

[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
 (DGT)(RML)
 vs.
 [8]
 [9] MARIE LINDOR,
 [10] Defendant.
 _____X

[11]
 [12] February 23, 2007
 [13] 9:30 a.m.

[14] DEPOSITION of Expert Witness,
 [15] DR. DOUGLAS W. JACOBSON, held at the offices
 [16] of Vanderberg & Fellu, LLP, 110 East 42nd
 [17] Street, New York, New York, pursuant to
 [18] Notice, before ELIZABETH SANTAMARIA, a
 [19] Notary Public of the State of New York.
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[21]
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 [23]
 [24] Reported by:
 ELIZABETH SANTAMARIA
 [25] JOB NO. 54123

[1] Appearances:
 [2]
 [3] HOLME ROBERTS & OWEN LLP
 [4] Attorneys for Plaintiffs
 [5] 1700 Lincoln Street
 [6] Denver, Colorado 80203-4541
 [7] BY: RICHARD L. GABRIEL, ESQ.
 [8]
 [9] VANDENBERG & FELIU, LLP
 [10] Attorneys for Defendant
 [11] 110 East 42nd Street
 [12] New York, New York 10017
 [13] BY: RAY BECKERMAN, ESQ.
 [14]
 [15] ALSO PRESENT: ZI MEI
 [16]

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

Jacobson

- [1] A: I guess I'm not clear what you mean
- [2] by that.
- [3] Q: Well, it's true, is it not, that
- [4] there can be more than one computer operating under
- [5] a single IP address?
- [6] MR. GABRIEL: Object to the form.
- [7] A: As I talked about it in the report
- [8] with public IP addresses, in order for the internet
- [9] to function there can only be — every public IP
- [10] address has to be globally unique within that window
- [11] of time.
- [12] Q: But there can be more than one
- [13] computer operating behind that IP address?
- [14] MR. GABRIEL: Same objection.
- [15] A: Every — I don't understand what you
- [16] are asking. Every device connecting to the public
- [17] internet has to have a global unique address.
- [18] Q: And a device doesn't have to be a
- [19] computer, does it?
- [20] A: That's correct.
- [21] Q: It could be a router, correct?
- [22] A: Yes.
- [23] Q: It could be a wired router?
- [24] A: Yes.

Jacobson

- [1] Q: It could be a wireless router?
- [2] A: Yes.
- [3] Q: And if there is a firewall, under
- [4] most circumstances no one would know the various
- [5] computers or devices behind the router, would they?
- [6] MR. GABRIEL: Object to form.
- [7] A: It depends on the type of router.
- [8] Q: Is it possible for more than one
- [9] device to be operating behind a single IP address?
- [10] A: Yes.
- [11] Q: Now, when we get to the devices, some
- [12] of the devices are computers. Is that not correct?
- [13] A: Yes.
- [14] Q: And is it possible for a computer to
- [15] have more than one user?
- [16] A: Yes.
- [17] Q: So, in other words, when a person is
- [18] engaged in peer-to-peer file sharing, it's not the
- [19] person that could be identified by an IP address, is
- [20] it?
- [21] MR. GABRIEL: Object to the form.
- [22] Lack of foundation.
- [23] Q: Isn't it the MAC address that is
- [24] identified?


Jacobson

- [1] MR. GABRIEL: Object to form.
- [2] A: I don't understand the follow-on
- [3] statement.
- [4] Q: Do you know what a MAC address is?
- [5] A: Yes.
- [6] Q: Can a router have a MAC address?
- [7] A: Yes.
- [8] Q: If I had ten different companies
- [9] operating behind a router and I had a properly
- [10] functioning firewall or firewalls, would anybody in
- [11] the wide network actually know what was behind the
- [12] router with the properly functioning firewall?
- [13] MR. GABRIEL: Object to the form.
- [14] Lack of foundation.
- [15] A: It's possible to determine who is
- [16] behind that, so to say that there is no way to know
- [17] is not true.
- [18] Q: How could you find out?
- [19] A: Potentially based on the activity
- [20] coming out. There is lots of ways that attackers
- [21] could use to determine what is behind a firewall.
- [22] Q: But one method to identify that
- [23] person would not be the IP address. The IP address
- [24] alone would not tell you that, would it?
- [25]

Jacobson

- [1] A: Would not tell you what?
- [2] Q: What individual was sharing files.
- [3] A: By "individual" do you mean
- [4] flesh-and-blood person?
- [5] Q: Yes.
- [6] A: The IP address tells you the identity
- [7] of the computer.
- [8] Q: It actually doesn't tell you the
- [9] identity of the computer. It tells you the identity
- [10] of the device.
- [11] A: That's correct.
- [12] Q: And it doesn't actually tell you the
- [13] identity of the device. It tells you a MAC address?
- [14] MR. GABRIEL: Objection to form.
- [15] A: IP address does not tell you a MAC
- [16] address.
- [17] Q: How could it tell you the identity of
- [18] the device? How would you identify a device other
- [19] than by a MAC address?
- [20] A: Every device in the public internet
- [21] is configured with an IP address.
- [22] Q: Which would link to what?
- [23] A: Which links to the device.
- [24] Q: And how do you identify the device on
- [25]

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
 [25]

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
 [25]

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.
 [25]

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
 [25]

[1] **Jacobson**

[2] an expert witness in this case?

[3] **A:** Yes.

[4] **Q:** Did you not have screens? When you

[5] used EnCase, didn't you look at a computer screen?

[6] **A:** Yes.

[7] **Q:** Did you save what was on that screen?

[8] **A:** No.

[9] **Q:** Did you generate reports?

[10] **A:** No.

[11] **Q:** Now I'm not asking you if you printed

[12] out reports or saved reports. I'm asking you if you

[13] generated reports.

[14] **A:** No.

[15] **Q:** So you did not document your findings

[16] in EnCase at all, did you?

[17] **A:** No.

[18] **Q:** Did Mr. Gabriel tell you to do that?

[19] **A:** No.

[20] **Q:** So did you feel that you could just

[21] review it on EnCase and then come and testify from

[22] memory at a trial? Is that what you intended to do?

[23] **A:** I examined the hard drive, found no

[24] evidence of file sharing software or audio files,

[25] and so there was nothing to document.

[1] **Jacobson**

[2] **A:** Yes.

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

[4] **A:** "Document findings."

[5] **Q:** Did you know that you were going to

[6] be giving sworn testimony in this case, including

[7] your December declaration and possible deposition

[8] and trial testimony?

[9] **A:** Would you reread the question back.

[10] (Record read.)

[11] **A:** At the time I examined the hard drive

[12] there were no scheduled depositions.

[13] **Q:** So you thought it was okay not to

[14] document your findings?

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

[16] **A:** I did document my findings, as shown

[17] in Exhibit 17.

[18] **Q:** When you say there were three user

[19] names of interest, what did you mean by that?

[20] **A:** In a Windows machine there are

[21] default users that are created, like Administrator

[22] and so on, that come with the installation of

[23] Windows. So these were users that were added above

[24] and beyond the default installation.

[25] **Q:** So it doesn't actually tell you who

[1] **Jacobson**

[2] **Q:** So you didn't feel was any need to

[3] create documentation of what your study had shown?

[4] **A:** There was no files to document.

[5] **Q:** Is that because it did not

[6] corroborate Plaintiff's case in any way?

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

[8] Argumentative.

[9] **A:** The testimony says I found no KaZaA

[10] or MP3 files and, therefore, there was nothing to —

[11] there were no screen shots to capture.

[12] **Q:** Do you have any idea why the case

[13] hasn't been dropped by now?

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

[15] Lack of foundation.

[16] **A:** I don't get involved with — so no.

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

[18] mark as Exhibit 21 a one-page document

[19] with a flowchart.

[20] (Defendant's Exhibit 21, one-page

[21] document with a flowchart, marked for

[22] identification, as of this date.)

[23] **Q:** Do you see item number 4?

[24] **A:** You mean bullet number 4?

[25] **Q:** Yes.

[1] **Jacobson**

[2] used the computer, does it? It just tells you the

[3] user names?

[4] **A:** Yes, these are user names for that

[5] computer.

[6] **Q:** And if someone was logged on under a

[7] particular computer name and the computer was kept

[8] on and another individual sat down and started using

[9] the computer, you wouldn't know who that was, would

[10] you, from the user name?

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

[12] **Q:** Are you familiar with the declaration

[13] that was given by the expert witnesses in the

[14] Netherlands in the foundation case, the witness

[15] statement of Henk Sips and Johan Pouwelse?

[16] **A:** I would have to see the document.

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

[18] mark this as Exhibit 22. It is a

[19] three-page document entitled "Witness

[20] statement of Henk Sips and Johan

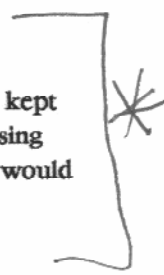
[21] Pouwelse."

[22] (Defendant's Exhibit 22, three-page

[23] document entitled "Witness Statement of Henk

[24] Sips and Johan Pouwelse," marked for

[25] identification, as of this date.)



Jacobson

- [1] Q: If you were just playing Minesweeper
[2] or Solitaire, would there be any user-generated
[3] files?
[4] A: No.
[5] Q: If a user used web-based e-mail such
[6] as Hotmail, Yahoo or Gmail, would any of those
[7] e-mails be stored on the hard drive?
[8] A: They don't have to be.
[9] Q: Can you tell how many people used the
[10] computer from which the hard drive came that you
[11] examined?
[12] A: I can tell how many accounts were on
[13] the hard drive, how many user accounts.
[14] Q: But you can't say how many people
[15] used it?
[16] A: Living, breathing people? No.
[17] Q: During your hard drive inspection,
[18] what files did you find in the deleted sectors of
[19] the disk?
[20] A: Very few, and none that matched the
[21] profile of KaZaA or MP3 files.
[22] MR. BECKERMAN: Let's take a short
[23] break.
[24] (Recess taken.)
[25]

Jacobson

- [1] Q: Did you examine the system registry
[2] for the computer that had the hard drive?
[3] A: I examined the registry from the hard
[4] drive.
[5] Q: Did it show that any other hard drive
[6] had ever existed in that computer?
[7] A: I didn't specifically look for that.
[8] I don't recall that there was an indication of that.
[9] Q: So you have no reason to think that
[10] the hard drive was replaced?
[11] A: Not — no.
[12] Q: And it is a fact, is it not, that the
[13] system registry would have disclosed that if it had
[14] taken place?
[15] A: If you would have rebuilt the system
[16] from scratch and copied the data files over to new
[17] hard drive, the system registry would have only
[18] shown the creation date or installation date of the
[19] operating system.
[20] Q: Isn't it a fact that the system
[21] registry contains information about each hard drive
[22] that's ever been connected to the computer,
[23] including the manufacturer, the size of the hard
[24] drive and in some instances the serial number?
[25]

Jacobson

- [1] A: Of all hard drives connected while
[2] that system registry was on that hard drive, if you
[3] pull out the hard drive that had that system
[4] registry and plugged a brand new one into the
[5] machine and rebuilt the operating system, there
[6] would be no evidence of that original hard drive you
[7] pulled out.
[8] Q: Was there any evidence that that had
[9] taken place here on or after August 7, 2004?
[10] A: No.
[11] Q: Does every internet packet contain a
[12] MAC address?
[13] A: No.
[14] Q: Does a MAC address tell you if a
[15] device is wired or wireless?
[16] A: If you can see the MAC address of the
[17] transmitting device you could see whether that
[18] device was wired or wireless.
[19] Q: Now, if it was a computer going
[20] through a wireless router, would you see the MAC
[21] address of the computer?
[22] A: Where am I looking for the MAC
[23] address?
[24] Q: Where you say it exists.
[25]

Jacobson

- [1] A: MAC address exists between any two
[2] nodes — some type of physical address exists
[3] between every pair of communicating nodes on the
[4] internet.
[5] Q: How would you see the MAC address of
[6] a transmitting device?
[7] A: I'd have to have a monitoring device
[8] on the media — median that the transmitting device
[9] was using.
[10] Q: And did you have such a monitoring
[11] device?
[12] A: No.
[13] Q: Does an IP address tell you if the
[14] device is wired or wireless?
[15] A: No.
[16] MR. BECKERMAN: I have no further
[17] questions.
[18] MR. GABRIEL: I think I just have
[19] three clarification questions.
[20] MR. BECKERMAN: Then I might have
[21] some clarifying questions of my own then.
[22] MR. GABRIEL: I understand.
[23] EXAMINATION BY
[24] MR. GABRIEL:
[25]