receive answers to, all questions to
[24] which we do not receive answers to, and
[25]

[1] **Jacobson**
 [2] then we will have a continued deposition.
 [3] **MR. GABRIEL:** You reserve whatever
 [4] you want, Ray, and seek whatever rulings
 [5] you want. The witness answered the
 [6] question and I submit this is browbeating
 [7] the witness into trying to get the witness
 [8] by arguing with me. This is not serving
 [9] any purpose.
 [10] **BY MR. BECKERMAN:**
 [11] RL Q. Have you formed an opinion as to
 [12] whether Marie Lindor personally uploaded any
 [13] copyrighted files, "yes" or "no"?
 [14] **MR. GABRIEL:** Objection. Form.
 [15] Asked and answered twice.
 [16] **Q:** Dr. Jacobson, would you please answer
 [17] the question.
 [18] **A:** I have twice already answered the
 [19] question.
 [20] **Q:** Are you refusing to answer the
 [21] question?
 [22] **MR. GABRIEL:** Objection.
 [23] Argumentative. He answered the question.
 [24] **MR. BECKERMAN:** We will seek a
 [25] ruling on that.

[1] **Jacobson**
 [2] RL Q. Have you personally formed an opinion
 [3] as to whether Marie Lindor personally downloaded any
 [4] copyrighted files?
 [5] **A:** The computer whose IP address who has
 [6] been identified as belonging to Marie Lindor made
 [7] copyrighted material available through peer-to-peer
 [8] software — made the material available through
 [9] peer-to-peer software.
 [10] **MR. BECKERMAN:** We also will seek a
 [11] ruling on that and we will seek a ruling
 [12] on all follow-up questions which would
 [13] have resulted from a "yes" or "no" answer.
 [14] MO I move to strike the nonresponsive
 [15] answer that was given.
 [16] **Q:** Based upon your examination of the
 [17] hard drive which you examined, what evidence did you
 [18] find that inculpated Marie Lindor personally?
 [19] **MR. GABRIEL:** Object to the form.
 [20] Lack of foundation.
 [21] **A:** Would you please define the
 [22] second-to-last word.
 [23] **Q:** "Her"?
 [24] **A:** No, "inculpated." Would you please
 [25] define that for me.

[1] **Jacobson**
 [2] **Q:** Do you not know what the word
 [3] "inculpated" means?
 [4] **A:** That's correct.
 [5] **Q:** Are you familiar with the word
 [6] "exculpate"?
 [7] **A:** No.
 [8] **Q:** What is your educational background?
 [9] **A:** Computer engineering.
 [10] **Q:** Well, which school did you attend?
 [11] Did you get a Bachelor's degree?
 [12] **A:** Yes.
 [13] **Q:** What school?
 [14] **A:** Iowa State University, science and
 [15] technology.
 [16] **Q:** When did you graduate?
 [17] **A:** With which degree?
 [18] **Q:** When did you get your Bachelor's
 [19] degree?
 [20] **A:** 1980.
 [21] **Q:** Do you have any other degrees?
 [22] **A:** I hold a Master of Science in
 [23] electrical engineering.
 [24] **Q:** When did you get that?
 [25] **A:** 1982.

[1] **Jacobson**
 [2] **Q:** Any other degrees?
 [3] **A:** A Doctor of Philosophy, Ph.D., in
 [4] computer engineering.
 [5] **Q:** When was that?
 [6] **A:** 1985.
 [7] **Q:** And you are associate professor at
 [8] Iowa State University?
 [9] **A:** That is correct.
 [10] **Q:** And you do not know what the word
 [11] "exculpate" means?
 [12] **A:** That's correct.
 [13] **Q:** Based upon your examination of the
 [14] hard drive which you examined in this case, what
 [15] evidence did you find that supported or would
 [16] support a conclusion that Marie Lindor had
 [17] personally uploaded any files?
 [18] **A:** The hard drive that I examined showed
 [19] no evidence of any peer-to-peer software or MP3
 [20] music files.
 [21] **Q:** So is it correct to say that there
 [22] was nothing on the hard drive that tended to prove
 [23] that she had uploaded or downloaded anything?
 [24] **A:** There was nothing on the hard drive
 [25] that indicated there was any peer-to-peer software.

Jacobson

[1] **Q:** Hypothetically, had you discovered
[2] KaZaA software and song files or remnants of KaZaA
[3] software or song files resembling those that had
[4] appeared in a screen shot, would that have tended to
[5] support a finding that she had downloaded or
[6] uploaded copyrighted files?
[7] **A:** That would have supported a claim
[8] that that computer was used to make files available.
[9] **Q:** So it would have supported a finding
[10] that the computer whose hard drive you examined had
[11] been used for that purpose?
[12] **A:** Correct.
[13] **Q:** It would not have supported a
[14] finding, would it, as to whether Marie Lindor
[15] herself had used those programs or files?
[16] **MR. GABRIEL:** Object to the form.
[17] Lack of foundation.
[18] **THE WITNESS:** Please read it back.
[19] (Record read.)
[20] **A:** That's correct.
[21] **Q:** Hypothetically, had you discovered
[22] substantial deletions, would that have supported a
[23] finding that there had been the use of KaZaA file
[24] sharing to download or upload copyrighted files?
[25]

Jacobson

[1] **MR. GABRIEL:** Object to the form.
[2] Lack of foundation.
[3] **A:** Had I found substantial deletions of
[4] the KaZaA software and music files, that would have
[5] supported it.
[6] **Q:** Had you discovered that the hard
[7] drive had been entirely reformatted would that, in
[8] your view, have supported a finding that the
[9] computer had been used for uploading or downloading
[10] copyrighted works?
[11] **MR. GABRIEL:** Same objections.
[12] **A:** Had the computer been reformatted,
[13] there would have been no conclusion that I could
[14] have drawn as to what was on the computer prior to
[15] formatting.
[16] **Q:** Hypothetically, had you discovered
[17] substantial defragmentation of the hard drive, would
[18] that have supported a finding that the computer had
[19] been used to upload or download copyrighted works?
[20] **MR. GABRIEL:** Same objection.
[21] **A:** If that's all I had found, no, that
[22] would not have supported.
[23] **Q:** So you have concluded that the hard
[24] drive that you examined was not used for KaZaA file
[25]

Jacobson

[1] sharing; is that correct?
[2] **A:** That's correct, as I testified or as
[3] I — in one of my documents, yes.
[4] **Q:** Are you aware of any evidence of
[5] anything that would point to Marie Lindor personally
[6] having done something as opposed to any other
[7] person?
[8] **MR. GABRIEL:** Objection to the
[9] form. Lack of foundation.
[10] **A:** I have examined evidence that shows
[11] that the computer registered to the IP address
[12] belonging to Marie Lindor was used to share
[13] copyrighted material.
[14] **Q:** But other than that, other than the
[15] fact that the computer was used, as you say, is
[16] there any evidence to show what natural person, what
[17] individual was the one who actually did it?
[18] **A:** No.
[19] **Q:** Do you know what processes and
[20] procedures MediaSentry employed?
[21] **A:** I do not know the inner works of
[22] MediaSentry processes and procedures.
[23] **Q:** Do you know what software they used?
[24] **A:** No.
[25]

Jacobson

[1] **Q:** Do you know if it was well known
[2] off-the-shelf software or if it was proprietary
[3] software?
[4] **A:** Again, I do not know the inner
[5] workings of MediaSentry's operations.
[6] **Q:** Do you know if their software had
[7] been peer-reviewed or published or anything like
[8] that?
[9] **A:** Not that I'm aware of.
[10] **Q:** Have you ever testified as an expert
[11] in a deposition?
[12] **A:** No.
[13] **Q:** Have you ever testified as an expert
[14] in a trial?
[15] **A:** No.
[16] **Q:** Have you ever testified as an expert
[17] in any other type of proceeding?
[18] **A:** I testified in front of a school
[19] board.
[20] **Q:** As an expert?
[21] **A:** Yes.
[22] **Q:** On what subject?
[23] **A:** A teacher was accused of viewing
[24] pornography at school.
[25]

Jacobson

[1] **Q:** There was no judge?
 [2] **A:** No.
 [3] **Q:** There was no arbitrator or judicial
 [4] type of person conducting it? It was just a school
 [5] board?
 [6] **A:** Yes.
 [7] **Q:** Has any judge or jury ever found your
 [8] methodology to be unreliable?
 [9] **A:** I've never been in front of a judge,
 [10] so no.
 [11] **Q:** Has any judge or jury ever found your
 [12] methodology to be reliable?
 [13] **A:** Again, I've never been in front of a
 [14] judge.
 [15] **Q:** Has anyone other than the RIAA ever
 [16] hired you to do a forensic examination of a hard
 [17] drive?
 [18] **A:** Yes.
 [19] **Q:** Who?
 [20] **A:** That school board. I'm currently
 [21] working on a —
 [22] **MR. GABRIEL:** Why don't you wait
 [23] until the ambulance passes.
 [24] **MR. BECKERMAN:** I don't think we —

Jacobson

[1] **MR. GABRIEL:** It may take a while.
 [2] **MR. BECKERMAN:** This is New York,
 [3] Richard. This isn't Denver. We could be
 [4] here all day.
 [5] **MR. GABRIEL:** Just try to keep your
 [6] voice up.
 [7] **A:** I am currently working on two
 [8] forensic cases that are ongoing. I've done quite a
 [9] bit of forensic work for law enforcement which I do
 [10] pro bono.
 [11] **Q:** When were you first hired to do
 [12] forensic work on a hard drive?
 [13] **MR. GABRIEL:** Just for
 [14] clarification, when you say hired, does
 [15] that include the pro bono work he's
 [16] talking about?
 [17] **MR. BECKERMAN:** Yes.
 [18] **A:** On a hard drive, probably in the late
 [19] '80s.
 [20] **Q:** And who was that?
 [21] **A:** The Iowa State University. I've done
 [22] quite a bit of forensic work helping out various
 [23] individuals at the university.
 [24] **Q:** What law enforcement agency hired you

Jacobson

[1] to do a forensic examination of a hard drive?
 [2] **A:** Again, I did it with no compensation.
 [3] I do all my forensic exams for law enforcement
 [4] through the Iowa State University police department.
 [5] However, they take in cases from other
 [6] jurisdictions. I don't always know the jurisdiction
 [7] that brought the case in.
 [8] **Q:** And they have never used you as a
 [9] witness?
 [10] **A:** No. We never — they've always
 [11] settled.
 [12] **Q:** Apart for doing things for people at
 [13] Iowa State University how many times have you
 [14] been — and apart from the RIAA, how many hard
 [15] drives have you done forensic examinations of?
 [16] **A:** By outside the university, do you
 [17] also mean outside the Iowa State Police Department?
 [18] **Q:** No.
 [19] **A:** I maybe misunderstood the question.
 [20] Can you restate the question or repeat the question?
 [21] **Q:** I will restate the question.
 [22] Apart from your work for the RIAA and
 [23] your work for people at Iowa State University, how
 [24] many hard drives have you been hired to do a
 [25]

Jacobson

[1] forensic examination of?
 [2] **A:** Probably half a dozen. It's been
 [3] over such a long period of time.
 [4] **Q:** What software did you use?
 [5] **A:** In the latest ones I've been using
 [6] EnCase.
 [7] **Q:** Which edition of EnCase?
 [8] **A:** I'm using 5.
 [9] **Q:** What did you use before?
 [10] **A:** I would use various Hex editors and
 [11] then — before it was — before we had sophisticated
 [12] software. Sometimes I would write software to
 [13] recover.
 [14] **Q:** When did you start using EnCase 5?
 [15] **A:** I don't remember the date that it
 [16] came out. Prior to that I was using version 4.
 [17] **Q:** When did you start using that?
 [18] **A:** Probably about three years ago.
 [19] **Q:** Has anyone other than the RIAA ever
 [20] hired you to opine on whether a particular computer
 [21] had been used for uploading or downloading
 [22] copyrighted works?
 [23] **A:** Copyrighted works?
 [24] **Q:** Yes.
 [25]

Jacobson

[1] **A:** No.
[2] **Q:** How long have you been using your
[3] present method of determining whether a particular
[4] computer has been used for uploading or downloading
[5] copyrighted works?
[6] **A:** About a year and a half.
[7] **Q:** When did you learn your present
[8] method of determining whether a particular computer
[9] has been used for uploading or downloading
[10] copyrighted works? Or did you develop it yourself?
[11] **A:** Clarification. Are you talking about
[12] exams on the hard drives or just the process, the
[13] entire process?
[14] **Q:** Well, you have a method, do you not?
[15] **A:** I have a method for examining hard
[16] drives and I have a method for reviewing the
[17] MediaSentry material.
[18] **Q:** So these are two different things?
[19] One isn't tied into the other?
[20] **A:** They are two different processes.
[21] **Q:** Okay. So let's break it down. Your
[22] method of —
[23] The MediaSentry materials are
[24] gathered through the internet?
[25]

Jacobson

[1] **A:** Yeah. MediaSentry gathers the
[2] material through the internet.
[3] **Q:** How did you learn your method of
[4] interpreting — withdrawn.
[5] Are you able —
[6] I am having a little difficulty with
[7] this conceptually. You are breaking it down into
[8] two separate processes. Is it your testimony that
[9] there is a way to detect whether a computer has been
[10] used for uploading or downloading copyrighted works
[11] without both looking at the MediaSentry material and
[12] the hard drive?
[13] **A:** Yes.
[14] **Q:** Let's break it down, then, into two
[15] separate things.
[16] How did you learn your method of
[17] determining from the MediaSentry materials whether a
[18] particular computer has been used for uploading or
[19] downloading copyrighted works?
[20] **A:** It was a process that I developed.
[21] **Q:** You developed it on your own?
[22] **A:** Yes.
[23] **Q:** How did you learn your method of
[24] determining from a hard drive whether a particular
[25]

Jacobson

[1] computer has been used for uploading or downloading
[2] copyrighted works?
[3] **A:** Well, the forensic examination
[4] process I learned through self-study and through the
[5] forensic examiner's exam.
[6] **Q:** Now, am I correct that you were doing
[7] this for law enforcement before you were a certified
[8] forensic examiner?
[9] **A:** That's correct.
[10] **Q:** And when did you become a certified
[11] forensic examiner?
[12] **A:** September '04.
[13] **Q:** And why did you become a certified
[14] forensic examiner?
[15] **A:** Two reasons. One is to be able to
[16] better work with the law enforcement and the other
[17] is to help support our university's educational
[18] mission, since we teach computer forensics.
[19] **Q:** Wouldn't a third reason be that it
[20] might give you standing to testify in a court of law
[21] as to your forensic examinations of hard drives?
[22] **A:** That I would tie in with the first
[23] reason, to work better with law enforcement.
[24] **Q:** What about your private work for the
[25]

Jacobson

[1] recording industry of America?
[2] **A:** I was a certified examiner before I
[3] was engaged by the recording industry.
[4] **Q:** Isn't it a fact that you were engaged
[5] by the RIAA in 2002?
[6] **A:** It was in September '05.
[7] **Q:** You were not doing any work for them
[8] in 2002?
[9] **A:** No. My first work for them was in
[10] the fall of 2005. I can't remember my first trip to
[11] Kansas City.
[12] **Q:** And you weren't doing any work for
[13] them in 2003?
[14] **A:** No.
[15] **Q:** And you weren't doing any work for
[16] them in 2004?
[17] **A:** I started working with the law firm
[18] in the fall of 2005.
[19] **MR. BECKERMAN:** Off the record.
[20] (Discussion off the record.)
[21] **Q:** Has your method of determining from
[22] the MediaSentry materials whether a particular
[23] computer has been used for uploading or downloading
[24] copyrighted works been tested by any testing body?
[25]

[1] **Jacobson**

[2] **A:** Not that I have submitted.

[3] **Q:** Do you know anyone else that is using

[4] your method, other than you?

[5] **A:** Not that I'm aware of.

[6] **Q:** Has your method of determining

[7] through the MediaSentry materials whether a

[8] particular computer has been used for uploading or

[9] downloading copyrighted works been subjected to any

[10] form of peer review?

[11] **A:** Not that I'm aware of.

[12] **Q:** Has your method of determining from

[13] the MediaSentry materials whether a computer has

[14] been used for uploading or downloading copyrighted

[15] works been published?

[16] **A:** No.

[17] **Q:** Is there a known rate of error for

[18] your method?

[19] **A:** No.

[20] **Q:** Is there a potential rate of error?

[21] **MR. GABRIEL:** Object to the form.

[22] **A:** I guess there is always a potential

[23] of an error.

[24] **Q:** Do you know of a rate of error?

[25] **A:** To my process, no.

[1] **Jacobson**

[2] **Q:** Are there any standards and controls

[3] over what you have done?

[4] **A:** No.

[5] **Q:** Have your methods been generally

[6] accepted in the scientific community?

[7] **A:** The process has not been vetted

[8] through the scientific community.

[9] **Q:** Have you had communications with

[10] MediaSentry?

[11] **A:** Not that I recall.

[12] **Q:** Have MediaSentry's methods been

[13] tested by any testing body?

[14] **A:** I don't know.

[15] **Q:** Have MediaSentry's methods been

[16] subjected to any form of peer review?

[17] **A:** I don't know.

[18] **Q:** Have MediaSentry's methods been

[19] published?

[20] **A:** I don't know.

[21] **Q:** It's a fact, is it not, that

[22] MediaSentry's methods are secret?

[23] **MR. GABRIEL:** Objection of lack of

[24] foundation.

[25] **A:** I don't know.

[1] **Jacobson**

[2] **Q:** Is there a known rate of error for

[3] MediaSentry's methods?

[4] **A:** Not that I'm aware of.

[5] **Q:** So when you evaluate the MediaSentry

[6] materials you are assuming them to be accurate?

[7] **A:** Yes.

[8] **Q:** Is there a potential rate of error

[9] for MediaSentry's methods?

[10] **MR. GABRIEL:** Object to the form.

[11] **A:** There is always a potential for an

[12] error.

[13] **Q:** Are there any standards and controls

[14] over MediaSentry's methods?

[15] **A:** I don't know.

[16] **Q:** Have MediaSentry's methods been

[17] generally accepted in the scientific community?

[18] **MR. GABRIEL:** Object to the form.

[19] Lack of foundation.

[20] **A:** Not that I know of.

[21] **Q:** Is MediaSentry peer-regulated?

[22] **A:** Not that I know of.

[23] **Q:** Apart from your work on RIAA

[24] litigations against owners of internet access

[25] accounts, have you engaged in research on

[1] **Jacobson**

[2] determining whether specific individual computer

[3] users engaged in copyright infringement through

[4] peer-to-peer file sharing?

[5] **MR. GABRIEL:** I'm sorry, I lost

[6] the question. Could you repeat it,

[7] please?

[8] **Q:** Apart from your work on the RIAA

[9] cases, have you engaged in any research on methods

[10] of determining whether specific individual computer

[11] users engaged in copyright infringement through the

[12] use of P2P file sharing?

[13] **A:** Yes.

[14] **Q:** And what kind of research was that?

[15] **A:** Obviously there was some research

[16] done through Palisade as part of its product rollout

[17] dealing with how to identify the individuals within

[18] an organization. One of my grad students also

[19] worked on the project to identify users of

[20] peer-to-peer software, although that was focused

[21] more on child pornography than it was copyright

[22] material.

[23] **Q:** I would like to leave aside research

[24] that may have been done by others. I mean to ask

[25] whether you personally have engaged in research.

Jacobson

[1] *Jacobson*
[2] **A:** Through Palisade as part of product
[3] development.
[4] **Q:** Is that something that is research
[5] which is private and proprietary?
[6] **A:** No. The piece I did is no longer
[7] used as the technology, so it's not.
[8] **Q:** Was it ever published?
[9] **A:** No. At the time it was proprietary
[10] to Palisade.
[11] **Q:** And now it's been replaced by other
[12] methods?
[13] **A:** Yes.
[14] **Q:** Apart from your work on the RIAA
[15] cases, have you engaged in any research on methods
[16] of determining whether specific computer hard drives
[17] contained evidence of copyright infringement through
[18] peer-to-peer file sharing?
[19] **A:** No.
[20] **Q:** Do any of your three reports — by
[21] "three reports" I'm referring to the April 7th
[22] initial report, the December 19th declaration that
[23] you signed and the October report which you did not
[24] sign. Do any of those three reports discuss the
[25] possibility of any alternate explanations other than

Jacobson

[1] *Jacobson*
[2] copyright infringement?
[3] **MR. GABRIEL:** Object to form to the
[4] extent that they speak for themselves.
[5] You can answer the question.
[6] **A:** Please read the question. I didn't
[7] understand.
[8] (Record read.)
[9] **A:** Alternate explanations to?
[10] **Q:** Your conclusions.
[11] **A:** No.
[12] I'm sorry. I said, "No."
[13] **Q:** Did any of the three reports discuss
[14] any alternate explanations other than KaZaA
[15] appearing on a file owned by Marie Lindor?
[16] **MR. GABRIEL:** Object to the form.
[17] They speak for themselves.
[18] **A:** What do you mean by KaZaA appearing
[19] on a file?
[20] **Q:** I'm sorry, I misspoke. Do any of
[21] your three reports discuss the possibility of any
[22] alternate explanations other than KaZaA appearing on
[23] a computer owned by Marie Lindor?
[24] **A:** No.
[25] **Q:** Are you, as we sit here, capable of

Jacobson

[1] *Jacobson*
[2] thinking of some alternate explanations?
[3] **A:** Yes.
[4] **Q:** Can you think of any possible
[5] infirmities in MediaSentry's methods as we sit here?
[6] **MR. GABRIEL:** Object to form and
[7] foundation. I'm sorry.
[8] **A:** I don't have an inner knowledge of
[9] their methods so I...
[10] **Q:** Can you think of any possible
[11] security vulnerabilities in the computer that was in
[12] Marie Lindor's apartment?
[13] **MR. GABRIEL:** Object to form and
[14] foundation.
[15] **A:** Repeat the question. Read it back.
[16] (Record read.)
[17] **A:** I didn't examine the hard drive that
[18] was given to me for security vulnerabilities, so I
[19] can't attest to what vulnerabilities may have been
[20] present in that hard drive.
[21] **Q:** As we sit here, can you think of any
[22] possible security vulnerabilities in the computer
[23] that was in Marie Lindor's apartment?
[24] **MR. GABRIEL:** Objection to form.
[25] Lack of foundation.

Jacobson

[1] *Jacobson*
[2] **A:** Read that back.
[3] (Record read.)
[4] **A:** Can you read it one more time.
[5] (Record read.)
[6] **A:** I'm sure the possibility exists there
[7] were security vulnerabilities. Again, I don't know
[8] which ones would apply to that particular computer.
[9] **Q:** And did your report discuss any of
[10] those possible security vulnerabilities?
[11] **A:** No.
[12] **Q:** Did you testify at an United States
[13] Senate committee in September of 2003?
[14] **A:** Yes.
[15] **Q:** Did you make this statement?
[16] "In summer of 2000 we introduced
[17] PacketHound which is designed to detect, monitor and
[18] block unauthorized peer-to-peer applications."
[19] **A:** That sounds like — that sounds like
[20] a statement I made.
[21] **Q:** Did you make this statement?
[22] "There are no effective controls
[23] regarding content provided on a peer-to-peer
[24] network."
[25] **A:** Again, that sounds like a statement I

[1] **Jacobson**

[2] made.

[3] **Q:** And did you make this statement?

[4] "Both the provider and the requester

[5] of the file are not easily detected."

[6] **A:** Again, that sounds like a statement

[7] that was in that testimony. I don't have the

[8] testimony in front of me, so I ...

[9] **Q:** Did you make this statement?

[10] "These technologies are not designed

[11] for the home users."

[12] **A:** Again, that sounds like a statement

[13] that was in the testimony.

[14] **Q:** Did you make this statement?

[15] "This leaves individuals on their own

[16] to solve the problems of peer-to-peer networking."

[17] **A:** Again, that sounds like a statement

[18] that was in the testimony.

[19] **Q:** Did you make this statement?

[20] "Which naturally leaves us to the

[21] question, what is the homeowner to do?"

[22] **A:** Again, that sounds like something

[23] that was in that testimony.

[24] **Q:** Did you make this statement?

[25] "Unlike web filtering, where certain

[1] **Jacobson**

[2] sites can be blocked and web access can be

[3] monitored, peer-to-peer traffic cannot be filtered

[4] based on its content. This leaves a home user no

[5] choice but to either allow peer-to-peer activity and

[6] all of its associated risks or not allow any

[7] peer-to-peer applications on their machines."

[8] **A:** Again, that sounds like what was in

[9] that testimony.

[10] **Q:** Are you familiar with Steven Gottlieb

[11] of the RIAA?

[12] **A:** I've heard the name but that's it.

[13] **Q:** Do you agree with this statement

[14] which I will represent to you he made on

[15] November 15, 2004 in comments he provided to the

[16] Federal Trade Commission?

[17] "P2P services often configure their

[18] software to share content by default. What users

[19] often do not know is that they may be sharing their

[20] tax records, financial records, health records,

[21] business records, e-mail and other personal and

[22] private material."

[23] Do you agree with that statement?

[24] **A:** Oh, I'm sorry. Yes.

[25] **Q:** Do you agree with this statement,

[1] **Jacobson**

[2] which I represent to you was made by Mr. Gottlieb?

[3] "As an additional matter P2P software

[4] may, upon installation, automatically search a

[5] user's entire hard drive for content, files that

[6] users have no intention of sharing may end up being

[7] offered to the entire P2P network."

[8] **A:** Yes.

[9] **Q:** Do you agree with this statement

[10] which I represent to you was made by Mr. Gottlieb?

[11] "Continued sharing of personal

[12] information is hard to avoid and is facilitated by

[13] confusing and complicated instructions for

[14] designating shared items."

[15] **A:** Yes.

[16] **Q:** Do you agree with this statement also

[17] made by Mr. Gottlieb?

[18] "A study by Nathaniel S. Good and

[19] Aaron Krekelberg at HP Laboratories showed that the

[20] majority of the users were unable to tell what files

[21] they were sharing and sometimes incorrectly assumed

[22] they were not sharing any files when in fact they

[23] were sharing all files on their hard drive.

[24] **MR. GABRIEL:** Object to the form.

[25] Lack of foundation.

[1] **Jacobson**

[2] **A:** I guess I can't quantify some, most,

[3] all. I'm sorry.

[4] **Q:** Are you familiar with the report by

[5] Nathaniel Good and Aaron Krekelberg at HP

[6] Laboratories?

[7] **A:** No.

[8] **MR. GABRIEL:** When we get to a good

[9] stopping point, can we take five? It's

[10] been an hour and a half.

[11] **MR. BECKERMAN:** Sure.

[12] (Recess taken.)

[13] **Q:** Your reports state your conclusions;

[14] is that correct?

[15] **A:** Yes.

[16] **Q:** And they state that your conclusions

[17] were based upon —

[18] Withdrawn. I shouldn't lump the

[19] three together.

[20] The April report states that

[21] conclusions were based upon the materials that had

[22] been provided to you by MediaSentry plus a few other

[23] documents; is that correct?

[24] **A:** Yes.

[25] **Q:** Does that report explain how you

Jacobson

[1] formed your conclusions from those documents?
 [2] **A:** Not in any detail.
 [3] **Q:** How many reports have you issued for
 [4] the RIAA?
 [5] **A:** Maybe 200. I don't know, don't
 [6] recall the exact count.
 [7] **MR. BECKERMAN:** I would like to
 [8] leave a space in the record for that
 [9] number.
 [10] **TO BE FURNISHED:** _____
 [11]
 [12] **Q:** How many of those reports concluded
 [13] that there was in fact downloading or uploading of
 [14] plaintiff's copyright files?
 [15] **A:** All of the — yes, all of the
 [16] reports.
 [17] **Q:** How much time did you spend on each
 [18] report?
 [19] **A:** A typical report takes me about 45
 [20] minutes.
 [21] **Q:** And how much time did you spend on
 [22] the April 2006 report in this case?
 [23] **A:** Without seeing the billing records, I
 [24] can only guess but I think it was 45 minutes.
 [25]

Jacobson

[1] **Q:** How much time did you spend preparing
 [2] the unsigned October report?
 [3] **A:** That was — not that one.
 [4] I'm sorry. I was pointing to
 [5] something on your desk. I probably shouldn't do
 [6] that.
 [7] **MR. GABRIEL:** After you looked at
 [8] the hard drive he is asking about.
 [9] **THE WITNESS:** Okay. Thank you.
 [10] **Q:** Would you like me to show you a copy?
 [11] **A:** No, I just wanted to clarify between
 [12] the two reports that —
 [13] Again, without looking at the billing
 [14] records, I would say probably two to four hours.
 [15] **Q:** And how much time did you spend on
 [16] the December 19th declaration?
 [17] **A:** Maybe 15 minutes.
 [18] **Q:** If a hard drive had been used for
 [19] peer-to-peer file sharing with KaZaA, would your
 [20] forensic inspection have allowed you to see whether
 [21] a file sharing program had been downloaded or
 [22] installed?
 [23] **A:** If the program was present on the
 [24] hard drive, a forensic examination would have shown
 [25]

Jacobson

[1] that.
 [2] **Q:** Similarly, if the hard drive had been
 [3] used for peer-to-peer file sharing with KaZaA, would
 [4] your forensic inspection have allowed you to see
 [5] whether there was a shared files folder on the
 [6] computer?
 [7] **A:** Yes.
 [8] **Q:** And, again, if the hard drive had
 [9] been used for peer-to-peer file sharing with KaZaA,
 [10] would your forensic inspection have shown you
 [11] whether there were audio files or remnants, or
 [12] evidence thereof, of the files that MediaSentry had
 [13] observed?
 [14] **A:** Yes.
 [15] **Q:** Under those same circumstances, would
 [16] your forensic inspection have allowed you to see
 [17] whether a party had attempted to delete file sharing
 [18] programs or other files?
 [19] **A:** Yes.
 [20] **Q:** Now, a dynamic IP address is
 [21] allocated very often for a short period of time; is
 [22] that not correct?
 [23] **A:** It depends how you define "short."
 [24] **Q:** Well, you yourself used that
 [25]

Jacobson

[1] technology, did you not?
 [2] **A:** Yes.
 [3] **Q:** So what is the shortest it could be?
 [4] There is no shortest, is there? It could be for a
 [5] split second?
 [6] **A:** A computer can request and release.
 [7] **Q:** It could be for hours or it could be
 [8] for seconds or —
 [9] **A:** It could be for days, yes.
 [10] **Q:** Would it be possible to have the same
 [11] dynamic IP address assigned to three people during
 [12] one minutes?
 [13] **MR. GABRIEL:** Object to the form.
 [14] **A:** It's possible.
 [15] **Q:** Now, the users of a peer-to-peer
 [16] network often think they are anonymous when they
 [17] distribute files. Isn't that true?
 [18] **A:** In my opinion, a lot of users feel
 [19] that they are anonymous.
 [20] **Q:** In your April 7th report you say that
 [21] in reality they can be identified using the IP
 [22] address. Is that not what you said in your report?
 [23] **A:** Yes, sir.
 [24] **Q:** That's not exactly true, is it?
 [25]

[1] **Jacobson**

[2] **A:** I guess I'm not clear what you mean

[3] by that.

[4] **Q:** Well, it's true, is it not, that

[5] there can be more than one computer operating under

[6] a single IP address?

[7] **MR. GABRIEL:** Object to the form.

[8] **A:** As I talked about it in the report

[9] with public IP addresses, in order for the internet

[10] to function there can only be — every public IP

[11] address has to be globally unique within that window

[12] of time.

[13] **Q:** But there can be more than one

[14] computer operating behind that IP address?

[15] **MR. GABRIEL:** Same objection.

[16] **A:** Every — I don't understand what you

[17] are asking. Every device connecting to the public

[18] internet has to have a global unique address.

[19] **Q:** And a device doesn't have to be a

[20] computer, does it?

[21] **A:** That's correct.

[22] **Q:** It could be a router, correct?

[23] **A:** Yes.

[24] **Q:** It could be a wired router?

[25] **A:** Yes.

[1] **Jacobson**

[2] **Q:** It could be a wireless router?

[3] **A:** Yes.

[4] **Q:** And if there is a firewall, under

[5] most circumstances no one would know the various

[6] computers or devices behind the router, would they?

[7] **MR. GABRIEL:** Object to form.

[8] **A:** It depends on the type of router.

[9] **Q:** Is it possible for more than one

[10] device to be operating behind a single IP address?

[11] **A:** Yes.

[12] **Q:** Now, when we get to the devices, some

[13] of the devices are computers. Is that not correct?

[14] **A:** Yes.

[15] **Q:** And is it possible for a computer to

[16] have more than one user?

[17] **A:** Yes.

[18] **Q:** So, in other words, when a person is

[19] engaged in peer-to-peer file sharing, it's not the

[20] person that could be identified by an IP address, is

[21] it?

[22] **MR. GABRIEL:** Object to the form.

[23] Lack of foundation.

[24] **Q:** Isn't it the MAC address that is

[25] identified?

[1] **Jacobson**

[2] **MR. GABRIEL:** Object to form.

[3] **A:** I don't understand the follow-on

[4] statement.

[5] **Q:** Do you know what a MAC address is?

[6] **A:** Yes.

[7] **Q:** Can a router have a MAC address?

[8] **A:** Yes.

[9] **Q:** If I had ten different companies

[10] operating behind a router and I had a properly

[11] functioning firewall or firewalls, would anybody in

[12] the wide network actually know what was behind the

[13] router with the properly functioning firewall?

[14] **MR. GABRIEL:** Object to the form.

[15] Lack of foundation.

[16] **A:** It's possible to determine who is

[17] behind that, so to say that there is no way to know

[18] is not true.

[19] **Q:** How could you find out?

[20] **A:** Potentially based on the activity

[21] coming out. There is lots of ways that attackers

[22] could use to determine what is behind a firewall.

[23] **Q:** But one method to identify that

[24] person would not be the IP address. The IP address

[25] alone would not tell you that, would it?

[1] **Jacobson**

[2] **A:** Would not tell you what?

[3] **Q:** What individual was sharing files.

[4] **A:** By "individual" do you mean

[5] flesh-and-blood person?

[6] **Q:** Yes.

[7] **A:** The IP address tells you the identity

[8] of the computer.

[9] **Q:** It actually doesn't tell you the

[10] identity of the computer. It tells you the identity

[11] of the device.

[12] **A:** That's correct.

[13] **Q:** And it doesn't actually tell you the

[14] identity of the device. It tells you a MAC address?

[15] **MR. GABRIEL:** Objection to form.

[16] **A:** IP address does not tell you a MAC

[17] address.

[18] **Q:** How could it tell you the identity of

[19] the device? How would you identify a device other

[20] than by a MAC address?

[21] **A:** Every device in the public internet

[22] is configured with an IP address.

[23] **Q:** Which would link to what?

[24] **A:** Which links to the device.

[25] **Q:** And how do you identify the device on

Jacobson

[1] the internet?
[2] **A:** Again, every device is identified
[3] through its IP address. The MAC address is only
[4] valid from one local connection to another.
[5] **Q:** What is the one thing unique about
[6] each device?
[7] **MR. GABRIEL:** Object to the form.
[8] **A:** Unique to it or that uniquely tells
[9] them apart?
[10] **Q:** That tells them apart.
[11] **A:** On the internet the only requirement
[12] for uniqueness is the IP address.
[13] **Q:** So when you say that in reality they
[14] can be identified using the IP address, your
[15] testimony is that it's not the user that can be
[16] identified, it's a computer that can be identified?
[17] Is that your testimony?
[18] Or is your testimony that it is the
[19] computer on the network device that is interfacing
[20] with the wide network?
[21] **A:** The IP address identifies the
[22] computer or device that is connected to the wide —
[23] to the internet.
[24] **Q:** And the device might be a network

Jacobson

[1] card?
[2] **A:** Generally network card doesn't have
[3] an IP address. The computer is what has the IP
[4] address.
[5] **Q:** The device might be a router?
[6] **A:** That's correct.
[7] **Q:** In that report you said that the IP
[8] address of the computer can be captured by a user
[9] during a search or file transfer. Now, you don't
[10] exactly mean of the computer; you mean of the
[11] computer or network device, right?
[12] **A:** In the peer-to-peer file transfer the
[13] device running — the computer running the
[14] peer-to-peer software reports its IP address
[15] along with — in addition to that, the IP address of
[16] the — if it is behind a router that separates
[17] public and private addresses, then the IP address of
[18] the public internet will also be shown.
[19] **Q:** But when you said that the IP address
[20] of the computer offering the files for distribution
[21] can be captured by a user during a search or file
[22] transfer, you didn't really mean the computer. You
[23] meant the computer or network device?
[24] **A:** In order for the peer-to-peer

Jacobson

[1] software to work, you have to have the identity of
[2] the machine holding the music or holding the data.
[3] **Q:** Even if it's going through a router?
[4] You're saying there is more than one IP address
[5] going through a router?
[6] **A:** The peer-to-peer software will
[7] present an IP address within the data payload of the
[8] IP packet.
[9] **Q:** Well, what I'm trying to understand
[10] is why in your report, referring to your April
[11] report, it seems to me that when you were making
[12] general descriptions of the technology involved, you
[13] kept saying computer or network device but then when
[14] you were coming to your conclusions about the
[15] defendant, then you all of a sudden started talking
[16] about computers and you left out network devices. I
[17] was wondering why.
[18] Do you agree with that, what I am
[19] saying?
[20] **A:** Yes.
[21] **Q:** Why did you do that? Why did you
[22] stop mentioning network devices?
[23] **A:** Because in an examination of
[24] MediaSentry data, I concluded that it was a computer

Jacobson

[1] at that IP address.
[2] **Q:** And how did you come to that
[3] conclusion?
[4] **A:** Through the MediaSentry traffic
[5] captures which shows the IP address of the actual
[6] computer and the IP address of the packet in transit
[7] across the internet, and those two IP addresses were
[8] both public and both matched.
[9] **Q:** What is the document you are
[10] referring to for MediaSentry?
[11] **A:** I think it was the download.text file
[12] or download log maybe they call it.
[13] **Q:** The log for the user?
[14] **A:** No.
[15] **MR. GABRIEL:** Do you want to go off
[16] the record for a minute and find it?
[17] **MR. BECKERMAN:** No. We are on the
[18] record.
[19] **Q:** The Marie system log? Lindor, Marie
[20] system log?
[21] **A:** No. That's not the system log. It
[22] could be the download record.
[23] **Q:** This one (indicating)?
[24] **A:** Yes.

[1] *Jacobson*

[2] **MR. BECKERMAN:** I would like to

[3] mark as Exhibit 6 a printout of numbered

[4] pages 36 to 45.

[5] (Defendant's Exhibit 6, printout of

[6] numbered pages 36 to 45, marked for

[7] identification, as of this date.)

[8] **Q:** So this tells you that there was no

[9] router?

[10] **A:** This tells me that there was — yes.

[11] There was no router.

[12] **Q:** How does it tell you that there was

[13] no router?

[14] **A:** Through the two —

[15] If you look at the second chunk down,

[16] you will see the source address at the top and you

[17] will see the KaZaA IP address midway through that,

[18] and they match and they are both public IP

[19] addresses.

[20] **Q:** You said they match?

[21] **A:** Uh-huh. The 141.155.57.198.

[22] **Q:** That's the source?

[23] **A:** And then down below you see the KaZaA

[24] IP?

[25] **Q:** Yes.

[1] *Jacobson*

[2] **A:** It's those two IP addresses.

[3] **Q:** What does the first number indicate?

[4] **A:** The first number of the IP address?

[5] **Q:** Yes.

[6] No. The second line of that chunk

[7] that says "source." What does that indicate?

[8] **A:** That is the source address. That is

[9] where the packet came from.

[10] **Q:** Now we go down to the next line you

[11] referred to, it says "KaZaA IP." What does that

[12] refer to?

[13] **A:** That is the IP address that the KaZaA

[14] software is running on, the IP address of the

[15] computer that the KaZaA software is running on.

[16] **Q:** What is the next line?

[17] **A:** A supernode. That's the supernode

[18] that KaZaA is connected to.

[19] **Q:** So, in other words, this went in

[20] directly through the supernode? So you are saying

[21] this transmission went through the supernode?

[22] **MR. GABRIEL:** Objection to form.

[23] **A:** No. This packet just indicates

[24] that — where the supernode is that KaZaA is talking

[25] to. The packet as shown by the second line is the

[1] *Jacobson*

[2] actual source address of the internet packet.

[3] **Q:** What is the next line, the KaZaA IP?

[4] **A:** Oh.

[5] **Q:** The line down below where you say the

[6] two numbers match, what is the meaning of that

[7] number?

[8] **A:** Which one? The KaZaA IP?

[9] **Q:** You said it is the same number.

[10] **A:** Right.

[11] **Q:** Where it says "KaZaA IP" and there is

[12] the same number.

[13] **A:** As line 2, yes. That is the — that

[14] is the —

[15] **Q:** What is the significance of that

[16] line?

[17] **MR. GABRIEL:** Let him ask the

[18] question and then you answer. He asked

[19] what is the significance of that line.

[20] **A:** Of the line "KaZaA IP"?

[21] **Q:** Yes.

[22] **A:** That is the IP address that the KaZaA

[23] software is using.

[24] **Q:** And how is that determined?

[25] **A:** It's determined by the KaZaA software

[1] *Jacobson*

[2] itself.

[3] **Q:** Why wouldn't those two numbers always

[4] be the same?

[5] **A:** In the case of a router as you

[6] described earlier that has private addresses on the

[7] inside, you will see those numbers be different.

[8] **Q:** So you are saying there can be

[9] different IP addresses for different devices behind

[10] the router?

[11] **A:** Yes.

[12] **Q:** What does the presence of the

[13] supernode line indicate?

[14] **A:** It indicates the supernode, that the

[15] KaZaA software is used to perform the searches.

[16] **Q:** So does this indicate that the

[17] computer that's referred to on — whose IP address

[18] is referred to on the source line and the KaZaA IP

[19] line is not a supernode?

[20] **A:** It indicates that that computer is

[21] communicating with that supernode in order to do the

[22] searches.

[23] **Q:** And how did MediaSentry determine

[24] these numbers?

[25] **A:** Line 2 of that section is the address

Jacobson

[1] that is carried within the data packet as it
[2] traverses across the internet. The line that starts
[3] "X-KaZaA-IP" is part of the data payload within that
[4] packet.
[5] **Q:** And how do you know that? Didn't you
[6] say you have never communicated with MediaSentry?
[7] **A:** That's correct.
[8] **Q:** So how do you know that?
[9] **A:** Because I understand how KaZaA
[10] operates.
[11] **Q:** And how did you come to understand
[12] how KaZaA operates?
[13] **A:** Through researching protocol.
[14] **Q:** Starting when?
[15] **A:** I can't remember the exact date I
[16] started researching KaZaA. It was all part of the
[17] work Palisade did in the production of PacketHound.
[18] **Q:** Are you familiar with the Ross
[19] studies of KaZaA?
[20] **A:** Not offhand.
[21] **Q:** You never read them?
[22] **A:** I don't recall without seeing one.
[23] **MR. BECKERMAN:** I would like to
[24] mark as Exhibit 7 a study entitled "The
[25]

Jacobson

[1] **KaZaA Overlay: A Measurement Study.**
[2] (Defendant's Exhibit 7, study
[3] entitled "The KaZaA Overlay: A Measurement
[4] Study," marked for identification, as of
[5] this date.)
[6] **Q:** So have you reviewed this report at
[7] any time?
[8] **A:** Yes, I have.
[9] **Q:** I direct your attention to Page 17
[10] and I call your attention to in the middle of the
[11] page a sentence that starts with the words "later
[12] versions." The statement says, "Later versions
[13] (KMDV 2.0+ and KaZaA-Lite) employ dynamic port
[14] numbers to evade firewalls."
[15] Do you agree with that statement?
[16] **MR. GABRIEL:** Objection. Lack of
[17] foundation.
[18] **A:** Yes.
[19] **Q:** Going down to the end of that
[20] paragraph, I will read you the last sentence and ask
[21] if you agree with that sentence.
[22] "Since the KaZaA port numbers are
[23] dynamic, it is very difficult to block KaZaA
[24] connections unless a very rigid filtering policy is
[25]

Jacobson

[1] employed at the firewall." Do you agree with that
[2] statement?
[3] **MR. GABRIEL:** Object to form. Lack
[4] of foundation.
[5] **A:** Yes.
[6] **Q:** Now I refer you to the first sentence
[7] of the next paragraph.
[8] "The reality of today's internet is
[9] that a large fraction of peers reside behind NATs."
[10] Do you agree with that statement?
[11] **MR. GABRIEL:** Object to form. Lack
[12] of foundation.
[13] **A:** I don't have any way to know what
[14] fraction.
[15] **Q:** Do you agree that NATs exist?
[16] **A:** Yes.
[17] **Q:** What is a NAT?
[18] **A:** The term stands for network address
[19] translator. It is a router that on one side has a
[20] public IP address and on the other side maintains or
[21] has a set of what I want to refer to as private or
[22] sometimes inside IP addresses, which are addresses
[23] that are not allowed on the public internet.
[24] **Q:** And do you agree that the existence
[25]

Jacobson

[1] of a network address translator makes it difficult
[2] to detect the IP address of specific computers
[3] behind the router?
[4] **MR. GABRIEL:** Objection to form.
[5] Lack of foundation.
[6] **A:** By router do you mean network address
[7] translator?
[8] **Q:** Yes.
[9] **A:** Yes.
[10] **Q:** And do you agree that KaZaA has used
[11] a connection reversal in order to try to overcome
[12] that?
[13] **MR. GABRIEL:** Objection to form.
[14] Lack of foundation.
[15] **A:** I agree with the definition that they
[16] specify in the article. I've never heard that
[17] specific term.
[18] **MR. BECKERMAN:** I would like to
[19] mark as Exhibit 8 a one-page chart.
[20] (Defendant's Exhibit 8, one-page
[21] chart, marked for identification, as of this
[22] date.)
[23] **Q:** Can you identify what that displays?
[24] **MR. GABRIEL:** Object to foundation.
[25]

[1] *Jacobson*

[2] He didn't draft it.

[3] You can answer the question.

[4] **A:** I don't know the intent of it but it

[5] shows, as it's labeled, a cable modem connected to

[6] the internet. And it shows a set of IP addresses,

[7] all of which are the private — designated as parts

[8] of the private IP address range.

[9] **Q:** Going back to the study, Exhibit 7, I

[10] call your attention to Page 21, a paragraph bearing

[11] number 7, and I'm going to the last two sentences

[12] and I am going to ask if you agree with this

[13] statement. "KaZaA uses dynamic port numbers along

[14] with" —

[15] **A:** I'm sorry. I am not finding it.

[16] **Q:** Page 21, there is a paragraph number

[17] 7.

[18] **A:** Okay. I'm sorry.

[19] **Q:** I am asking if you agree with this

[20] statement. "KaZaA uses dynamic port numbers along

[21] with its hierarchical design to avoid firewall

[22] blocking."

[23] Do you agree with that?

[24] **MR. GABRIEL:** Objection to form.

[25] Lack of foundation.

[1] *Jacobson*

[2] **A:** I know KaZaA uses dynamic port

[3] numbers. Whether that was the original design

[4] intent to avoid firewalls would be a fair

[5] assumption.

[6] **Q:** The next sentence, do you agree with

[7] that statement?

[8] "Furthermore, it uses connection

[9] reversal to allow NATed peers to share files."

[10] **MR. GABRIEL:** Objection to form.

[11] Lack of foundation.

[12] **A:** Yes.

[13] **Q:** When you studied KaZaA, did you

[14] familiarize yourself with the concept of pollution

[15] on KaZaA?

[16] **A:** No.

[17] **Q:** Do you know what pollution is on

[18] KaZaA?

[19] **A:** My understanding is it is putting

[20] things out into the network KaZaA that either

[21] misrepresents the content or for some reason is not

[22] what it says to be.

[23] **MR. BECKERMAN:** I will mark this as

[24] Exhibit 9. It is a paper entitled

[25] "Pollution in P2P File Sharing Systems."

[1] *Jacobson*

[2] (Defendant's Exhibit 9, paper

[3] entitled "Pollution in P2P File Sharing

[4] Systems," marked for identification, as of

[5] this date.)

[6] **Q:** Going to the first page, the

[7] right-hand column, the first full paragraph, the

[8] first sentence starts with "One sabotage technique."

[9] I will ask if you agree with this statement.

[10] **MR. GABRIEL:** I'm sorry. Where are

[11] you?

[12] I got it.

[13] **Q:** "One sabotage technique that is

[14] particularly prevalent today is that of pollution."

[15] Do you agree with that statement?

[16] **MR. GABRIEL:** Objection to form.

[17] Lack of foundation.

[18] **A:** I don't have any knowledge that as

[19] they define pollution it is prevalent on the

[20] peer-to-peer systems.

[21] **Q:** Are you aware that one of

[22] MediaSentry's areas of business is pollution?

[23] **A:** No.

[24] **Q:** Are you aware that MediaSentry is in

[25] the business of sending out decoy files?

[1] *Jacobson*

[2] **MR. GABRIEL:** Objection to form.

[3] **A:** No.

[4] **MR. GABRIEL:** Sorry. Belated

[5] objection to the form.

[6] **Q:** Excuse me?

[7] **A:** No.

[8] **Q:** I turn you to the second page, the

[9] first full paragraph. About two-thirds of the way

[10] down in the paragraph there is a sentence that

[11] starts "We will see that." I call your attention to

[12] that sentence and ask if you agree with this

[13] statement.

[14] "We will see that pollution is indeed

[15] pervasive with more than 50 percent of the copies of

[16] many popular recent songs being polluted in KaZaA

[17] today." Do you agree with that?

[18] **MR. GABRIEL:** Objection to form.

[19] Lack of foundation.

[20] **A:** I have no way of knowing if that's

[21] true or false.

[22] **Q:** So is it your testimony that you are

[23] not knowledgeable about pollution?

[24] **MR. GABRIEL:** Objection to form.

[25] **Q:** Are you knowledgeable about

Jacobson

- [1] pollution?
[2] **A:** Only to the extent that I know what
[3] it is.
[4] **Q:** And that's the sole extent of your
[5] knowledge?
[6] **A:** Yes.
[7] **Q:** And are you familiar with the
[8] distinction between content pollution and metadata
[9] pollution?
[10] **A:** I just now read their classification.
[11] **Q:** Is it the first time you ever learned
[12] of the distinction between those two terms?
[13] **A:** Yes.
[14] **Q:** So it would be fair to say that your
[15] expertise does not extend to the nature and extent
[16] and methods of pollution on KaZaA?
[17] **A:** Yes.
[18] **Q:** When you in your report refer to
[19] analogizing an IP address to a return address and a
[20] send address on a letter, would you say that analogy
[21] is somewhat incorrect?
[22] **A:** There is probably no perfect analogy
[23] but it's a reasonable analogy to use for a lay
[24] explanation.
[25]

Jacobson

- [1] **Q:** Is it fair to say that your postal
[2] address is to your home whereas an IP address would
[3] be more like an address to a timeshare that you
[4] might occupy for a split second or for a minute?
[5] **MR. GABRIEL:** Objection to form.
[6] **A:** The IP address delivers to a device
[7] or location.
[8] **Q:** But not a person?
[9] **A:** That's correct.
[10] **Q:** And not for any given amount of time,
[11] just as long as the internet connection stays on
[12] line?
[13] **MR. GABRIEL:** Objection to form.
[14] **A:** Define what you mean by internet
[15] connection.
[16] **Q:** You don't know what I mean by an
[17] internet connection?
[18] **A:** There are multiple definitions.
[19] **Q:** Why don't you give me the most common
[20] meaning.
[21] **A:** There is an application layer
[22] connection which is used by individual applications
[23] to communicate.
[24] **Q:** With a dynamic IP address is the
[25]

Jacobson

- [1] person using it still using it after he's
[2] disconnected from the internet?
[3] **MR. GABRIEL:** Objection to form.
[4] **A:** Depending on how they are connected,
[5] the dynamic address may be dropped.
[6] **Q:** You're saying they could end their
[7] connection to the internet and still — and the
[8] dynamic IP address stays in effect and then if they
[9] turn it back on, they could pick up the same exact
[10] dynamic IP address? Is that your testimony?
[11] **MR. GABRIEL:** Objection to form.
[12] Lack of foundation.
[13] **A:** If the device that issues the dynamic
[14] address can detect the other device being turned
[15] off, then the dynamic IP address can be released.
[16] Otherwise, the dynamic address could still be
[17] assigned to that device.
[18] **Q:** Now, with a decentralized
[19] peer-to-peer network, it's your statement in your
[20] report that a request is sent to each neighbor and
[21] each neighbor sends the request to the next neighbor
[22] and so on. Did you mean that literally?
[23] **A:** You said decentralized?
[24] **Q:** Yes.
[25]

Jacobson

- [1] **A:** Yes.
[2] **Q:** To neighbors? What do you mean by
[3] neighbors?
[4] **A:** The decentralized peer-to-peer
[5] software referred to the peer-to-peer entities that
[6] they talked directly to as neighbors.
[7] **Q:** So you are using it figuratively to
[8] describe other computers?
[9] **A:** Yes.
[10] **Q:** You say the semi-decentralized
[11] peer-to-peer network uses a central index server.
[12] Is that correct?
[13] **A:** Yes.
[14] **Q:** And that if one server node quits,
[15] the other nodes can still function?
[16] **A:** Yes.
[17] **Q:** Now, when you access a screen shot,
[18] are you accessing a file or are you accessing an
[19] index of files?
[20] **A:** When you query the server, what you
[21] get is an index of the files.
[22] **Q:** Now, is it your testimony that every
[23] time you see a screen shot in KaZaA, you're seeing
[24] files that are on a single ordinary node?
[25]

[1] **Jacobson**

[2] **MR. GABRIEL:** Objection to form.

[3] **A:** There are many ways you can query

[4] KaZaA, one of which is to ask all the files that are

[5] contained on a particular machine.

[6] **Q:** How would you frame such a query?

[7] **A:** You frame the query with the address

[8] of the machine that contains the information.

[9] **Q:** And do you know how MediaSentry

[10] queried?

[11] **A:** I don't know the exact techniques

[12] that they used.

[13] **Q:** Now you said in your report that you

[14] will demonstrate how defendant's internet account

[15] and computer were used. Would you now demonstrate

[16] for me how you can — show me how you can

[17] demonstrate that the defendant's computer was used?

[18] **A:** Which line of the report are you?

[19] **Q:** What?

[20] **A:** Which line of the report are you

[21] referring to?

[22] **Q:** Paragraph 15.

[23] **A:** Would you restate the question.

[24] (Record read.)

[25] **A:** Identifications through the IP

[1] **Jacobson**

[2] address to demonstrate which computer it is.

[3] **Q:** No, I'm asking you to demonstrate it

[4] now for me. You said, "I will testify to the

[5] procedures and results obtained by MediaSentry

[6] coupled with the information compiled by defendant's

[7] ISP to demonstrate the defendant's internet account

[8] and computer were used to download and upload

[9] copyrighted music from the internet using the KaZaA

[10] peer-to-peer network."

[11] Please demonstrate for me that

[12] defendant's computer was used to download and upload

[13] copyrighted music.

[14] **A:** I can demonstrate through the

[15] MediaSentry material.

[16] **Q:** Okay.

[17] **A:** I don't have the MediaSentry

[18] material.

[19] **MR. BECKERMAN:** We will mark as

[20] Exhibit 10 a two-page printout, page

[21] numbers 46 to 47.

[22] (Defendant's Exhibit 10, two-page

[23] printout of page numbers 46 to 47, marked

[24] for identification, as of this date.)

[25] **MR. BECKERMAN:** We will mark as

[1] **Jacobson**

[2] Exhibit 11 a printout, page numbers 49 to

[3] 187.

[4] (Defendant's Exhibit 11, printout of

[5] page numbers 49 to 187, marked for

[6] identification, as of this date.)

[7] **MR. BECKERMAN:** And you already

[8] have Exhibit 6 and we have Exhibit 12,

[9] which is a screen shot, pages 199 to 224.

[10] (Defendant's Exhibit 12, printout of

[11] pages 199 to 224, marked for identification,

[12] as of this date.)

[13] **MR. BECKERMAN:** And we will mark as

[14] Exhibit 13 a one-page printout marked as

[15] page number 48.

[16] (Defendant's Exhibit 13, one-page

[17] printout of page numbered 48, marked for

[18] identification, as of this date.)

[19] **MR. BECKERMAN:** And we will mark as

[20] Exhibit 14 a printout of pages numbers 188

[21] through 198.

[22] (Defendant's Exhibit 14, printout of

[23] pages numbers 188 through 198, marked for

[24] identification, as of this date.)

[25] **Q:** Now would you please demonstrate how

[1] **Jacobson**

[2] you can show that it's the defendant's computer that

[3] was used.

[4] **MR. BECKERMAN:** Off the record.

[5] (Recess taken.)

[6] **Q:** Please demonstrate that the

[7] defendant's computer was used.

[8] **MR. GABRIEL:** If I can ask you, if

[9] you refer to an exhibit, please say what

[10] the exhibit is.

[11] **THE WITNESS:** Yes.

[12] **Q:** Before we go into that, let me just

[13] ask you something.

[14] When you say "defendant's computer"

[15] in your report, you're referring to the computer

[16] that was accessed by MediaSentry; is that correct?

[17] **A:** I'm referring to the — yeah, the

[18] computer with the IP address shown in Exhibit 6 that

[19] we discussed earlier.

[20] **Q:** And it's your contention that the

[21] computer as to which you examined the hard drive is

[22] a different computer than the one that was accessed

[23] by MediaSentry; is that correct?

[24] **A:** Yes.

[25] **Q:** Now, going to the first computer, how

Jacobson

[1] do you know that it was defendant's computer?
[2] **A:** We don't have the Verizon information
[3] in front of me. By using the subpoenaed records
[4] from Verizon they show —
[5] **Q:** They were asked —
[6] I'm sorry. I cut you off.
[7] They were asked to identify the owner
[8] of an account that had used an IP address; is that
[9] correct?
[10] **A:** Yes.
[11] **Q:** How would that tell you who owned the
[12] computer?
[13] **A:** It tells me the individual who has
[14] the account that was associated with that IP
[15] address; therefore, that computer at the time.
[16] **Q:** Let's say — not me, that would be
[17] too improbable. Let's say you had a visitor at your
[18] home and that visitor plugged into your internet
[19] connection with his laptop. Would that make his
[20] computer your computer?
[21] **A:** Without knowing the configuration of
[22] your home network, I couldn't.
[23] **Q:** Let's say you had a wired internet
[24] connection at your home, you had a cable modem and

Jacobson

[1] someone was visiting who had a laptop, a friend of
[2] yours or relative, and that person asked if they
[3] could plug in their laptop and check their e-mail.
[4] Okay?
[5] Now, the IP address would show up as
[6] your address, would it not? The dynamic IP address?
[7] **A:** It depends.
[8] **Q:** If I sent a query like the record
[9] industry sent to Verizon, I would get you, right?
[10] If you are the person who pays for the internet
[11] access at your home.
[12] **A:** If the ISP allows multiple devices
[13] directly connected to their internet service.
[14] **Q:** And it wouldn't have been your
[15] computer, it would have been your friend's or
[16] relative's computer. Correct?
[17] **MR. GABRIEL:** Object to the form.
[18] Lack of foundation.
[19] **A:** The scenario you laid out. If the
[20] ISP allowed multiple IP addresses, then it would
[21] have associated an IP address with that particular
[22] device.
[23] **Q:** So when you say it was defendant's
[24] computer, you don't actually have any knowledge as

Jacobson

[1] to whether it was defendant's computer. All you
[2] know is that the defendant's name is associated with
[3] the internet access account; is that correct?
[4] **MR. GABRIEL:** Objection to form.
[5] **A:** I know that the — yeah, the computer
[6] associated with that user account, an IP address was
[7] used.
[8] **Q:** But you don't know whose computer it
[9] actually was, do you?
[10] **A:** No.
[11] **Q:** But your report said it was
[12] defendant's computer, so I think you will agree that
[13] that's an imprecision in your report.
[14] **MR. GABRIEL:** Objection to form.
[15] Lack of foundation. Misstates the report.
[16] **A:** The report states that I have
[17] identified through the internet service provider the
[18] account holder of the IP address.
[19] **Q:** The report says that you will
[20] demonstrate that it was defendant's computer that
[21] was used. How can you demonstrate that the computer
[22] belonged to the defendant? You don't know who it
[23] belonged to.
[24] **MR. GABRIEL:** Objection to form.

Jacobson

[1] Lack of foundation.
[2] **Q:** You are under oath.
[3] **A:** It's my opinion that given the
[4] information from MediaSentry and from Verizon, that
[5] that IP address was associated with the defendant
[6] and computers or at least in presence of the
[7] defendant.
[8] **Q:** There are two parts to your
[9] statement. You say the defendant's internet account
[10] and computer. Right now I'm not asking you about
[11] the internet account. I'm asking about the
[12] computer. You will agree, then, will you not, that
[13] when you said computer that you don't actually know
[14] if it was defendant's computer or not?
[15] **A:** It is the computer associated with
[16] the account of the defendant.
[17] **Q:** But you don't know if it was
[18] defendant's computer?
[19] **A:** I know that the computer was
[20] associated with the defendant's internet account.
[21] **Q:** But you don't know if the defendant
[22] owned it?
[23] **A:** Nowhere is purchase information.
[24] **Q:** And you do not know if the defendant

[1] **Jacobson**

[2] ever used it?

[3] **A:** I know that the computer associated

[4] with that address was used.

[5] **Q:** Now, demonstrate how you know that

[6] that computer was used to upload and download

[7] copyrighted music from the internet.

[8] **A:** Well, I know which computer through

[9] Exhibit 6. That is the primary piece of evidence.

[10] I know that material was downloaded

[11] through Exhibit 10. I know music was made available

[12] through Exhibits 10, 11, 12 and 14, and I know that

[13] the music was downloaded through Exhibit 11.

[14] **MR. BECKERMAN:** I would like to

[15] mark as Exhibit 15 the undated October

[16] report.

[17] (Defendant's Exhibit 15, undated

[18] October report, marked for identification,

[19] as of this date.)

[20] **Q:** When did you provide this report to

[21] Mr. Gabriel?

[22] **A:** October 25th.

[23] **Q:** Why did you not sign it?

[24] **A:** It's a draft.

[25] **Q:** Why is it not dated?

[1] **Jacobson**

[2] **A:** It was a draft report.

[3] **Q:** Have you ever submitted an unsigned

[4] or undated draft to Mr. Gabriel before?

[5] **A:** I could have. I don't recall.

[6] **Q:** Have you ever submitted unsigned

[7] drafts or undated drafts to anyone in Mr. Gabriel's

[8] firm before?

[9] **A:** Again, I could have. I don't recall.

[10] **Q:** Is it your practice to submit

[11] unsigned, undated drafts before submitting your

[12] final reports to them?

[13] **A:** The standard report goes in without

[14] their review.

[15] **MR. GABRIEL:** I would like the

[16] record to reflect that there is a copying

[17] issue in Exhibit 15. Page DJ0069 was

[18] stamped "Draft." I note in the copying

[19] the draft was too light to copy

[20] apparently.

[21] **Q:** Did Mr. Gabriel tell you not to issue

[22] a final report, but to issue a draft instead?

[23] **A:** Yes.

[24] **Q:** Now, turning to Page DJ0071,

[25] Paragraph 17, the second sentence, which says, "I

[1] **Jacobson**

[2] will testify based on the forensic examination of

[3] the hard drive that was copied from the computer

[4] owned by the defendant."

[5] Now, are you saying there that the

[6] second computer which you claim is different than

[7] the first one was owned by the defendant also?

[8] **A:** I'm lost in the second, first and —

[9] **Q:** It's your words. It's your

[10] testimony. It's your declaration, your unsigned

[11] draft which Mr. Gabriel asked you to submit to him

[12] so he could have input into the final. But this was

[13] your wording I assume. Right?

[14] **A:** Yes.

[15] **Q:** This was wording that was not fed to

[16] you by Mr. Gabriel?

[17] **A:** Correct.

[18] **Q:** So you say the computer owned by the

[19] defendant. Now you are saying that the second

[20] computer was owned by the defendant.

[21] **A:** I'm saying the hard drive that I was

[22] given to examine was reported to have been owned by

[23] the defendant and I examined that hard drive and

[24] came up with that conclusion.

[25] **Q:** So is it your testimony that she

[1] **Jacobson**

[2] owned both computers?

[3] **MR. GABRIEL:** Objection to form.

[4] **A:** It's my testimony that the hard drive

[5] contained no evidence of KaZaA and that hard drive

[6] was reported to have belonged to the computer owned

[7] by the defendant.

[8] **Q:** What basis do you have for saying

[9] that the computer was owned by the defendant?

[10] **A:** Based on the chain of evidence

[11] that — the chain of custody that followed the

[12] forensic disk.

[13] **Q:** So it is your testimony that Marie

[14] Lindor, who is a home health aide who has never even

[15] used a computer, it is your testimony that she owns

[16] two computers?

[17] **MR. GABRIEL:** Objection to form.

[18] Lack of foundation. Misstates testimony.

[19] **Q:** Is that your testimony? She has

[20] never even used a computer in her life, that she

[21] owns not one, but two computers?

[22] **MR. GABRIEL:** Same objection.

[23] **A:** What I am stating is that the hard

[24] drive I examined, which was reported to have come —

[25] been owned by the defendant did not contain KaZaA or

Jacobson

[1] any of the copyrighted or any music files.
[2] **MR. BECKERMAN:** Let's mark as
[3] Exhibit 16 your April report.
[4] (Defendant's Exhibit 16, Dr. Douglas
[5] W. Jacobson's April report, marked for
[6] identification, as of this date.)
[7] **Q:** Now, on Page DJ0006, Paragraph 19, in
[8] the last line you use the words "being distributed."
[9] **A:** Yes.
[10] **Q:** Were you using "distributed" in the
[11] legal sense of the word or in the generic sense of
[12] the word?
[13] **MR. GABRIEL:** Objection to form.
[14] **A:** I'm not a lawyer so I don't know the
[15] legal — I guess I am not clear as to what
[16] difference you are trying to make between the two
[17] words.
[18] **Q:** Where did you get the word
[19] "distributed"?
[20] **A:** In that paragraph I'm referring to
[21] the fact that the files were on the peer-to-peer
[22] network and by the nature of the peer-to-peer
[23] network they are being distributed.
[24] **Q:** Do you know of any instances in which

Jacobson

[1] they were distributed to anyone other than
[2] MediaSentry?
[3] **A:** Given the nature of the peer-to-peer
[4] system, there is a high probability that they
[5] were — well, strike that.
[6] Distributed, they are being offered
[7] for distribution by the fact that they were on the
[8] peer-to-peer network.
[9] **Q:** The question was whether they had
[10] actually been distributed, not whether they had been
[11] offered for distribution.
[12] **MR. GABRIEL:** Objection to form.
[13] **A:** The KaZaA program made those files
[14] available through the supernode. Anybody —
[15] Let me strike that and start over.
[16] The KaZaA program made the files
[17] available on her computer for distribution and given
[18] the nature of the peer-to-peer network and the
[19] number of users, there is a high probability that
[20] songs were actually uploaded from that computer.
[21] **Q:** Do you have any knowledge of any
[22] specific instances of any uploads other than to
[23] MediaSentry?
[24] **A:** No.

Jacobson

[1] **Q:** In Paragraph 21 you use the words
[2] that the computer was registered to the defendant.
[3] How does a computer get registered to a person?
[4] **A:** Through the IP address it is
[5] registered. Verizon indicated the subscriber.
[6] **Q:** So you don't mean that the computer
[7] was registered to the defendant. You mean the IP
[8] address was identified by Verizon as having been on
[9] the internet access account that was in the name of
[10] the defendant. Is that correct?
[11] **A:** The IP address of, was registered to
[12] the defendant on said computer. So it says that the
[13] IP address.
[14] **Q:** Not the computer. The IP address was
[15] registered?
[16] **A:** That's what 21 states.
[17] **Q:** 21 states that the computer that had
[18] the IP address was registered to the defendant.
[19] "I will testify based on all of the
[20] information" —
[21] **A:** Right, right.
[22] **Q:** So you don't mean the computer was
[23] registered, you mean the IP address was registered?
[24] **A:** Yes.

Jacobson

[1] **Q:** Now, in Paragraph 22 you state that
[2] you could prove from the MediaSentry user log that
[3] the music found on the defendant's computer was
[4] downloaded from other users on the internet. How
[5] would you have done that?
[6] **A:** By using the metadata tags, in
[7] particular the description tag. For example,
[8] Page 0106.
[9] **MR. GABRIEL:** What exhibit?
[10] **THE WITNESS:** I'm sorry.
[11] Exhibit 11.
[12] **A:** Page 10106 indicates in the
[13] description "ripped by" and had several — several
[14] cases "ripped by X7" and so on, and that's
[15] throughout the document.
[16] **Q:** A metadata is text, is it not?
[17] **A:** Yes.
[18] **Q:** Metadata can be changed, can it not?
[19] **A:** Metadata can be changed and is not
[20] present on original CD recordings.
[21] **Q:** And it can be changed easily through
[22] commonly available software, can it not?
[23] **A:** Yes.
[24] **Q:** And could it be changed through KaZaA

[1] **Jacobson**

[2] software?

[3] **A:** Yeah, I believe KaZaA lets you edit

[4] the metadata.

[5] **MR. BECKERMAN:** I would like to

[6] mark as Exhibit 17 a page of handwritten

[7] notes.

[8] (Defendant's Exhibit 17, page of

[9] handwritten notes, marked for

[10] identification, as of this date.)

[11] **Q:** When were these notes prepared?

[12] **A:** These notes were prepared prior to

[13] the submission of the October — let's see which

[14] exhibit. Exhibit 15.

[15] **Q:** Are there any other notes which you

[16] jotted down which you did not preserve from the date

[17] the hard drive was furnished to you?

[18] **A:** No.

[19] **Q:** What are the letters at the top

[20] right?

[21] **A:** DHCP name server.

[22] **Q:** What are the three IP addresses below

[23] that?

[24] **MR. GABRIEL:** Objection to form.

[25] **A:** Those are the IP addresses of the

[1] **Jacobson**

[2] name server that were on her computer.

[3] **Q:** What does that mean?

[4] **A:** The name server, my best analogy is a

[5] giant phone book that converts names and IP

[6] addresses. So when you type in www.google.com, you

[7] get the IP address of Google.

[8] **Q:** What is the entry at the bottom,

[9] "7704 repaired"? What is that a reference to?

[10] **A:** In examining the hard drive, it

[11] appeared that there was some type of repair of the

[12] Windows operating system on that date.

[13] **MR. BECKERMAN:** I would like to

[14] mark as Exhibit 18 a single-page document

[15] which says "wireless router" at the top.

[16] (Defendant's Exhibit 18, single-page

[17] document bearing "wireless router" at the

[18] top, marked for identification, as of this

[19] date.)

[20] **Q:** When was this prepared?

[21] **A:** 3/14.

[22] **Q:** Now, You say "wireless router?" and

[23] then say, "No." How did you know there was no

[24] wireless router?

[25] **A:** Again, by looking at the information

[1] **Jacobson**

[2] on Exhibit 6.

[3] **Q:** How does that show you that there is

[4] no wireless router?

[5] **A:** Again, as I testified earlier, here

[6] at the source address and that the KaZaA IP address

[7] matched.

[8] **Q:** And that tells you that there was no

[9] wireless router?

[10] **A:** Again, those are all public IP

[11] addresses on both the computer and the device that

[12] put the IP packet onto the internet, both at the

[13] same IP address.

[14] **Q:** And that's your sole basis for your

[15] conclusion?

[16] **A:** Yes.

[17] **MR. BECKERMAN:** I would like to

[18] mark as Exhibit 19 a two-page letter from

[19] Verizon.

[20] (Defendant's Exhibit 19, two-page

[21] letter from Verizon, marked for

[22] identification, as of this date.)

[23] **Q:** Is that the source for your

[24] information as to whose access account it was?

[25] **A:** Yes.

[1] **Jacobson**

[2] **MR. BECKERMAN:** I would like to

[3] mark as Exhibit 20 a resume, a one-page

[4] resume, page number DJ0076.

[5] (Defendant's Exhibit 20, one-page

[6] resume, page number DJ0076, marked for

[7] identification, as of this date.)

[8] **A:** It is a printout of a file that I

[9] found on the hard drive that I examined. It was

[10] described in Exhibit 15.

[11] **Q:** Did you know who prepared this?

[12] **A:** I know it was on the hard drive and

[13] it in the directory of user Kathleen on the system.

[14] **Q:** Do you know who typed it?

[15] **A:** No.

[16] **Q:** Now, what does it say next to the

[17] word "e-mail" in this resume?

[18] **A:** J-C-Q-L-L-I-N-E.

[19] **Q:** What tools did you use to determine

[20] that the hard drive had not been used for a KaZaA

[21] account?

[22] **A:** I used EnCase to examine the captured

[23] hard drive.

[24] **Q:** When you used EnCase, did you know

[25] that this matter was in litigation and that you were

Jacobson

[1] an expert witness in this case?
[2] **A:** Yes.
[3] **Q:** Did you not have screens? When you
[4] used EnCase, didn't you look at a computer screen?
[5] **A:** Yes.
[6] **Q:** Did you save what was on that screen?
[7] **A:** No.
[8] **Q:** Did you generate reports?
[9] **A:** No.
[10] **Q:** Now I'm not asking you if you printed
[11] out reports or saved reports. I'm asking you if you
[12] generated reports.
[13] **A:** No.
[14] **Q:** So you did not document your findings
[15] in EnCase at all, did you?
[16] **A:** No.
[17] **Q:** Did Mr. Gabriel tell you to do that?
[18] **A:** No.
[19] **Q:** So did you feel that you could just
[20] review it on EnCase and then come and testify from
[21] memory at a trial? Is that what you intended to do?
[22] **A:** I examined the hard drive, found no
[23] evidence of file sharing software or audio files,
[24] and so there was nothing to document.
[25]

Jacobson

[1] **Q:** So you didn't feel was any need to
[2] create documentation of what your study had shown?
[3] **A:** There was no files to document.
[4] **Q:** Is that because it did not
[5] corroborate Plaintiff's case in any way?
[6] **MR. GABRIEL:** Objection to form.
[7] Argumentative.
[8] **A:** The testimony says I found no KaZaA
[9] or MP3 files and, therefore, there was nothing to —
[10] there were no screen shots to capture.
[11] **Q:** Do you have any idea why the case
[12] hasn't been dropped by now?
[13] **MR. GABRIEL:** Objection to form.
[14] Lack of foundation.
[15] **A:** I don't get involved with — so no.
[16] **MR. BECKERMAN:** I would like to
[17] mark as Exhibit 21 a one-page document
[18] with a flowchart.
[19] (Defendant's Exhibit 21, one-page
[20] document with a flowchart, marked for
[21] identification, as of this date.)
[22] **Q:** Do you see item number 4?
[23] **A:** You mean bullet number 4?
[24] **Q:** Yes.
[25]

Jacobson

[1] **A:** Yes.
[2] **Q:** What does that say?
[3] **A:** "Document findings."
[4] **Q:** Did you know that you were going to
[5] be giving sworn testimony in this case, including
[6] your December declaration and possible deposition
[7] and trial testimony?
[8] **A:** Would you reread the question back.
[9] (Record read.)
[10] **A:** At the time I examined the hard drive
[11] there were no scheduled depositions.
[12] **Q:** So you thought it was okay not to
[13] document your findings?
[14] **MR. GABRIEL:** Objection to form.
[15] **A:** I did document my findings, as shown
[16] in Exhibit 17.
[17] **Q:** When you say there were three user
[18] names of interest, what did you mean by that?
[19] **A:** In a Windows machine there are
[20] default users that are created, like Administrator
[21] and so on, that come with the installation of
[22] Windows. So these were users that were added above
[23] and beyond the default installation.
[24] **Q:** So it doesn't actually tell you who
[25]

Jacobson

[1] used the computer, does it? It just tells you the
[2] user names?
[3] **A:** Yes, these are user names for that
[4] computer.
[5] **Q:** And if someone was logged on under a
[6] particular computer name and the computer was kept
[7] on and another individual sat down and started using
[8] the computer, you wouldn't know who that was, would
[9] you, from the user name?
[10] **A:** That's correct.
[11] **Q:** Are you familiar with the declaration
[12] that was given by the expert witnesses in the
[13] Netherlands in the foundation case, the witness
[14] statement of Henk Sips and Johan Pouwelse?
[15] **A:** I would have to see the document.
[16] **MR. BECKERMAN:** I would like to
[17] mark this as Exhibit 22. It is a
[18] three-page document entitled "Witness
[19] statement of Henk Sips and Johan
[20] Pouwelse."
[21] (Defendant's Exhibit 22, three-page
[22] document entitled "Witness Statement of Henk
[23] Sips and Johan Pouwelse," marked for
[24] identification, as of this date.)
[25]

Jacobson

[1] **MR. GABRIEL:** I would like to
 [2] interpose a belated objection to the
 [3] characterization of the document as a
 [4] declaration.
 [5] **MR. BECKERMAN:** I agree. The
 [6] correct characterization should be as a
 [7] witness statement. So stipulated.
 [8] **MR. GABRIEL:** Thank you.
 [9] **Q:** Have you ever seen this document
 [10] before?
 [11] **A:** I've seen it.
 [12] **Q:** You have seen it?
 [13] **A:** I have seen it.
 [14] **Q:** In what context?
 [15] **A:** I believe my wife might have e-mailed
 [16] it and made a copy of it.
 [17] **Q:** Did anyone from the Plaintiff's law
 [18] firm send you a copy of it?
 [19] **A:** No.
 [20] **Q:** Did you ever access it yourself on
 [21] the internet?
 [22] **A:** Either she sent it to me directly or
 [23] a link to it, so I don't know if I got it as a
 [24] document or as a link to a document.
 [25]

Jacobson

[1] **Q:** Do you agree with the statement at
 [2] the bottom of Page 2 that detailed checks are,
 [3] therefore, required?
 [4] **MR. GABRIEL:** Objection to form.
 [5] Lack of foundation.
 [6] **A:** Would you read the question.
 [7] (Record read.)
 [8] **A:** I don't really know. They didn't
 [9] describe what they meant by detailed checks so I
 [10] can't — I can't comment on that.
 [11] **Q:** We will turn to the next page. It
 [12] says, "We believe that the following procedure takes
 [13] the necessary precautions when trying to establish
 [14] if a user is making copyrighted works available for
 [15] download," and then they list certain procedures.
 [16] Do you agree that those procedures
 [17] take the necessary precautions?
 [18] **MR. GABRIEL:** Objection to form.
 [19] Lack of foundation.
 [20] **A:** The steps seem like reasonable
 [21] precautions.
 [22] **Q:** Going down a few paragraphs, there
 [23] are some terms. Do you agree that superpeer hopping
 [24] is a technical problem in trying to determine which
 [25]

Jacobson

[1] user might have violated copyright law?
 [2] **MR. GABRIEL:** Objection to form.
 [3] Lack of foundation.
 [4] **A:** They don't define what they mean by
 [5] superpeer hopping, so ...
 [6] **Q:** Don't you think they are referring to
 [7] the hopping from one supernode to another supernode,
 [8] shutting one down and starting another?
 [9] **MR. GABRIEL:** Objection to form.
 [10] Lack of foundation. Calls for
 [11] speculation.
 [12] **Q:** You are the expert. You have
 [13] indicated that you have studied KaZaA in depth.
 [14] Isn't it a fact that a single search on KaZaA can
 [15] hop from one supernode to another?
 [16] **A:** A search on KaZaA can prop you will
 [17] gate from one supernode to another.
 [18] **Q:** So don't you think that's what they
 [19] are referring to when they say superpeer hopping?
 [20] **MR. GABRIEL:** Objection to form.
 [21] Lack of foundation. Calls for
 [22] speculation.
 [23] **A:** I have not heard that term used, so I
 [24] don't know ...
 [25]

Jacobson

[1] **Q:** Would you agree that the fact that a
 [2] single search can switch from one supernode to
 [3] another to another to another would constitute a
 [4] technical problem in conducting such an
 [5] investigation?
 [6] **MR. GABRIEL:** Objection to form.
 [7] **A:** I would characterize it more as a
 [8] technical inconvenience than a problem.
 [9] **Q:** So you would agree that it is a
 [10] technical inconvenience that needs to be overcome?
 [11] **A:** I'm not saying that it hasn't been
 [12] overcome, if that's what your question is.
 [13] **Q:** My question is exactly what it said,
 [14] that it is a technical problem that needs to be
 [15] overcome?
 [16] **MR. GABRIEL:** Technical
 [17] inconvenience. Let's be clear which
 [18] question you are asking, please.
 [19] **Q:** Is it a technical inconvenience that
 [20] needs to be overcome?
 [21] **A:** Yes.
 [22] **Q:** And you would agree that it requires
 [23] the taking of certain precautions?
 [24] **MR. GABRIEL:** Objection to form.
 [25]

Jacobson

- [1] **A:** If by precautions you mean procedures
[2] to understand that that can happen, yes.
[3] **Q:** Would you agree that NAT translation
[4] is a technical problem in conducting such an
[5] investigation?
[6] **MR. GABRIEL:** Objection to form.
[7] Lack of foundation.
[8] **A:** I would agree that that process —
[9] procedures and processes need to be put in place to
[10] handle NAT translation.
[11] **Q:** And you agree that firewall relaying
[12] is a technical problem that needs to be considered
[13] during the process and procedure?
[14] **MR. GABRIEL:** Objection to form.
[15] **A:** I would agree that firewall relaying
[16] is something that needs to be considered during the
[17] process and procedure.
[18] **Q:** In the next paragraph they refer to
[19] pollution. Would you agree that pollution is a
[20] problem that needs to be taken into account in
[21] conducting such an investigation?
[22] **MR. GABRIEL:** Objection to form.
[23] Lack of foundation.
[24] **A:** I think processes and procedures need

Jacobson

- [1] to be put in place to deal with the issue of
[2] pollution.
[3] **Q:** Does KaZaA have limitations in file
[4] searching?
[5] **A:** If by limitations you mean is one
[6] user limited to the scope of where they can search
[7] across the entire KaZaA network, yes.
[8] **Q:** What is meant by the term "computer
[9] hygiene precautions"?
[10] **MR. GABRIEL:** Objection to form.
[11] Lack of foundation.
[12] **A:** It is my opinion what they are
[13] talking about is it's possible to get data from
[14] multiple locations for one file and if you don't
[15] take care watching where those — where the data
[16] comes from and how much data is produced, that you
[17] could end up marking IP addresses that have
[18] transferred no data.
[19] **Q:** What is multi-peer downloading
[20] contamination?
[21] **MR. GABRIEL:** Objection to form.
[22] Lack of foundation.
[23] **A:** That goes to what I was saying,
[24] multiple peer nodes contributing to a single file.
[25]

Jacobson

- [1] **Q:** Does the fact that MediaSentry
[2] observed the computer solely through the internet
[3] and did not have physical access to the computer
[4] itself limit its observational power?
[5] **MR. GABRIEL:** Objection to form.
[6] **A:** Obviously weren't able to physically
[7] view the individual typing on the keyboard.
[8] **Q:** Is the internet secure and safe and
[9] reliable?
[10] **MR. GABRIEL:** Objection to form.
[11] **A:** I guess it depends on how you define
[12] those terms. Secure? No. The end nodes on the
[13] internet often are not secure. Safe? I guess I'm
[14] not sure what you are talking about as far as
[15] safety.
[16] **Q:** Can people hack into other people's
[17] systems?
[18] **A:** Yes. I would wrap that under the
[19] security umbrella.
[20] **Q:** Isn't it a fact that you teach a
[21] course on how to do that?
[22] **A:** Yes.
[23] **Q:** Isn't it a fact that you teach
[24] students how to crack passwords?
[25]

Jacobson

- [1] **A:** Yes.
[2] **Q:** And you teach them about spoofing?
[3] **A:** Yes.
[4] **Q:** What is spoofing?
[5] **A:** Spoofing is pretending to be somebody
[6] else.
[7] **Q:** What is redirection?
[8] **A:** Depends on where we are talking about
[9] it, but redirection is typically forcing the traffic
[10] to go somewhere else or forcing the user to go
[11] somewhere else.
[12] **Q:** Does the existence of a firewall
[13] guarantee security?
[14] **A:** No.
[15] **Q:** Isn't it a fact that when you teach a
[16] course in information warfare, most of the people
[17] will find some vulnerabilities in the network that
[18] is being attacked?
[19] **MR. GABRIEL:** Objection to form.
[20] **A:** In the course I teach, I set up a
[21] corporate environment that has vulnerabilities
[22] associated with it as part of the exercise.
[23] **Q:** And the vulnerabilities that you
[24] build in are not unheard of in the real world; is
[25]

[1] **Jacobson**
[2] that correct?
[3] **A:** That's correct.
[4] **Q:** So an IP address can be spoofed,
[5] right?
[6] **A:** Yes.
[7] **Q:** And a MAC address?
[8] **A:** Yes.
[9] **Q:** Did you ever recover the registry
[10] entries from either of the two computers that you
[11] have been testifying about?
[12] **A:** I recovered the register entries from
[13] the hard drive that I examined.
[14] **Q:** Well, if you recovered them, where
[15] are they? How come you never turned them over to
[16] me?
[17] **A:** In EnCase you open them up as a file
[18] viewer and you can examine them by just looking at
[19] them.
[20] **Q:** So you viewed them but didn't
[21] preserve a record of it?
[22] **A:** The hard drive image is still in my
[23] possession.
[24] **Q:** But when you viewed it in EnCase, you
[25] didn't make any documentation of what you saw in the

[1] **Jacobson**
[2] registry entries?
[3] **A:** I was looking for evidence of the
[4] KaZaA program and found none.
[5] **Q:** But you actually had the register
[6] entries in front of you on the screen and you didn't
[7] make any record of that?
[8] **A:** There wasn't anything to make a
[9] record of.
[10] **Q:** There were no register entries?
[11] **A:** There were register entries, but none
[12] associated with KaZaA.
[13] **Q:** You were told by Mr. Gabriel just to
[14] look for things that incriminated the defendant?
[15] **MR. GABRIEL:** Objection to form.
[16] Lack of foundation. Argumentative.
[17] **Q:** Is that your testimony? Were you
[18] directed only to find things that helped the
[19] plaintiffs win their case?
[20] **MR. GABRIEL:** Same objections.
[21] **A:** I was told to examine the hard drive
[22] for evidence of file-sharing software and evidence
[23] of MP3.
[24] **Q:** That's all you were told to examine
[25] it for? So you weren't told to examine it for

[1] **Jacobson**
[2] evidence as to whether it had been — the hard drive
[3] had been changed or anything like that?
[4] **A:** I wasn't directed to do anything more
[5] than that, although as part of the examination I
[6] did — as noted in Exhibit 17, I noted, for example,
[7] that the operating system was repaired on July 7th
[8] of '04.
[9] **RQ MR. BECKERMAN:** I call for the
[10] production of those register entries.
[11] **MR. GABRIEL:** They don't exist.
[12] The witness doesn't have a duty to create
[13] them and you have your image of his hard
[14] drive. You can produce them yourself.
[15] **Q:** So EnCase has no way of backtracking
[16] your project?
[17] **A:** The only record it keeps is when you
[18] specifically write something to a report file; when
[19] you see something, you explicitly say, "Put this in
[20] a report."
[21] **Q:** So you were just looking in the
[22] registry for evidence of KaZaA? That's it?
[23] **A:** I was looking for the IP address and
[24] as shown in Exhibit 17, I was looking for evidence
[25] of dates about the system, so the date the system

[1] **Jacobson**
[2] was repaired.
[3] **Q:** Do some users of KaZaA fool people
[4] with fake content?
[5] **MR. GABRIEL:** Objection to form.
[6] **A:** I don't have any firsthand experience
[7] with that.
[8] **Q:** What is a MAC address?
[9] **A:** A MAC address is referred to as the
[10] physical address, which is the address used to
[11] transfer data packets across local area network.
[12] **Q:** Does the cable modem have a MAC
[13] address?
[14] **A:** Yes.
[15] **Q:** Does a wired router have a MAC
[16] address?
[17] **A:** Yes.
[18] **Q:** Does a wireless router have a MAC
[19] address?
[20] **A:** Yes.
[21] **Q:** Does an ethernet card have a MAC
[22] address?
[23] **A:** Yes.
[24] **Q:** Is a network card a synonym for
[25] ethernet card or is it something else?

Jacobson

[1] **A:** An ethernet card would probably be
[2] considered a subset of a network card.
[3] **Q:** Do other network cards also have MAC
[4] addresses?
[5] **A:** There would be networks that do not
[6] use the concept of a MAC address.
[7] **Q:** Does a DSL modem have a MAC address?
[8] **A:** It has it on its — on the subscriber
[9] side.
[10] **Q:** Is there a limit to the number of
[11] devices behind a single router?
[12] **A:** Theoretical or practical? The answer
[13] is “yes” to both, I guess.
[14] **Q:** And what factors would limit it?
[15] **A:** The IP address space would be one
[16] limiting factor and then the performance would be
[17] more of a practical limiting factor.
[18] **Q:** Can you have a router behind another
[19] router?
[20] **A:** Yes.
[21] **Q:** What is the MAC address of the
[22] computer that was accessed by MediaSentry?
[23] **A:** There is no documentation to indicate
[24] what the MAC address of that computer was.
[25]

Jacobson

[1] **Q:** What is the MAC address of the
[2] computer whose hard drive you examined?
[3] **A:** Since I did not have the ethernet
[4] card, I don't know.
[5] **Q:** What type of internet service was
[6] used by the computer that MediaSentry was
[7] interacting with?
[8] **A:** There wasn't enough information from
[9] Verizon to indicate whether it was a cable modem or
[10] a DSL.
[11] **Q:** So you don't know?
[12] **A:** No.
[13] **Q:** Did that connect to the internet
[14] directly or through another device's MAC address?
[15] **A:** Did what connect?
[16] **Q:** When that computer was on line with
[17] or supposedly on line with MediaSentry, was it
[18] directly or was it through another device's MAC
[19] address?
[20] **MR. GABRIEL:** Objection to form.
[21] **A:** Every time a packet goes through a
[22] cable modem, a router, a NAT, the MAC address is not
[23] preserved; it is destroyed and recreated on the
[24] other side.
[25]

Jacobson

[1] **Q:** So the answer is?
[2] **A:** Could you reread the original
[3] question.
[4] (Record read.)
[5] **A:** Are you talking about which address
[6] it presented to the ISP?
[7] **Q:** You can't answer the question the way
[8] it's asked?
[9] **A:** I don't know where —
[10] Again, as the packet moves through
[11] the internet, every device that picks up the packet,
[12] it retransmits and creates a new MAC address.
[13] **Q:** Do you know whether it connected to
[14] the internet directly or through another device's
[15] MAC address? If you don't know you can say you
[16] don't know.
[17] **MR. GABRIEL:** Objection to form.
[18] You can answer the question.
[19] **A:** Stated the way it's stated, no, I
[20] don't know.
[21] **Q:** How many devices accessed the
[22] internet through Marie Lindor's internet access
[23] account?
[24] **A:** I have evidence of one device with
[25]

Jacobson

[1] the IP address that we have talked about in
[2] Exhibit 6, that one device being connected to the
[3] internet during the times as described in
[4] Exhibit 16.
[5] **Q:** How many MAC addresses have accessed
[6] the internet through Marie Lindor's account?
[7] **A:** I have no way of knowing.
[8] **Q:** When is a MAC address assigned to a
[9] computer?
[10] **A:** MAC addresses are actually assigned
[11] to the network cards by the network card vendor.
[12] **Q:** And is that also true for any other
[13] network device?
[14] **A:** In the ethernet world, yes. MAC
[15] addresses are assigned. Blocks are assigned to the
[16] vendors and the vendors allocate individual
[17] addresses.
[18] **Q:** Did the computer which you examined
[19] have a wireless card? The computer whose hard drive
[20] you examined, did that have a wireless card?
[21] **A:** All I received was the hard drive. I
[22] did not receive the —
[23] **Q:** So you don't know?
[24] **A:** Correct.
[25]

Jacobson

[1] **Q:** Can an ethernet card be removed from
 [2] one PC and put into another?
 [3] **A:** If it is an actual card as opposed
 [4] to — connected to — actually on the motherboard.
 [5] **Q:** If you were an internet pirate or
 [6] cracker who wanted to spoof a MAC address, could you
 [7] easily find the MAC address by, let's say, finding a
 [8] box that a cable modem had come in and just writing
 [9] down the MAC address from that?
 [10] **MR. GABRIEL:** Objection to form.
 [11] Lack of foundation.
 [12] **A:** I don't know if they write the MAC
 [13] addresses on the outside of cable modem shipping
 [14] boxes.
 [15] **Q:** You can manually reassign a new MAC
 [16] address, can you not?
 [17] **A:** In a lot of systems, yes.
 [18] **Q:** What is reprogramming a MAC address?
 [19] **MR. GABRIEL:** Objection to form.
 [20] **A:** I've never heard it quite put that
 [21] way, but my understanding would be that that would
 [22] be changing the MAC address of the device.
 [23] **Q:** Did you or MediaSentry ever actually
 [24] know the MAC address of either of the computers?
 [25]

Jacobson

[1] **MR. GABRIEL:** Objection to form.
 [2] Lack of foundation as to MediaSentry.
 [3] **A:** I did not know the MAC address. I
 [4] cannot testify to what MediaSentry knew in that
 [5] case.
 [6] **Q:** How would one spoof an IP address?
 [7] **A:** Can we go off the record for a
 [8] second? Am I allowed to say that?
 [9] **MR. GABRIEL:** You need to answer
 [10] his question first. If there is an issue
 [11] with the question, you can tell him.
 [12] **A:** Long version or short version?
 [13] **Q:** Short version.
 [14] **A:** Okay. Boy, there is no short
 [15] version.
 [16] **Q:** There are many ways to do it, is that
 [17] not correct?
 [18] **A:** Well, there is many ways and it
 [19] depends for what purpose as to whether those ways
 [20] would work.
 [21] **Q:** Okay. It's not necessary to really
 [22] go into detail.
 [23] **A:** Okay.
 [24] **Q:** There are many ways to spoof an IP
 [25]

Jacobson

[1] address?
 [2] **A:** Not all of which work. Correct.
 [3] **Q:** Did you personally verify the IP
 [4] number?
 [5] **A:** The IP address on the hard drive,
 [6] since it's DHCP, the IP address is not committed to
 [7] the hard drive.
 [8] **Q:** So the answer is no, you did not
 [9] verify the IP address?
 [10] **A:** Not on the hard drive.
 [11] **Q:** And how did MediaSentry get the IP
 [12] address?
 [13] **MR. GABRIEL:** Objection to the
 [14] extent it was asked and answered.
 [15] Go ahead.
 [16] **A:** I don't know the exact process and
 [17] procedures that MediaSentry used.
 [18] **Q:** So you couldn't test or verify the
 [19] procedures? You didn't know what they were?
 [20] **A:** Given the procedures, I could test
 [21] them. The method that I would use is, again, since
 [22] every packet —
 [23] **Q:** No. The question was — I was asking
 [24] whether you verified the way that — the method that
 [25]

Jacobson

[1] MediaSentry used.
 [2] **A:** No.
 [3] **Q:** Do you know what the IP address was
 [4] of the screen shot?
 [5] **MR. GABRIEL:** Objection to form.
 [6] **A:** The screen shot was a screen shot of
 [7] the files associated with the user.
 [8] **Q:** Well, they would have had to have
 [9] been a dynamic IP address assigned it that, would it
 [10] not have, to that connection?
 [11] **MR. GABRIEL:** Objection to form.
 [12] **A:** You have an IP — you have an IP
 [13] connection to the supernode and then to transfer the
 [14] files, you make an IP connection to the machine that
 [15] has the — that has the files.
 [16] **Q:** When you did the forensic examination
 [17] of the hard drive, other than telling you that they
 [18] wanted you to look for evidence of KaZaA, were there
 [19] any other instructions given to you?
 [20] **A:** Look for the — any MP3 files and
 [21] then just a general look for anything that may be
 [22] associated with — you know, with MediaSentry and my
 [23] testimony or my expert report. So things like IP
 [24] addresses, et cetera.
 [25]

Jacobson

[1] **Q:** You say it's not difficult to
[2] determine whether a computer was connected with a
[3] wireless router based on how IP's are assigned? How
[4] could you possibly tell from the way IP's are
[5] assigned whether or not it was connected to a
[6] wireless router?
[7] **A:** Again, back to Exhibit 6 where the
[8] machine itself reports its IP address and so does
[9] the device with the global internet address. A
[10] wireless router is going to have an internal address
[11] and then a public address, and so you will see a
[12] discrepancy in those two IP addresses.
[13] **Q:** How did you make that determination
[14] in this case? I'm not sure I follow that.
[15] You put in your declaration on
[16] December 19th "Based on how IP's are assigned, it is
[17] not difficult to determine whether a computer was
[18] connected to the internet via a wireless router.
[19] This computer was not." How did you determine that
[20] that computer was not connected to the internet via
[21] a wireless router?
[22] **MR. GABRIEL:** Objection. Asked and
[23] answered.
[24] **A:** This computer had a public IP address

Jacobson

[1] that matched the IP address that was in the packet
[2] that was transmitted onto the internet from an entry
[3] point into the internet. And so, therefore, since
[4] the computer said it had the same address as the
[5] packet ...
[6] **Q:** I don't understand your testimony.
[7] What do you mean by a public IP address?
[8] **A:** The public IP space is divided into
[9] address ranges. A majority of the addresses are to
[10] be handed out for devices that are directly
[11] connected to the public — to the internet. Some of
[12] the addresses have been reserved for private
[13] addresses, addresses that cannot show up on the
[14] internet. They will not be routed across the
[15] internet. These are the addresses used by NATs and
[16] wireless routers and so on as you have shown in
[17] your —
[18] **Q:** Don't look for the documents.
[19] **A:** The image with the picture where you
[20] had the 192168 addresses. Those, for example, are
[21] private IP address space.
[22] **Q:** So you are going to rely on what you
[23] just said. That's the way you know it wasn't a
[24] wireless router. Everything you have just said now

Jacobson

[1] establishes that it was not a wireless router?
[2] **A:** In my opinion, yes.
[3] **Q:** Was KaZaA fully installed on the
[4] first computer?
[5] **MR. GABRIEL:** Objection to form.
[6] **A:** If by the first computer you mean the
[7] computer that MediaSentry reported on, that was
[8] running a KaZaA client.
[9] **MR. BECKERMAN:** Read back that
[10] answer.
[11] (Record read.)
[12] **Q:** I asked you if it was fully installed
[13] on the computer.
[14] **MR. GABRIEL:** If that's a question,
[15] I object.
[16] **A:** The KaZaA application was installed
[17] and running on that computer.
[18] **MR. GABRIEL:** The record should
[19] reflect that the document Dr. Jacobson was
[20] looking for was Exhibit 8 with the 192IP
[21] address. That's what he said, just for
[22] clarity.
[23] **Q:** Other than this two-page document
[24] from Verizon which was sent to Jenner & Block law

Jacobson

[1] firm, did you see anything else from Verizon?
[2] **A:** No.
[3] **Q:** Do you know what procedures Verizon
[4] employed to link Ms. Lindor's name and address to
[5] the alleged IP address?
[6] **A:** No.
[7] **Q:** Do you know who conducted the
[8] research?
[9] **A:** No.
[10] **Q:** Do you know if the procedures were
[11] accurately and competently followed?
[12] **A:** I have no way of knowing that.
[13] **Q:** Do you know if the search was free
[14] from human and mechanical error?
[15] **A:** I have no way of knowing.
[16] **Q:** Have the ISP's ever misidentified a
[17] subscriber?
[18] **MR. GABRIEL:** Objection to form.
[19] Lack of foundation.
[20] **A:** I have no way of knowing.
[21] **Q:** Have the ISP's ever identified a
[22] customer who is not even a subscriber at the time of
[23] the infringement?
[24] **MR. GABRIEL:** Objection to form.

[1] *Jacobson*

[2] Lack of foundation.

[3] **A:** I have no way of knowing.

[4] **Q:** Did you see their logs?

[5] **A:** All I saw from Verizon is what is

[6] shown in Exhibit 19.

[7] **Q:** Were MediaSentry's clocks

[8] synchronized with Verizon's?

[9] **MR. GABRIEL:** Objection to form.

[10] Lack of foundation.

[11] **A:** I have no way of knowing.

[12] **Q:** How many people were assigned this IP

[13] address during the 24 hours of August 7, 2004,

[14] 141.155.57.198?

[15] **A:** The date you said was August 7th?

[16] **Q:** August 7, 2004.

[17] **A:** I have no way of knowing that.

[18] **Q:** Is it true that the ISP keeps a log

[19] of all IP address assignments?

[20] **MR. GABRIEL:** Objection. Lack of

[21] foundation.

[22] **A:** I don't know how Verizon operates

[23] internally.

[24] **Q:** Does the log contain the name and

[25] address of a subscriber or does it contain a MAC

[1] *Jacobson*

[2] address?

[3] **MR. GABRIEL:** Same objection.

[4] **A:** I have no idea what is in their

[5] internal logs.

[6] **Q:** How did Verizon link Ms. Lindor's

[7] name to that IP address?

[8] **MR. GABRIEL:** Same objection.

[9] **A:** I have no knowledge about Verizon.

[10] **Q:** So is it fair to say that all of your

[11] reports are based on the assumption that the

[12] information which you obtained from Verizon was

[13] accurate?

[14] **A:** Yes.

[15] **Q:** And you have no idea how they

[16] obtained that information; is that correct?

[17] **A:** I have no firsthand knowledge of how

[18] they obtained that information.

[19] **Q:** Do you have some secondhand knowledge

[20] of how they operated?

[21] **A:** I could speculate as to how they

[22] might do it.

[23] **Q:** But you don't know? You just would

[24] be speculating?

[25] **A:** Yes.

[1] *Jacobson*

[2] **Q:** I am sure Mr. Gabriel wouldn't want

[3] you to speculate. Did you make any attempt to

[4] verify the information?

[5] **A:** The Verizon information?

[6] **Q:** Yes.

[7] **A:** The only verification that I do is I

[8] compare the Verizon subpoena response date, time, IP

[9] to the subpoena itself to verify that they — that

[10] Verizon is reporting back on the same data that was

[11] requested.

[12] **Q:** Do you know if Ms. Lindor's apartment

[13] has a wired router?

[14] **A:** I don't know anything about

[15] Ms. Lindor's apartment.

[16] **Q:** So would you know if her apartment

[17] had a wireless router?

[18] **A:** Again, I don't know anything about

[19] Ms. Lindor's residence.

[20] **Q:** Would it have been possible to have

[21] more than one router?

[22] **MR. GABRIEL:** Objection to form.

[23] **A:** It's possible to have any number of

[24] routers. But given the IP address correlation,

[25] given the IP address in the packet in the computer

[1] *Jacobson*

[2] are both republic.

[3] **Q:** What is a wireless access point?

[4] **A:** A wireless access point is the

[5] wireless device that actually — it is a device that

[6] actually interfaces with the wireless devices, the

[7] machines with wireless cards, so that actually is

[8] the base station transmitter.

[9] **Q:** How does that relate to a wireless

[10] router?

[11] **A:** That's part of a — that's part of

[12] the router. The access point we typically talk is

[13] the wireless side.

[14] **Q:** Didn't you say in your declaration

[15] under penalty of perjury that your conclusion that

[16] it was not connected to the internet via a wireless

[17] router was based in part on the registry entries

[18] recovered from the computer?

[19] **A:** Yes.

[20] **Q:** And you didn't feel it was important

[21] to identify those registry entries?

[22] **A:** Again, since I didn't find anything

[23] there was nothing to document and since I can —

[24] The hard drive is still in my

[25] possession.

Jacobson

[1]
[2] **Q:** Well, do you think you can now go
[3] generate more reports after having gone through this
[4] deposition and then come up with them at the trial
[5] and surprise me with them?

[6] **MR. GABRIEL:** Objection.
[7] Argumentative. We are aware of what our
[8] obligations are.

[9] **Q:** You said in your declaration that
[10] there was no internal IP address here. What did you
[11] mean by that?

[12] **A:** Which declaration are you reading?

[13] **Q:** Your December 19th declaration. You
[14] said there was no internal IP address here.

[15] **MR. GABRIEL:** I don't believe you
[16] marked it as an exhibit.

[17] **Q:** Do you doubt that you put that in
[18] your declaration?

[19] **MR. GABRIEL:** Wait. He is talking
[20] about your December declaration. He has
[21] not marked it as an exhibit, if that is
[22] what you are looking for.

[23] **Q:** Well, do you doubt that that's what
[24] you said? Let me quote.

[25] "I base this on the data mentioned

Jacobson

[1] above as well as on the registry entries recovered
[2] from the computer and the fact that there was no
[3] internal IP address here." Do you not know what
[4] that statement means?
[5] that statement means?

[6] **A:** I know what that statement means. I
[7] assume if you are reading it, it is indeed what I —
[8] I don't remember verbatim what I said
[9] without seeing the report.

[10] **MR. BECKERMAN:** Please mark this as
[11] Exhibit 23. It is a declaration dated
[12] December 19, 2006.

[13] (Defendant's Exhibit 23, declaration
[14] dated December 19, 2006, marked for
[15] identification, as of this date.)

[16] **Q:** I refer you to Page 4, Paragraph 5,
[17] second sentence, and ask you what you were talking
[18] about.

[19] Actually, let me go to this first.
[20] When you say the registry entries were recovered,
[21] they weren't recovered; you are just saying you saw
[22] them and then kept them to yourself. Is that
[23] correct? You didn't recover them?

[24] **MR. GABRIEL:** Objection to form.
[25] Argumentative.

Jacobson

[1] **Q:** You read them and made no notation or
[2] record or report of them; is that correct? So when
[3] you say recovered —
[4] you say recovered —

[5] **A:** In a Windows PC the registries
[6] actually exist in several places and so to get a
[7] view of all of them, you end up through EnCase
[8] running their internal program which puts the
[9] registries in a human, readable format. So that's
[10] what I meant by the word "recovered."

[11] **Q:** What did you mean when you said there
[12] was no internal IP address here?

[13] **A:** There was no evidence of an
[14] internal — of the internal addresses like the
[15] 192.168 addresses that you find when you have a
[16] wireless router.

[17] **Q:** So in preparing your analysis, you go
[18] directly from the MediaSentry documents to the
[19] report that you write for the RIAA lawyers and there
[20] is no intermediate work papers or analysis sheets?

[21] **A:** Yes. That's Exhibit 18.

[22] **Q:** That's it? That's the only thing
[23] that you prepare before preparing your report?

[24] **A:** Yes.

[25] (Recess taken.)

Jacobson

[1] **Q:** If I was on the internet right now
[2] and my IP address was 195.175.1.2, how would you
[3] determine whether I was connected through a wireless
[4] router or not?
[5] router or not?

[6] **A:** We look at the — if all I saw was a
[7] single packet from you with no other data, I
[8] couldn't make that determination. But if I saw a
[9] payload that also reported your IP address, then I
[10] could make that determination.

[11] **Q:** So let's say I sent you an e-mail.
[12] Would you be able to tell?

[13] **A:** Not with every e-mail. There may be
[14] configurations in which an e-mail would disclose
[15] that information.

[16] **Q:** Now, going back to what you said
[17] about the packet, would you see the private IP?

[18] **A:** If the application reported the
[19] private IP as part of the payload, but not as part
[20] of the IPV4 header.

[21] **Q:** And how does it distinguish between
[22] wireless and not wireless?

[23] **MR. GABRIEL:** Objection to form.

[24] **A:** You wouldn't be able to tell the
[25] difference between a router with private addresses,

[1] **Jacobson**
[2] whether it was wireless or not wireless.
[3] **Q:** Does the packet identify whether the
[4] user is wireless or not?
[5] **A:** It depends on which packet you see?
[6] **Q:** How would a packet tell you that it's
[7] wireless?
[8] **A:** If I actually captured the wireless
[9] packet, its MAC address is larger than the MAC
[10] address of a — on the wired side, along with the
[11] frame format is different.
[12] **Q:** The MAC address of a wireless is a
[13] different type of MAC address?
[14] **A:** Its layout is different.
[15] **Q:** Is a MAC address visible outside of
[16] the local network?
[17] **A:** Not of the internal machines.
[18] **Q:** So how would a packet on the public
[19] internet have a MAC address header?
[20] **A:** Every packet has some type of MAC
[21] address header.
[22] **Q:** Does NAT hide the private IP?
[23] **A:** If by "hide" you mean that the
[24] private IP does not show up in the IPV6 header, that
[25] is correct.

[1] **Jacobson**
[2] **Q:** What is the name and model of the PC
[3] whose hard drive image you examined?
[4] **A:** I don't know.
[5] **Q:** What is the MD5 hash of the hard
[6] drive you examined?
[7] **A:** I don't recall what that is.
[8] **Q:** What is the SHA1 hash of the hard
[9] drive image you examined?
[10] **A:** I don't even recall looking at that.
[11] **Q:** What kind of hashing does KaZaA use?
[12] **A:** I don't remember the exact algorithm
[13] that it uses.
[14] **Q:** Would it refresh your recollection
[15] for me to tell you that it uses UU Hash?
[16] **A:** I have no reason to doubt that.
[17] **Q:** Do you know why MediaSentry compiled
[18] the list with the SH1 values instead of the UU Hash
[19] values?
[20] **A:** Which list?
[21] **Q:** You are the person who is testifying
[22] about the MediaSentry printouts.
[23] **MR. GABRIEL:** I will object. He
[24] didn't testify about hash values at all.
[25] **Q:** Isn't it a fact that they have a list

[1] **Jacobson**
[2] of SHA1 hash values?
[3] **MR. BECKERMAN:** Withdrawn. I
[4] withdraw the question.
[5] **Q:** Can multiple users of KaZaA have the
[6] same user name?
[7] **A:** Yes.
[8] **Q:** Can users change their nickname in
[9] KaZaA?
[10] **A:** Yes.
[11] **Q:** Do KaZaA nicknames uniquely identify
[12] a person?
[13] **A:** No.
[14] **Q:** Could I create a user name
[15] "Dr. Jacobson" at KaZaA?
[16] **A:** Yes.
[17] **Q:** Does KaZaA operate as a background
[18] service?
[19] **MR. GABRIEL:** Objection to form.
[20] **A:** You can minimize KaZaA and have it
[21] run out of the system tray.
[22] **Q:** Is it possible that someone who has
[23] the computer on and has KaZaA running might not even
[24] know it's running?
[25] **A:** It's possible.

[1] **Jacobson**
[2] **Q:** Is there a way through the internet
[3] to remotely control someone else's computer?
[4] **MR. GABRIEL:** Objection to form.
[5] Lack of foundation.
[6] **A:** It's possible.
[7] **Q:** What is a zombie?
[8] **A:** In reference to computer security, a
[9] zombie is a program that is under control of some
[10] other master program which is under control of some
[11] individual.
[12] **Q:** What is a cracker?
[13] **A:** When I use the term, it is in
[14] reference to either a person or process to break
[15] passwords.
[16] **Q:** What is a drone?
[17] **A:** Again, in computer security
[18] terminology that, again, would be a piece of
[19] software that's under control by another individual.
[20] **Q:** When you provide your investigations,
[21] do you do anything to verify or to determine whether
[22] or not the computer in question was under control by
[23] an outside remote user?
[24] **A:** No.
[25] **Q:** Do you know who conducted the

Jacobson

- [1] [2] MediaSentry investigation?
[3] **A:** No.
[4] **Q:** Do you know the qualifications and
[5] training of anyone who conducted the investigation?
[6] **A:** No.
[7] **Q:** Are screen shots reliable evidence,
[8] in your opinion?
[9] **MR. GABRIEL:** Objection to form.
[10] Lack of foundation. Calls for a legal
[11] conclusion on its face.
[12] **A:** I don't know what represents legal
[13] evidence in a court of law.
[14] **Q:** Do you consider screen shots
[15] reliable?
[16] **MR. GABRIEL:** Objection.
[17] **A:** A screen shot is an image of the
[18] application and the application data that is shown
[19] on the screen at that time.
[20] **Q:** Can it be subject to manipulation or
[21] forgery?
[22] **MR. GABRIEL:** Objection to form.
[23] Calls for speculation.
[24] **A:** Any image can be subject to
[25] manipulation.

Jacobson

- [1] **Q:** Could it be altered in the graphics
[2] editing program?
[3] **MR. GABRIEL:** Same objections.
[4] **A:** Any image can be altered in the
[5] graphics editing program.
[6] **Q:** Did you take any steps to verify the
[7] authenticity of the screen shot?
[8] **A:** No.
[9] **Q:** Did you take any steps to verify that
[10] the song files were genuine?
[11] **A:** Other than what was reported through
[12] MediaSentry and through the certificates of — I
[13] can't recall what they are called exactly, but
[14] through the documents provided by the recording
[15] industry.
[16] **Q:** You yourself did nothing to verify
[17] that they were genuine?
[18] **A:** Other than through the documentation
[19] I was provided.
[20] **Q:** What did MediaSentry do to verify
[21] that they were genuine?
[22] **MR. GABRIEL:** Objection to form.
[23] Lack of foundation.
[24] **A:** I don't know what MediaSentry did.

Jacobson

- [1] **Q:** Did you verify that the IP address
[2] had not been highjacked?
[3] **MR. GABRIEL:** Objection to form.
[4] **A:** I relied on the Verizon documentation
[5] and so, no, I did not.
[6] **Q:** Did you verify that the IP address
[7] had not been faked?
[8] **MR. GABRIEL:** Same objection.
[9] **A:** I relied on the Verizon
[10] documentation.
[11] **Q:** Did you verify that the IP address
[12] had not been spoofed?
[13] **MR. GABRIEL:** I will object to the
[14] form. Lack of foundation.
[15] You can answer.
[16] **A:** Only that I can say that it was an IP
[17] address that was within Verizon's domain.
[18] **Q:** Is a log file a text file?
[19] **A:** It can be.
[20] **Q:** Were these log files text files?
[21] **A:** The originals I believe came that
[22] way. When I receive them, they are .PDF documents.
[23] **Q:** Can text files be easily altered?
[24] **MR. GABRIEL:** Objection to form.

Jacobson

- [1] **A:** Yes.
[2] **Q:** In your report you said the lack of
[3] user-created files and e-mail leads you to believe
[4] that this computer wasn't used very much. What did
[5] you mean by user-created files?
[6] **A:** When I looked through the hard drive
[7] there were very few files that were created by
[8] user-run applications, like documents.
[9] **Q:** Is it possible to use a computer for
[10] extended periods without creating any user files?
[11] **MR. GABRIEL:** Objection to form.
[12] **A:** It's possible.
[13] **Q:** If you were, let's say, surfing the
[14] internet and clearing the cache, would there be any
[15] user-created files from that?
[16] **A:** As long as you didn't download
[17] anything.
[18] **Q:** If you were listening to any CD's,
[19] would there be any user-created files?
[20] **A:** No.
[21] **Q:** If you were playing Minesweeper or
[22] Solitaire, would there be any user-created files?
[23] **A:** I believe Solitaire you can save a
[24] game.
[25]

[1] **Jacobson**

[2] **Q:** If you were just playing Minesweeper

[3] or Solitaire, would there be any user-generated

[4] files?

[5] **A:** No.

[6] **Q:** If a user used web-based e-mail such

[7] as Hotmail, Yahoo or Gmail, would any of those

[8] e-mails be stored on the hard drive?

[9] **A:** They don't have to be.

[10] **Q:** Can you tell how many people used the

[11] computer from which the hard drive came that you

[12] examined?

[13] **A:** I can tell how many accounts were on

[14] the hard drive, how many user accounts.

[15] **Q:** But you can't say how many people

[16] used it?

[17] **A:** Living, breathing people? No.

[18] **Q:** During your hard drive inspection,

[19] what files did you find in the deleted sectors of

[20] the disk?

[21] **A:** Very few, and none that matched the

[22] profile of KaZaA or MP3 files.

[23] **MR. BECKERMAN:** Let's take a short

[24] break.

[25] (Recess taken.)

[1] **Jacobson**

[2] **Q:** Did you examine the system registry

[3] for the computer that had the hard drive?

[4] **A:** I examined the registry from the hard

[5] drive.

[6] **Q:** Did it show that any other hard drive

[7] had ever existed in that computer?

[8] **A:** I didn't specifically look for that.

[9] I don't recall that there was an indication of that.

[10] **Q:** So you have no reason to think that

[11] the hard drive was replaced?

[12] **A:** Not — no.

[13] **Q:** And it is a fact, is it not, that the

[14] system registry would have disclosed that if it had

[15] taken place?

[16] **A:** If you would have rebuilt the system

[17] from scratch and copied the data files over to new

[18] hard drive, the system registry would have only

[19] shown the creation date or installation date of the

[20] operating system.

[21] **Q:** Isn't it a fact that the system

[22] registry contains information about each hard drive

[23] that's ever been connected to the computer,

[24] including the manufacturer, the size of the hard

[25] drive and in some instances the serial number?

[1] **Jacobson**

[2] **A:** Of all hard drives connected while

[3] that system registry was on that hard drive, if you

[4] pull out the hard drive that had that system

[5] registry and plugged a brand new one into the

[6] machine and rebuilt the operating system, there

[7] would be no evidence of that original hard drive you

[8] pulled out.

[9] **Q:** Was there any evidence that that had

[10] taken place here on or after August 7, 2004?

[11] **A:** No.

[12] **Q:** Does every internet packet contain a

[13] MAC address?

[14] **A:** No.

[15] **Q:** Does a MAC address tell you if a

[16] device is wired or wireless?

[17] **A:** If you can see the MAC address of the

[18] transmitting device you could see whether that

[19] device was wired or wireless.

[20] **Q:** Now, if it was a computer going

[21] through a wireless router, would you see the MAC

[22] address of the computer?

[23] **A:** Where am I looking for the MAC

[24] address?

[25] **Q:** Where you say it exists.

[1] **Jacobson**

[2] **A:** MAC address exists between any two

[3] nodes — some type of physical address exists

[4] between every pair of communicating nodes on the

[5] internet.

[6] **Q:** How would you see the MAC address of

[7] a transmitting device?

[8] **A:** I'd have to have a monitoring device

[9] on the media — median that the transmitting device

[10] was using.

[11] **Q:** And did you have such a monitoring

[12] device?

[13] **A:** No.

[14] **Q:** Does an IP address tell you if the

[15] device is wired or wireless?

[16] **A:** No.

[17] **MR. BECKERMAN:** I have no further

[18] questions.

[19] **MR. GABRIEL:** I think I just have

[20] three clarification questions.

[21] **MR. BECKERMAN:** Then I might have

[22] some clarifying questions of my own then.

[23] **MR. GABRIEL:** I understand.

[24] **EXAMINATION BY**

[25] **MR. GABRIEL:**

Jacobson

[1]
[2] **Q:** Dr. Jacobson, Mr. Beckerman asked you
[3] some questions about the processes that you used
[4] both when you did your first report and also when
[5] you reviewed the hard drive, and you gave testimony
[6] about that. Do you recall?

[7] **A:** Yes.

[8] **Q:** With respect to the processes that
[9] you used, is it your view that reasonable experts in
[10] your fields use the same processes?

[11] **A:** Yes.

[12] **Q:** Is there any other way to do what you
[13] did, to your knowledge?

[14] **A:** The hard drive examination could have
[15] been done with any one of a number of tools, but all
[16] of those tools behave in roughly the same way.

[17] **Q:** Mr. Jacobson, with respect to the
[18] reports in the declaration that you did and
[19] Mr. Beckerman asked you about, he asked you whether
[20] you had discussed any alternative explanations for
[21] the conclusions you reached. Do you recall him
[22] asking you that?

[23] **A:** Yes.

[24] **Q:** You did talk about the absence of a
[25] router.

Jacobson

[1] **MR. BECKERMAN:** Objection.
[2] Leading.

[3] **Q:** Yes?

[4] **A:** Yes.

[5] **Q:** Mr. Beckerman had asked you questions
[6] about the instructions that I or my firm gave you in
[7] terms of what you were supposed to look for on the
[8] hard drive, correct?

[9] **A:** Yes.

[10] **Q:** And your testimony will speak for
[11] itself. I think you said look for KaZaA, look for
[12] MP3 files, anything associated with your expert
[13] report. Do you recall giving that general
[14] testimony?

[15] **A:** Yes.

[16] **Q:** Did we also ask you to look if
[17] anything was deleted?

[18] **A:** I believe you did.

[19] **Q:** And did you do that?

[20] **A:** Yes.

[21] **Q:** Mr. Beckerman asked you a lot of
[22] questions today about what you relied on and he
[23] asked you whether you had verified different things.
[24] For example, the Verizon information was one of the

Jacobson

[1] things he asked you if you verified. Do you
[2] remember just being asked those questions?

[3] **A:** Yes.

[4] **Q:** With respect to the various data you
[5] relied on from MediaSentry or Verizon, do you have
[6] any information sitting here today, Dr. Jacobson, to
[7] suggest that any of that is not correct?

[8] **A:** No.

[9] **Q:** Do you have an opinion as to whether
[10] a reasonable expert in your field would rely on
[11] information like that?

[12] **MR. BECKERMAN:** Objection. He
[13] hasn't shown himself qualified to give an
[14] opinion on something like that.

[15] **Q:** You can answer.

[16] **A:** I believe that a person in my field
[17] would use the same information.

[18] **Q:** Last question. Would you look at
[19] Exhibit 8, please.

[20] **A:** Yes. I found it.

[21] **Q:** A couple of times today you alluded
[22] to this exhibit and referred to it or you talked
[23] about — and the record speaks for itself, I'm just
[24] trying to get us in the same place — an internal IP

Jacobson

[1] address and 192. Does the number 192 here somehow
[2] correlate with an internal IP address?

[3] **A:** Yes. The internet registration
[4] authority, which is basically the governing body of
[5] IP addresses, has allocated three address ranges
[6] that are to be used internally only, they are not to
[7] show up on the internet, and the 192.168 is one of
[8] those blocks of addresses.

[9] **Q:** And with respect to the IP — the
[10] public IP address that you talked about a lot today
[11] relating to this case, was that within one of the
[12] ranges for internal addresses?

[13] **A:** No.

[14] **MR. GABRIEL:** That's all I have.

[15] **MR. BECKERMAN:** I have no further
[16] questions.

[17] **MR. GABRIEL:** Thank you for your
[18] courtesy. We are going to run out and
[19] make a plane.

[20] (Time noted: 2:28 p.m.)

[1] **CAPTION**

[2]

[3]

[4] The Deposition of DR. DOUGLAS W. JACOBSON, taken in the

[5] matter, on the date, and at the time and place set

[6] out on the title page hereof.

[7]

[8] It was requested that the deposition be taken by

[9] the reporter and that same be reduced to

[10] typewritten form.

[11]

[12] It was agreed by and between counsel and the

[13] parties that the Deponent will read and sign the

[14] transcript of said deposition.

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

[1] DEPOSITION ERRATA SHEET

[2]

[3] RE:

[4] FILE NO.

[5] CASE CAPTION: UMG V. LINDOR

[6] DEPONENT: DR. DOUGLAS W. JACOBSON

[7] DEPOSITION DATE: 2/23/07

[8]

[9] To the Reporter:

[10] I have read the entire transcript of my Deposition

[11] taken in the captioned matter or the same has been

[12] read to me. I request for the following changes

[13] be entered upon the record for the reasons

[14] indicated.

[15] I have signed my name to the Errata Sheet and the

[16] appropriate Certificate and authorize you to

[17] attach both to the original transcript.

[18]

[19]

[20]

[21]

[22]

[23]

[24] SIGNATURE: _____ DATE: _____

[25] DR. DOUGLAS W. JACOBSON

[1] **CERTIFICATE**

[2]

[3] STATE OF _____:

[4] COUNTY/CITY OF _____:

[5]

[6]

[7] Before me, this day, personally appeared

[8] DR. DOUGLAS W. JACOBSON, who, being duly sworn, states

[9] that the foregoing transcript of his

[10] Deposition, taken in the matter, on the date, and

[11] at the time and place set out on the title page

[12] hereof, constitutes a true and accurate transcript

[13] of said deposition.

[14]

[15] DR. DOUGLAS W. JACOBSON

[16]

[17]

[18] SUBSCRIBED and SWORN to before me this _____

[19] day of _____, 2007, in the

[20] jurisdiction aforesaid.

[21]

[22]

[23]

[24] My Commission Expires _____ Notary Public

[25]

[1] **INDEX**

[2]

[3] WITNESS EXAMINATION BY PAGE

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[5] MR. GABRIEL 149

[6]

[7] _____ INFORMATION REQUESTS _____

[8] DIRECTIONS: None

[9] RULINGS: 25, 26

[10] TO BE FURNISHED: 53

[11] REQUESTS: 115

[12] MOTIONS: 22, 26

[13]

[14] **EXHIBITS**

[15] DEFENDANT'S Page

[16] for Iden.

[17] 1 Press release from Palisade Systems, Inc. 8

[18] bearing the headline "Peer-to-Peer

[19] File Sharing Struggles Intensify

[20] In Universities"

[21] 2 One-page press release of Palisade 9

[22] Systems, Inc. dated April 21, 2004

[23]

[24] 3 Two-page article by David Chappelle 9

[25] dated April 19, 2004

[26] 4 C/net News.com article dated 11

[27] April 21, 2004

[28]

[29] 5 Press release from ZDNet entitled 14

[30] "File-Swap Killer Grabs Attention"

[31] 6 Printout of numbered pages 36 to 45 65

[1]
 [2] 7 Study entitled "The KaZaA Overlay: 70
 A Measurement Study"
 [3]
 [4] 8 One-page chart 72
 [5]
 [6] 9 Paper entitled "Pollution in P2P 75
 File Sharing Systems"
 [7] 10 Two-page printout of page numbers 82
 46 to 47
 [8]
 [9] 11 Printout of page numbers 49 to 187 83
 [10]
 [11] 12 Printout of pages 199 to 224 83
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 [13] 13 One-page printout of page numbered 48 83
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 [15] 14 Printout of pages numbers 188 through 198 83
 [16]
 [17] 15 Undated October report 89
 [18]
 [19] 16 Dr. Douglas W. Jacobson's April report 93
 [20]
 [21] 17 Page of handwritten notes 97
 [22]
 [23] 18 Single-page document bearing 98
 "wireless router" at the top
 [24] 19 Two-page letter from Verizon 99
 [25] 20 One-page resume, page number DJ0076 100
 [26] 21 One-page document with a flowchart 102
 [27] 22 Three-page document entitled 104
 "Witness Statement of Henk Sips
 and Johan Pouwelse"
 [28] 23 Declaration dated December 19, 2006 134
 [29]
 [30]
 February 23, 2007
 [31] New York, New York

[1]
 [2] CERTIFICATE
 [3] STATE OF NEW YORK) ss.:
 [4] COUNTY OF RICHMOND)
 [5]
 [6] I, ELIZABETH SANTAMARIA, a Registered
 [7] Professional Reporter and Notary Public of
 [8] the State of New York, do hereby certify
 [9] that the foregoing Deposition is, of the
 [10] witness, DR. DOUGLAS W. JACOBSON, taken at
 [11] the time and place aforesaid, is a true and
 [12] correct transcription of my shorthand notes.
 [13] I further certify that I am not
 [14] neither counsel for nor related to any party
 [15] to said action, nor in any way interested in
 [16] the result or outcome thereof.
 [17] IN WITNESS WHEREOF, I have hereunto
 [18] set my hand this day of March, 2007
 [19]
 [20]
 [21] ELIZABETH SANTAMARIA
 [22]
 [23]
 [24]
 [25]

Lawyer's Notes

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