1300

1   IN THE UNITED STATES DISTRICT COURT
             FOR THE EASTERN DISTRICT OF VIRGINIA
2   Norfolk Division

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4   - - - - - - - - - - - - - - - - - - -
)
5   I/P ENGINE, INC.,   )
)
6   Plaintiff   )
)
7   v.   )
)   CIVIL ACTION NO.
8   AOL, INC., GOOGLE INC., IAC   )   2:11cv512
       SEARCH & MEDIA, INC., GANNETT   )
9   CO., INC., and TARGET   )
       CORPORATION,   )
10   )
             Defendants.   )
11 - - - - - - - - - - - - - - - - - - -

12

              TRANSCRIPT OF TRIAL PROCEEDINGS
13

                           DAY 8
14

                   (Afternoon session)
15

                   Norfolk, Virginia
16

                   October 25, 2012
17

18

    BEFORE: THE HONORABLE RAYMOND A. JACKSON, and a jury
19   United States District Judge

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              JODY A. STEWART, Official Court Reporter

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 1   APPEARANCES:

 2           CRENSHAW, WARE & MARTIN PLC
             By:  Donald C. Schultz
 3                W. Ryan Snow
                  Counsel for the United States
 4                    AND
             DICKSTEIN SHAPIRO LLP
 5           By:  Jeffrey K. Sherwood
                  Frank C. Cimino, Jr
 6                Kenneth W. Brothers
                  Dawn Rudenko Albert
 7                Charles J. Monterio, Jr.
                  Counsel for the Plaintiff

 8


 9           KAUFMAN & CANOLES, P.C.
             By:  Stephen Edward Noona
10                    AND
             QUINN EMANUEL URQUHART & SULLIVAN LLP
11           By:  David Bilsker
                  David Perlson
12                Robert Wilson
                  Howard Yeh-hao Chen
13                David Nelson
                  Counsel for the Defendants
14

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1302

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 1                           I N D E X

 2    PLAINTIFF'S
      WITNESSES                                          PAGE
 3
        NONE
 4

 5

      DEFENDANT'S
 6    WITNESSES                                          PAGE

 7      LYLE UNGAR
            Direction Examination By Mr. Perlson         1303
 8

 9

10                        E X H I B I T S

11    PLAINTIFF'S
12    NO.            DESCRIPTION                          PAGE

13      NONE

14
      DEFENDANT'S
15    NO.            DESCRIPTION                          PAGE

16      DX-59               Document                      1320
        DX-58               Document                      1343
17

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JODY A. STEWART, Official Court Reporter

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 1                        AFTERNOON SESSION

 2              (Hearing commenced at 2:29 p.m.)

 3              THE COURT:  Matters that you might want to take up

 4    regarding cross, we will certainly do it at a later point.

 5    Let's just keep moving.

 6              (Jury in at 2:30 p.m.)

 7              THE COURT:  You may be seated.  Let the record

 8    reflect that all jurors are present after lunch.  Does

 9    counsel agree?

10              MR. CIMINO:  We do, Your Honor.

11              MR. PERLSON:  We do, Your Honor.

12              THE COURT:  All right.  You may continue,

13    Mr. Perlson.

14    BY MR. PERLSON:

15    Q.  Good afternoon, Dr. Ungar.

16    A.  Good afternoon.

17    Q.  I want to draw your attention to, um, Tab 1 of your

18    binder.

19    A.  Yeah.

20    Q.  And what's at Tab 1?

21    A.  The '420 patent.

22    Q.  That's the patent asserted here?

23    A.  One of the two, yeah.

24    Q.  Okay.  And if you could please show slide 9.  Now, at Tab

25    1 at the '420 patent, do you see a references cited on the
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Ungar, L. - Direct (cont'd)   1304

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 1   cover?
 2   A.   You mean the patent document?
 3   Q.   Yeah, at number 56 there?
 4   A.   Yes.
 5   Q.   And that lists the cited references and publications from
 6   that?
 7   A.   Yes.
 8   Q.   Okay.  And is this what was presented, the patent office
 9   had before it?
10   A.   Yeah.
11   Q.   Okay.  Do you see the Fab article among the references
12   cited?
13   A.   No, it's not there.
14   Q.   So did the patent office have the Fab article before it
15   when it issued the patents?
16        MR. CIMINO:  Objection, speculation.  Had it before
17   it is not cited in there.
18        THE COURT:  I think the best thing you can do is
19   argue here to allow him what he stated, that this reference
20   was not before the patent office based on this list.
21   BY MR. PERLSON:
22   Q.   So based on the patent itself?
23   A.   Based on the patent itself, it was not present.
24   Q.   Now, actually going back to the -- sorry, before we go to
25   another one, if you could refer to Tab 2?
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Ungar, L. - Direct (cont'd)   1305

1   A. Yes.

2   Q. And Tab 2, what is that?

3   A. That's the '664 patent.

4   Q. And do you see that there's a list of references cited

5   there and on the next page?

6   A. I do.

7   Q. And is the Fab article listed in the references cited

8   on -- in either the first or second page?

9   A. No.

10 Q. So based on the patent itself, was the Fab article before

11 the patent office?

12 A. No.

13 Q. Again, if you could turn back to the '420 patent.

14 A. Yeah.

15 Q. And look at the list of references cited. Is the

16 Webhound pieces that we went over earlier today, is that in

17 the references cited in the '420 patent?

18 A. No.

19 Q. So based on the patent itself, was the '420 patent before

20 the patent office?

21 A. Was the Webhound, no.

22 Q. Yeah, was the Webhound. Okay. Thanks. And if you could

23 go to the '664 patent. If you look at the references cited

24 on the first two pages of the '664 patent, is the Webhound

25 pieces listed there?

JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1306

1   A. No.

2   Q. So based on the patent itself, was the Webhound reference

3   before the patent office?

4   A. No.

5   Q. If you go to slide 18, please. Going back to the '420

6   patent and the list of references cited, is the Rose patent

7   listed among the references cited for the '420 patent?

8   A. It is not.

9   Q. So on the face of the '420 patent, was the Rose patent

10 before the patent office when the patent issued?

11 A. No.

12 Q. And if you could go to the '664 patent, and if you look

13 on Pages 1 to 2 in the references cited, was the Rose patent

14 that we discussed before the patent office when it issued the

15 patents, according to the patent itself?

16 A. No.

17 Q. If you could please go to claim -- I'm sorry, slide 25,

18 please. Okay. Now, we discussed some of the independent

19 claims in relation to these references but I want to talk

20 some about the dependent claims. Were the elements that are

21 in the dependent claims disclosed in the prior art?

22 A. They were.

23 Q. And was extracting features from filtered information,

24 was that in the prior art?

25 A. Yes.

Ungar, L. - Direct (cont'd)   1307

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 1   Q.  Was delivering filtered information in the prior art?
 2           THE COURT:  Mr. Perlson, the effect of putting this
 3   slide up and doing what you're doing is to lead the witness.
 4   The more appropriate question is to turn that around, as
 5   opposed to you reading the chart and asking him what is that.
 6           MR. PERLSON:  How about, I can put up the claim
 7   language next to some references and ask him about that?
 8           THE COURT:  All right.
 9   BY MR. PERLSON:
10   Q.  So now we have the slide here, claims 21 and 22 of the
11   '664 patent.  What are these -- what's in claim 21?
12   A.  Claim 21 is a dependent claim building on claim 1, and it
13   requires additionally filtering by extracting features from
14   the information, like taking words from a webpage.
15   Q.  And then what is in claim 22 of the '664 patent?
16   A.  Claim 22 is a further dependent claim that requires that
17   these extracted features comprise the made of content data
18   indicative of the relevance of the information webpage to at
19   least one of the query in the user.
20   Q.  And do you -- these dependent claims, do they exist in
21   the prior art?
22   A.  Many places.
23   Q.  Okay.  And can you give us an example?
24   A.  One example that, the same abstract from Webhound that I
25   cited before talks about using some easily extractible
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JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1308

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 1   features of documents.

 2   Q.  In your opinion does that meet the additional limitations

 3   of claim 21 and 22 of the '664 patent?

 4   A.  Yes.

 5   Q.  And then I put up the language of claim 6 of the '664

 6   patent.  What does claim 6 of the -- what additional

 7   limitations does claim 6 of the '664 patent have?

 8   A.  It is a dependent claim that further requires that when

 9   delivered -- one delivers or delivering that filtered

10   information.  You've got to actually give the webpages to the

11   first user.

12   Q.  So it's delivering --

13   A.  Delivering.  Just whatever is found, deliver it up, show

14   it to the user.

15   Q.  Search engines do that?

16   A.  Search engines do that, yes.  It is sort of how things

17   work.  Usually you show people what you found.

18   Q.  Okay.  And can you -- was that also present in the

19   Webhound reference?

20   A.  Yes.  All the systems delivered them but the Webhound

21   one, I have give a quote here that only the top ranked ones,

22   that would be the documents, be returned or delivered to the

23   user.

24   Q.  And then is there a corresponding claim 28 that's similar

25   to this additional claim 6 in the method claim?
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Ungar, L. - Direct (cont'd)   1309

1   A.   Yeah.

2   Q.   And would this be -- is this in the prior art for the

3   same reason?

4   A.   Yeah.   Again, the systems and method claims are parallel,

5   the same arguments apply.

6   Q.   Now, claim 5 of the '664 patent, what additional

7   limitation does that have?

8   A.   This required that the filtered information be not a

9   webpage but be an advertisement.

10 Q.   And did that exist in the prior art?

11 A.   Yes.

12 Q.   Can you give us an example?

13 A.   Yeah.   One example I've given here is from a patent by

14 Culliss, and it talks about finding articles, in this case

15 advertisements and movies, like relevant advertisements.

16 Q.   Okay.   Shown claims 14 and 15 of the '420 patent.   What

17 do these limitations add?   Start with claim 14.

18 A.   14 requires that the collaborative feedback data be

19 passive feedback data.   So active feedback data, I'd say, on

20 a scale of one to ten, how much do you like it, we have to

21 provide a rating.   Passive feedback data, I watch to see if

22 you click, do you buy.

23 Q.   And these types of feedback data exist in the prior art?

24 A.   Yes.   So, again, citing to the Culliss patent, it says,

25 "Once a user has selected a matched article," all right, like

Ungar, L. - Direct (cont'd)   1310

1   clicking on a webpage, and then it shows how to do it. It

2   shows you can then alter the scores and change the system.

3   Q. And we have here just claim 14 and 15 of the '420 patent,

4   but are there corresponding dependent claims for these two

5   additional limitations in the method claim?

6   A. Yes. It also has something that requires passive

7   feedback data, and then the -- of course, 15 doing the actual

8   response, the actual click or the actual selection for those

9   informon.

10   Q. And did the prior art exist in those corresponding method

11   claims --

12   A. Yeah.

13   Q. -- 27, 28?

14   A. Yes. The same prior art I just showed would apply there,

15   as well.

16   Q. So just to summarize here, was all the -- did the prior

17   art include all the elements of the asserted claims?

18   A. Yes.

19   Q. And that's for the asserted and dependent claims?

20   A. Yeah, the systems, the method, the dependent claims,

21   everything in the asserted claims was present in the prior

22   art.

23   Q. Actually, my question, I meant to say was that true for

24   the independent and dependent claims?

25   A. Yes. I answered the question I thought you had asked,

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Ungar, L. - Direct (cont'd)   1311

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 1   meant to ask.
 2   Q.  Now, the next slide we are talking about the next step of
 3   the analysis which looks at the differences between the
 4   claims and the prior art; is that something you looked at?
 5   A.  Yes.
 6   Q.  And, well, first of all, did you find any difference
 7   between the claims and the prior art?
 8   A.  No.  I think the claims were fully described in the prior
 9   art.
10   Q.  And would there be any elements that, to the extent there
11   were any elements missing, would they be obvious to add?
12   A.  I think any elements were missing, I didn't see any
13   missing, it would have been obvious to add them based on the
14   many examples of these sort of systems in the literature.
15   Q.  Let's talk a little bit about a person of ordinary skill
16   in the art.  Can you remind us again what your opinion is as
17   to who would be the person of ordinary skill in the art?
18   A.  Yes.  I said someone at that time who had a Bachelor's
19   degree in computer science or some equivalent degree and two
20   or three years experience in information retrieval.
21   Q.  And what are we supposed to assume about the person of
22   ordinary skill in the art in the obviousness analysis?
23   A.  We are supposed to assume that they knew about the prior
24   art, that they were actually aware of it.
25   Q.  And what is your opinion as to whether the person of
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Ungar, L. - Direct (cont'd)   1312

1   ordinary skill in the art would have found the asserted

2   claims in this case obvious?

3   A.   I believe they would have found the asserted claims

4   obvious.

5   Q.   Now, we discussed before whether content-based and

6   collaborative-based filtering were used, and were they used

7   in the prior art?

8   A.   Yes, widely.

9   Q.   And were search engines used in the prior art?

10 A.   Oh, yeah.

11 Q.   And in the patents-in-suit, were this content filtering

12 used in a somehow in a different way than it was in the prior

13 art?

14 A.   No.

15 Q.   And same as true for collaborative filtering, was that

16 used in a different way in the patents-in-suit, like in

17 unpredictable way in the patents-in-suit?

18 A.   No. It was just a standard way that was widely used.

19 Q.   And how about search engines, was there some new or

20 unpredicted way that search engines were used in the

21 patents-in-suit?

22 A.   No.

23 Q.   Are you aware of anything that would have prevented a

24 person from ordinary skill in the art to be able to combine

25 the elements that existed in the art?

Ungar, L. - Direct (cont'd)   1313

1   A.   No. I think it would have been easy for someone who was

2   a skilled in the art, who knew a little bit of information

3   retrieval, to put together the existing pieces as the patents

4   described.

5   Q.   Now, the -- as part of your opinions in this case, did

6   you review prosecution history?

7   A.   I did.

8   Q.   And did you -- in particular, did you review the notice

9   of allowance for the '420 patent?

10 A.   Yes.

11 Q.   Okay. And how did the PTO, when they issued their notice

12 of allowance, what did they note was the reason that they had

13 granted the patents?

14 A.   Here I need to explain one term before I do this. We've

15 been talking so far about a demand search. The user types in

16 a query, and an answer comes back. But the inventors were

17 mostly concerned with what is called a wise. The company is

18 called WiseWire, and a wire is a standing query. So, for

19 example, I want a news clipping service tell me, send me all

20 the articles that come out about my favorite football team.

21 So the query is not a one-time demand answers, like we've

22 been talking about, it is a wire, ongoing, keep sending me

23 stuff as it comes out.

24 Q.   Do any of the asserted claims in this case contain a wire

25 or acquire a wire?

Ungar, L. - Direct (cont'd)   1314

1   A.   They don't, which is you haven't heard about it yet.

2   Q.   And what did the patent office then say in its notice of

3   allowance -- what is the notice of allowance, first of all,

4   properly explain it?

5   A.   So notice -- so when one files a patent, you say, well,

6   will this patent be approved? Is it legitimate? And the

7   patent office says yes or no or brings out problems with it.

8   Q.   And in this instance as to the '420 patent, did the

9   patent office observe or make a statement as to why it was

10 granting the '420 patent?

11 A.   Yes.

12 Q.   And what did the patent office say?

13 A.   They said that the prior art fails to show storing a

14 linked list of relevant informons as a wire and providing the

15 system for returning a wire to an individual user, so the

16 patent office, say, well what is novel? There is something

17 novel. The previous art doesn't show use of a wire.

18 Q.   And does that -- would the existence of a wire apply to

19 any of the asserted claims in the case?

20 A.   No. As we said, those are all about demand searches not

21 about wires.

22 Q.   Are you aware of any statement from the patentees

23 subsequent to this notice of allowance, like commenting on it

24 or suggesting anything in it was wrong?

25 A.   Not suggesting it was wrong, no.

Ungar, L. - Direct (cont'd)   1315

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 1   Q.  Now, you had mentioned earlier secondary considerations

 2   of obviousness?

 3   A.  Yes.

 4   Q.  And are you aware of any evidence of commercial success

 5   of the patented invention?

 6   A.  I'm not.  And it's actually somewhat surprising, it

 7   wasn't used.  This patent was owned by Lycos, a leading

 8   search engine, and over the years they never actually

 9   implemented it.

10   Q.  And is commercial success one of the secondary

11   considerations that you are supposed to look at in an

12   obviousness analysis?

13   A.  It is.

14   Q.  And is your -- in your opinion is there any evidence of

15   commercial success for the patented invention?

16   A.  None.

17   Q.  Are you aware of any failure of others -- well, first of

18   all, is failures of others another secondary consideration?

19   A.  It is.

20   Q.  And are you aware of any failures of others that would be

21   relevant here to the obviousness determination?

22   A.  No.

23   Q.  How about long-felt --

24            THE COURT:  How about asking him whether the

25   secondary considerations are of nonobviousness and let him
```

JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1316

1   testify to what they are.

2   MR. PERLSON: Okay.

3   THE COURT: You are naming them for him, so you let

4   him list them, then we will hear what he has to say about it.

5   BY MR. PERLSON:

6   Q. Okay. Doctor, are you aware of any other secondary

7   considerations of nonobviousness?

8   A. Yes. Long-felt and unresolved need would be a secondary

9   consideration.

10 Q. And is there any evidence of a long-felt and unresolved

11 need as to the patents asserted in this case?

12 A. No. In fact, I described a number of other systems, and

13 there were many, many more that combined content-based and

14 collaborative filtering to resolve the weaknesses of each

15 individual one, as, for example, the Fab system did.

16 Q. Are you aware of any other secondary considerations of

17 nonobviousness?

18 A. Yes. I looked to see if there was praise or awards.

19 Q. In reference to the patents?

20 A. In reference to the patents, I'll sorry, yes.

21 Q. Are you aware of any?

22 A. No.

23 Q. So in your opinion, do the secondary considerations of

24 nonobviousness show a lack of obviousness in this case?

25 A. The secondary considerations do not show a lack of

Ungar, L. - Direct (cont'd)   1317

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 1   obviousness.  I still think it's obvious.
 2   Q.  Okay.  Now, you had mentioned earlier that Dr. Carbonell
 3   is plaintiff's rebuttal expert, do you -- are you aware that
 4   as to whether Dr. Carbonell --
 5            MR. CIMINO:  Objection, Your Honor.  This is the
 6   exact type of slide you asked counsel not to put up,
 7   Dr. Carbonell's position and then the response.
 8            THE COURT:  Well, he can ask the question.  He has
 9   it up but the jury doesn't have the slide yet.
10            MR. CIMINO:  Okay.
11            THE COURT:  You may continue with the line of
12   question.
13   BY MR. PERLSON:
14   Q.  Okay.  Are you aware of what Dr. Carbonell argues in
15   terms of why the patents are not obvious in his opinion?
16   A.  Yes.
17   Q.  And what is your understanding of that?
18   A.  Dr. Carbonell argues that the prior art did not feature a
19   tight integration between the search system and the content
20   and collaborative filter.
21   Q.  And what is -- do you agree with his analysis?
22   A.  No.
23   Q.  Why?
24   A.  Because I think it would have been obvious to one of
25   ordinary skill in the art that if you are filtering search
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JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1318

1   results, it's obvious to keep around the query and use that

2   also for filtering.

3   Q.   And why would that be the case?

4   A.   Because -- just think about it. If you ask a query of a

5   search engine, you get a result, you just have the query

6   sitting there with the result, why not use that also for

7   filtering.

8   Q.   Okay. So just in summary in obviousness, what is your

9   opinion regarding whether the asserted claims are invalid for

10 obviousness?

11 A.   I think all the asserted claims are invalid for

12 obviousness.

13 Q.   Now, we had mentioned earlier that in addition to

14 obviousness you had also offered an opinion in relation to

15 anticipation; is that correct?

16 A.   Yes.

17 Q.   And do you -- what is your opinion in terms of invalidity

18 for anticipation?

19 A.   That there are multiple prior art references that make

20 the patent claims invalid due to anticipation.

21 Q.   Okay. And when you were -- again, I think we talked a

22 little bit about the rules of the road for anticipation.

23 What is your understanding what you have to show in order to

24 demonstrate -- what we have to show in order to demonstrate

25 anticipation?

Ungar, L. - Direct (cont'd)   1319

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 1   A.   Anticipation requires that each one, each and every one
 2   of the claims be present in a single prior art reference.
 3   Q.   And what are the references in which you rely to show
 4   anticipation?
 5   A.   I present several.  We will talk about one from Culliss
 6   and one from Bowman and Ortega patents.
 7   Q.   Okay.  Well, let's go through and talk about these one by
 8   one.  First let's talk about the Bowman reference.  Now, when
 9   was the Bowman reference filed?
10   A.   Filed on March 10th of 1998.
11   Q.   And was that before the patents issued in this case were
12   filed?
13   A.   Yes.  They were filed on December 3rd of the same year.
14   So this is prior art, before the filing date.
15   Q.   Okay.  And there's -- shows Amazon.com there.  What is
16   the significance of that?
17   A.   Well, Bowman and Ortega and the other co-inventors here
18   were at Amazon.  This is an invention that was done -- was
19   made by Amazon people and used for many years, maybe still is
20   at Amazon.
21   Q.   Now, let's talk a little bit about Bowman.  And can you
22   just have -- I have shown here --
23           THE COURT:  Excuse me, counsel.  The Court hates to
24   do it, but Mr. Perlman, Cinimo, can I see you just one
25   second?
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JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1320

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 1             (Side-bar conference.)
 2             THE COURT:  Is somewhere in the Court's mind,
 3  doesn't the prior art reference have to be out there at least
 4  a year before?  I'm trying to remember.
 5             MR. CIMINO:  I wish.  I think this is something we
 6  may be able to agree on.
 7             THE COURT:  I'm thinking of something else then
 8  because I said December 3rd.  Wait a minute here now.  That
 9  is nine months.
10             MR. CIMINO:  That is so-called statutory prior art.
11             THE COURT:  Something else.
12             MR. CIMINO:  They didn't get us by much but they got
13  us by a couple of months.  Okay, Your Honor.
14             (Side-bar conference.)
15             MR. PERLSON:  Before I move on, I'd like to move
16  Bowman into evidence, it's DX-59.
17             THE COURT:  Any objection?
18             MR. CIMINO:  None, Your Honor.
19             THE COURT:  It will be admitted, DX-59.
20             MR. PERLSON:  Okay.
21             (The document was received in evidence and marked as
22  Defendant's Exhibit No. DX-59.)
23  BY MR. PERLSON:
24  Q.  And, Doctor, if you could turn the -- Tab 10.
25  A.  Yes.
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Ungar, L. - Direct (cont'd)   1321

1   Q.   Is that the Bowman reference?

2   A.   It is.

3   Q.   Okay. Now, if you could just refer to claims 28 and 29

4   of the Bowman patent.

5   A.   Yes.

6   Q.   And if you could just walk us through briefly what it is

7   that is described in Bowman.

8   A.   Yes. So -- start with 28. So this -- so Bowman

9   describes a computer system to rank items in a search result.

10   So this is Amazon. Remember someone is typing in a search

11   looking for a book and items are books. By receiving a

12   query, typing in, testifying one or more terms or words,

13   generating a query result, potential books of interest, and

14   then for each item, each book, for example, identified a

15   query result, combining the relative frequencies with which

16   user selected the item in earlier queries. That is by each

17   of the terms, the words of the query producing a ranking.

18   So that is a lot of words, but there is a search,

19   you type it in or someone types it in. The first user brings

20   back the items, like books, and then there's a system that

21   uses -- I show in Dr. Frieder's green here -- feedback based

22   on how often other users selected the same book.

23   Q.   Now, what we also have up here claim 29, what does that

24   add to 28 or disclose in addition to 28?

25   A.   28 started with a feedback system. 29 describes

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Ungar, L. - Direct (cont'd)   1322

1   combining that with a content system. And what it does is it

2   adjusts the ranking value, which is gotten from the feedback

3   system, produced for each item, each book identified in

4   query, to reflect the number of terms, the words of interest,

5   to reflect the number of terms specified by the query that

6   are matched by the item.

7   So the more words in the query that match the words

8   in the items, in the book, book title, the more the scores

9   are raised up.

10 Q. Dr. Ungar, does the Bowman reference disclose filtering?

11 A. Yes.

12 Q. I have a portion here of the Bowman reference. It's

13 column 9:58-64. What is being described there?

14 A. It talks about subsetting the items in the query result.

15 So the subset is to take some of them and dump other ones, to

16 include only those items above a threshold ranking value.

17   So it takes the score for each book, each item, and

18 if the score is above a threshold, keeps it; if not, then not

19 filtering.

20 Q. Let's try to walk through sort of an explanation of how

21 this system works. What's shown on this slide here?

22 A. So user types in the Amazon search box, a query, for

23 example, ghost stories for kids.

24 Q. And then what happens?

25 A. Then the Amazon system grabs a bunch of potential books

Ungar, L. - Direct (cont'd)   1323

1   that might be of interest and looks for -- there is actually

2   three here, but more in reality. It looks for each one to

3   see how often each one was clicked on by people who typed the

4   same query, how many clicks they got. The first one shown

5   here has, for example, 200 clicks; the second one, 150

6   clicks; the third one, 100 clicks.

7   Q. You refer to the number of clicks. What does it do then

8   with the information on the number of clicks from the search?

9   A. It forms the score. Every item returned is given a score

10   based on how many clicks it got.

11   Q. Is that reflected on this illustration?

12   A. Yes. I have shown it in red, the scores, which are the

13   same as the black numbers of clicks.

14   Q. In the -- what is happening in this next slide here?

15   A. So that part was a feedback basis to my claim 28. This

16   describes the content-based modification done in claim 29.

17   And remember the query was ghost stories for kids, and that

18   the significant terms were "ghost, stories and kids," or more

19   like a stop word, and what the Bowman patent or Ortega patent

20   says is to match how often each of the query terms, ghost,

21   stories, kids, shows up in the item. So in the first book

22   I've shown here, "Scary and Silly Campfire Stories" only one

23   term matched, only has "stories."

24   The second one, "The campfire ghost stories," two of

25   the terms matched: "Ghost and stories." And the third one,

Ungar, L. - Direct (cont'd)   1324

1   "Ghost Stories For Kids," all three of the terms matched.

2   MR. PERLSON: Your Honor, I just want to make sure,

3   is this shown, being shown to the jury?

4   THE COURT: Yes, it is.

5   MR. PERLSON: No, it is not.

6   THE WITNESS: How to follow when you can't actually

7   see the pictures of the book there.

8   THE COURT: The video shows the jury video is on.

9   THE JURY: No, sir.

10   MR. PERLSON: Has --

11   THE WITNESS: It should be a set of books.

12   THE COURT: Wait a minute. Is it on now?

13   THE JURY: It is on.

14   MR. PERLSON: I wonder how long that's been the

15   case? I guess just a few slides?

16   THE WITNESS: The first one hard to follow. Let me

17   do it again quickly.

18   MR. PERLSON: Okay. We will do it quickly.

19   THE WITNESS: Very quickly again, it is taking the

20   terms in the query, "ghost stories for kids." In the first

21   book it matches once.

22   MR. PERLSON: I'm sorry, just we will do it real

23   quick because here we have the search and then what -- they

24   heard it but just summarize what it is this one is showing.

25   THE WITNESS: This shows each of the three items,

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1   the three books were clicked on either 200, 150 or 100 times

2   in black, and that produces a score, a feedback score of 200,

3   150 or 100 in red. So the number of clicks on a book gives

4   it its initial score.

5   BY MR. PERLSON:

6   Q. Okay. Now, the next one, again, I think you talked about

7   this a little so let's just, you know, do it briefly. What

8   is being shown on this slide here?

9   A. So before we had a feedback score. This shows how Bowman

10   in claim 29 says that one can adjust based on content. And

11   the content is the "ghost, stories, kids." Those are the

12   three terms in the "ghost stories for kids." The first book

13   matches one word, "stories." Second book title matches two

14   words, e-terms, "ghost" and "stories," and the third book

15   matches all three terms, "ghost, stories and kids."

16   This then leads to an adjustment of the score.

17   Q. Okay.

18   A. Sorry.

19   Q. Mention the adjustment, is that -- let's move on to the

20   next slide. What is being shown here?

21   A. So the initial score we had was 200, 150, and 100, based

22   on the number of clicks. Then the Bowman/Amazon patent says,

23   okay, but we looked to see what the content is, how much do

24   the query terms -- how many query terms match the title.

25   The first book only matched one word in the

Ungar, L. - Direct (cont'd)   1326

1   criteria. This can be down rated score. The second one

2   matched two of the three terms, is a little up waiting, and

3   the third book, which matched all three terms, the initial

4   feedback scores raised more substantially, so it's got three

5   words matching, three terms.

6   Q. Now, let's see what happens next with this information.

7   What is being shown here?

8   A. So the Bowman patent then says, well, we've got now these

9   revised scores, got the score which was both the feedback

10 plus the content data of the number of words in the title,

11 and I've shown these three books again, the scores of 210,

12 180 and 160. It returns those books and whose above the

13 threshold, filters out the other ones.

14 Q. Okay. Now, let's talk about -- let's walk through how

15 Bowman matches up with the claims of the patent. What do we

16 see here?

17 A. Here is the -- now familiar claim 10 of the '420 patent

18 with the standard Frieder color scheme, yellow search, blue

19 for content, green for feedback system and purple for the

20 combining of the filtering.

21 Q. Now, let's go first to the preamble. Is Bowman in a

22 search engine environment?

23 A. It is. It's a computer system to rank items for search

24 result. Remember the user typed in a search looking for a

25 book.

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Ungar, L. - Direct (cont'd)   1327

```
 1    Q.   So -- and is there any dispute that this element is met?

 2    A.   No, no dispute.

 3    Q.   Okay.  Can we check the box?

 4    A.   Yeah.

 5    Q.   Okay.  The element 10(a) is that met in Bowman?

 6    A.   Yes.  Bowman also has a system for scanning or searching

 7    a network.  I put here a little quote that talks about the

 8    network connection that is part of the system.

 9    Q.   And so can you just point specifically to the language in

10    that claim 28 that you're referring to.

11    A.   Yes.  I've highlighted it here in yellow, right, the

12    computer system to rank items in search result by receiving a

13    query...and generating a query result."  All right.  That was

14    a query I showed the user typing in and the result, the

15    books, items returned.

16    Q.   And is the network aspect of the scanning network met, as

17    well?

18    A.   It is.

19    Q.   And refer to --

20    A.   Yes, it's down there.  I'm sorry.  I thought I just said

21    that if you looked at this bottom box, the specification of

22    the Bowman patent includes describing a network connection.

23    Q.   And is there any dispute as to whether this element of

24    claim 10 is met in Bowman?

25    A.   No.
```

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Ungar, L. - Direct (cont'd)   1328

1   Q.   So can we check off this element in claim 10?

2   A.   Yes.

3   Q.   Okay. Now let's discuss element 10(b), the content-based

4   filter system element. Is that met in Bowman?

5   A.   It is.

6   Q.   And how is that met in Bowman?

7   A.   Well, remember claim 28 describes feedback system. Claim

8   29 said that one should then adjust the ranking value

9   produced for each item identified in the query to reflect the

10 number of terms specified by the query that are matched by

11 the item.

12   So as I showed matching the number of terms in a

13 query, the same is true showing up in item, that's

14 content-based.

15 Q.   Now, does it, staying with 10(b), does Bowman disclose a

16 content-based filter?

17 A.   Yes.

18 Q.   And where does it disclose that?

19 A.   In the passage shown here which I actually showed before

20 we talks about subsetting the items in a query result. That

21 is subsetting, filtering, keeping only the ones above the

22 threshold.

23 Q.   Now, you understand that Dr. Carbonell, what his opinion

24 is as to whether Bowman does content-based filtering?

25 A.   His report said he does not think that Bowman filters.

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Ungar, L. - Direct (cont'd)   1329

```
 1   Q.  And why does -- what does he say as to why Bowman doesn't
 2   meet this limitation?
 3   A.  Dr. Carbonell says that Bowman looks at all the items at
 4   once but that filtering requires looking at them one by one
 5   by one to go through each one and check individually if they
 6   are above a threshold and then remove them if they're not.
 7   Q.  And does Dr. Carbonell point to any passages in Bowman
 8   to -- in support of his argument?
 9   A.  For the filtering or for the content-based?
10   Q.  Well, let's first talk about the content.
11   A.  So Dr. Bowman disputes the content side which is -- I
12   said that the content part is matching the words in the query
13   to the words in the title.  And Dr. Carbonell says that that
14   matching -- and I put up here claim 29.  I hope you can see
15   each of the blue there, right, reflect the number of terms
16   specified by the query that are matched by the item.  And
17   Dr. Carbonell says that there is a passage in Bowman saying
18   that Bowman doesn't -- actually look at the item attributes.
19   Q.  Before we go on to that second point, do you agree with
20   Dr. Carbonell's interpretation of claim 29?
21   A.  No.
22   Q.  Why do you think that his interpretation is incorrect?
23   A.  Well, the passages he cites saying that Bowman doesn't
24   match are not convincing.  I have shown one here that talks
25   about using collective and individual user behavior rather
```

Ungar, L. - Direct (cont'd)   1330

1   than attributes of the items. And it is true that the

2   main -- the first step in claim 28 does use feedback data

3   rather than using matching. So the first piece of Bowman, in

4   fact, does use something other than content.

5   But claim 29 in the description of Bowman goes on to

6   describe matching, and there are many places where Bowman

7   describes matching exactly in the sensible way that we have

8   been talking about.

9   Q. Well, let's go over an example of one of those. Showed

10   up on the slide, this is Bowman at count 1, 28, 39. Can you

11   describe what's being shown here?

12   A. Yes. This describes matching the way Bowman describes it

13   and the way I described it to you, a user to submit a query

14   to a book seller containing items that the user believes are

15   words in title. So it's a query that might be words in

16   title. A query server program processes the query to

17   identify within the domain items matching the terms of the

18   query. So it's matching items, the books, matching the terms

19   of the query, the words in the query. That is exactly what

20   matching is, as I've been saying I guess all day today.

21   Q. Is that a content analysis?

22   A. That is a content analysis, right, match words of the

23   query to the words of the title of the book.

24   Q. Now, in terms of Dr. Carbonell's view that there's not

25   filtering in Bowman, do you agree with that?

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Ungar, L. - Direct (cont'd)   1331

```
 1   A.   No.

 2   Q.   Why not?

 3   A.   That's what I started to explain before, which is my

 4   other objection, which was that Dr. Carbonell argues that

 5   filtering requires entering each item individually against

 6   the threshold rather than subsetting and just saying this

 7   group is in, that group is out, letting a group at once.

 8   Q.   And does the patent -- does Bowman support the existence

 9   of filtering?

10   A.   Yes, Bowman describes filtering.

11   Q.   And can you explain how it does that?

12   A.   So Bowman, this is the same section about subsetting,

13   describes, in fact, says that one can either pick a

14   predetermined number of items, only pick the top 10 queries,

15   which sounds like subsetting, or one can pick those, the part

16   right after the red, having the highest ranking values.  And

17   having the highest ranking values is what we have seen

18   before, picking the ones, that threshold.

19   Q.   So does Bowman meet claim (b) of the '420 patent?

20   A.   It does.

21   Q.   Now let's move on to 10(c) of the '420 patent.  This

22   relates to the feedback system, receiving collaborative

23   feedback.  Is that met in Bowman?

24   A.   It is.

25   Q.   And how is that?
```

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Ungar, L. - Direct (cont'd)   1332

1   A.   Well, I've given the claim 28 that describes combining

2   the relative frequencies with which users have selected the

3   item in earlier queries to produce a ranking value for the

4   IMs. That is the feedback based on other users receiving

5   selections. And that's the feedback system.

6   What makes it collaborative, or you talk about the

7   collaborative part, remember the similar needs and interests,

8   well, Bowman, in the specification, talks about incorporating

9   into the ranking process information about the user and

10   applying separate rating scores for users in different

11   demographic roots.

12   So Bowman says you can take young and old people,

13   and the old and female, people from the north and the south,

14   and do separate ratings for them. So we can take users with

15   similar interests and needs and do separating ratings.

16   Q.   And is there any dispute as to whether element 10(c) in

17   the '420 patent exists in Bowman?

18   A.   No.

19   Q.   So what is your opinion as to whether claim C, claim

20   10(c) of the '420 patent is met in Bowman?

21   A.   It is met.

22   Q.   Okay. So we have shown up here claim 10(d), and is claim

23   10(d) of the '420 patent met in Bowman?

24   A.   It is met.

25   Q.   And how is that?

Ungar, L. - Direct (cont'd)   1333

```
 1    A.   Well, claim(d) requires a filter system combining --

 2    pertaining feedback data with the content profile data, and

 3    then the filter, each informon, book for relevance to the

 4    query, and we've seen before the feedback data, like shown in

 5    green.  We've seen the content data shown in blue.  And I've

 6    now added in purple here, the step of adjusting the ranking

 7    value produced for each item identified in the query.

 8         So it starts with the feedback data, number of

 9    feedback, then does the content adjusting, and using the same

10    notion that Dr. Frieder claims that says that as long as you

11    pull these informations together, provide a combined score

12    and filter it, then this claim is met.

13    Q.   So do these -- the highlighting that corresponds with

14    Dr. Frieder's analysis for purposes of infringement?

15    A.   These are the highlighting that reflects what Dr. Frieder

16    argued for infringement.  I'm applying that same highlighting

17    for the question of whether it is valid, and based on the

18    principles he described, this Bowman -- this claim is met.

19    Q.   So you understand whether Dr. Carbonell, what he says

20    about whether this is met?

21    A.   He claims that it's not.

22    Q.   And for what reason?

23    A.   Again, the same argument where he says there is no

24    filtering for content-based filtering, he says there is no

25    filtering based on the combined score.
```

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Ungar, L. - Direct (cont'd)   1334

1   Q.   And so do you disagree for the same reasons?

2   A.   And I disagree for the same reasons. Bowman does say you

3   can filter by conferring to a threshold.

4   Q.   So do you have an opinion as to whether all the elements

5   of claim 10 of the '420 patent exist in Bowman?

6   A.   They do.

7   Q.   And is it your opinion that they do?

8   A.   It is my opinion that they do.

9   Q.   Okay. Well, let's move along to a couple of the

10   dependent claims here. It is shown dependent claims 14 and

11   15 of the '420 patent. Is dependent claim 14 of the '420

12   patent met in Bowman?

13   A.   Yes. Claim 14 was the one that required an addition that

14   the feedback data be passive rather than active. And Bowman

15   talks about the relative frequencies with which users

16   selected the item. So that's a passive feedback. User is

17   selecting items.

18   Q.   And how about claim 15, is that met in Bowman?

19   A.   Yes. Passively by monitoring the actual response, again,

20   Bowman says monitor the response. See what user has

21   selected.

22   Q.   So in your opinion are claims 14 and 15 of the '420

23   patent met in Bowman?

24   A.   Yes.

25   Q.   Now, this next slide here is the last step. What is it

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Ungar, L. - Direct (cont'd)   1335

1   that is being shown here?

2   A.   On the left are the system claims, the ones we just

3   talked about, 10, 14 and 15.   On the right are the

4   corresponding method claims, 25, 27, 28.   The method claims

5   have the same elements, the same requirements as the system

6   claims.

7   Q.   Okay.   And to save some time, do you have an opinion as

8   to whether claim 25 exists in Bowman?

9   A.   Claims 25, 27 and 28 exist in Bowman for the exact same

10 argument I just gave as to why the corresponding 10, 14 and

11 15 exist.

12 Q.   So your arguments -- what you pointed to for claim 10,

13 14, 15 also applies to 25, 27 and 28?

14 A.   Yes.

15 Q.   So let's move on to the '664 patent now.   What's shown

16 here on this slide?

17 A.   Shown here is, again, Dr. Frieder's coloring of the '664

18 claim showing the searching, content, collaborative and

19 combining for filtering.

20 Q.   Okay.   Well, let's march through the '664 patent.   First,

21 in Bowman is the -- is Bowman in a search environment?

22 A.   Yes.

23 Q.   And how do we know that?

24 A.   Looking again at claim 28, computer system to rank items

25 in a search result by receiving a query and generating a

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Ungar, L. - Direct (cont'd)   1336

1   query result.

2   Q.   And is there any dispute as to whether Bowman is in a

3   search environment?

4   A.   No.

5   Q.   So we can check that box?

6   A.   Yeah.

7   Q.   How about claim 1(a) of the '664 patent, does that exist

8   in Bowman?

9   A.   Yes.   Bowman also does searching for information, and as

10   I just showed, it receives a query, it generates a query

11   result.

12   Q.   And is that similar for the reason the scanning element

13   was met in the '420 patent?

14   A.   Yes.   Do you remember searching, scanning, very similar.

15   Q.   Okay.   So I can check that box?

16   A.   Yes.

17   Q.   Okay.   Claim 1(b) of the '664 patent, is that met in

18   Bowman?

19   A.   Yes.   That requires a feedback system for receiving

20   information found to be relevant to the query of the users.

21   Q.   And does that exist in Bowman?

22   A.   And I don't think I'll take the time to read it but the

23   exact same passages we showed before shows that that feedback

24   system exists.

25   Q.   And is there any dispute as to whether claim 1(b) of the

Ungar, L. - Direct (cont'd)   1337

1   '664 patent is met by Bowman?

2   A.   No.

3   Q.   So we can put a check on that one, too?

4   A.   Yes.

5   Q.   All right. Now let's move on to element 1(c) of the '664

6   patent. Does that exist in Bowman?

7   A.   Yes.

8   Q.   How?

9   A.   So 1(c) requires this content-based filtering system for

10 combining information from the feedback system with

11 information from the scanning system, filtering the combined

12 information for relevance to at least one of the query of the

13 user, and I've shown again claims 28 and 29 that show the

14 yellow giving the information from the scanning system, the

15 blue giving the content-based, the green giving the feedback,

16 and the purple showing adjusting of the ranking value.

17   So using Dr. Frieder's criteria for what is

18 required, it's fully met.

19 Q.   And now let's go to the next slide here. We had talked

20 in relation to the filtering the combined information before.

21 How does Dr. Frieder assert that the filtering the combined

22 information in element 1(c) is met in the accused products?

23 A.   Well, remember the '664 that you grabbed information,

24 like webpages or information extracted from the content from

25 the feedback system, combined them together and filter them,

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Ungar, L. - Direct (cont'd)   1338

1   I think that is how it works. But Dr. Frieder says that it

2   uses pCTR, predicted click-through rate score. Instead of

3   filter the pCTR, it filters on the basis of it, it uses it.

4   So we have some disagreement there.

5   Q. But using his interpretation and using the analysis that

6   Dr. Frieder applies to the accused products, is this element

7   met in Bowman?

8   A. Yes. Using Dr. Frieder's argument instead of the pCTR in

9   this case as a combined score, remember we adjusted the

10 feedback score is in the content to get a combined number for

11 each book, and then Bowman says, okay, we can filter based on

12 that combined score.

13 Q. Now, does Dr. Carbonell, does he express any opinion as

14 to whether this element is met?

15 A. He again argues that there is no content-based filtering.

16 Q. Okay. And is that the same argument that we just talked

17 about a little while ago?

18 A. We just talked about it. Probably don't need to repeat

19 it, my same argument still applies again.

20 Q. And you still disagree?

21 A. I still disagree.

22 Q. Okay. So can we check off the last box in Bowman?

23 A. We can check off all boxes.

24 Q. And what is your opinion as to whether claim 1 of the

25 '664 patent is met by the Bowman reference?

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Ungar, L. - Direct (cont'd)   1339

```
 1   A.  So claim 1 is now anticipated, met all the elements are

 2   met.

 3   Q.  Now, let's go through and talk a little bit about some of

 4   these dependent claims here.  So here we've shown claim 5 of

 5   the '664 patent.  Is that met in Bowman?

 6   A.  Claim 5 requires that the filtered information be an

 7   advertisement, and Bowman, which is an Amazon product for

 8   finding books, the Bowman patent describes something where

 9   the facility, that is their word for the system, uses

10   purchase of an item as a selection action, and it looks at

11   request of purchase items in shopping basket.

12        So Amazon, if you are buying a book, it put the book

13   in a shopping basket.  So Amazon is, in fact -- and the

14   patent from the Amazon, the Bowman or Amazon patent is

15   about -- talks about using advertisements.

16   Q.  And how about claim 6 of the '664 patent, which refers to

17   this information delivery system for delivering the filtered

18   information to the first user, is that met in Bowman?

19   A.  Yes.  This is the part that says that once you found the

20   information, like the webpage or book, you need to show it to

21   the user, and, in fact, Bowman describes the facility or the

22   system displays the items that are found, shows information

23   to the user.

24   Q.  So is this -- is claim 6 of the '664 patent met by

25   Bowman?
```

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Ungar, L. - Direct (cont'd)   1340

1   A.   It is.

2   Q.   Now let's talk about claims 21 and 22 of the '664 patent.

3   First claim 21, does that exist in Bowman?

4   A.   So claim 21 requires extracting features from

5   information, all right, like grabbing words from the webpage

6   or in this case from the book; and claim 29, which we just

7   looked at, talks about adjusting the ranking value to reflect

8   the number of terms specified by the query that are matched

9   by the item.

10   So if you're seeing how many terms, how many of the

11   key terms likes "ghost, stories, kids" show up in the book

12   title, that is extracting the features, it is going to pull

13   out the words. Those words are the features.

14   Q.   Okay. How about claim 22, is that met in Bowman?

15   A.   Yes. Claim 22 further says that these features you pull

16   out must comprise content data indicative of the relevance.

17   It's got to show that these features indicate the relevance

18   of the query to the item, but that's precisely what Bowman is

19   doing. It is seeing how many words, key terms in the query

20   match items in the words in the book. That's indicating

21   relevance.

22   Q.   And so in your opinion does Bowman anticipate claims 21

23   and 22 of the '664?

24   A.   It does.

25   Q.   Here we have another one of these comparison slides.

Ungar, L. - Direct (cont'd)   1341

```
 1   What is being shown here?
 2   A.   Here again on the left is the search system, the ones
 3   we've already seen.  On the right are the corresponding
 4   method claims with the same elements but for a method rather
 5   than for a system.
 6   Q.   And do you have an opinion as to whether claim 26 of the
 7   Bowman reference anticipates or is anticipated -- let me
 8   start over again.  Do you have an opinion as to whether
 9   Bowman anticipates claim 26 of the '664 patent?
10   A.   Yes.
11   Q.   And what is your opinion?
12   A.   Claim 26 anticipates for the exact same argument that the
13   corresponding claim 1 I just talked about in this.
14   Q.   And there is a reference in here to claim 6 of the '664
15   patent?
16   A.   Yes.
17   Q.   And does it have the corresponding method claim?
18   A.   28.
19   Q.   And what is your opinion as to whether claim 28 of the
20   '664 patent is anticipated by Bowman?
21   A.   Again, the corresponding method claim anticipates for
22   exactly the same reason that the -- this one talks about
23   anticipates.
24   Q.   Okay.  Now, one more dependent claim for Bowman.  This is
25   claim 38 of the '664 patent.  Do you have an opinion as to
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Ungar, L. - Direct (cont'd)   1342

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 1   whether claim 38 of the '664 patent is met by Bowman?
 2   A.  Yes.
 3   Q.  And what is your opinion?
 4   A.  It is met.
 5   Q.  And how is that?
 6   A.  Well, claim 38 requires scanning a network.  I have
 7   already walked you through this, that claim 28 does talk
 8   about a search result, a query, query results, and Bowman
 9   also talks about a network, describes how in network.
10   Q.  So in your opinion is claim 38 of Bowman met by the -- in
11   your opinion is claim 38 of the '664 patent met by Bowman?
12   A.  Yes.
13   Q.  Okay.  All right.  Well before we move on to the next
14   reference, there's only one more, can you just give us a
15   summary as to how the Bowman reference meets the asserted
16   claims using Dr. Frieder's colors?
17   A.  Yes.  So I've shown you that Dr. Frieder says to infringe
18   one has to have yellow, a search or scanning step, one has to
19   have blue, a content-based step, one would have to have
20   green, a collaborative feedback step, and you have to have
21   purple assess them for combining those.  And then for
22   filtering I just walked you through how all of those elements
23   are described in Bowman.
24   Q.  Well, let's move on to the next reference.  This is the
25   Culliss reference.  I think if you could turn to Tab 11 in
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Ungar, L. - Direct (cont'd)   1343

1   your binder.

2   A.   Yeah.

3   Q.   You there?

4   A.   Yes.

5   Q.   Can you recognize the patent at Tab 11?

6   A.   Yes.   That is the Culliss patent.

7   Q.   Okay.   And what is the date of filing of the Culliss

8   patent?

9   A.   August 1st, 1997.

10   MR. PERLSON: Your Honor, I'd like to move -- this

11 is DX-58 into evidence.

12   THE COURT: Any objection?

13   MR. CIMINO: No, Your Honor.

14   THE COURT: DX-58 will be admitted.

15   (The document was received in evidence and marked as

16 Defendant's Exhibit No. DX-58.)

17 BY MR. PERLSON:

18 Q.   So what we have on the slide here is a little extra from

19 the abstract.   Can you just give real quick a brief overview

20 of the Culliss patent?

21 A.   Yes.   Culliss is a patent.   It describes how to do search

22 using combined content-based and collaborative filtering and

23 the abstract starts off by describing a search activity of a

24 user is monitored, it watches their search activity.   It is

25 used to organize the articles for a future search by the same

Ungar, L. - Direct (cont'd)   1344

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 1   user, by another one.
 2          So, again, it's going to have a content-based, a
 3   collaborative based and a way of recommending articles for a
 4   search system.
 5   Q.  And let's move on, have a little overview here of
 6   Culliss.  Just walk through the system a little bit with an
 7   illustration.  What's being shown on this page?
 8   A.  So a user types in a query through a search engine, types
 9   in, for example, "Paris, museum, vacations," and the search
10   engine scans network, retrieves in this case a couple of
11   potentially relevant webpages.
12   Q.  And what happens next?
13   A.  Well, Culliss starts with a content-based analysis, exact
14   opposite.  Bowman did feedback first and then content.
15   Culliss does content first and then later feedback, a
16   content-based analysis.
17          Culliss looks at the terms, "Paris, museum,
18   vacation," counts off how often each of these terms shows up
19   in the article.  First article has 5 Parises; 3 museums, 2
20   vacations, add them up, gets a content score of ten, and the
21   second article might have 4, 2 and 3 for a content score of
22   9.
23   Q.  What would the system then do?
24   A.  Well, we stopped at this point, the one with the higher
25   score, the ten, would be shown to the user, the top ranked
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Ungar, L. - Direct (cont'd)   1345

1   one.

2   Q.   And then what would happen?

3   A.   Well, if the user then clicks on the second ranked item,

4   then Culliss says, oh, we should go back and readjust scores

5   associated with each word. We thought the user might pick

6   the first one, the higher content one, but the user picked

7   something else instead, the second highest one. And if I

8   may? The other one.

9   Q.   What happens -- what's being shown here?

10   A.   Well, you skipped the other one.

11   Q.   Oh.

12   A.   You skipped over before I could walk through. The one

13   with the crossed out numbers. I need to not skip that one.

14   We need the one before that. There. Stop.

15   Okay. So the user clicks on the second article, not

16   the first one, and therefore the key term scores the numbers

17   associated with each of the words in the second article are

18   increased. So Paris for that article was 4 is now 5. Museum

19   is 3 instead of 2. Vacation, each of those goes up, and so

20   the score for that article that was clicked on is modified

21   based on the feedback data. It is increased.

22   Q.   Go to the next one.

23   A.   Yes.

24   Q.   Okay. And what's being shown here?

25   A.   Well, now, after the feedback, the same user or different

Ungar, L. - Direct (cont'd)   1346

1   user does the same search, Paris, museum, vacations, now the

2   second article, which used to be lower based on content, is

3   now higher because the feedback data has been used to drive

4   it up.

5   Q. Okay. Well, let's go through and here once again we have

6   the claim 10 of the '420 patent. What's the highlighting

7   here?

8   A. This is the same highlighting we've seen over and over

9   with the four components and Dr. Frieder's coloring.

10 Q. Well, let's march through the claims again. Is Culliss

11 in a search engine environment?

12 A. Yes. I have shown here a quote from Culliss, "The

13 invention will accept a search query from the user, the

14 search engine then identifies in any conceivable manner,

15 identifies the articles which are associated with the matched

16 key terms." So it takes the query, identifies articles, does

17 a search.

18 Q. And is there any dispute as to whether the Culliss is in

19 a search engine environment?

20 A. No.

21 Q. So can we check this box?

22 A. Yes.

23 Q. All right. Claim 10(a) of the '420 patent, is that met

24 in Culliss?

25 A. Again, as with the search, this is the scanning a network

Ungar, L. - Direct (cont'd)   1347

1   to make a demand search, and the same passage I just

2   described talks about taking a search query and identifying

3   articles associated. It does the scanning network.

4   Q. And is there any dispute as to whether this element is

5   met?

6   A. No.

7   Q. So can I check the box?

8   A. Please.

9   Q. All right. Now, claim 10(b) of Culliss is, does that

10   exist -- I'm sorry, claim 10. I keep on doing that. Claim

11   10(b) of the '420 patent, does that exist in Culliss?

12   A. Yes.

13   Q. And how is that?

14   A. So claim 10(b) requires the content-based analysis.

15   Remember that the example I showed you and here I have a

16   quote from Culliss describing it, that the scores for an

17   article, like a webpage, can be initially set to correspond

18   with the frequency of the term occurrence, how often each of

19   these words in the query show up in the article.

20   Q. Now, does -- on the next slide, does Culliss filter as

21   required in claim 10(b)?

22   A. Yes.

23   Q. And how do we know that?

24   A. Well, Culliss actually computes a ranking which it can

25   filter on but Culliss also talks about a very particular

Ungar, L. - Direct (cont'd)   1348

1   filtering scheme in terms of filtering out X-rated material

2   that works very much like the other filtering. And he says

3   that one can learn a similar ranking score like we used

4   before, they used before, not me, and by precluding articles

5   entirely from the search results, filtering them, not showing

6   them, where the X-rated score is above a threshold.

7   Q. So would then that would prevent adult things from being

8   shown to kids, basically?

9   A. Yeah. I mean, you want to have -- people would like to

10   have a facility on their search engines that's X-rated

11   queries are not shown to people who aren't looking for them

12   or shouldn't be looking for them.

13   Q. Okay. And then now what -- does Dr. Carbonell have an

14   opinion as to whether Culliss has -- meets claim 10(b)?

15   A. Dr. Carbonell disagrees with me.

16   Q. And what is Dr. Carbonell's view?

17   A. Dr. Carbonell says that, unlike what I've described, I

18   described that there's a content-based initial piece that

19   once feedback comes, they are combined together, and the

20   combined effect is then used for filtering.

21   Carbonell claims in his report that the content

22   portion gets overwhelmed. If you get enough feedback data,

23   it forgets all of the content and becomes purely a feedback

24   system. He also claims that this filtering method of X-rated

25   items won't work.

JODY A. STEWART, Official Court Reporter

1   Q.   And do you agree with Dr. Carbonell?

2   A.   Not on either point.

3   Q.   Okay. Well, let's talk about the first point. Well,

4   first of all, does Carbonell dispute that whether a content

5   score is always -- is present?

6   A.   He agrees that a content score is used, he just claims

7   that somehow eventually it goes way.

8   Q.   And do you agree that it just goes away?

9   A.   No.

10   Q.   Why not?

11   A.   Well, a couple of reasons: First of all, you've got

12   content -- some of the content no one is going to click on.

13   That part will always have content and not have

14   collaborative. Other ones, there is initial content, the

15   feedback can adjust the score up or it could adjust the score

16   down.

17   So sometimes it will adjust it just up and down, it

18   is still there. But mostly what happens is you'll have

19   content, feedback and both of them will be present. The

20   content never fully goes away.

21   Q.   And then how about Dr. Carbonell's view that this rating

22   system won't work? Why do you disagree with that?

23   A.   It will work. It works exactly the same way that I just

24   described that everything else works in Culliss. It starts

25   with content. So Culliss says start with some terms that are

Ungar, L. - Direct (cont'd)   1350

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 1   X-rated terms -- I won't mention them -- that go along with
 2   keywords, go long with X-rated.  That is initial
 3   content-based rating.  Then watch and see what people who are
 4   searching X-rated stuff click on.  If they click on X-rated
 5   stuff, implement those terms, give them a collaborative
 6   up-rating.  Then when someone says I want a G-rated response,
 7   then filter those articles ahead.  I'm sorry.
 8           MR. PERLSON:  Can we show this?  I'm not sure it's
 9   being shown to the jury.
10           THE WITNESS:  Oh.
11   BY MR. PERLSON:
12   Q.  Can you just, you know, try to go through?
13   A.  I don't want to waste people's time.  You don't need to
14   read all this stuff, but each of these things just shows what
15   I said.  They are set by content analysis, they are altered
16   by feedback, and if the X-rated score is above the threshold,
17   if you are looking for G-rated stuff, it filters it out.  I
18   just point to these specific points in Culliss where he
19   describes that.  I'm not going to read them.  I don't want to
20   read it.  People see it.
21   Q.  Well --
22   A.  It is important to see them there.  I'm not making it up.
23   Q.  All right.  Well, and just for the record, what portions
24   of Culliss are you referring to where this rating is
25   explained?
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Ungar, L. - Direct (cont'd)   1351

1   A.   The ones which I didn't read, 14:23-26, 11:47-51 and

2   12:1-5.

3   Q.   Now, can we check claim 10(b)?

4   A.   Yes.

5   Q.   All right. So let's talk about claim 10(c) of the '420

6   patent. Is that met by Culliss?

7   A.   It is.

8   Q.   And how is it met?

9   A.   Again, taking Dr. Frieder's argument that collaborative

10 feedback is feedback from users who enter the same query,

11 which I disagree with, but in fairness I'm using his same

12 analysis here, then Culliss at column 4, Line 37-45 describes

13 this use of feedback.

14   Once a user has selected a matched article, I've

15 shown the figure, the index can be altered, such that the key

16 terms scores, like the "Paris, museum" terms for the selected

17 match article are altered. So, for example, you can add one

18 to them. Just described exactly what I just showed you,

19 initial content score, altered based on feedback.

20 Q.   And is there any dispute as to whether this element is

21 met by Culliss?

22 A.   No.

23 Q.   Okay. So we can check this box? All right. One more in

24 this claim. So let's talk about claim 10(d) of the '420

25 patent. Is that met by Culliss?

JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1352

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 1   A.   Yes.

 2   Q.   And how is it met?

 3   A.   Claim(d) is the part that does the combining of the

 4   feedback data with the content profile data, and Culliss

 5   again starts by setting the scores based on the content, and

 6   then alters those scores based on the feedback, and like

 7   Frieder's analysis, that uses the criteria, then the ad

 8   combines them.

 9   Q.   And does Dr. Carbonell, does he have a view as to whether

10   this element is met?

11   A.   He does not.

12   Q.   Well, does he -- this refers to content score.  Does he

13   have an opinion as to that?

14   A.   Well, again, as I showed before, he didn't believe the

15   content score was valid.  You probably watched that over

16   time.  I disagreed but he claimed that.  And he agrees that

17   the filtering won't work.  So, of course, he believes that

18   you can't combine content and collaborative and filtering

19   since he doesn't believe in content or filtering.

20   Q.   And do you agree with that?

21   A.   No, I think he's wrong.

22   Q.   Okay.  And so can we check the last box?

23   A.   Yes, they are all checked.

24   Q.   Okay.  And what is your opinion regarding whether claim

25   10 of the '420 patent is met by Culliss?
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JODY A. STEWART, Official Court Reporter

Ungar, L. - Direct (cont'd)   1353

1   A. Culliss fully meets, fully anticipates claim 10.

2   THE COURT: All right, ladies and gentlemen,

3   with that we are going to take a 15-minute break, come back

4   and continue.

5   (Jury out at 3:45 p.m.)

6   THE COURT: When we return, we will raise whatever

7   matter it is you want to raise about the cross-examination.

8   MR. PERLSON: Thank you, Your Honor.

9   (Recess from 3:45 p.m. to 4:12 p.m.)

10   THE COURT: All right. What is the nature of these

11   issues you wish to raise?

12   MR. PERLSON: Your Honor -- let me talk.

13   MR. CIMINO: I just think the witness should

14   probably be excluded.

15   MR. PERLSON: Well, I think he probably should be

16   excluded.

17   THE COURT: He probably what?

18   MR. CIMINO: I believe the witness should be

19   excluded for the Court to hear this.

20   THE COURT: Step in the witness room.

21   MR. PERLSON: Your Honor, a very serious issue in

22   relation to a plan course of cross-examination of Dr. Ungar

23   that plaintiff has -- we thought and now has confirmed that

24   they will go into. On October 13th of this year in one of

25   the blog posts of Vringo, the parent of the parent of

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 1   plaintiff, one of the parent investors had dug up an

 2   eight-year-old case in which -- in a case in which Dr. Ungar

 3   was not a party, he was not an expert witness, and had

 4   testified by videotape.  And Judge Posner, who is sitting by

 5   designation in District Court, had made some commentary

 6   regarding Dr. Ungar's testimony that was solely saw by video,

 7   it was no trial, wasn't there, and the plaintiffs apparently

 8   want to create a trial within a trial in which we are somehow

 9   now going to look into the Court's comments regarding

10   Dr. Ungar's testimony.

11            THE COURT:  What about his testimony?

12            MR. PERLSON:  He said, it was in relation to an

13   e-mail in which Dr. Ungar had not remembered, but Ungar

14   testifying by way of a videotape deposition, which enabled me

15   to evaluate his credibility, claimed not to remember having

16   done any research under the sponsored research agreement

17   related to the patented inventions.  And this is a little

18   background.  What happened was that in the case, it was

19   actually a lawsuit between this company Pinpoint and Amazon.

20   Pinpoint had -- Dr. Ungar had done some work for, had sued

21   Amazon, and then Amazon claimed that the work was done while

22   Dr. Ungar was employed at University of Pennsylvania, this

23   belonged to the University of Pennsylvania.  And so the issue

24   was who owned the patent.

25            And I hope Judge Posner thought that Dr. Ungar would
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Ungar, L. - Direct (cont'd)   1355

1   have benefited if Pinpoint won the case and kept ownership,

2   would, in fact, Dr. Ungar would have been entitled to -- if

3   Pinpoint had lost, Dr. Ungar actually would have gained money

4   because he -- it would have gone to University of

5   Pennsylvania, and he would have been entitled to royalties.

6   But so he was actually testifying against his

7   financial interest in the case, which Judge Posner got

8   backwards, and in doing so he said -- he said, I found

9   Ungar's testimony seemly lacking credibility, especially but

10 not only in light of Zhang's deposition testimony, and he --

11 when asked, and said Zhang's curriculum, CV describes work he

12 did for Herz and Ungar as the university sponsored.

13   And when asked why he described it so, he answered I

14 just remember I heard the term from either Fred Herz or

15 Dr. Lyle Ungar so I just used it. And then it says -- and

16 then -- then later on he says, I attach no weight to the fact

17 that Zhang was paid for his work on the patented invention by

18 Herz rather than university. It was in the interest of Herz,

19 Ungar and Zhang to create the appearance that the research

20 was not sponsored, since if it was, the inventors would be

21 entitled under the university's patent policy to only have 30

22 percent share of the profit versus a hundred percent share

23 that they would have received if it was not sponsored

24 research.

25   And this actually the opposite conclusion. And,

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Ungar, L. - Direct (cont'd)   1356

1   first of all -- so that's the factor in here. But, of

2   course, you could see how this crazy trial creates a problem.

3   THE COURT: Let me see what he has to say about it.

4   You tell me why is this admissible?

5   MR. CIMINO: This goes directly to this witness's

6   credibility, Your Honor.

7   THE COURT: You know something, I'm not going to

8   spend a whole lot of time on this now. You can go directly

9   to his credibility.

10   MR. CIMINO: Yes, Your Honor. The next sentence in

11   the opinion says, "Ungar's refusal to acknowledge that an

12   e-mail purporting to come from this e-mail address was

13   actually composed by him or with his knowledge are merely the

14   low point of this witness' unsatisfactory testimony.

15   The patent that's being discussed here is one of the

16   ones Dr. Ungar showed to the jury in his qualifications, and

17   I believe he has ownership interest in --

18   THE COURT: Well, you know, that might be the proper

19   subject of cross-examination, but what the Court is not going

20   to do, we are not going to get into Judge Posner's remarks

21   about the witness in that case. We are not going to do that.

22   We are not going to do that because I think it is collateral.

23   I can say some things about the experts in this case, you

24   know, but we are not going to do that. If something

25   naturally arises based upon something the witness says, then

1   there may -- if he opens the door to it, then we would see

2   how we would get into it. But the Court doesn't see how it's

3   a matter of logic or rules of evidence you are just going to

4   get right in, you are going to bring that in.

5   MR. CIMINO: Well, Your Honor, I think there are

6   some examples that will come out on cross where Dr. Ungar is

7   again ignoring evidence.

8   THE COURT: Well, let's put it this way. You deal

9   with that but we are not getting into Judge Posner Said or in

10   such and such case the judge said. We are not going to do

11   that. We are not going to do that. And there is nothing --

12   you looked a little astonished by the rule. The Court is

13   very familiar with the rules of evidence, and that is just

14   not something that we just get in and just comes in just like

15   that.

16   There has to be an opening or something or some

17   basis for it comes in, or he says something that opens the

18   door to it. That is the only way. And then if he opens the

19   door to it, the Court's going to control how much we are

20   going to get in because we are not going to get in to trying

21   another case and a bunch of hearsay and he said from another

22   case. We are just not going to operate that way.

23   MR. CIMINO: We are not trying to admit it into

24   evidence, Your Honor.

25   THE COURT: I know you're not trying to put it in

Ungar, L. - Direct (cont'd)   1358

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 1   evidence.  You are trying to cross-examine him on it.  I said
 2   it's inappropriate cross-examination but for him open the
 3   door to something else to provide that he gets in it.  So you
 4   can just -- that is not going to happen.
 5             MR. CIMINO:  Okay, Your Honor.
 6             THE COURT:  All right.
 7             MR. PERLSON:  And, Your Honor, just to be clear, you
 8   know --
 9             THE COURT:  Well, I am clear.
10             MR. PERLSON:  No, you're clear on that, crystal
11   clear.  I just want to -- I'm worried that there is going to
12   be some questions that did you testify in this case and
13   planting a seed somehow.
14             THE COURT:  Well, then they are not going to tilt
15   that windmill yet.  You heard what the Court said.
16             MR. PERLSON:  Okay.  Yeah.  I hope not.
17             THE COURT:  I do plan to be awake.
18             MR. PERLSON:  Okay.  And then one more thing, in --
19   I think this was in relation to the slides and when they were
20   complaining about how many slides there were.  There was some
21   reference made to the fact that these slides were prepared by
22   us, and that we are somehow being, like, you know, a puppet
23   master of the witness, and that sort of thing, and, you know,
24   I'm worried that there is going to be some sort of discussion
25   that he is going to get into communications.
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Ungar, L. - Direct (cont'd)   1359

 1   THE COURT: We are not going to spend a lot of time

 2   trying to predict, bring up the whole cross-examination. We

 3   will deal with that when we come to it, but I simple say on

 4   this. Both parties have been equally involved in the Court's

 5   perception of working with these slides they have been using.

 6   So I don't think you can point the finger at each other about

 7   that. So I'm not worried about that even.

 8   All right. What else, sir?

 9   MR. CIMINO: Well, it can wait till afterwards, Your

10   Honor. I was just going to raise the issue of confidential

11   portion of the deposition, if the Court needed to give notice

12   for tomorrow or something like that.

13   THE COURT: Well, I'll just do that on the end of

14   the day. You are right. We will deal with that at the end

15   of the day. Let's get back in here.

16   By the way, since we are still out here, how much

17   more time do you have on this witness? Five minutes?

18   MR. PERLSON: I think I got maybe 20, 30. I'm going

19   to -- 20, 30 minutes, no more than that, I don't think.

20   THE COURT: We are not going to start

21   cross-examination at 5 o'clock. You may not get to the

22   witness today because the Court -- you know, we are going to

23   stop at 5 o'clock. We wear the jury out. This is a lot of

24   intense listening here going on. So I expect you to finish

25   by 5.

Ungar, L. - Direct (cont'd)   1360

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 1              MR. PERLSON:  Oh, I will definitely finish by 5,

 2   Your Honor.

 3              THE COURT:  Okay.  Well, then, you finish 5 or 10 of

 4   5, I'm going to let them go because we are not going to start

 5   cross-examination at 10 minutes to 5.

 6              MR. PERLSON:  Thank you, Your Honor.

 7              MR. CIMINO:  That is fine, Your Honor.

 8              THE COURT:  We have some other things we need to

 9   address, leave us in here for a few minutes anyway.  First

10   bring the witness back.

11              I'm sure you would have been pleased to stay in

12   there, right?

13              THE WITNESS:  Happy to be with you all.

14              THE COURT:  Bring the jury in.

15              (Jury in at 4:21 p.m.)

16              THE COURT:  You may be seated.  Let the record

17   reflect all jurors are present in the courtroom.  Does

18   counsel agree?

19              MR. CIMINO:  Yes, Your Honor.

20              MR. PERLSON:  Yes, Your Honor.

21              THE COURT:  You may resume.

22   BY MR. PERLSON:

23   Q.  Good afternoon again, Dr. Ungar.

24   A.  Hi.

25   Q.  Can we put up the slide.  So I think we had left off with
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Ungar, L. - Direct (cont'd)   1361

1   Culliss and claim 10 of the '420 patent, and what was your

2   opinion regarding claim 10 of the '420?

3   A.   My opinion was that Culliss meets all of the elements of

4   claim 10 of the '420.

5   Q.   Okay. And, now, again let's go into some of the

6   dependent claims of the '420 patent. First, claim 14 of the

7   '420 patent, does Culliss anticipate claim 14 of the '420?

8   A.   Yes. Claim 14 was the passive feedback data, and I have

9   shown here same section I showed before, that once a user

10 selected an article, so it shows the user selects the

11 article, is passively monitoring.

12 Q.   And so is claim 14 of the '420 patent met by Culliss?

13 A.   Yes.

14 Q.   Now, on claim 15 of the '420 patent, is that met by

15 Culliss?

16 A.   Yes. That further requires monitoring the actual

17 response, noting, in this case, that the user has selected

18 the article. So it's met.

19 Q.   And what is your opinion as to whether Culliss

20 anticipates claim 14 and 15 of the '420 patent?

21   THE COURT: I think you asked and answered this and

22 you're in the process of resummarizing what you asked and

23 answered some time ago.

24   MR. PERLSON: Sorry, Your Honor.

25   THE COURT: Well, let's just ask it one time and

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1   then we move on.

2   THE WITNESS: It anticipates it, to answer your

3   question.

4   BY MR. PERLSON:

5   Q. Now, what is being shown here on this slide?

6   A. This, once again, shows parallel on the left the system

7   claims we looked at, 10, 14 and 15; and on the right, the

8   corresponding method claims, 25, 27 and 28.

9   Q. And what is your opinion regarding whether Culliss

10   anticipates claim 25 of the '420 patent?

11   A. Culliss does.

12   Q. And is that on the same basis that you had for claim 10?

13   A. Yeah.

14   Q. How about claim 27 of the '420 patent?

15   A. Again, it anticipated for the same reason as the

16   corresponding claim 14.

17   Q. Okay. And then let me ask you the question this time.

18   Claim 28 of the '420 patent, does that -- is that anticipated

19   by Culliss?

20   A. Yes.

21   Q. And what are the reasons for that?

22   A. Again, because it's equal to the corresponding claim 15.

23   Q. Okay. Let's go into the '664 patent in the Culliss

24   reference. Can you describe what's being shown here on this

25   slide?

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1   A.   This is, again, Frieder's coloring scheme exhibit for

2   claim 1 of the '664 patent.

3   Q.   Now let's first address the preamble. Is Culliss in a

4   search engine environment?

5   A.   Yes. I've shown here a quote from Culliss that Culliss

6   says, "The invention will accept a search query. The search

7   engine will then identify the articles which were associated

8   with the matched key terms," so, yes.

9   Q.   And is there any dispute as to whether this element of --

10 whether Culliss is in a search engine environment?

11 A.   No dispute.

12 Q.   We can do another check?

13 A.   Check it.

14 Q.   All right. Now, let's talk about claim 1(a) of the '664

15 patent. Is that met by Culliss?

16 A.   Yes.

17 Q.   And how is that?

18 A.   Claim 1(a) requires a scanning system for searching for

19 information, and the same passage I just read to you

20 describes precisely that.

21 Q.   And maybe you could -- is that in the last sentence

22 there? Perhaps you can just read briefly?

23 A.   Yeah. I'll read it again. Take the search query and the

24 search engine identifies any conceivable manner the articles

25 associated with the matched key terms. So it searches for

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1   them.

2   Q.   So can we check 1(a) of -- claim 1(a) of the '664 patent

3   for Culliss?

4   A.   Yes.

5   Q.   Now, claim 1(b) of the '664 patent, is that met by

6   Culliss?

7   A.   It is.

8   Q.   And how is that met?

9   A.   So claim 1(b) requires, remember feedback system for

10   receiving information found to be relevant to the query by

11   other users, and Culliss describes that passage, which I just

12   read to you, about the search engine that gets back the

13   articles that match. And then in the bottom square in green

14   it talks about once the user has selected a matched article,

15   then this index, remember it was adding feedback on top of

16   the content, this index is altered, for example, by adding

17   one. So this feedback receives information about articles

18   that are found relevant, which ones they clicked on, and uses

19   that to adjust the score.

20   Q.   And, again, what is the green and the yellow?

21   A.   Yeah. So, again, yellow as always is search, green is

22   collaborative feedback.

23   Q.   And does this relate to the -- the green relate to the

24   functionality that Dr. Frieder has pointed to in terms of

25   Google's AdWords?

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1   A.   Yes.   This is the green he said is the part that is the

2   feedback system.

3   Q.   And is there any dispute as to whether Culliss meets 1(b)

4   of the '664 patent?

5   A.   No.

6   Q.   So we can put another check?

7   A.   Yeah.

8   Q.   All right.   Now let's go to the last element in claim 1

9   of the '664 patent.   Is this met by the Culliss reference?

10 A.   It is.

11 Q.   And how is it met?

12 A.   Claim 1(c) requires the content-based filter system

13 combines the information from the feedback system with the

14 information from the scanning system and then filters that

15 combine information for relevance to query or the user or

16 both.

17   So I've shown -- the pieces I've shown before are

18 the same search part there that is described as the search

19 engine that brings back the first part.   I've shown the piece

20 in blue when he talks about the content system that sets the

21 scores corresponding to how often terms show up in the

22 article.   This is using Frieder's color scheme and his

23 interpretation for the blue.

24   I have shown the green, the feedback system that

25 takes user feedback, right.   Once a user has selected a

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1   matched article, then the index can be altered. And under

2   Frieder's interpretation of altering, you take information

3   from the content, the blue, you take feedback from the user

4   clicking, and that is then used to alter the score.

5   So that has all of the elements that Frieder has

6   been requiring when he claims that Google infringes.

7   Q. Now, focusing in on the filtering aspect, what type of

8   filtering does claim 1(c) of the '664 patent require?

9   A. It requires filtering the combined information, the part

10   from the feedback system and from the content-based system.

11   Q. And how is Dr. Frieder read that limitation?

12   A. Dr. Frieder argues that it's not filtering the

13   information, which I think it is, but he argues that

14   filtering on the basis of the information, because he

15   interprets the information as being the predicted

16   click-through rate, which, as I said, you can't filter.

17   So Dr. Frieder says, well, what this claim really

18   means is you filter on -- the words on the basis aren't

19   there, but he says it really means you filter on the basis of

20   the combined information, in his case the pCTR. In this case

21   there is a combined score, which I talked about, content

22   score.

23   Q. Let's back up a little bit.

24   A. Sorry.

25   Q. Focusing on Culliss now, what is it in Culliss that meets

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1   the filtering and combined information in the manner in which

2   Dr. Frieder has applied that limitation to AdWords?

3   A.   One quick filter on the combined scores I just said.

4   There is also a section which I also described in Culliss

5   which explicitly describes filtering, and this was the

6   X-rated story where the X-rated articles, ones that have a

7   content and collaborative content, suggesting they are

8   X-rated, are precluded from the search results, if the

9   X-rated score is above a threshold, but filters X-rated

10 articles based on this combined information.

11 Q.   Okay. And what is Dr. Carbonell's view as to the '664

12 claim 1(c)?

13 A.   Dr. Carbonell disputes my assertions. He doesn't think

14 Culliss meets the claim.

15 Q.   And why?

16 A.   Well, the same arguments we saw before. Thinks there is

17 no content, as he claims that the collaborative feedback will

18 overwhelm the content, so the content will vanish. And he

19 claims that the filtering, the X-rated filtering I just

20 described, won't work.

21 Q.   And do you agree with that?

22 A.   No.

23 Q.   So in your opinion is claim 1(c) of the '664 patent met

24 by Culliss?

25 A.   Yes.

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1   Q. So are -- what is your opinion regarding whether claim 1

2   of the '664 patent is anticipated by Culliss?

3   A. I believe it is anticipated, all of the elements are met,

4   therefore it is anticipated.

5   Q. Now, let's go into some of the dependent claims. Again,

6   we see claim 5 of the '664 patent. Is that met by Culliss?

7   A. Yes. Claim 5 requires that the filtered information be

8   in advertisement, and Culliss says that it could be -- these

9   articles he's talking about could be advertisements.

10   Q. How about claim 6 of the '664 patent, is that anticipated

11   by Culliss?

12   A. Yes. Claim 6 requires that there be information delivery

13   system, something that shows some results back to users, and

14   Culliss says the search engine will then display a squib,

15   that is a funny word for a short summary, the search engine

16   will then display a short summary of each of the matched

17   articles. So it is displaying, delivering information.

18   Q. How about claim 21 of the '664 patent, does Culliss

19   anticipate claim 21?

20   A. Yes. Claim 21 requires extracting features from the

21   information, for example, the words in the book title. And

22   Culliss describes that the scores can be set to correspond

23   with the frequency of the term occurrence in the article. So

24   to find the term occurrence in the article, you've got to

25   count how often the term shows up there, the term, that is

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1   the feature.

2   Q.   And how about claim 22, does Culliss anticipate claim 22?

3   A.   Yes.

4   Q.   And how does he do that?

5   A.   Well, these extracted features need to be indicative of

6   the relevance of the query, for example, and that is

7   precisely what Culliss does. It's finding the words in the

8   query or terms in the query, showing up in the book title,

9   that indicates the relevance of the article, the book, the

10   query.

11   Q.   Now we have another one of these comparison slides here.

12   What is your opinion regarding whether claim 26 of the '664

13   patent is anticipated by Culliss?

14   A.   It is.

15   Q.   And what is the basis of that opinion?

16   A.   Well, claim 26, again, is the method claim that

17   corresponds to claim 1 of the system claim, and because claim

18   26 has the same elements, same requirements as claim 1, all

19   my arguments carry over and it is anticipated.

20   Q.   And how about claim 28 of the '664 patent, does Culliss

21   anticipate that?

22   A.   Yes.

23   Q.   And what is the basis of your opinion?

24   A.   Well, similarly, the claim 28 is the method claim that

25   corresponds to claim 6 on the left, which is the system

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1   claim, and, again, it requires the same elements and

2   therefore the same arguments apply, it is anticipated.

3   Q.   All right.   Claim 38 of the '664 patent, is that met by

4   Culliss?

5   A.   It is.

6   Q.   And how is that met?

7   A.   So claim 38 requires the addition, the dependent claim of

8   scanning a network, and as I showed you before, this is the

9   same section you seen before, Culliss describes accepting a

10   search query -- I'm sorry.   I'm getting a little tired, it's

11   been a long day -- and the search engine then identifies any

12   conceivable manner the articles which are associated.   It

13   scans the network.   It does this searching, scanning.

14   Q.   Okay.   Can you give us a summary of how Culliss meets the

15   asserted claims?

16   A.   Yes.   So, again, we see the four colors from Frieder's

17   infringement arguments, requires search and scanning, which

18   I've just described in the yellow, requires content, remember

19   that Culliss initially sets their score to how often each

20   term in the query shows up in the book title.   That is

21   content.

22   It requires then combining that, which is done in

23   this purple, with the collaborative feedback, the information

24   about what users, other users have used to click the article,

25   and it is used to form the combined score, and then the

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 1   combined score is used for ranking and for filtering.
 2   Q.  Okay.  Well, let's just a summary of the opinions, which
 3   shows that we are at -- near the end.
 4              THE COURT:  I think he has given all these opinions
 5   before.
 6              MR. PERLSON:  Okay.  I just want to do a quick
 7   wrap-up.  Is that okay?
 8              THE COURT:  All right, Mr. Perlson.  As I said, we
 9   don't want to repeat everything all over again.
10   BY MR. PERLSON:
11   Q.  Okay.  Well, can you just summarize your opinions briefly
12   to the jury regarding what you've opined on today?
13   A.  Yes.  So I've shown in painful detail that Google doesn't
14   infringe any of the asserted claims.  They are all obvious in
15   light of the prior art.  I have described a bunch of prior
16   art.
17              There is a bunch of other art I looked at which
18   you'll be thankful I'm not going to talk about.  This is some
19   of the much larger selection.  And all of the asserted claims
20   were anticipated by both the Bowman patent and the Culliss
21   patent.
22              MR. PERLSON:  Your Honor, I pass the witness.
23              THE COURT:  Happened before 10 of, so I think we are
24   going to go for just a few minutes.  Second thought, okay,
25   ladies and gentlemen, there's a matter I need to take up with
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 1   counsel for what the Court is going to do, so the Court is

 2   going do excuse you to come back in tomorrow morning, and we

 3   will get started -- wait a minute -- tomorrow morning at

 4   10:00.  Relax, don't think about patents, see you in the

 5   morning.

 6             (Jury out at 4:39 p.m.)

 7             THE COURT:  You can step down, Doctor.  Remember,

 8   you are still under examination.

 9             THE WITNESS:  Yes.  I will not talk to anyone.

10             THE COURT:  You may be seated.

11             Now, Mr. Taylor, hold on one second.  Tell the

12   jurors hold on for one second before they go anywhere.  Just

13   have them hold for a while.  One thing I need to do was, I

14   think some of the jurors were trying to get an indication

15   just how long we were going because they need to give some

16   notice to their employers how long they are going to be

17   around here.

18             So I need to get a handle on exactly how many more

19   witnesses defendants have, how many rebuttal witnesses we are

20   talking about, so I can give them some idea of where we are

21   on concluding the case and so I can tell them something

22   generally about where we are next week on this case.

23             Yes, sir.

24             MR. NELSON:  At most three, Your Honor, after

25   Dr. Ungar.
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 1              THE COURT:  Okay.

 2              MR. NELSON:  That is not including the deposition

 3    that Your Honor still needs to recall.

 4              THE COURT:  But then you have Dr. Becker -- not

 5    Dr. Becker, Dr. Ugone?

 6              MR. NELSON:  Correct.  I'm sorry, four, because I

 7    forgot about Mr. Berger.

 8              THE COURT:  So depending on how long we go tomorrow,

 9    we may or may not be finished -- are you calling Dr. Ugone

10    tomorrow?

11              MR. NELSON:  Yes.  That is the plan.  I think we

12    should -- the witnesses would be the prior art witnesses

13    potentially and then Mr. Berger.  We will see what happens

14    with the deposition testimony.  And Dr. Ugone.

15              THE COURT:  Okay.  Thank you.

16              Okay.  Mr. Brothers.

17              MR. BROTHERS:  Yes, Your Honor.  There is still

18    pending issue as to, in fact, whether the two witnesses whose

19    patents were discussed here, whether they might be

20    five-minute witnesses each, Mr. Culliss and Mr. Ortega,

21    because that evidence is already in.

22              And then, in any event, for our rebuttal case we

23    will be calling Dr. Carbonell, and at this point I don't

24    think we anticipate calling any other witnesses on rebuttal.

25              THE COURT:  And how much time do you anticipate a
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1 direct on Dr. Carbonell being?

2   MR. BROTHERS: I believe his direct will be about

3 somewhere between an hour and 15 minutes to an hour and a

4 half.

5   THE COURT: Okay. So we may finish all the evidence

6 at least by Monday?

7   MR. BROTHERS: If the Court goes all day tomorrow, I

8 would anticipate that all of their witnesses would be on,

9 and, yes, the evidence should be completed by Monday. That

10 is my anticipation.

11   THE COURT: Okay. Well, then Mr. Taylor, I want you

12 to just let the jury know that they can give their employees

13 notice that they will be in here at a minimum of two to three

14 days next week.

15   All right. Now, that deposition that you -- I said

16 I was going to try to read, and react to, have you all come

17 together on what it is that what that deposition is you had

18 some issues about so that I can enjoy myself that evening

19 reading that deposition?

20   MR. PERLSON: It will be quite something for you,

21 Your Honor. I know that we put something together. I don't

22 know, because we've all been in here, whether we have been

23 able to sync up exactly on --

24   THE COURT: I tell you what you do. You sync up in

25 the next 10 or 15 minutes, and then you deliver that

1 deposition to the Court. The Court will be around here till

2 some time. You take what time you need, and then you just

3 make sure it gets to my chambers.

4   MR. BROTHERS: We will do that, Your Honor. I know

5 I have the version of the transcript here identifying in

6 handwriting which portions, according to my notes, the

7 defendants intended to provide to the Court or to the jury,

8 as well as our objections, and it's got a whole lot of

9 annotations on it, though. They told me they were going to

10 get a prettier copy available, but I don't know if it is

11 ready.

12   THE COURT: It is up to you all if you want to

13 deliver a pretty copy or whatever.

14   MR. PERLSON: We have a pretty copy.

15   THE COURT: Okay. I will be in here tomorrow

16 morning at least by 9:30. Oh, one other thing. Since your

17 cross-examination is starting tomorrow morning, do you

18 anticipate you are going to get into anything confidential?

19 If so, we need to give notice once again on whether we are

20 going to have the court closed, and if we are going to do it,

21 I prefer you to deal with that early on so that we can close

22 the court probably early in the morning and then open court.

23   MR. CIMINO: There wasn't that much confidential

24 material, so I think the cross will be brief. I'd prefer not

25 to do it in the beginning, but I'm happy to if it makes

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 1   things easier for the Court.

 2            THE COURT:  Do you anticipate you will need to get

 3   into any proprietary information?

 4            MR. CIMINO:  Yes, I believe there will be some

 5   questions, so maybe a half hour.

 6            THE COURT:  The problem is trying to do it on the

 7   end, is we don't know how long you would be going before we

 8   need to do it.

 9            MR. CIMINO:  I understand.

10            THE COURT:  That is why we end up, the easiest way

11   to do it is to take it out of order.

12            MR. CIMINO:  I'm happy to do it out of order.

13            THE COURT:  All right.  Out of order.  Once again,

14   we will give notice from 10 to -- how much time?

15            MR. CIMINO:  No more than half hour, probably less

16   than that.

17            THE COURT:  Okay.  10:00 to 10:30, what we will do

18   once again, okay.  And we will go from there.

19            MR. CIMINO:  Very good, Your Honor.

20            THE COURT:  All right.  The Court will wait for that

21   transcript.

22            MR. PERLSON:  We have it here, Your Honor.  We will

23   talk to the other side, work it out.

24            THE COURT:  All right.

25            (Hearing adjourned at 4:45 p.m.)
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1   CERTIFICATION

2

3   I certify that the foregoing is a correct transcript

4 from the record of proceedings in the above-entitled matter.

5

6

7   X_____/s/_____x

8   Jody A. Stewart

9   X_____October 25, 2012_____x

10   Date

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