Exhibit L

1   IN THE UNITED STATES DISTRICT COURT

2   FOR THE DISTRICT OF DELAWARE

3

4   PERSONALIZED USER MODEL, LLP,   )
          Plaintiff,   )

5   )

          v.   ) 09-525-LPS

6   )

    GOOGLE INC.,   )

7   Defendant.   )
    _____   )

8   GOOGLE INC.,   )
        Counterclaimant,   )

9   )

          v.   )

10   )

    PERSONALIZED USER MODEL, LLP   )

11   and YOCHAI KONIG,   )
          Counter Defendants.   )

12

13   DEPOSITION OF MUSTAFA KEMAL SONMEZ

14   Taken on behalf of Defendant and Counterclaimant

15   * * *

16

17   BE IT REMEMBERED THAT the deposition of

18   MUSTAFA KEMAL SONMEZ was taken before Rosemary

19   Tanzer, a Registered Professional Reporter and a

20   Certified Shorthand Reporter for Oregon and

21   Washington, on Monday, August 15, 2011, commencing

22   at the hour of 9:24 a.m., at LNS COURT REPORTING

23   AND CAPTIONING, 1123 S.W. Yamhill Street, Portland,

24   Oregon.

25   Job No. CS344933

1   MR. FRIEDMAN: No, no, no, no, no,

2   no. Over the next few weeks.

3   THE WITNESS: Okay.

4   Q   BY MS. ROBERTS: So then the -- the speaker

5   verification project, did it use models or modeling

6   techniques?

7   A   Everything uses models and modeling

8   techniques. It's not a distinction about that

9   particular project. But yeah, like anything that

10   uses computers, I suppose you need to build a model

11   for, so yeah.

12   Q   Now --

13   A   Just a general statement, I don't know what --

14   it wouldn't really say much about the particular

15   problem or task.

16   Q   Now, for the particular task of speaker

17   verification, would there have been -- I guess,

18   were the models connected to particular speakers or

19   to particular sounds?

20   A   Well, there are different ways of doing that,

21   but, yes. Some actually -- some approaches would

22   develop a model per speaker. And then -- but there

23   are other approaches where you would sort of

24   transform the features into a space and

25   discriminate over there, so that wouldn't

1 necessarily be separate models for speakers. But

2 yeah, there are algorithms that do both.

3 Q   In terms of the speaker verification project

4 at SRI, was there any particular approach you were

5 using or were you using --

6 A   Well, we use many approaches. And our system

7 actually, essentially, was an amalgam of, like,

8 maybe six or seven different systems. Like, for

9 example, Yochai's front end would be one of those

10 systems we would combine to get better accuracy.

11 And yes, some of those systems did have a model per

12 speaker.

13 Q   Are you familiar with the term "neuro

14 networks"?

15 A   Yes.

16 Q   Were neuro networks used in this speaker

17 verification project?

18 A   They were. Right. Actually, Yochai's

19 technique involves estimating a neuro network

20 and -- but, also, that's, again, a very general

21 thing because neural networks also kind of have

22 come to refer to things as general as machine

23 learning or statistics. That's a very broad area,

24 I would say.

25 Q   Are you familiar with Bayesian learning

1   2000, there was a meeting recognition project that

2   Mr. Stolcke worked on?

3   A   Yes.

4   Q   And when you say after 2000, do you recall

5   roughly when that would have been?

6   A   I can guess. I want to say maybe 2003 or

7   2004, although I'm not positive.

8   Q   In the 1996 to 1999 time frame, did SRI do any

9   work in machine learning outside the context of

10 speech recognition or speaker verification?

11 A   I guess -- let me see. My work on

12 bioinformatics could be an exception, but like

13 99 percent was really speech and speaker. Anything

14 that the STAR Lab did related to that.

15 Q   So let me clarify. Not limited to the STAR

16 Lab but SRI more broadly, do you know whether it

17 did any work in machine learning?

18 A   Oh, yeah. Machine learning is a very general

19 framework. So anybody who is working on -- with

20 computers at SRI would be doing some sort of

21 machine learning.

22 Q   Did SRI do any work in personalization?

23 A   I don't know what that means, personalization.

24 Q   Did it do any work in providing personalized

25 computer services to computer users?

1   A   That's certainly not within STAR Lab. There

2   was nothing like that. In terms of general SRI, I

3   don't know.

4   Q   Have you ever heard of the CALO project?

5   A   Yes, I have.

6   Q   What is that?

7   A   CALO was essentially -- let's see. I know the

8   person who led that project, Adam Cheyer,

9   C-H-E-Y-E-R. So CALO is the project that -- so

10   what I know is it's a very large project, first of

11   all. SRI was like an integrator of many, many sort

12   of -- they essentially -- CALO must be DARPA, I

13   think. DARPA funded the whole field, pretty much,

14   like almost every single researcher in the field.

15   And they picked SRI as, like, an integrator of

16   many, many different technologies. Speech was one

17   of those, but there was all kinds of other

18   technologies, essentially, like image, documents,

19   everything, I think, all under one roof.

20   So SRI's task was to integrate all of

21   those technologies into a single system in an age

22   of framework which Adam Cheyer had developed, which

23   is, essentially, you have these independent agents

24   that each working on -- one working on speech, one

25   goes to, who knows, maybe e-mails, and one goes

1   Q   BY MS. ROBERTS: In your time at SRI, did it do

2   any work in Internet search?

3   MR. FRIEDMAN: Objection as to form.

4   A   I don't know anybody who did Internet search

5   at SRI.

6   Q   BY MS. ROBERTS: At SRI.

7   A   I mean, I can't be sure about the whole SRI,

8   but in the STAR lab certainly that was not a topic

9   of research. And among the projects I know that's

10 like the AI center, which was a close related

11 artificial intelligent center, I don't think

12 anybody was doing research over there either. But

13 I can only be sure about the STAR Lab.

14 Q   In terms of other labs or divisions, you just

15 wouldn't know for sure one way or another?

16 A   I can't be sure. There is not a research

17 project that I know of, but I can't say there was

18 none, other than the speech for the STAR Lab.

19 Q   Okay. Now, you mentioned the artificial

20 intelligence lab; is that correct?

21 A   Right.

22 Q   Is that a lab that you worked with in

23 connection with your work at the STAR Lab?

24   MR. FRIEDMAN: In what time frame?

25 Q   BY MS. ROBERTS: We'll start with the entire time

1   frame.

2   A   Right. So my involvement with the AI center

3   is, again, relates to my work in computational

4   biology. There was a very large DARPA program

5   called Bio-SPICE for which I was the proposal

6   manager. And a very central figure in that was

7   Peter Karp, who was in the AI center. He's a

8   computational biologist. I can't recall any other

9   common projects that I have with the AI lab. AI

10   lab is just like another lab, just like speech

11   technology and research lab, a separate entity

12   within the same information technology division.

13   Q   So then, for the speaker verification project,

14   you didn't interact with the AI lab?

15   A   No.

16   Q   Is it AI lab or AI center? Doesn't matter?

17   A   I don't know. We were a lab, so they must be

18   a lab too. That's my guess.

19   Q   Okay. If I call them the lab, you'll

20   understand who I'm referring to?

21   A   Yes.

22   Q   Okay. As of 1999, did you have any reason to

23   believe that SRI would not do any work in Internet

24   search?

25   MR. FRIEDMAN: Objection as to form.

1   A   I know for a fact that speech technology and

2   research lab was not doing any re -- because I know

3   all the projects involved, and Internet search is

4   really something very different.

5   In terms of timing, I'm not even sure.

6   Is that before Google? I don't even know if

7   Internet search was even hot then. It's such a

8   long time ago.

9   Q   BY MS. ROBERTS: Right.

10   A   But I know that STAR Lab was not doing

11   anything related to Internet search.

12   Q   Okay. And in terms -- beyond the STAR Lab,

13   the SRI as a whole, you don't know one way or

14   another?

15   A   I can't be sure. There was not a project that

16   I knew of that did Internet search, but I can't say

17   nobody else was.

18   Q   And you're not sure if you were even aware of

19   Internet search at that time; is that correct?

20   MR. FRIEDMAN: Object to the form.

21   Q   BY MS. ROBERTS: Do I understand you correctly?

22   A   I'm just wondering because it's such a long

23   time ago. For example, I honestly cannot -- cannot

24   remember when, actually, I started using Google,

25   for example. I just don't recall. But it can't be

1 that far away from that time. So I think Internet

2 search really -- I'm just guessing, it must have

3 taken -- it must have taken off much after that,

4 I'm guessing. But I don't remember ever even that

5 becoming an issue or something that got discussed

6 at that time. It was -- we focused solely on

7 speech and language.

8 Q   And did you -- in the same time period, as of

9 1999, did you have any reason to believe that SRI

10 would not do any work in providing personalized

11 computer services to users?

12   MR. FRIEDMAN: Objection as to form.

13 A   Well, I know again, speech technology and

14 research lab was not providing any sort of

15 personalized user experience or -- because that

16 wasn't really what we were -- we didn't really have

17 users, so to speak. It was really more large

18 systems that was meant for processing of large

19 corpora of data. That's C-O-R-P-O-R-A, like a

20 corpus versus corpora. So it's really to develop

21 speech algorithms. So we weren't -- so I can say

22 for sure for STAR Lab, there wasn't any of that.

23 SRI, since it's bigger, even though there is not a

24 project that I was aware of, I can't say there

25 wasn't any.

1   Q   BY MS. ROBERTS: Are you familiar with the

2   company called Utopy?

3   A   Yes.

4   Q   What is that company?

5   A   So Utopy is the company that Yochai Konig

6   founded after he left SRI.

7   Q   And what kind of work does Utopy do?

8   A   Well, again, I didn't follow this very

9   closely, but it started out as a search company, a

10   personalized search company. I know this because

11   after Yochai left, like maybe a year or maybe two

12   years after he left, I was -- I was invited to be a

13   Beta user on Utopy's first version. I logged in

14   and I took a quick look, but I didn't have much

15   time, essentially. But then, after some time

16   passed, I heard that they were now doing more

17   speech analytics.

18   (Reporter requests clarification.)

19   THE WITNESS: Analytics.

20   Q   BY MS. ROBERTS: Do you recall when you first

21   learned about Utopy?

22   A   Yes. So that was -- that must be, like, a

23   year or -- it was really when I received this Beta

24   user invitation.

25   Q   And you said that was roughly a year or two

1   after Mr. Konig left SRI?

2   A   I'm just guessing. I don't know exactly when

3   the time.

4   Q   So maybe in the 2000/2001 time frame, but not

5   later than that?

6   A   That must be -- that sounds right, although I

7   can't be sure. The thing is, it was -- it was at

8   least a year after he left, I think, because we

9   didn't hear from him. And then -- so I just

10 remember the name Utopy, which sounded like an

11 interesting name. I don't know.

12 Q   And so you were invited to be a Beta user of

13 this personalized search product?

14 A   That's right.

15 Q   And you didn't ultimately --

16 A   Well, I mean, I logged in. And I guess the

17 idea was -- it was essentially making a model of

18 the type of searches that you do such that -- and

19 then use this profile to do further searches.

20 That's what I got the idea was. And -- but like I

21 said, at that point, I think -- I don't know, maybe

22 I'm a little -- the Internet search was not like a

23 huge part of life as it is now in some ways. So I

24 wasn't doing Internet searches every single day, I

25 don't think.

1 thing came, essentially, as invitations, meant

2 nothing to the lab, because it was something

3 different, completely, from what the lab was

4 working on. So it was actually -- so they had just

5 found something else to do, that kind of thing.

6 Q   Does the name Personal Web ring a bell for

7 you?

8 A   It doesn't.

9 Q   The program that you were invited to be a Beta

10 user of, do you recall if it had a name?

11 A   It was called Utopy, I think. Like the

12 website was Utopy, but I don't recall the name of

13 the program.

14 Q   Do you know whether SRI was ever aware of that

15 program?

16 A   It was never, like, either mentioned in a

17 meeting or -- so I don't know if somebody at SRI --

18 when or how they became -- if they became aware.

19 But I myself did not become aware until I received

20 the invitation. So I don't know if SRI, as a

21 whole, when they became aware.

22 Q   Now, other than being invited to become a Beta

23 user of this program, did you have any other

24 contact with Mr. Konig after he left SRI?

25 A   Well, we may have hung out. We may have spent

1 rights to and that Yochai and others are -- I don't

2 know this third person at all, Michael Berthold.

3 And then really the question involved what Yochai

4 was working on before he left SRI and whether there

5 is any reasonable way in which somehow these

6 patents could be related to the work he was doing

7 while he was at SRI. And again -- and again, I

8 said, essentially, Internet search or anything

9 related to that was not really the lab's -- the

10 lab's focus or topic in any way.

11   And also we discussed, for example, just

12 the fact that machine learning or computer science

13 could be used in both. In my view essentially, you

14 know, I said that doesn't -- that those are such

15 general frameworks and tools that it really does

16 not, in my view, provide a link between what he was

17 doing before he left SRI and what he did with

18 Utopy, essentially. That was -- that was asked to

19 me and I gave an answer.

20 Q   Was an explanation of what's covered in these

21 patents provided to you?

22 A   No. We didn't look at the patents. These are

23 the first time I'm seeing them. We did not discuss

24 specific claims or anything like that.

25 Q   Did you discuss any specific issues in the