EXHIBIT 38

	Page 1
1	UNITED STATES DISTRICT COURT
2	EASTERN DISTRICT OF VIRGINIA
3	NORFOLK DIVISION
4	x
	I/P ENGINE, INC.,
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	Plaintiff,
6	
	v. Civil Action No. 2:11-cv-512
7	
	GOOGLE INC., et al.,
8	
	Defendants.
9	x
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11	CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER
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13	Videotaped Deposition of DONALD M. KOSAK
14	Washington, D.C.
15	Thursday, May 31, 2012
16	9:04 a.m.
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22	Reported by: Amy E. Sikora, RPR, CRR, CSR-NY, CLR
23	
24	Tob No. CC207174
25	Job No. CS397174

Page 213 Do you know what your early 1 information filtering techniques were? 2 I don't know what they're referring to 3 Α. I -- I had no part in creating this 4 5 document and this is the first that I've seen this. 6 7 Well, you are listed as a consultant Ο. in Innovate/Protect; right? 8 9 Α. I don't know. 10 Q. Take a look at the last page. 11 Α. Hmm. I see my name on the last page. 12 Well, did you adopt -- adapt any of Ο. 13 your early information filtering techniques to apply to search systems? 14 15 MS. ALBERT: Objection. No 16 foundation. Asked and answered. 17 Α. Certainly we acquired a large number of techniques that we developed in working with 18 content and working with information filtering 19 20 systems. And it's a true statement that we may 21 have used some of those techniques and applied 22 some of those techniques to the domain of search systems or information retrieval. 23 Can you think of any techniques that 24 Q. you did adapt and apply to search? 25

Page 214 In -- in general or --Α. 1 2. Ο. Yeah. At my time at Lycos. The question's 3 Α. very broad. I mean, it covers the scope of, 4 5 what, 14 years? And you're asking me if I ever did something. I don't know if I can answer that 6 7 in any other way than -- than, I don't know. Q. All right. So let's cabinet it in 8 9 time, then. 10 Α. Okay. Prior to December 1998, did you ever 11 Ο. 12 adapt any techniques from information filtering 13 to search systems that you were creating? 14 Α. We certainly used various techniques in some of those research projects that we built. 15 16 Ο. And what techniques were those? 17 Various ways of parsing documents. Α. Various ways of stemming -- stemming is a 18 technical term. Different linguistic analysis. 19 Just an entire litany of -- of techniques. 20 Any techniques related to 21 22 collaborative filtering? 23

Certainly some of the techniques had Α. something to do with collaborative filtering.

> Do you remember which of the Q.

> > Veritext Corporate Services

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techniques had to do with collaborative filtering that you used in search --

A. I don't know.

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Q. -- or adapted from the early information filtering techniques?

MS. ALBERT: Objection.

A. It's difficult for me to answer because we had a lot of different research projects, and many of them were on around ways of improving the search experience. And this was, you know, 1998 that we're talking about. I don't recall exactly which experiments had which pieces in it.

You know, these are not things that I spent hours every day on the experiments. They were things that I parceled off to people to run tests and get results back to me. So I've got possibly a few hours of experience on some of them and, you know, maybe a day of experience on another. They're not things that are going to be indelibly etched in my memory.

Q. See, now I'm confused because earlier today you said that you and Mr. Lang were the only ones that were working on the search part of the project?

- A. From management. You asked me a question about managing, and I answered that Ken and I were the only ones that oversaw that information.
 - O. So who else worked --
 - A. From the management standpoint.
- Q. Sorry.

- A. Sorry to interrupt.
- Q. Are you done?
- A. I am finished.
- Q. Who else worked on search, those search research projects that incorporated content-based- and collaborative filtering besides you and Mr. Lang?
- A. Well, there were two teams that did some of the experiments. There was the research group. I don't recall what -- what size precisely at that particular time period that research group was. There was another group called the Lycos advanced product development group that basically built prototypes, not finished products. So those two different teams would be the direct ones responsible.
- Q. Do you remember any individuals in the research group?

- Q. All right. Then tell me what happens.

 I make a demand search. I put in a query.

 There's no wire. What happens?
 - A. We use the content-based side of the filter to generate a list of results.
 - Q. Okay. After the content-based filter generates a list of results, what happens next?
 - A. In this prototype that we're discussing, at that point the results were displayed to the user; in this case, a researcher. That person may or may not click on some of the results. If they clicked on some of the results, we tabulated that as a feedback into the system. You know, this result was clicked, that result was clicked. And modified or created the pool of information that we used on the collaborative side.
 - Q. Well, how did it modify or -- how did it modify the pool of information that you used on the collaborative side, if the person already received the results of that query?
 - A. That would be for the next person coming through asking for that query. So if the next person came through and typed in a query, the same query, for example, yeah.

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Q. So the first time a user made a demand search and there wasn't a wire for it, the collaborative part of the algorithm did not kick in?

MS. ALBERT: Objection.

- A. Well, there -- there were instances that we could use the information that we might have on one of the results that came up to make a determination as to whether, you know, the ranking of that result should be moved up or down.
 - Q. So tell me how that worked.
- A. In our prototype system, when -- when you had multiple queries coming through, the queries didn't necessarily have to generate the exact same result set. But there might be a document that's in common between those result sets. The fact that somebody at this semi-related query (indicating) clicked on that document, might make that document rise up numerically its score higher. So that pattern of behavior might influence other queries.
- Q. How did you know that a query was semi-related as opposed to -- if it wasn't identical, how did you know that it was

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semi-related?

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- A. Well, in my example I'm talking about a case where the same result or the same document was shown in both queries. So I'm drawing the conclusion that there was a relationship between the queries because they returned an instance of the same document. And I'm kind of talking about a very finite example here.
- Q. And then when you used -- when you used that information where somebody had clicked on the same document that showed up in the two queries, what happened next?
- A. I don't know. I could speculate. I mean, this -- this prototype that we're talking about is a collection of different things and it's, what? 12 years ago. We could walk through hundreds of different corner cases. I know that it did something for those corner cases. I can't remember every single corner case a decade after it was done.
- Q. Well, let's not go for every single one. Let's just talk about the ones you remember.
- A. Well, okay. On those corner cases, I don't know.

- Q. What do you mean by "corner cases"?
- A. When you get down to the detail level of how some particular co-occurrence of different things by different users for different document sets for hypothetical queries, I'm not going to be able to answer questions like that 10 years after, you know, this was done.

Again, to remind you, I didn't build these prototypes. I helped collaborate with the design of these things with Ken Lang who directed the building of these prototypes. He would be much more familiar with the prototypes than myself.

- Q. So when the prototypes were built, did the builders have any leeway on how they were implementing things or were they told exactly what to do?
- A. I don't know how Ken directed them. I did not attend any of Ken's staff meetings or, you know, research group meetings. I was, you know, busy. The collaboration was between Ken and myself.
- Q. The people that were busy building the system, what kind of backgrounds did they have?
 - A. Are you talking about the people who

reported to Ken Lang?

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- Q. Yeah. Who actually did the building of the system.
- A. Well, I don't know who Ken had building the various things or carrying out his projects. Ken's staff had a bunch of people who were Ph.D.'s. He had a handful of people who were in the process of getting Ph.D.'s, and he had some really hard core software engineers.

Most of the time the research group had Ph.D. guys, and the really hard core engineers were in the prototyping advanced development group. And sometimes there was some overlap. And the reason Ken had both of them is he could mix them together how he wanted. So I don't know which combinations of staff he used.

- Q. It sounds like the people had a pretty high level of educational background, though, that were working on implementing this; is that right?
- A. I think that characterizes most of the employees then, yes.
- Q. And would you say that was representative of the skill level of people working in this field at that time in 1998?