

UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

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BMW OF NORTH AMERICA, LLC,  
Petitioner,

v.

NORTHSTAR SYSTEMS LLC,  
Patent Owner.

Patent No. 8,478,527

Filing Date: July 5, 2011

Issue Date: July 2, 2013

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Examination of CRAIG ROSENBERG, Ph.D.,  
an Expert Witness, who is located in  
Seattle, Washington on February 2, 2024  
at 11:37 Eastern Time before Dawn Matera,  
a Certified Shorthand Reporter and Notary  
Public for the State of New York.

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22 Michael Mondelli  
23

24 \* \* \*  
25

1 CRAIG ROSENBERG

2 C R A I G R O S E N B E R G, the  
3 Witness herein, having first been duly  
4 sworn by the Notary Public, was examined  
5 and testified as follows:

6 EXAMINATION BY MR. RUBINO:

7 Q. Good morning, Dr. Rosenberg.

8 A. Good morning.

9 Q. Have you ever been deposed  
10 before?

11 A. I have, yes.

12 Q. About how many times?

13 A. Approximately 50 times.

14 Q. Can you please state your whole  
15 name for the record?

16 A. Craig Stuart Rosenberg.

17 Q. And since you have been deposed  
18 before, I would like to go over some  
19 ground rules but they will probably be  
20 fairly old hat for you, okay?

21 A. That sounds good to me.

22 Q. Throughout the course of the  
23 deposition today I will be asking  
24 questions. The court reporter on video  
25 will be taking down your answers. She

1 CRAIG ROSENBERG

2 can't record hand gestures or head nods.  
3 All of your answers have to be verbal; do  
4 you understand that?

5 A. I do.

6 Q. And if I ask you a question and  
7 it's unclear, please ask me throughout  
8 the course of the day to rephrase it; is  
9 that fair?

10 A. Yes, it is.

11 Q. And otherwise if you don't ask  
12 me to rephrase or indicate that it's  
13 unclear, we will have assumed that you  
14 understood the question; is that fair?

15 A. That's also fair.

16 Q. Is there any reason why you  
17 can't provide truthful and accurate  
18 testimony today?

19 A. No.

20 Q. Dr. Rosenberg, for whom do you  
21 work in this case, who has employed you?

22 A. Well, I am working with the law  
23 firm of Finnegan for their client BMW.

24 Q. Are you engaged by BMW or by  
25 Finnegan?

1 CRAIG ROSENBERG

2 A. I believe I would need to go  
3 back and look at the engagement  
4 agreement, which I haven't revisited  
5 since I was engaged. But I believe it's  
6 Finnegan for the benefit of BMW, for  
7 their client BMW. So I believe I'm  
8 engaged by Finnegan. The agreement is  
9 with Finnegan.

10 Q. Dr. Rosenberg, about how many  
11 hours have you spent in these cases?

12 A. I would estimate between 150  
13 and 200 hours.

14 Q. What's your hourly rate?

15 A. 650 per hour.

16 Q. Is it fair to say that you've  
17 been compensated approximately \$130,000  
18 for this case so far?

19 A. Again, that's an estimate. An  
20 estimate. But I would estimate about  
21 150, perhaps as much as 200 hours times  
22 650 an hour. So, yes, I have been  
23 working on this case, I believe since  
24 March of 2023.

25 Q. And when we say this case, are

1 CRAIG ROSENBERG

2 we referring to the three IPRs, IPR  
3 numbers 202300890, 202300934 and  
4 202301017?

5 A. That is all correct.

6 Q. And it's your understanding  
7 that we're here today to provide your  
8 deposition in relation to those three  
9 petitions, correct?

10 A. Yes, that's my understanding.

11 Q. And in the context of those  
12 three proceedings, you submitted expert  
13 declarations, right?

14 A. I did.

15 Q. Now, was it one declaration or  
16 three declarations?

17 A. It was three different  
18 declarations.

19 Q. Did you draft it three times or  
20 did you draft it once and then modify it  
21 for subsequent declarations?

22 A. Well, as you know there is  
23 similarities between the three patents at  
24 issue. So there was some reuse between  
25 the -- between various passages in the

1 CRAIG ROSENBERG

2 declarations where we used just because  
3 of similarities in the claims and the  
4 claim limitations.

5 Q. Have you ever testified at  
6 trial before?

7 A. I have.

8 Q. How many times?

9 A. Eight times.

10 Q. Do you recall who those -- who  
11 you were engaged by each of those eight  
12 times?

13 A. No. I mean I haven't memorized  
14 all of them but if we looked at my CV and  
15 we go to the back there is testifying  
16 experience. I could go back down through  
17 those and point out which ones were trial  
18 testimony.

19 Q. Dr. Rosenberg, do you have any  
20 anything with you in terms of  
21 documentation?

22 A. Yes. I've got my paper copies  
23 of my declarations. I've got electronic  
24 copies of the declarations. I have some  
25 paper copies of the prior art and

1 CRAIG ROSENBERG

2 electronic copies of the prior art. I  
3 have one sheet that is excerpts from my  
4 declarations. And a couple of sheets  
5 that basically just show how various  
6 grounds are mapped to the claims for the  
7 three different patents at issue.

8 Q. Is that a document that you  
9 have submitted to the Patent Office  
10 already or is that a new document that  
11 you generated?

12 A. I believe -- this is a new  
13 document, correct?

14 MS. SPECHT: Yes, I can help  
15 clarify, Vincent. It's a new  
16 document. It's basically the tables  
17 in each of Dr. Rosenberg's  
18 declarations that say what the grounds  
19 are.

20 A. They would correspond to the  
21 table of contents that show which  
22 grounds, which prior art is used for  
23 which grounds.

24 MS. SPECHT: If you want to mark  
25 them, we are happy to pop them in

1 CRAIG ROSENBERG

2 Exhibit Share folder.

3 MR. RUBINO: I am not quite sure  
4 what they are. I would like to -- I  
5 would like to ask questions of your  
6 witness about the documents in this  
7 proceeding and not to have him, you  
8 know, bringing new documents to a  
9 deposition. That's a little kind of  
10 ridiculous, honestly.

11 MS. SPECHT: Well, Vincent,  
12 that's not ridiculous. Dr. Rosenberg  
13 is entitled to bring summary documents  
14 that he prepared himself in  
15 preparation for this deposition.  
16 You're of course welcome to ask him  
17 questions. You're welcome to mark  
18 them as exhibits. But he can have  
19 whatever he wants to rely on with him.

20 MR. RUBINO: I don't think  
21 that's right. He can't just take new  
22 testimony with him and introduce it at  
23 deposition, that's just not correct.

24 MS. SPECHT: Vincent, continue  
25 asking your questions at all. But it

1                   CRAIG ROSENBERG  
2           is not new testimony. As  
3           Dr. Rosenberg said, and I confirmed,  
4           it is the charts from the grounds  
5           presented in each of his declarations.  
6           There is no new information. So maybe  
7           proceed with your questions and then  
8           you can decide whether you object or  
9           not.

10                   MR. RUBINO: I object. Sounds  
11           like new information to me. It sounds  
12           highly inappropriate.

13                   MS. SPECHT: And we disagree  
14           with your objection.

15                   MR. RUBINO: Are you going to  
16           insist that he uses these documents  
17           throughout the course of the day  
18           today?

19                   MS. SPECHT: I am going to  
20           insist that Dr. Rosenberg use any  
21           materials that he wants to rely on  
22           that he prepared in preparation for  
23           this deposition, which is what he has  
24           with him.

25           Q.       Dr. Rosenberg, do you have any,

1 CRAIG ROSENBERG

2 any other electronic devices active that  
3 you can message people on? Are you  
4 pretty much locked down right now?

5 A. I am locked down. There is a  
6 cell phone at the end of the conference  
7 table but it's in airplane mode, and I  
8 just have this Zoom meeting up and no  
9 other messaging apps. No other  
10 communications other than you and I.

11 MR. RUBINO: So here is the  
12 deal, Kara, I am not going to mark  
13 these documents. I would like you to  
14 e-mail them to me and I can determine  
15 whether or not I want them to mark  
16 them. If I was sitting there in  
17 person I can take a look and decide  
18 whether I want to mark it. Is that  
19 fair?

20 MS. SPECHT: That's fair. We  
21 will have them sent to you right now.

22 Q. Dr. Rosenberg, you have  
23 testified at, you said in jury trials  
24 before, right?

25 A. I have, yes.

1 CRAIG ROSENBERG

2 Q. Of those eight times, how many  
3 times has the jury held in your favor?

4 A. I really, I would need to go  
5 back through, through the cases and -- I  
6 mean in some cases it's not just so cut  
7 and dry.

8 Let's see, I was working for a  
9 defendant and the plaintiff wanted a  
10 very, very large sum of money and the  
11 jury decided on a very, very small sum of  
12 money. So the attorneys I was working  
13 with and their client was incredibly  
14 happy. Does that count as in our favor  
15 or not? It's not necessarily so binary  
16 and cut and dry. And I don't know just  
17 sitting back here. I would have to go  
18 back and look through the trials and  
19 think about it.

20 As far as damages, I really  
21 haven't kept track or kept score, so to  
22 speak.

23 Q. And so, Dr. Rosenberg, back to  
24 your electronic devices. So you don't  
25 have any electronic means of

1 CRAIG ROSENBERG

2 communicating with anyone else, right?

3 A. That's correct.

4 Q. And you don't have any other  
5 means of communicating with anyone else  
6 other than the people here on the Zoom,  
7 right?

8 A. That is also correct.

9 Q. So who is sitting in the room  
10 next to you?

11 A. Kara, Sneha and Lionel, the  
12 three attorneys working for Finnegan.

13 Q. I see.

14 MR. RUBINO: So Kara, you're  
15 physically in the room with him?

16 MS. SPECHT: Correct. As we  
17 represented to you by e-mail the other  
18 day.

19 MR. RUBINO: I am assuming the  
20 person whose head I see in the  
21 reflection on the screen is, it  
22 doesn't look like Lionel, but maybe it  
23 is.

24 MS. SPECHT: That's Sneha.

25 Q. So other than those attorneys,

1 CRAIG ROSENBERG

2 there is no one else in the room with  
3 you, right?

4 A. That's correct.

5 Q. About how long did you spend  
6 preparing for your deposition?

7 A. I met with these three  
8 attorneys over the course of two days, I  
9 am estimating, 10 to 12 hours over the  
10 course of Wednesday and Thursday of this  
11 week.

12 Q. Have you ever had the Patent  
13 Office disagree with any of your expert  
14 testimony?

15 A. When you say the Patent Office,  
16 I am not sure if it was the Patent Office  
17 or if it was a District Court case. But  
18 if you're asking about a Daubert  
19 challenge or something like that, that's  
20 happened once to my knowledge. I can  
21 describe that.

22 Q. Sure, can you please describe  
23 your Daubert challenge where the Court  
24 did not agree your analysis?

25 A. Sure. The case was Aatrix

1 CRAIG ROSENBERG

2 versus Green Shades. And I was asked to  
3 do a 101 analysis.

4 A lower court had already  
5 agreed -- so it was Alice Step 1 and Step  
6 2. A lower court had already agreed that  
7 Step 1 of Alice was satisfied. The  
8 attorneys asked me to only do Step 2 of  
9 Alice. I wrote a 230-page report, of  
10 which three pages were describing how the  
11 lower court had already determined that  
12 Step 1 of Alice was satisfied and that I  
13 agreed with the lower court. And the  
14 vast majority of my report was all on  
15 Step 2 of Alice. Opposing counsel filed  
16 a Daubert challenge that I should have  
17 done Step 1 and Step 2 Alice, even though  
18 I was asked not to do Step 1. And the  
19 appellate court agreed. And my report  
20 was disallowed because of that.

21 The attorneys felt very bad  
22 that they asked me not to do Step 1,  
23 obviously. I felt bad. But anyway,  
24 through no fault of my own, that report  
25 was stricken.

1 CRAIG ROSENBERG

2 Q. How about the Patent Office  
3 specifically, do you recall any times  
4 when the Patent Office disagreed with  
5 your analysis?

6 A. No, I am not aware.

7 Q. So you're unaware of any cases  
8 in IPRs where in final written decisions  
9 the Patent Office disagreed with your  
10 analysis, right?

11 A. That's correct.

12 Q. Do you recall a case where you  
13 represented somebody named Silver State  
14 Intellectual Technologies?

15 A. I do. I do recall that case.

16 Q. Who did you represent in that  
17 case?

18 A. Silver State.

19 Q. How about a case Valmont v.  
20 Lindsay?

21 A. Yes, I recall that case, too.  
22 It would be -- I know I had a deposition  
23 in that case, so that would be in my CV  
24 as far as which side I represented. I  
25 can't recall right off. I believe it was

1 CRAIG ROSENBERG

2 ultimately successful. I remember the  
3 attorney contacting me and thanking me,  
4 because he was successful.

5 Q. So to your knowledge, that was  
6 a success, right?

7 A. Yes. I can't recall the  
8 particular details, but I have  
9 correspondence with him showing how they  
10 were notorious either -- again, I need to  
11 review, review my role in the case. I  
12 assume it was an IPR but I don't even  
13 know for sure. I need to go back and  
14 review.

15 Q. Do you recall the issue from  
16 that case as to whether a device was  
17 hand-held or not?

18 A. No, I don't recall that level  
19 of detail.

20 My recollection is that it had  
21 to do with farming equipment and  
22 specifically irrigation equipment, and  
23 perhaps user interfaces that allowed  
24 farmers to control their irrigation  
25 equipment from afar, like remote controls

1 CRAIG ROSENBERG

2 for it. So I recall that. That's what  
3 the patents were about and what the  
4 technology was. But I can't recall  
5 specifically issues around hand-held or  
6 not.

7 Q. Do you recall whether you  
8 provided any opinions in that case as to  
9 whether or not a personal computer could  
10 be a hand-held computer?

11 A. I may have. I may have. Like  
12 I said, that was probably six years ago  
13 or more perhaps. Maybe -- you probably  
14 have the date in front of you. But I am  
15 guessing around 2016/2017 latest would be  
16 my guess.

17 So I don't recall issues around  
18 whether a personal computer can be  
19 hand-held or not. I may have, but again  
20 I would need to review that to determine.

21 Q. So you don't recall whether or  
22 not the Patent Office agreed with your  
23 claim construction analysis in that case;  
24 is that fair?

25 A. Yes, that's fair. I hadn't

1 CRAIG ROSENBERG

2 heard that they disagreed and I don't  
3 know the specific issues. I haven't  
4 reviewed that case in a long, long time,  
5 since the attorney called me and thanked  
6 me for my work and said that, that they  
7 were, he didn't use the word "notorious,"  
8 but essentially that they prevailed.

9 Q. So you don't remember whether  
10 or not the Patent Office criticized your  
11 analysis based on your personal knowledge  
12 of the technology at issue; is that fair?

13 A. That's right. Again, I keep  
14 saying I really don't have knowledge of  
15 the very specifics of that case. The  
16 most I remember is the general area of  
17 technology, which I described around the  
18 irrigation equipment and remote control  
19 of the irrigation equipment.

20 Q. Do you remember a case Fidelity  
21 v. Groove Digital?

22 A. I do. But again, I have -- I  
23 don't have specific knowledge of the  
24 details of that. I believe it had -- it  
25 may have had to do with applets in

1 CRAIG ROSENBERG

2 software but I may be wrong about that.

3 Q. Do you recall whether that case  
4 was a success?

5 A. I don't recall. No, I don't  
6 recall.

7 Q. Do you recall whether the  
8 Patent Office agreed or disagreed with  
9 your analysis in that case?

10 A. No, I do not.

11 Q. You don't recall any instance  
12 where the Patent Office did disagree with  
13 your analysis, right?

14 A. That's correct. Like I  
15 testified earlier, I believe this 101  
16 issue in the Aatrix versus Green Shades  
17 case was not the Patent Office. That was  
18 likely a District Court case and not the  
19 Patent Office.

20 Q. So you wouldn't have gone back  
21 and reviewed decisions by the Patent  
22 Office to see what you had done wrong so  
23 you wouldn't do it again; is that fair?

24 MS. SPECHT: Objection to form.

25 Q. Let me restate it. If you had

1 CRAIG ROSENBERG

2 made a mistake, you didn't go back to  
3 review it to try to correct it going  
4 forward?

5 MS. SPECHT: Same objection.

6 A. I think your question assumes I  
7 was informed that I had made a mistake.  
8 If I was informed that I had made a  
9 mistake, I certainly, in an effort for  
10 continuous quality improvement, to use a  
11 phrase, would want to understand what  
12 happened and how that can be prevented in  
13 the future.

14 Q. Do you recall any cases where  
15 you represented a petitioner in an IPR  
16 proceeding and where the patents were  
17 held to be valid?

18 A. Not specifically, no. Not  
19 specifically. I don't recall it. I  
20 really don't keep score, so to speak. I  
21 don't have a document that shows the  
22 outcomes of the various cases that I've  
23 worked on in the past.

24 In general, I work almost a  
25 50/50 split for plaintiffs and

1 CRAIG ROSENBERG

2 defendants.

3 Q. How often do you work with  
4 clients of Finnegan?

5 A. My recollection is I worked  
6 with Finnegan on two other cases prior.  
7 So this case and two other cases come to  
8 mind.

9 Q. Which cases were those?

10 A. It was Sony versus Arris and  
11 Pace, which was an IPC proceeding. And  
12 the FIS and Groove Digital case.

13 Q. Who did you represent in each  
14 of those cases?

15 A. Sony and -- let me just check  
16 my CV, but I think it was FIS. Yes, FIS  
17 and Sony.

18 Q. Do you recall whether you  
19 prevailed in that case?

20 A. I did not. And when you  
21 characterize it as whether I prevailed,  
22 it's not really the expert that prevails  
23 in a case, as you know. I am an  
24 independent expert and provide testimony.  
25 So I would characterize it more as

1 CRAIG ROSENBERG

2 whether the plaintiff prevailed or the  
3 defendant prevailed rather than if I  
4 prevailed.

5 MR. RUBINO: All right. I have  
6 introduced an exhibit as Exhibit 1.

7 (Rosenberg Exhibit 1, Final  
8 judgment in Fidelity Information  
9 Services versus Groove Digital, was so  
10 marked for identification, as of this  
11 date.)

12 MR. RUBINO: Let me know if you  
13 can see it.

14 And for the record, it's Exhibit  
15 1 to his deposition. There will be  
16 other Exhibit 1s in the proceeding  
17 which I will refer to Exhibit -- as  
18 Exhibit 001 for Petitioner's Exhibit,  
19 or 1001 for Petitioner's Exhibit.  
20 This is Rosenberg Exhibit 001.

21 Q. Dr. Rosenberg, are you able to  
22 see the document?

23 A. I clicked on it and it says  
24 "generating file preview" this may take a  
25 while. I will just wait until this

1 CRAIG ROSENBERG

2 completes the preview.

3 All right. I see Fidelity  
4 Information Services versus Groove  
5 Digital, final written decision,  
6 judgment.

7 Q. And this is a case you worked  
8 on, right?

9 A. Yes, it is.

10 Q. And you were the petitioner's  
11 expert in this case, correct?

12 A. Yes, I was.

13 Q. I would like you to look at the  
14 bottom of page 60.

15 A. All right. I am on the bottom  
16 of 60.

17 Q. Do you see where it says  
18 "Petitioner's expert testifies"?

19 A. I do see that.

20 Q. That was you, right? You were  
21 the petitioner's expert?

22 A. I was the petitioner's expert.  
23 It's possible -- I see Rosenberg on the  
24 top of the next page, yes, that's me.

25 Q. So do you recall giving the

1 CRAIG ROSENBERG

2 opinion, "In my opinion one of ordinary  
3 skill in the art would understand that  
4 the target audience criteria statements  
5 would be stored in a second database  
6 until they are transmitted to and  
7 received by (the server)."

8 Do you recall that?

9 A. I see that statement. But it's  
10 been so long since I revisited this case.

11 Again, my recollection is this  
12 had something to do with applets. So I  
13 really don't know the context of the  
14 second database or transmitting and  
15 receiving by servers. So I see the  
16 statement, but I can't really piece  
17 together what I was saying or what it  
18 referred to, I should say.

19 Q. But you recall that this case  
20 had to do with servers and transmitting  
21 and receiving with servers, right?

22 A. My recollection is it had to do  
23 with applets, but I'll take your  
24 representation of what you're saying that  
25 servers were involved.

1 CRAIG ROSENBERG

2 Q. Is an applet a kind of  
3 software?

4 A. Yes.

5 Q. So this case, this IPR  
6 20190050, related to software?

7 A. Yes, it did relate to software.

8 Q. And you rendered opinions about  
9 how certain prior art references in the  
10 software space rendered obvious claims of  
11 a patent in the software space, right?

12 A. I assume so. Again, I haven't  
13 reviewed this but representing the  
14 Petitioner in an IPR proceeding, it would  
15 make sense that I'm analyzing prior art  
16 to look at anticipation of obviousness.

17 Q. If you can take a look at the  
18 next sentence on 61, do you see where it  
19 says, "Petitioner's expert opines that it  
20 would have been obvious to store the  
21 criteria statements in the campaign  
22 database 46-1."

23 Do you see that?

24 A. I do see that.

25 Q. So that confirms that this

1 CRAIG ROSENBERG

2 opinion related to be obviousness, right?

3 A. Yes, it does.

4 Q. And do you see a couple of  
5 sentences down where it says, "We are not  
6 persuaded by Dr. Rosenberg's conclusory  
7 testimony that an ordinary skilled  
8 artisan would have been motivated to  
9 store the criteria statements with the  
10 campaign database, which is already  
11 configured to store the results of the  
12 target audience comparison, in order to  
13 keep the query and results together."

14 Do you see that statement?

15 A. Yes, I do see that statement.

16 Q. So before today you hadn't  
17 known that the Patent Office determined  
18 that your obvious analysis was conclusory  
19 in this case; is that fair?

20 A. That's correct.

21 Q. So you wouldn't have done --  
22 well, let me rephrase that.

23 You wouldn't have tried to fix  
24 any of the issues you had with your  
25 declaration in the 050 case going

1 CRAIG ROSENBERG

2 forward, right? You didn't know there  
3 was a problem?

4 A. The 050? Oh, this case.

5 Q. Let me ask you a different way.  
6 I think that was a little bit of a  
7 strange question. Let me reask it, okay?

8 A. Please do.

9 Q. So now that you know that the  
10 Patent Office determined that your  
11 arguments in the '050 proceeding were  
12 conclusory, would you try not to make  
13 those same mistakes going forward?

14 MS. SPECHT: Objection to form.

15 A. I always try to provide a good  
16 basis for my analysis. I try to provide  
17 detail and evidence to show the basis for  
18 my opinions and never try to say  
19 something that the Patent Office or any  
20 other reader of the report or declaration  
21 would find conclusory.

22 The fact that I worked on a  
23 large number of cases before, the fact  
24 that not all of them, not 100 percent of  
25 them have agreed with my analysis and may

1 CRAIG ROSENBERG

2 have agreed more with the other side or  
3 there was a mix, I think that's purely to  
4 be expected, just statistically, given  
5 the number of cases that I've worked on.

6 This one statement, it seems  
7 like the PTAB didn't seem to find enough  
8 background evidence or analysis to make  
9 that statement conclusory.

10 But to answer your question, I  
11 always do my very best to show my basis  
12 for my reasoning and not to provide just  
13 overall conclusory statements. And I  
14 don't believe I have done that with these  
15 three proceedings.

16 Q. But you did your best in this  
17 proceeding, as well, in the '050 case?  
18 You still tried your best, didn't you?  
19 You didn't, you know, purposefully lose  
20 this one, right?

21 A. Of course not. I didn't  
22 purposely lose it. And I always try my  
23 best. And I always work with the  
24 materials that are given to me, so to  
25 speak. It reminds me of the phrase by

1 CRAIG ROSENBERG

2 McNamara, you go to war with the army  
3 you're given, not the army you want.

4 So I was working with the  
5 materials of this case and provided my  
6 analysis, independent analysis given the  
7 materials I had to work with, which were  
8 a completely different set of facts and  
9 materials that are in these three  
10 proceedings.

11 Q. Do you have any reason to  
12 believe that your analysis was different  
13 in the '050 proceeding than it is in the  
14 three BMW/NorthStar proceedings that  
15 we're here to discuss today?

16 MS. SPECHT: Objection to form.

17 A. Yes, of course it was  
18 different. Like I said, it's a  
19 completely different case, around  
20 different technology, with different  
21 facts. So my analysis was necessarily  
22 different.

23 Q. Sitting here today, do you know  
24 whether you made the same mistakes in the  
25 NorthStar cases that you made in the '050

1 CRAIG ROSENBERG

2 case?

3 MS. SPECHT: Objection to form.

4 A. Your question implies that I  
5 made mistakes. I don't believe I made  
6 mistakes.

7 Q. You don't believe the Patent  
8 Office says you made a mistake here?

9 A. Yeah, let me just finish my  
10 answer, please.

11 Your question implies that I  
12 made mistakes on these three declarations  
13 for BMW. A, I am not aware of mistakes I  
14 made. I am not aware of any conclusory  
15 statements that I've made. So your  
16 question implies, well, how come you made  
17 the same mistakes that you did in the  
18 '050. And just because the Patent Office  
19 determined that a single statement that  
20 you're showing me, they deemed  
21 conclusory, that's -- I wouldn't  
22 necessarily characterize that as a  
23 mistake that I made. That is they didn't  
24 find enough basis for that statement and  
25 chose to label it conclusory.

1 CRAIG ROSENBERG

2 But to take this, what you're  
3 showing me here, which is a different  
4 case with different technology, and to  
5 say that, A, I made a mistake and, B,  
6 therefore you must have made same  
7 mistakes on these three BMW patents I  
8 think is a fallacious conclusion that I  
9 don't agree with at all.

10 Q. So you don't think you made a  
11 mistake in the '050 case; is that right?

12 A. Whether you characterize it  
13 as -- I wouldn't characterize it as a  
14 mistake. I made a statement that it  
15 looks like here, that the PTAB determined  
16 was a conclusory statement.

17 Conclusory to me means it's  
18 just a statement and it's not backed up  
19 by enough detail or analysis or basis for  
20 that decision. So the PTAB didn't seem  
21 like there was enough there. That was  
22 the PTAB's ruling, their judgment, their  
23 opinion that ultimately turned into their  
24 ruling.

25 Q. And sitting here today, you

1 CRAIG ROSENBERG

2 don't have any basis one way or the  
3 other, like you don't know whether the  
4 statements you made in the NorthStar  
5 proceedings are more or less robust than  
6 any of the statements you made in the  
7 '050 proceeding; you haven't done that  
8 analysis, right?

9 MS. SPECHT: Objection to form.  
10 Mischaracterization.

11 A. Well, I certainly didn't do an  
12 analysis of comparing this, the three  
13 declarations that I filed in this, in  
14 these three proceedings, with all of the  
15 other reports, declarations.

16 Q. That's all I was asking.  
17 That's all I was asking. I am not asking  
18 you about the differences between them.  
19 I was just asking if you made a  
20 comparison.

21 MS. SPECHT: Counsel, if you  
22 could please let Dr. Rosenberg  
23 complete his answers before cutting  
24 him off with additional statements  
25 that aren't even a question on the

1 CRAIG ROSENBERG

2 record.

3 MR. RUBINO: Let me rephrase it.  
4 I will withdraw the question and I  
5 will rephrase it.

6 Q. So Dr. Rosenberg, I would just  
7 like to know have you, before today,  
8 compared the statements in your  
9 declarations in the NorthStar cases with  
10 your statements in the '050 proceeding,  
11 yes or no? That's all I am asking.

12 MS. SPECHT: Objection to form.

13 A. No, I haven't. I think it  
14 would be unusual for an expert to compare  
15 a report or a declaration that they filed  
16 with every other previous declaration  
17 that they previously filed, so. But the  
18 direct answer to your question is no.

19 Q. Thank you. You can put that  
20 document aside for now, sir.

21 A. Okay.

22 Q. Dr. Rosenberg, I would like to  
23 ask you -- I would like you to take a  
24 look at one of the patents, the  
25 challenged patents, okay?

1 CRAIG ROSENBERG

2 A. Sure.

3 Q. Specifically U.S. Patent Number  
4 8,032,297 which is Exhibit 1001 to the  
5 00890 proceeding.

6 A. I have the '297 Exhibit up on  
7 the screen.

8 MR. RUBINO: Kara, for the  
9 record, Counsel, I want to -- I am not  
10 going to reintroduce each of these  
11 exhibits. He has copies of them. I  
12 am going to refer to them by their  
13 exhibit number that's in the  
14 proceeding; is that okay?

15 MS. SPECHT: That's acceptable.

16 Q. Dr. Rosenberg, I would like you  
17 to look at column 17 of the '297 patent,  
18 it's on page 33 and 34 of the pdf, and  
19 specifically Claim 1?

20 A. Okay. I have Claim 1 on my  
21 screen.

22 Q. I would like you to take a look  
23 at the two limitations that say  
24 "computing." They should be the third  
25 and fourth limitations of Claim 1.

1 CRAIG ROSENBERG

2 A. Okay. I see those two  
3 limitations.

4 Q. And you rendered opinions about  
5 Claim 1, right?

6 A. I did, yes.

7 Q. And you rendered an opinion  
8 that Claim 1 was obvious in view of  
9 several prior art references, right?

10 A. That's also correct.

11 Q. And to perform that prior art  
12 analysis and obviousness analysis you  
13 first had to understand the scope of the  
14 claims, right?

15 A. Yes.

16 Q. Sitting here today, you have an  
17 understanding what you believe the scope  
18 of these claim terms is, right?

19 A. Yes, I do.

20 Q. So within your understanding of  
21 what the scope of these claim terms is,  
22 can you tell me what it means to compute  
23 a distance?

24 MS. SPECHT: Objection. Calls  
25 for a legal conclusion.

1 CRAIG ROSENBERG

2 A. So on paragraph 93 of my  
3 declaration for the '297 it says that  
4 Krietler discloses that its system is  
5 implemented in computer code executed by  
6 a processor, stating that it is "Embodied  
7 in the form of a computer program code  
8 embodied in tangible media" such that  
9 "When the computer program code is loaded  
10 into and executed by the computer, 'the  
11 computer becomes an apparatus for  
12 practicing the disclosed method of  
13 implementing' on a general purpose  
14 processor." And all of that is in  
15 Krietler column 25, 1 through 19.

16 So one would understand, a  
17 POSITA would understand that Krietler  
18 computes the obtained navigational  
19 information because it determines with  
20 that processor navigation and drive time  
21 information. That's what I am trying to  
22 say there.

23 Q. Help me here. Are you saying  
24 the meaning of the term "computing" in  
25 the context of Claim 1, you're referring

1 CRAIG ROSENBERG

2 to the Krietler reference; is that right?

3 A. Oh, no, I was describing how  
4 Krietler renders obvious that limitation,  
5 computing.

6 Q. So I am asking you a different  
7 question. Which sitting here as an  
8 expert who has ascertained the scope of  
9 the claims as your first step in your  
10 obvious analysis, what do you believe  
11 "computing" means?

12 A. All right. One moment. If you  
13 look at the bottom of column 4, around  
14 line 64, it says, "The distance displayed  
15 by the distance indicator may be computed  
16 by an algorithm computing an imaginary  
17 travel path."

18 So it's talking about the  
19 distance that's being displayed is  
20 computed by an algorithm. A POSITA would  
21 understand that that algorithm is  
22 executed on a processor.

23 I am sure there is more  
24 disclosure about what computing means  
25 relative to distance on the top of column

1 CRAIG ROSENBERG

2 5, lines 1 through 5, it says, "The  
3 algorithm may include consideration such  
4 as one-way streets, road conditions,  
5 traffic patterns, user preferences, et  
6 cetera, when computing the distance of  
7 the optimal route." And I can go on.

8 There's several disclosures  
9 related to how computing interacts with  
10 computing the distance in the '297  
11 patent.

12 Q. So I asked you about computing.  
13 Is this also -- this is your context of  
14 how you're understanding the computing  
15 terms in Claim 1; is that right?

16 A. I believe it's most appropriate  
17 to look at the intrinsic record when  
18 understanding a claim term. So that's  
19 exactly what I am doing here, is I am  
20 looking at the specification of '297 to  
21 understand how a POSITA would understand  
22 these claim terms.

23 Q. So it's your opinion then that  
24 the computing claim terms, you can  
25 ascertain the scope of those claim terms

1 CRAIG ROSENBERG

2 by looking at, did you say column 4?

3 A. Well, I first started 4. I  
4 forget, somewhere in 4 and then the top  
5 of column 5. But it wasn't exhaustive.

6 I thought you were asking me  
7 how would one understand in Claim 1 those  
8 computing limitations. And specifically  
9 computing distances. And a POSITA at the  
10 time of the invention, when reading the  
11 claim terms, would first look to the  
12 intrinsic record, which is the  
13 specification as pointing you to several  
14 disclosures within the specification of  
15 '297, to understand how a POSITA would  
16 understand those terms and therefore what  
17 the terms means, the scope of the terms.  
18 I believe it's the appropriate way to  
19 analyze what "computing" means.

20 Q. Sorry, I'm still confused. So  
21 you're saying the computing claim terms,  
22 in order to understand what one of skill  
23 in the art would have thought the scope  
24 of those claim terms were, you're saying  
25 you would look back to the specification

1 CRAIG ROSENBERG

2 and more specifically as an example you  
3 pointed me to column 4 lines 58 through  
4 column 5 line 5; is that fair?

5 A. I searched for "computing" in  
6 my searchable pdf. And those were the  
7 first two hits that I found. There may  
8 be more, like I said. But it seems very  
9 reasonable to me and my understanding  
10 very appropriate, when trying to  
11 understand what claim terms mean and part  
12 of what they mean is what the scope of  
13 the claim term is, is to look in the  
14 intrinsic record. So the specification  
15 itself, the file history, and to see they  
16 are used to understand how a POSITA at  
17 the time of the invention would  
18 understand them. And then perhaps after  
19 that one could look to extrinsic evidence  
20 as well.

21 So you're, I guess your  
22 statements and your tone imply that what  
23 I am doing is crazy. And it seems very  
24 appropriate to me.

25 It does go on, you said into

1 CRAIG ROSENBERG

2 the record, column 5 line 5, but there is  
3 more discussed about computing distance  
4 and optimal routes that go down through  
5 lines 18 of column 5.

6 Q. Is that also the portion of the  
7 specification you're relying on for  
8 computing a placement? Sorry, I am just  
9 trying to understand where you are coming  
10 from here.

11 A. I would need to review the  
12 specification to point you to column and  
13 line numbers in the specification that  
14 would inform one of skill in the art as  
15 to the various ways that placement of the  
16 OVIs could be done. Because there is not  
17 just one, there are several ways that  
18 that can be done, and I can find out for  
19 you, if you would like.

20 Q. Sure. That would be great if  
21 you can find that. Because I would like  
22 to understand how you're interpreting  
23 these claim terms in your analysis, more  
24 specifically the computing of placement  
25 term.

1 CRAIG ROSENBERG

2 A. Sure. If we look at column 10,  
3 lines 23 through 46, so an alternate  
4 embodiment, other methods of applying  
5 OVIs and GPS of OVIs make very different  
6 shapes, colors and move in different  
7 directions.

8 So I guess let's read before  
9 that, and maybe displayed, I guess  
10 starting, we'll probably end up referring  
11 back to Figure 5A and 5B. But if you  
12 look at 20 through 46, it describes how  
13 OVIs could be positioned relative to the  
14 direction that the user is facing. But  
15 in that embodiment, if the user turned 90  
16 degrees, all the OVIs would also rotate  
17 90 degrees in the opposite direction. We  
18 see that the '297 contemplates other ways  
19 that that's done itself, other ways that  
20 that's done.

21 I referred a moment ago to  
22 Figure 5A and 5B, and they explain that  
23 the OVI is computed to indicate the  
24 location of the POI, and I think it was  
25 the top of column 25 talks all about the

1 CRAIG ROSENBERG

2 computing resources that Krietler has to  
3 do the OVI placement.

4 There is one other place I am  
5 recalling. Let me find it for you, I  
6 would like to point out.

7 Q. You said Krietler, did you mean  
8 Krietler --

9 A. Oh, I am sorry, I keep going  
10 back to the prior art references.

11 Q. So when you said Krietler  
12 there, you meant Jacobson?

13 A. Yeah. I am not going to point  
14 to Krietler now because you're just  
15 asking me questions about '297, Jacobson.  
16 And I would point you to Figure 5A and 5B  
17 of '297. I would point you to column 10,  
18 lines 20 through 47.

19 And my recollection in  
20 reviewing the patent owner's preliminary  
21 response is that NorthStar had admitted  
22 that there are several methods of  
23 computing placement of OVIs, that there  
24 is not just one, one method for placing  
25 OVIs.

1 CRAIG ROSENBERG

2 Q. Do you have an opinion as to  
3 what can satisfy the computing part of  
4 the computing a placement? In other  
5 words, algorithm, can it be simpler than  
6 an algorithm? Do you have any opinion of  
7 the scope of the term "computing" in the  
8 context of placement?

9 A. Again, I would turn to the  
10 intrinsic record.

11 Q. Let me revise it here, let me  
12 ask you a simple question, okay?

13 A. Please.

14 Q. In order to compute the  
15 placement do you have to have an  
16 algorithm?

17 A. Let me look at the claim terms.  
18 I think it says computing, computing a  
19 placement position of an OVI. And I  
20 think I already pointed us to this  
21 section of '297 earlier in the  
22 deposition, this is the bottom of column  
23 4, it says, "The distance displayed" --  
24 never mind, that's distance. Let me move  
25 on here.

1 CRAIG ROSENBERG

2 So your question is, does one  
3 need an algorithm to compute? Like can  
4 you do computing without an algorithm?

5 Q. Well, let me rephrase it a bit  
6 more.

7 A. Sure.

8 Q. I am specifically asking you  
9 about the computing of placement. Can  
10 you do that without an algorithm?

11 A. In the context of this patent  
12 and the three patents in general, where  
13 the OVIs are placed, and I don't believe  
14 that I have read anything about where the  
15 position of the OVIs are prestored in  
16 some database and they are just fetched  
17 and retrieved and then placed at that  
18 position; I am not seeing -- I believe  
19 computing in the context of these patents  
20 would necessarily need to run an  
21 algorithm.

22 Now, does that mean there  
23 couldn't be systems out there that call  
24 it computing when really it was just  
25 fetching a pixel value and then using it?

1 CRAIG ROSENBERG

2 I am sure there could be systems there  
3 and maybe in the context of the intrinsic  
4 records of those systems they would refer  
5 to that as computing. But what I have  
6 read here is that computing typically and  
7 generally involves running an algorithm  
8 to determine a placement position.

9 Q. So you're saying computing is  
10 different from just retrieving a stored  
11 value; is that what you're saying?

12 A. Again, I am not seeing in this  
13 patent anything about retrieving a stored  
14 value as least as far as the OVIs are  
15 concerned.

16 The OVIs are computed. The  
17 position of the OVIs are computed. And  
18 like I said before, there are multiple  
19 ways to do that. There is not a single  
20 way to do that. But you asked does it  
21 involve running an algorithm, and I would  
22 say in general for this patent, that's  
23 what -- that's my understanding. I  
24 don't -- I don't see anything in the  
25 intrinsic record that is talking about

1 CRAIG ROSENBERG

2 the OVI position is grabbed from a  
3 database and just talked down to the  
4 location of the values of the database.

5 So I am agreeing with you, in  
6 general, that an algorithm seems to be  
7 required. The algorithm is run on the  
8 computing resources that you see at the  
9 top of column 25.

10 MR. RUBINO: We have been going  
11 about an hour. I need to take a break  
12 to make a phone call. Are you all  
13 okay with taking a break now?

14 MS. SPECHT: That's fine.

15 THE REPORTER: Back on the  
16 record.

17 Q. Good afternoon, Dr. Rosenberg.

18 A. I'm sorry, I missed what you  
19 said there.

20 Q. I said good afternoon.

21 A. Good afternoon to you as well.

22 Q. So before break we were talking  
23 about the computing terms. I would like  
24 to talk to you about the next term, the  
25 creating term, okay?

1 CRAIG ROSENBERG

2 A. Sure.

3 Q. So in your opinion, does the  
4 creating term in Claim 1 of the '297  
5 patent also require an algorithm or can  
6 that just be something where you're  
7 pulling and plopping from a database as  
8 well?

9 A. An OVI can contain multiple  
10 components. But maybe a figure would be  
11 helpful here. Let me bring up a figure.

12 Let's look at Figure 5A. So on  
13 5A we see three different OVIs; 512, 514  
14 and 516 are the three different OVIs. So  
15 when the claim limitation talks about --  
16 let me go back so I am reading it  
17 exactly -- "creating the OVI containing  
18 the distance and travel-related  
19 information." So I am going to go back  
20 to 5A. We see three examples of OVIs,  
21 which are elements 512, 414 and 516.

22 In 512 and 516, there is an  
23 icon associated with the OVI, the  
24 restaurant has it's fork and knife icon  
25 which is a bit map. The gas -- 516 has a

1 CRAIG ROSENBERG

2 gasoline pump, presumably for a gas  
3 station. So those pictorial components  
4 would very likely not be computing on the  
5 fly but would be grabbed from some form  
6 of computer storage, whether it be a  
7 database, on disk, across a network  
8 resource, something like that.

9 There's other components that  
10 can be included with an OVI as well.  
11 Such as the vector that you see in item  
12 512, which shows an arrow with the length  
13 of the arrow. It's got a directionality.  
14 It's got an arrowhead. That would likely  
15 be computed. So the system would need to  
16 compute the direction to element one and  
17 draw that arrow in the proper  
18 orientation.

19 Also the distance says 700 feet  
20 in five minutes. Those two elements, the  
21 distance and time, would need to be  
22 computed, too, based on the distance to  
23 the off-screen map object that this OVI  
24 refers to.

25 Going now to 514 and 516, we

1                   CRAIG ROSENBERG

2       don't have an arrow, essentially the  
3       vector, because it's not required. It  
4       may include a vector if we look at the  
5       specification. And I can point you to  
6       that if you want. It doesn't have that,  
7       but it does have the icons that I pointed  
8       out earlier, which correspond to a  
9       restaurant and a gas station. And then  
10      it also has a distance. Here it's shown  
11      in a slightly different format than the  
12      OVI of 512. But nonetheless, it's still  
13      a distance. And that would be computed  
14      as well.

15                   So I believe a POSITA at the  
16      time of the invention, in reading these  
17      claims and reading the spec, would  
18      understand that computation would be  
19      part, but not necessarily 100 percent.  
20      That everything would need to be fully  
21      computed.

22                   And I would point to the icons  
23      themselves as being something that  
24      wouldn't be computed, but would be stored  
25      from some database or network storage or

1 CRAIG ROSENBERG

2 local storage of JPEGs or PNGs or maybe  
3 even in a vector format. A file that  
4 represents the pictorial element of the  
5 OVI if it contains one, like it is in two  
6 of the three OVIs that we see here.

7 Q. So it's your opinion that for  
8 the creating an OVI limitation there  
9 needs to be some algorithm, calculation,  
10 computation, but not entirely; is that  
11 fair?

12 A. I would like to rephrase your  
13 question because I consider it slightly  
14 imprecise and your question could be read  
15 to me that, that there is also, that  
16 purely an algorithm would not do it, but  
17 could -- you also would need perhaps a  
18 retrieval from a disk or from a database.

19 If you look at OVI in 512, I  
20 want to make sure it's 5A, 5A, I believe  
21 everything here on that OVI could be  
22 computed. There would be no need to  
23 store any pictorial elements for that.  
24 And an algorithm that makes a call to a  
25 graphics library could position, could

1 CRAIG ROSENBERG

2 point the number one in the upper  
3 left-hand corner. It could draw the  
4 arrow, it could put text in corresponding  
5 to the distance and time.

6 So I would say that it could be  
7 purely algorithmically with no retrieval  
8 or it could be a combination, as we see  
9 for elements 514 and 516.

10 Q. And 512, from what you just  
11 described as a distance, it has a time  
12 and then it has the direction, right?

13 A. That particular one has all  
14 three, yes. But 514 and 516 don't have  
15 the direction. The direction is implied  
16 by where it's positioned. But it doesn't  
17 have the vector that's drawn.

18 Q. And it doesn't have a time?

19 A. It doesn't have the time  
20 either, correct.

21 Q. So do you see in your  
22 understanding of these claims any  
23 difference between the direction to the  
24 OVI and the placement of the OVI, or do  
25 you think they both mean placement of the

1 CRAIG ROSENBERG

2 OVI and direction are the same thing?

3 MS. SPECHT: Objection to form.

4 A. I am looking at Claim 1 and I  
5 don't see the term. Point me to it if I  
6 am just missing it in my scan of Claim 1  
7 in the '297.

8 I don't see direction. I see  
9 the limitation that's computing a  
10 placement position of the OVI, so I have  
11 an understanding of what that means. But  
12 if you can ask your question again,  
13 understanding that direction is within  
14 Claim 1.

15 Q. Sure. Let me ask you a  
16 different way then.

17 So we were talking about  
18 direction earlier as an example, but more  
19 specifically let's talk about travel-  
20 related information, okay?

21 A. Okay.

22 Q. In your view and the way you're  
23 applying the claims here, is travel-  
24 related information the same thing as  
25 placement position or is it something

1 CRAIG ROSENBERG

2 else?

3 A. Let's go, I believe it's at the  
4 bottom of column 1. I am going to column  
5 1 of the '297 patent.

6 So if we look at the bottom of  
7 column 1, the line starting at 66, "The  
8 OVI may include information referencing  
9 the map object, as well as," I am reading  
10 from the top of column 2, "information on  
11 the map object's direction, distance,  
12 travel time to the map object, estimated  
13 time of arrival, et cetera."

14 So I think these are all  
15 examples of travel-related information.  
16 And if we look at the claims themselves,  
17 Claim 1, creating an OVI, 1E, "Creating  
18 the OVI containing the distance and  
19 travel-related information."

20 So I just read from the bottom  
21 of column 1 and the top of column 2.  
22 Those are examples of what travel-related  
23 information could contain.

24 And also Claim 8 is  
25 constructive, too. It is "The method of

1 CRAIG ROSENBERG

2 Claim 1" -- I am reading Claim 8 of the  
3 '297 -- "The method of Claim 1 where  
4 computing the travel distance" -- I'm  
5 sorry, let me read it accurately.

6 "The method of Claim 1 wherein  
7 computing the distance and travel  
8 information includes at least one of the  
9 following: Aerial distance to the MO,  
10 the travel distance to the MO, a visual  
11 indicator pointing in the direction of  
12 the MO, and an estimated travel time."

13 So it's saying "at least one of  
14 the following" and it gives multiple  
15 examples that you could add to what we  
16 find at the bottom of column 1 and the  
17 top of column 2. I believe that's how a  
18 POSITA would understand what travel-  
19 related information is. So I think  
20 that's important to understand.

21 And now I think your question  
22 was, is the vector or the arrow, is that  
23 the same thing as the placement?

24 Q. No. I am asking a more general  
25 question. And maybe it would help if we

1 CRAIG ROSENBERG

2 put -- do you have the ability to have  
3 Claim 1 in one hand and then maybe Figure  
4 5 in the other hand.

5 A. Most likely.

6 Q. Let's go to 5A if we can, one  
7 of the ones you were looking at. I would  
8 like you to look at 5A and claim 1 at the  
9 same time, okay?

10 A. Let me just bring up those  
11 materials.

12 Q. You want Figure 5 of '297, 5A  
13 rather?

14 A. Yes. And the other thing you  
15 want me to look at is Claim 1 of '297.

16 Q. Yes.

17 A. I have 5A on a paper document  
18 and Claim 1 on my screen.

19 Q. So for the first computing  
20 limitation that says, "Computing distance  
21 and travel-related information," right?  
22 Do you see those?

23 A. I do.

24 Q. So in 512 you would agree that  
25 the distance is the 700 feet and the

1 CRAIG ROSENBERG

2 travel-related information can include  
3 five minutes and the little vector arrow,  
4 right?

5 A. I just want to cross-reference,  
6 I am already here, Claim 8. Travel  
7 distance of visual indicator pointing in  
8 the direction of the MO. I would agree  
9 with that statement.

10 Q. The next limitation is  
11 computing a placement position, right?

12 A. Yes, it is.

13 Q. And so that is essentially the  
14 information about where to put the icon  
15 on the screen, right?

16 A. I would agree with that in  
17 general. Typically we see these OVIs on  
18 the edge, on the edges, the north, south,  
19 east or west boundary of the map. But  
20 computing the placement position is where  
21 the OVI is displayed on the screen.

22 Q. So for 514, for example, do you  
23 see that one?

24 A. I see 514, yes.

25 Q. So looking back to the

1 CRAIG ROSENBERG

2 computing distance, so the distance there  
3 would be .7 miles, right?

4 A. That's correct.

5 Q. And computing a placement,  
6 that's where the icon is located on the  
7 screen, right?

8 A. That is also correct.

9 Q. And so for 514, there is no  
10 computing of travel-related information,  
11 right? There is nothing else in that  
12 icon other than its physical placement  
13 and the distance to it and the picture of  
14 the fork and the knife, right?

15 A. The distance to it is part of  
16 the travel-related information as we saw  
17 from Claim 8 as well as the bottom of  
18 column 1 and the top of column 2.

19 Q. So let me get this straight.  
20 You're saying that distance and travel-  
21 related information can be one thing,  
22 just the distance; is that what you're  
23 saying?

24 A. I am saying that distance is an  
25 example of what travel-related

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2 information is and I didn't see any  
3 requirement in '297 that the OVI needs to  
4 include every possible piece of travel  
5 information that, I think it even used  
6 the phrase "one or more." Let me go back  
7 to column 1.

8 Well, actually "at least one or  
9 more" is on Claim 8, when they are  
10 talking about "Travel information  
11 includes at least one of -- includes at  
12 least one of the following," aerial  
13 distance is what we are seeing in 5A.  
14 Figure 5A, element 514, that .7 is the  
15 aerial distance, travel distance to the  
16 MO. The aerial distance to the MO versus  
17 travel distance. So those can be  
18 slightly different.

19 A visual indicator, it could  
20 include a visual indicator because, like  
21 I said, it's at least one of the  
22 following, so all that's required is one  
23 estimated travel time, that could be  
24 there.

25 And again, let's look at the

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2 specific language at the bottom of column  
3 1 and the top of column 2, it says, "The  
4 OVI may include information referencing  
5 the MO, as well as information on the MO;  
6 its direction, distance, travel time,  
7 estimated time of arrival, et cetera."

8 So your question implied that  
9 it's necessary to have all of them, such  
10 as distance, direction, travel time,  
11 distance along the route versus -- I mean  
12 these things are contemplated, but at  
13 least in two different places, Claim 8  
14 and the bottom of Claim -- the bottom of  
15 column 1, the patent is clear that it  
16 says these different components may be  
17 included. It's not required that they  
18 are included.

19 Q. I think we have a disconnect  
20 because what I was asking -- because I  
21 wasn't asking whether they all had to be  
22 included. My reading is computing  
23 distance and travel-related information.  
24 So at least two things that are computed,  
25 distance and travel-related information,

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2 in Claim 1. That's how I am reading it.

3 Are you reading it as distance  
4 or other travel-related information?

5 A. I am not an attorney, but I  
6 would say in my non-attorney that this  
7 claim is not drafted particularly well  
8 because distance is one type of  
9 travel-related information. So if you  
10 say distance and travel-related  
11 information, and travel-related  
12 information includes distance, I gave  
13 examples from the spec itself where the  
14 travel-related information includes  
15 distance. You see that on line 1 of  
16 column 2 of the '297.

17 So if I were drafting the  
18 claims -- and again, I am not an  
19 attorney -- I wouldn't say distance and  
20 travel-related information because  
21 travel-related information is a  
22 collection of possible items including  
23 distance.

24 Q. So in other words, your  
25 analysis for obviousness is based on your

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2 interpretation of this claim and your  
3 reading of this claim that distance alone  
4 can satisfy that computing limitation,  
5 correct?

6 MS. SPECHT: Objection to form.

7 A. If the claim said that  
8 computing distance and -- I was going to  
9 say distance and distance.

10 Q. I am not asking you for what  
11 the claim says. I am asking about when  
12 you analyzed the claims and applied the  
13 prior art, you were only looking for  
14 either distance or one or more other  
15 travel-related information to satisfy  
16 that computing element, right?

17 A. No, no.

18 Q. You were looking for two  
19 things?

20 A. I was looking for if the prior  
21 art satisfied the claim language and the  
22 claim language is specifying distance and  
23 it's also specifying travel-related  
24 information. Well, it turns out distance  
25 is part of travel-related information.

1 CRAIG ROSENBERG

2 So if there is prior art that  
3 just shows distance, that meets the claim  
4 language because it needs to show  
5 distance, yes, we have that in the prior  
6 art. And it needs to show travel-related  
7 information. The travel-related  
8 information includes distance.

9 And it's not a requirement that  
10 every single piece of all of the  
11 contemplated information are all used  
12 together at the same time. Just one is  
13 enough. And distance is in there, too.  
14 So it follows if the prior art is showing  
15 distance, then that meets the claim  
16 language.

17 Q. And just confirming, that  
18 understanding that distance alone  
19 satisfies the computing limitation,  
20 computing distance and travel-related  
21 information, you applied that reasoning  
22 in your obviousness analysis, correct?

23 A. I did. But there is, I mean, I  
24 am also pointing, as you know, to prior  
25 art that includes more than just distance

1 CRAIG ROSENBERG

2 as well.

3 Q. Did you state in your report,  
4 in your declaration, that you believe the  
5 term "computing distance and  
6 travel-related information" is satisfied  
7 by distance alone?

8 A. I would need to search through  
9 my report to see if I said that specific  
10 thing. But when you ask questions about  
11 it I am telling you my opinion right now.  
12 That it would be just based on the fact  
13 that distance is part of travel-related  
14 information and essentially it's and/or  
15 combination, not an and combination.

16 Q. I would like to ask you a  
17 couple of questions about the Suomela  
18 reference, the Nokia reference.

19 A. All right.

20 Q. Do you understand what the  
21 point is of the invention of Suomela?  
22 And let me say this again, I am going to  
23 call it Nokia, that way I don't  
24 mispronounce it; is that okay?

25 A. If you like. I will understand

1 CRAIG ROSENBERG

2 what you mean if you refer to the '734  
3 patent, Suomela as Nokia. I will  
4 understand that.

5 Q. Do you have an understanding as  
6 of one of skill in the art of what the  
7 invention was in the Nokia reference?

8 MS. SPECHT: Objection,  
9 foundation.

10 MR. RUBINO: That is a  
11 foundational question.

12 MS. SPECHT: Objection to form  
13 then.

14 A. Yes, I do have an understanding  
15 of what the general invention of the  
16 Nokia '734 patent is.

17 Q. So what is your understanding  
18 of that invention?

19 A. It is to provide context to a  
20 user of points of interest, you can call  
21 it map objects, points of interest that  
22 are outside the visual area of the map  
23 positioned appropriately so that the user  
24 can maintain orientation, when  
25 understanding what is shown in the

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2 detailed area of the map, they can used  
3 OVIs essentially which Suomela/Nokia  
4 calls them object icons. They can an  
5 understanding of the relative orientation  
6 of these off map objects.

7 So essentially it's the same as  
8 '297, where you have OVIs that represent  
9 off-map objects that are useful to the  
10 user and understanding their orientation  
11 in a broader sense and yet still be able  
12 to be relatively zoomed in so they can  
13 navigate in the local area that the map  
14 is showing.

15 Q. So in the Nokia reference, for  
16 example, if you look at Figure 5?

17 A. I am in Figure 5.

18 Q. According to the Nokia  
19 reference, Figure 5 shows two scales, two  
20 map scales, a zoomed-in scale and a  
21 zoomed-out scale, right?

22 A. I would not characterize it in  
23 that way. I would say there is a scale  
24 associated with zoomed in but there is  
25 not a scale associated with the object

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2 area, that border area.

3 There does not -- there is not  
4 necessarily a scale. A scale wouldn't  
5 imply a certain number of centimeters on  
6 the screen corresponds to a certain  
7 number of kilometers in the real world.  
8 And I don't believe that that's required  
9 in the object area to have a scale.

10 Q. So it's your opinion that when  
11 you read the Nokia reference and looked  
12 at the figures, you didn't see two map  
13 scales, correct?

14 A. I guess you could call it two  
15 different scales. But I am saying that  
16 that one could practice the invention of  
17 Nokia without having a specific scale  
18 because the icons, the OVIs, and again  
19 they are calling them object icons of  
20 Nokia, they are not pushing them a little  
21 bit closer to the -- if those mountains,  
22 let's say, are much further, looking at  
23 the mountains on Figure 5 of Nokia, if  
24 those mountains are 99 miles away and the  
25 lighthouse of, I'll use kilometers, if

1 CRAIG ROSENBERG

2 those mountains are 150 kilometers away  
3 and the lighthouse -- I'm sorry, 2.5  
4 kilometers away, it would not be shown as  
5 it's shown right now, because the  
6 mountains would have to be further off to  
7 the northeast in that object area to  
8 represent a scale. So you would have a  
9 consistent scale.

10 But there is not a need for a  
11 scale associated with the object area.  
12 It's just showing the equivalent of --  
13 these are OVIS, to use the language of  
14 the '297 patent. They are off the  
15 screen. They represent map objects that  
16 are off the area. And they may include a  
17 directional icon, like you see in 42,  
18 element 42 for all of them. They may  
19 include a distance as you see in element  
20 44, for the lighthouse and the airport.  
21 They don't have to include it, but I  
22 guess I am just taking exception to --  
23 they can call it two different scales.  
24 And I see that in the abstract they  
25 remove to it as two different scales as

1                   CRAIG ROSENBERG

2       well as in other places.

3                   But I am just telling you, as  
4       one of skill in the art, that it doesn't  
5       have to be a constant scale to show what  
6       they are showing here. It's not a  
7       requirement that it be a separate scale.  
8       It's showing OVIs for off-map objects and  
9       the fact that you can have very different  
10      distances -- this will tell you right  
11      here the lighthouse is 2.5 miles away  
12      from element 28, which is your position  
13      in the center. 2.5 kilometers away. The  
14      airport is 5.5 kilometers away. Yet they  
15      are both relatively equally close to the  
16      corner of the map. You know, one is not  
17      twice as far, the airport should be over  
18      twice as far further. So that tells me  
19      at least in this diagram, they are not  
20      really paying much attention to the scale  
21      of the object area, but that's neither  
22      here nor there.

23                  These claim terms that we are  
24      dealing with don't have to do with scale.  
25      They are not talking about the scales

1 CRAIG ROSENBERG

2 where the OVIs are placed when they are  
3 placed on borders. Really your question  
4 about scale, it certainly could be in  
5 scale but it doesn't have to be in scale.

6 I am trying to be responsive to  
7 your questions. I don't see anything in  
8 the subject patents that require that the  
9 OVIs be positioned in a given scale.

10 Q. Certainly the claims of the  
11 '297 patent have nothing to do with  
12 scale, right?

13 A. Not that I thought, I agree.

14 Q. And for this Nokia reference,  
15 it's your opinion that the inventive  
16 concept of the Nokia reference doesn't  
17 have to do with using multiple scales; is  
18 that fair?

19 A. They talk about multiple  
20 scales, and I was just saying the  
21 inventive concept of the Nokia patent has  
22 to do with visualizing off-map objects in  
23 the form of what they're calling object  
24 icons, which are essentially equivalent  
25 to OVIs, and placing those in the object

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2 area. And having optional information  
3 such as distance, directionality, icons.  
4 So I see it as being the same as what  
5 '297 is practicing.

6 Q. And so you didn't see anything  
7 in the Nokia reference indicating that  
8 presenting a map with two scales was  
9 important to the invention of the Nokia  
10 reference, right?

11 MS. SPECHT: Objection to form.

12 A. That's not how I would  
13 characterize it.

14 I would say the invention of  
15 the Nokia reference could be done, easily  
16 done, as I pointed out, because I think  
17 the figures showed that there is not a  
18 consistent scale for the object area.  
19 Just looking at Figure 5, that airport is  
20 over twice the distance away than the  
21 lighthouse and yet they are both shown  
22 approximately the same radius away from  
23 element 28.

24 So I am just saying the  
25 invention of Nokia doesn't require that

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2 the object area be in a consistent scale.  
3 That's not the focus. The focus of the  
4 Nokia invention and the focus of '297 are  
5 not around the specifics of scales. I  
6 guess that's not the focus of the  
7 invention.

8 And the Nokia reference could  
9 easily, as we see in Figure 5, be  
10 presented where the object area is not  
11 presented at a constant scale. I think  
12 you see evidence in looking at that  
13 figure.

14 Q. I am not asking you about  
15 constant scale. What I am asking you is,  
16 either it does or it doesn't. Does the  
17 Nokia reference require two scales in  
18 order to achieve its inventive concept or  
19 does it not require two scales to achieve  
20 its inventive concept? What is your  
21 opinion on that?

22 MS. SPECHT: Objection to form.

23 Asked and answered.

24 Q. You were answering me why the  
25 scales don't have to be consistent. I am

1 CRAIG ROSENBERG

2 just asking if the Nokia reference  
3 requires two scales in order to achieve  
4 the object of its invention?

5 MS. SPECHT: Same objection.

6 A. Yes, in the sense that the  
7 object area would have a different scale,  
8 a different scale than the detailed area.  
9 So I agree with that. The object area  
10 needs to have a different scale.

11 What I was talking about for  
12 the last 10 minutes or so is that the  
13 object area, all of the icons that are  
14 placed in the object area don't have to  
15 have the same scale as each other. So  
16 maybe we got off on a tangent having to  
17 do with constant scales.

18 But, yes, it would require two  
19 scales because the object area is  
20 necessarily a much more zoomed-out scale  
21 than the detailed area.

22 Q. Okay.

23 MR. RUBINO: I have no further  
24 questions.

25 MS. SPECHT: Can we take a quick

1 CRAIG ROSENBERG

2 break.

3 (Off the record.)

4 THE REPORTER: On the record.

5 BY MS. SPECHT:

6 Q. Dr. Rosenberg, do you recall  
7 counsel for NorthStar asking you about  
8 the computing limitations and  
9 specifically computing of placement of  
10 the OVI?

11 A. I do recall that, yes.

12 Q. And I believe you testified  
13 that there should be an algorithm for  
14 computing the placement; is that correct?

15 MR. RUBINO: Objection to form.

16 A. That's my recollection.

17 Q. Is it your opinion that the  
18 prior art you've relied on in this case  
19 discloses an algorithm for computing the  
20 placement of the OVI?

21 MR. RUBINO: Objection to form.

22 Beyond the scope.

23 A. Yes, it is.

24 Q. And which reference discloses  
25 an algorithm for computing placement?

1 CRAIG ROSENBERG

2 MR. RUBINO: Objection to form.

3 Beyond the scope.

4 A. So I believe both Krietler as  
5 well as Suomela/Nokia teach that.

6 Q. And can you explain how those  
7 references disclose the algorithm you  
8 testified about?

9 MR. RUBINO: Objection to form.  
10 Beyond the scope. And let the record  
11 reflect I didn't ask him anything  
12 about how these limitations were met  
13 and you're going well beyond the scope  
14 of his declaration.

15 A. So I am looking at Krietler  
16 column 6, line 50. It says, "In some  
17 embodiments the links are shown  
18 visually." The links are the OVIs, are  
19 shown visually on the map.

20 For example, if the user is  
21 looking at the center of San Francisco,  
22 the San Francisco International Airport  
23 is to the south of the city. An icon may  
24 be displayed on the south border of the  
25 image that points in the general

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2 direction of San Francisco Airport, for  
3 example, as shown in Figure 1, the  
4 special icon 110 may be an arrow which is  
5 easily distinguished from other types of  
6 icons on the image. So if you look at  
7 Figure 1 it talks about computing that  
8 the San Francisco Airport is to the south  
9 of where the user has indicated it's  
10 placed on the south border. The arrow is  
11 pointing in the proper direction; that  
12 would be an example from Krietler.

13 Q. And you also testified that  
14 Suomela discloses an algorithm for  
15 computing placement, correct?

16 MR. RUBINO: Objection. Beyond  
17 the scope of his questioning and his  
18 declaration.

19 A. I did, yes.

20 Q. And can you explain how Suomela  
21 discloses an algorithm in your opinion?

22 MR. RUBINO: Same objections.

23 A. I guess one point I could point  
24 you to is column 4 of Suomela, which is  
25 also referred to as Nokia. Column 4,

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2 lines, line 39.

3 The distance indicator of 44  
4 shows the distance from the center of the  
5 map or location indicator to each of the  
6 objects 29 as the location is represented  
7 by the location indicator 28 and objects  
8 29 are known. The processor 14 is able  
9 to determine both distance and direction  
10 between these locations using, for  
11 example, algorithms contained in the map  
12 software 21.

13 So this is referring to Suomela  
14 Figure 5. And we see that there is the,  
15 algorithms are computing things such as  
16 distance that we see in element 44 for  
17 the lighthouse and the airport.

18 Q. Do you recall counsel for  
19 NorthStar asking you about the proper  
20 interpretation of the claim term distance  
21 and travel-related information?

22 A. I recall that.

23 Q. And do you remember testifying  
24 that distance alone may satisfy this  
25 limitation?

1 CRAIG ROSENBERG

2 MS. SPECHT: Objection to form.

3 A. I do recall that, yes.

4 Q. Is it your opinion that  
5 additional travel information in addition  
6 to distance could also satisfy this  
7 limitation?

8 A. Absolutely, yes.

9 Q. And is it your opinion that the  
10 references you've relied on in your  
11 declaration disclose both distance as  
12 well as additional travel information?

13 MS. SPECHT: Objection to form.

14 A. Yes, we see that on Figure 5 of  
15 Suomela I was just referring to. The  
16 directionality element 42. The distance.  
17 The type of, the category, if you will,  
18 whether it's a light house or airport.

19 Q. So in your opinion does the  
20 interpretation of the term distance and  
21 travel-related information impact your  
22 analysis on obviousness at all?

23 MR. RUBINO: Objection to form.

24 Beyond the scope.

25 A. No, it does not.

1 CRAIG ROSENBERG

2 Q. Do you recall counsel for  
3 NorthStar asking about the scaling in the  
4 Suomela or Nokia reference?

5 A. I recall that.

6 Q. And in your opinion does the  
7 scaling in Suomela have any impact on its  
8 ability to be combined with Krietler?

9 MR. RUBINO: Objection, form.  
10 Beyond the scope.

11 A. No, it does not.

12 Q. Would combining Suomela with  
13 Krietler destroy the purpose of the  
14 Suomela reference?

15 MR. RUBINO: Objection to form.  
16 Beyond the scope.

17 A. Not in the least. There is  
18 tremendous similarities between the three  
19 subject patents, Suomela and Krietler,  
20 and Suomela goes into more detail about  
21 travel-related information.

22 MS. SPECHT: Thank you, no  
23 further questions.

24 MR. RUBINO: A couple of  
25 follow-ups for me.

1 CRAIG ROSENBERG

2 BY MR. RUBINO:

3 Q. Dr. Rosenberg, did you discuss  
4 those answers with your counsel during  
5 the break?

6 A. I did not. They left the room.  
7 Shut the door. And I had, I had no idea  
8 what they were going to question me  
9 about.

10 Q. And nothing in your redirect  
11 there changes any of the answers that you  
12 have given earlier, right? You're not  
13 rescinding any of your answers, right?

14 A. That's correct.

15 MR. RUBINO: No further  
16 questions. Pass the witness.

17 MS. SPECHT: All right. I think  
18 no questions here. So I think we can  
19 conclude.

20 (Time noted: 1:56 p.m.)

21

22

23

24

25

ACKNOWLEDGMENT OF DEPONENT

I have read the foregoing transcript of my deposition and except for any corrections or changes noted on the errata sheet, I hereby subscribe to the transcript as an accurate record of the statements made by me.

-----  
CRAIG ROSENBERG

SUBSCRIBED AND SWORN before  
and to me this \_\_\_\_ day of \_\_\_\_\_,  
2024.

-----  
NOTARY PUBLIC

My Commission Expires:

CERTIFICATION

I, DAWN MATERA, a Notary Public for  
and within the State of New York, do  
hereby certify:

That the witness whose testimony as  
herein set forth, was duly sworn by me;  
and that the within transcript is a true  
record of the testimony given by said  
witness.

I further certify that I am not  
related to any of the parties to this  
action by blood or marriage, and that I  
am in no way interested in the outcome of  
this matter.

IN WITNESS WHEREOF, I have hereunto  
set my hand this 13th day of February,  
2024.

*Dawn Matera*

DAWN MATERA

\* \* \*

I N D E X

| Witness | Page |
|---------|------|
|---------|------|

CRAIG ROSENBERG

|                           |       |
|---------------------------|-------|
| Examination by Mr. Rubino | 3, 81 |
| Ms. Specht                | 75    |

E X H I B I T S

| Rosenberg | Page |
|-----------|------|
|-----------|------|

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| Exhibit 1 Final judgment in Fidelity<br>Information Services<br>versus Groove Digital | 23 |
|---------------------------------------------------------------------------------------|----|

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## ERRATA SHEET

## VERITEXT

CASE NAME: BMW v. NorthStar

DATE OF DEPOSITION: February 2, 2024

WITNESS'S NAME: Craig Rosenberg

PAGE/LINE(s) / CHANGE REASON

| PAGE/LINE(s) | CHANGE | REASON |
|--------------|--------|--------|
| 1            |        |        |
| 2            |        |        |
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CRAIG ROSENBERG

Subscribed and Sworn To  
 Before Me This \_\_\_\_\_ Day  
 of \_\_\_\_\_, 2024.

Notary Public

My Commission Expires \_\_\_\_\_

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| <b>&amp;</b>          | <b>110</b> 77:4        | <b>202300890</b> 6:3  | <b>33</b> 35:18        |
| <b>&amp;</b> 2:3      | <b>11:37</b> 1:15      | <b>202300934</b> 6:3  | <b>3300</b> 2:12       |
| <b>0</b>              | <b>12</b> 14:9         | <b>202301017</b> 6:4  | <b>34</b> 35:18        |
| <b>001</b> 23:18,20   | <b>130,000</b> 5:17    | <b>2024</b> 1:14      | <b>39</b> 78:2         |
| <b>00890</b> 35:5     | <b>13th</b> 83:18      | 82:18 83:19           | <b>4</b>               |
| <b>050</b> 27:25 28:4 | <b>14</b> 78:8         | 85:3,22               | <b>4</b> 38:13 40:2,3  |
| 28:11 29:17           | <b>1400</b> 2:5        | <b>206</b> 2:17       | 40:4 41:3              |
| 30:13,25 31:18        | <b>150</b> 5:12,21     | <b>21</b> 78:12       | 45:23 77:24,25         |
| 32:11 33:7            | 69:2                   | <b>212-257-5796</b>   | <b>411</b> 2:16        |
| 34:10                 | <b>17</b> 35:17        | 2:18                  | <b>414</b> 49:21       |
| <b>1</b>              | <b>17th</b> 2:4        | <b>212-257-5797</b>   | <b>42</b> 69:17,18     |
| <b>1</b> 15:5,7,12,17 | <b>18</b> 42:5         | 2:18                  | 79:16                  |
| 15:18,22 23:6         | <b>1875</b> 2:9        | <b>23</b> 43:3 84:7   | <b>44</b> 69:20 78:3   |
| 23:7,15 35:19         | <b>19</b> 37:15        | <b>230</b> 15:9       | 78:16                  |
| 35:20,25 36:5         | <b>1:56</b> 81:20      | <b>25</b> 37:15 43:25 | <b>46</b> 43:3,12      |
| 36:8 37:15,25         | <b>1e</b> 55:17        | 48:9                  | <b>46-1</b> 26:22      |
| 39:2,15 40:7          | <b>1s</b> 23:16        | <b>271</b> 2:4        | <b>47</b> 44:18        |
| 49:4 54:4,6,14        | <b>2</b>               | <b>28</b> 70:12 72:23 | <b>5</b>               |
| 55:4,5,7,17,21        | <b>2</b> 1:9,14 15:6,8 | 78:7                  | <b>5</b> 1:9 39:2,2    |
| 56:2,3,6,16           | 15:15,17 55:10         | <b>29</b> 78:6,8      | 40:5 41:4,4            |
| 57:3,8,15,18          | 55:21 56:17            | <b>297</b> 35:6,17    | 42:2,2,5 57:4          |
| 59:18 60:7            | 59:18 61:3             | 37:3 39:10,20         | 57:12 67:16,17         |
| 61:3,15 62:2          | 62:16 85:3             | 40:15 43:18           | 67:19 68:23            |
| 62:15 77:3,7          | <b>2.5</b> 69:3 70:11  | 44:15,17 45:21        | 72:19 73:9             |
| 84:7                  | 70:13                  | 49:4 54:7 55:5        | 78:14 79:14            |
| <b>10</b> 14:9 43:2   | <b>20</b> 43:12 44:18  | 56:3 57:12,15         | <b>5.5</b> 70:14       |
| 44:17 74:12           | <b>200</b> 5:13,21     | 60:3 62:16            | <b>50</b> 3:13 76:16   |
| <b>100</b> 28:24      | <b>2011</b> 1:9        | 67:8 69:14            | <b>50/50</b> 21:25     |
| 51:19                 | <b>2013</b> 1:9        | 71:11 72:5            | <b>512</b> 49:13,21,22 |
| <b>1001</b> 23:19     | <b>2016/2017</b>       | 73:4                  | 50:12 51:12            |
| 35:4                  | 18:15                  | <b>2nd</b> 2:12       | 52:19 53:10            |
| <b>101</b> 15:3 20:15 | <b>20190</b> 2:10      | <b>3</b>              | 57:24                  |
| <b>10580</b> 2:17     | <b>20190050</b> 26:6   | <b>3</b> 84:3         | <b>514</b> 49:13       |
|                       | <b>2023</b> 5:24       | <b>30363-6209</b> 2:5 | 50:25 53:9,14          |

|                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 58:22,24 59:9<br>60:14<br><b>516</b> 49:14,21,22<br>49:25 50:25<br>53:9,14<br><b>5777</b> 83:22<br><b>58</b> 41:3<br><b>5a</b> 43:11,22<br>44:16 49:12,13<br>49:20 52:20,20<br>57:6,8,12,17<br>60:13,14<br><b>5b</b> 43:11,22<br>44:16 | <b>800</b> 2:9<br><b>81</b> 84:3<br><b>9</b><br><b>90</b> 43:15,17<br><b>93</b> 37:2<br><b>94304</b> 2:13<br><b>99</b> 68:24<br><b>a</b><br><b>aatrix</b> 14:25<br>20:16<br><b>ability</b> 57:2<br>80:8<br><b>able</b> 23:21<br>67:11 78:8<br><b>absolutely</b> 79:8<br><b>abstract</b> 69:24<br><b>acceptable</b><br>35:15<br><b>accurate</b> 4:17<br>82:8<br><b>accurately</b> 56:5<br><b>achieve</b> 73:18<br>73:19 74:3<br><b>acknowledg...</b><br>82:2<br><b>action</b> 83:14<br><b>active</b> 11:2<br><b>actually</b> 60:8<br><b>add</b> 56:15<br><b>addition</b> 79:5<br><b>additional</b><br>33:24 79:5,12<br><b>admitted</b> 44:21 | <b>aerial</b> 56:9<br>60:12,15,16<br><b>afar</b> 17:25<br><b>afternoon</b><br>48:17,20,21<br><b>ago</b> 18:12<br>43:21<br><b>agree</b> 14:24<br>32:9 57:24<br>58:8,16 71:13<br>74:9<br><b>agreed</b> 15:5,6<br>15:13,19 18:22<br>20:8 28:25<br>29:2<br><b>agreeing</b> 48:5<br><b>agreement</b> 5:4<br>5:8<br><b>airplane</b> 11:7<br><b>airport</b> 69:20<br>70:14,17 72:19<br>76:22 77:2,8<br>78:17 79:18<br><b>algorithm</b><br>38:16,20,21<br>39:3 45:5,6,16<br>46:3,4,10,21<br>47:7,21 48:6,7<br>49:5 52:9,16<br>52:24 75:13,19<br>75:25 76:7<br>77:14,21<br><b>algorithmically</b><br>53:7 | <b>algorithms</b><br>78:11,15<br><b>alice</b> 15:5,7,9<br>15:12,15,17<br><b>allowed</b> 17:23<br><b>alternate</b> 43:3<br><b>alto</b> 2:13<br><b>america</b> 1:4<br><b>analysis</b> 14:24<br>15:3 16:5,10<br>18:23 19:11<br>20:9,13 27:18<br>28:16,25 29:8<br>30:6,6,12,21<br>32:19 33:8,12<br>36:12,12 38:10<br>42:23 62:25<br>64:22 79:22<br><b>analyze</b> 40:19<br><b>analyzed</b> 63:12<br><b>analyzing</b><br>26:15<br><b>answer</b> 29:10<br>31:10 34:18<br><b>answered</b><br>73:23<br><b>answering</b><br>73:24<br><b>answers</b> 3:25<br>4:3 33:23 81:4<br>81:11,13<br><b>anticipation</b><br>26:16<br><b>anyway</b> 15:23 |
| <b>6</b>                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>6</b> 76:16<br><b>60</b> 24:14,16<br><b>61</b> 26:18<br><b>64</b> 38:14<br><b>650</b> 5:15,22<br><b>66</b> 55:7                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>7</b>                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>7</b> 59:3 60:14<br><b>700</b> 50:19<br>57:25<br><b>734</b> 66:2,16<br><b>75</b> 84:4                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>8</b>                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>8</b> 55:24 56:2<br>58:6 59:17<br>60:9 61:13<br><b>8,032,297</b> 35:4<br><b>8,478,527</b> 1:8                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>apparatus</b> 37:11<br><b>appeal</b> 1:2<br><b>appearances</b> 2:2<br><b>appellate</b> 15:19<br><b>applet</b> 26:2<br><b>applets</b> 19:25 25:12,23<br><b>applied</b> 63:12 64:21<br><b>applying</b> 43:4 54:23<br><b>appropriate</b> 39:16 40:18 41:10,24<br><b>appropriately</b> 66:23<br><b>approximately</b> 3:13 5:17 72:22<br><b>apps</b> 11:9<br><b>area</b> 19:16 66:22 67:2,13 68:2,2,9 69:7 69:11,16 70:21 72:2,18 73:2 73:10 74:7,8,9 74:13,14,19,21<br><b>arguments</b> 28:11<br><b>army</b> 30:2,3<br><b>arris</b> 22:10<br><b>arrival</b> 55:13 61:7 | <b>arrow</b> 50:12,13 50:17 51:2 53:4 56:22 58:3 77:4,10<br><b>arrowhead</b> 50:14<br><b>art</b> 7:25 8:2,22 25:3 26:9,15 36:9,11 40:23 42:14 44:10 63:13,21 64:2 64:6,14,25 66:6 70:4 75:18<br><b>artisan</b> 27:8<br><b>ascertain</b> 39:25<br><b>ascertained</b> 38:8<br><b>aside</b> 34:20<br><b>asked</b> 15:2,8,18 15:22 39:12 47:20 73:23<br><b>asking</b> 3:23 9:25 14:18 33:16,17,17,19 34:11 38:6 40:6 44:15 46:8 56:24 61:20,21 63:10 63:11 73:14,15 74:2 75:7 78:19 80:3<br><b>associated</b> 49:23 67:24,25 69:11 | <b>assume</b> 17:12 26:12<br><b>assumed</b> 4:13<br><b>assumes</b> 21:6<br><b>assuming</b> 13:19<br><b>atlanta</b> 2:5<br><b>attention</b> 70:20<br><b>attorney</b> 17:3 19:5 62:5,6,19<br><b>attorneys</b> 2:4 12:12 13:12,25 14:8 15:8,21<br><b>audience</b> 25:4 27:12<br><b>avenue</b> 2:12,16<br><b>aware</b> 16:6 31:13,14<br><b>b</b><br><b>b</b> 3:2 32:5 84:6<br><b>back</b> 5:3 7:15 7:16 12:5,17 12:18,23 17:13 20:20 21:2 40:25 43:11 44:10 48:15 49:16,19 58:25 60:6<br><b>backed</b> 32:18<br><b>background</b> 29:8<br><b>bad</b> 15:21,23<br><b>based</b> 19:11 50:22 62:25 65:12 | <b>basically</b> 8:5,16<br><b>basis</b> 28:16,17 29:11 31:24 32:19 33:2<br><b>believe</b> 5:2,5,7 5:23 8:12 16:25 19:24 20:15 29:14 30:12 31:5,7 36:17 38:10 39:16 40:18 46:13,18 51:15 52:20 55:3 56:17 65:4 68:8 75:12 76:4<br><b>benefit</b> 5:6<br><b>best</b> 29:11,16 29:18,23<br><b>beyond</b> 75:22 76:3,10,13 77:16 79:24 80:10,16<br><b>binary</b> 12:15<br><b>bit</b> 28:6 46:5 49:25 68:21<br><b>blood</b> 83:14<br><b>bmw</b> 1:4 4:23 4:24 5:6,7 30:14 31:13 32:7 85:3<br><b>board</b> 1:2<br><b>border</b> 68:2 76:24 77:10 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>borders</b> 71:3<br><b>bottom</b> 24:14<br>24:15 38:13<br>45:22 55:4,6<br>55:20 56:16<br>59:17 61:2,14<br>61:14<br><b>boundary</b><br>58:19<br><b>break</b> 48:11,13<br>48:22 75:2<br>81:5<br><b>bring</b> 9:13<br>49:11 57:10<br><b>bringing</b> 9:8<br><b>broader</b> 67:11                                                         | 17:11,16 18:8<br>18:23 19:4,15<br>19:20 20:3,9<br>20:17,18 22:7<br>22:12,19,23<br>24:7,11 25:10<br>25:19 26:5<br>27:19,25 28:4<br>29:17 30:5,19<br>31:2 32:4,11<br>75:18 85:3<br><b>cases</b> 5:11 12:5<br>12:6 16:7<br>21:14,22 22:6<br>22:7,9,14<br>28:23 29:5<br>30:25 34:9<br><b>category</b> 79:17<br><b>cell</b> 11:6<br><b>center</b> 70:13<br>76:21 78:4<br><b>centimeters</b><br>68:5<br><b>certain</b> 26:9<br>68:5,6<br><b>certainly</b> 21:9<br>33:11 71:4,10<br><b>certification</b><br>83:2<br><b>certified</b> 1:16<br><b>certify</b> 83:6,12<br><b>cetera</b> 39:6<br>55:13 61:7<br><b>challenge</b> 14:19<br>14:23 15:16 | <b>challenged</b><br>34:25<br><b>change</b> 85:5<br><b>changes</b> 81:11<br>82:6<br><b>characterize</b><br>22:21,25 31:22<br>32:12,13 67:22<br>72:13<br><b>charts</b> 10:4<br><b>check</b> 22:15<br><b>chose</b> 31:25<br><b>city</b> 76:23<br><b>claim</b> 7:4 18:23<br>35:19,20,25<br>36:5,8,18,21<br>37:25 39:15,18<br>39:22,24,25<br>40:7,11,21,24<br>41:11,13 42:23<br>45:17 49:4,15<br>54:4,6,14<br>55:17,24 56:2<br>56:2,3,6 57:3,8<br>57:15,18 58:6<br>59:17 60:9<br>61:13,14 62:2<br>62:7 63:2,3,7<br>63:11,21,22<br>64:3,15 70:23<br>78:20<br><b>claims</b> 7:3 8:6<br>26:10 36:14<br>38:9 51:17<br>53:22 54:23 | 55:16 62:18<br>63:12 71:10<br><b>clarify</b> 8:15<br><b>clear</b> 61:15<br><b>clicked</b> 23:23<br><b>client</b> 4:23 5:7<br>12:13<br><b>clients</b> 22:4<br><b>close</b> 70:15<br><b>closer</b> 68:21<br><b>code</b> 37:5,7,9<br><b>collection</b><br>62:22<br><b>colors</b> 43:6<br><b>column</b> 35:17<br>37:15 38:13,25<br>40:2,5 41:3,4<br>42:2,5,12 43:2<br>43:25 44:17<br>45:22 48:9<br>55:4,4,7,10,21<br>55:21 56:16,17<br>59:18,18 60:7<br>61:2,3,15<br>62:16 76:16<br>77:24,25<br><b>combination</b><br>53:8 65:15,15<br><b>combined</b> 80:8<br><b>combining</b><br>80:12<br><b>come</b> 22:7<br>31:16<br><b>coming</b> 42:9 |
| <b>c</b>                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>c</b> 3:2<br><b>calculation</b><br>52:9<br><b>california</b> 2:13<br><b>call</b> 46:23<br>48:12 52:24<br>65:23 66:20<br>68:14 69:23<br><b>called</b> 19:5<br><b>calling</b> 68:19<br>71:23<br><b>calls</b> 36:24 67:4<br><b>campaign</b><br>26:21 27:10<br><b>case</b> 4:21 5:18<br>5:23,25 14:17<br>14:25 16:12,15<br>16:17,19,21,23 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|                                   |                                    |                                    |                                |
|-----------------------------------|------------------------------------|------------------------------------|--------------------------------|
| <b>commission</b><br>82:23 85:24  | 50:6                               | <b>conditions</b> 39:4             | <b>context</b> 6:11            |
| <b>communicating</b><br>13:2,5    | <b>computes</b><br>37:18           | <b>conference</b><br>11:6          | 25:13 37:25                    |
| <b>communicati...</b><br>11:10    | <b>computing</b><br>35:24 37:24    | <b>configured</b><br>27:11         | 39:13 45:8                     |
| <b>compare</b> 34:14              | 38:5,11,16,24                      | <b>confirmed</b> 10:3              | 46:11,19 47:3                  |
| <b>compared</b> 34:8              | 39:6,9,10,12,14                    | <b>confirming</b><br>64:17         | 66:19                          |
| <b>comparing</b><br>33:12         | 40:19,21 41:5                      | <b>confirms</b> 26:25              | <b>continue</b> 9:24           |
| <b>comparison</b><br>27:12 33:20  | 42:3,8,24 44:2                     | <b>confused</b> 40:20              | <b>continuous</b><br>21:10     |
| <b>compensated</b><br>5:17        | 44:23 45:3,4,7                     | <b>consider</b> 52:13              | <b>control</b> 17:24           |
| <b>complete</b> 33:23             | 45:18,18 46:4                      | <b>consideration</b><br>39:3       | 19:18                          |
| <b>completely</b><br>30:8,19      | 46:9,19,24                         | <b>consistent</b> 69:9             | <b>controls</b> 17:25          |
| <b>completes</b> 24:2             | 47:5,6,9 48:8                      | 72:18 73:2,25                      | <b>copies</b> 7:22,24          |
| <b>components</b><br>49:10 50:3,9 | 48:23 50:4                         | <b>constant</b> 70:5               | 7:25 8:2 35:11                 |
| 61:16                             | 54:9 56:4,7                        | 73:11,15 74:17                     | <b>corner</b> 53:3             |
| <b>computation</b><br>51:18 52:10 | 57:19,20 58:11                     | <b>construction</b><br>18:23       | 70:16                          |
| <b>compute</b> 36:22              | 58:20 59:2,5                       | <b>constructive</b><br>55:25       | <b>correct</b> 6:5,9           |
| 45:14 46:3                        | 59:10 61:22                        | <b>contacting</b> 17:3             | 8:13 9:23 13:3                 |
| 50:16                             | 63:4,8,16                          | <b>contain</b> 49:9                | 13:8,16 14:4                   |
| <b>computed</b><br>38:15,20 43:23 | 64:19,20 65:5                      | 55:23                              | 16:11 20:14                    |
| 47:16,17 50:15                    | 75:8,9,14,19,25                    | <b>contained</b><br>78:11          | 21:3 24:11                     |
| 50:22 51:13,21                    | 77:7,15 78:15                      | <b>containing</b><br>49:17 55:18   | 27:20 36:10                    |
| 51:24 52:22                       | <b>concept</b> 71:16               | <b>contains</b> 52:5               | 53:20 59:4,8                   |
| 61:24                             | 71:21 73:18,20                     | <b>contemplated</b><br>61:12 64:11 | 63:5 64:22                     |
| <b>computer</b> 18:9              | <b>concerned</b><br>47:15          | <b>contemplates</b><br>43:18       | 68:13 75:14                    |
| 18:10,18 37:5                     | <b>conclude</b> 81:19              | <b>contents</b> 8:21               | 77:15 81:14                    |
| 37:7,9,10,11                      | <b>conclusion</b> 32:8             |                                    | <b>corrections</b><br>82:6     |
|                                   | 36:25                              |                                    | <b>correspond</b><br>8:20 51:8 |
|                                   | <b>conclusory</b><br>27:6,18 28:12 |                                    | <b>corresponden...</b><br>17:9 |
|                                   | 28:21 29:9,13                      |                                    | <b>corresponding</b><br>53:4   |
|                                   | 31:14,21,25                        |                                    | <b>corresponds</b><br>68:6     |
|                                   | 32:16,17                           |                                    |                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>counsel</b> 2:16<br>15:15 33:21<br>35:9 75:7<br>78:18 80:2<br>81:4<br><b>count</b> 12:14<br><b>couple</b> 8:4 27:4<br>65:17 80:24<br><b>course</b> 3:22 4:8<br>9:16 10:17<br>14:8,10 29:21<br>30:17<br><b>court</b> 3:24<br>14:17,23 15:4<br>15:6,11,13,19<br>20:18<br><b>craig</b> 1:12 3:1<br>3:16 4:1 5:1<br>6:1 7:1 8:1 9:1<br>10:1 11:1 12:1<br>13:1 14:1 15:1<br>16:1 17:1 18:1<br>19:1 20:1 21:1<br>22:1 23:1 24:1<br>25:1 26:1 27:1<br>28:1 29:1 30:1<br>31:1 32:1 33:1<br>34:1 35:1 36:1<br>37:1 38:1 39:1<br>40:1 41:1 42:1<br>43:1 44:1 45:1<br>46:1 47:1 48:1<br>49:1 50:1 51:1<br>52:1 53:1 54:1<br>55:1 56:1 57:1 | 58:1 59:1 60:1<br>61:1 62:1 63:1<br>64:1 65:1 66:1<br>67:1 68:1 69:1<br>70:1 71:1 72:1<br>73:1 74:1 75:1<br>76:1 77:1 78:1<br>79:1 80:1 81:1<br>82:12 84:2<br>85:4,20<br><b>crazy</b> 41:23<br><b>creating</b> 48:25<br>49:4,17 52:8<br>55:17,17<br><b>criteria</b> 25:4<br>26:21 27:9<br><b>criticized</b> 19:10<br><b>cross</b> 58:5<br><b>cut</b> 12:6,16<br><b>cutting</b> 33:23<br><b>cv</b> 7:14 16:23<br>22:16 | <b>daubert</b> 14:18<br>14:23 15:16<br><b>dawn</b> 1:15 83:4<br>83:23<br><b>day</b> 4:8 10:17<br>13:18 82:17<br>83:18 85:21<br><b>days</b> 14:8<br><b>deal</b> 11:12<br><b>dealing</b> 70:24<br><b>decide</b> 10:8<br>11:17<br><b>decided</b> 12:11<br><b>decision</b> 24:5<br>32:20<br><b>decisions</b> 16:8<br>20:21<br><b>declaration</b><br>6:15 27:25<br>28:20 34:15,16<br>37:3 65:4<br>76:14 77:18<br>79:11<br><b>declarations</b><br>6:13,16,18,21<br>7:2,23,24 8:4<br>8:18 10:5<br>31:12 33:13,15<br>34:9<br><b>deemed</b> 31:20<br><b>defendant</b> 12:9<br>23:3<br><b>defendants</b><br>22:2 | <b>degrees</b> 43:16<br>43:17<br><b>deponent</b> 82:2<br><b>deposed</b> 3:9,17<br><b>deposition</b> 3:23<br>6:8 9:9,15,23<br>10:23 14:6<br>16:22 23:15<br>45:22 82:5<br>85:3<br><b>describe</b> 14:21<br>14:22<br><b>described</b><br>19:17 53:11<br><b>describes</b> 43:12<br><b>describing</b><br>15:10 38:3<br><b>destroy</b> 80:13<br><b>detail</b> 17:19<br>28:17 32:19<br>80:20<br><b>detailed</b> 67:2<br>74:8,21<br><b>details</b> 17:8<br>19:24<br><b>determine</b><br>11:14 18:20<br>47:8 78:9<br><b>determined</b><br>15:11 27:17<br>28:10 31:19<br>32:15<br><b>determines</b><br>37:19 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>device</b> 17:16<br><b>devices</b> 11:2<br>12:24<br><b>diagram</b> 70:19<br><b>difference</b><br>53:23<br><b>differences</b><br>33:18<br><b>different</b> 6:17<br>8:7 28:5 30:8<br>30:12,18,19,20<br>30:20,22 32:3<br>32:4 38:6 43:5<br>43:6 47:10<br>49:13,14 51:11<br>54:16 60:18<br>61:13,16 68:15<br>69:23,25 70:9<br>74:7,8,10<br><b>digital</b> 19:21<br>22:12 23:9<br>24:5 84:8<br><b>direct</b> 34:18<br><b>direction</b> 43:14<br>43:17 50:16<br>53:12,15,15,23<br>54:2,8,13,18<br>55:11 56:11<br>58:8 61:6,10<br>77:2,11 78:9<br><b>directional</b><br>69:17<br><b>directionality</b><br>50:13 72:3<br>79:16 | <b>directions</b> 43:7<br><b>disagree</b> 10:13<br>14:13 20:12<br><b>disagreed</b> 16:4<br>16:9 19:2 20:8<br><b>disallowed</b><br>15:20<br><b>disclose</b> 76:7<br>79:11<br><b>disclosed</b> 37:12<br><b>discloses</b> 37:4<br>75:19,24 77:14<br>77:21<br><b>disclosure</b><br>38:24<br><b>disclosures</b><br>39:8 40:14<br><b>disconnect</b><br>61:19<br><b>discuss</b> 30:15<br>81:3<br><b>discussed</b> 42:3<br><b>disk</b> 50:7 52:18<br><b>displayed</b><br>38:14,19 43:9<br>45:23 58:21<br>76:24<br><b>distance</b> 36:23<br>38:14,15,19,25<br>39:6,10 42:3<br>45:23,24 49:18<br>50:19,21,22<br>51:10,13 53:5<br>53:11 55:11,18<br>56:4,7,9,10 | 57:20,25 58:7<br>59:2,2,13,15,20<br>59:22,24 60:13<br>60:15,15,16,17<br>61:6,10,11,23<br>61:25 62:3,8<br>62:10,12,15,19<br>62:23 63:3,8,9<br>63:9,14,22,24<br>64:3,5,8,13,15<br>64:18,20,25<br>65:5,7,13<br>69:19 72:3,20<br>78:3,4,9,16,20<br>78:24 79:6,11<br>79:16,20<br><b>distances</b> 40:9<br>70:10<br><b>distinguished</b><br>77:5<br><b>district</b> 14:17<br>20:18<br><b>document</b> 8:8<br>8:10,13,16<br>21:21 23:22<br>34:20 57:17<br><b>documentation</b><br>7:21<br><b>documents</b> 9:6<br>9:8,13 10:16<br>11:13<br><b>doing</b> 39:19<br>41:23<br><b>door</b> 81:7 | <b>dr</b> 3:7 4:20<br>5:10 7:19 8:17<br>9:12 10:3,20<br>10:25 11:22<br>12:23 23:21<br>27:6 33:22<br>34:6,22 35:16<br>48:17 75:6<br>81:3<br><b>draft</b> 6:19,20<br><b>drafted</b> 62:7<br><b>drafting</b> 62:17<br><b>draw</b> 50:17<br>53:3<br><b>drawn</b> 53:17<br><b>drive</b> 37:20<br><b>dry</b> 12:7,16<br><b>duly</b> 3:3 83:8<br><b>dunner</b> 2:3 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>e</b>                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>e</b> 3:2,2 11:14<br>13:17 84:1,6<br><b>earlier</b> 20:15<br>45:21 51:8<br>54:18 81:12<br><b>easily</b> 72:15<br>73:9 77:5<br><b>east</b> 58:19<br><b>eastern</b> 1:15<br><b>edge</b> 58:18<br><b>edges</b> 58:18<br><b>effort</b> 21:9<br><b>eight</b> 7:9,11<br>12:2                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>either</b> 17:10<br>53:20 63:14<br>73:16<br><b>electronic</b> 7:23<br>8:2 11:2 12:24<br>12:25<br><b>element</b> 50:16<br>52:4 60:14<br>63:16 69:18,19<br>70:12 72:23<br>78:16 79:16<br><b>elements</b> 49:21<br>50:20 52:23<br>53:9<br><b>embodied</b> 37:6<br>37:8<br><b>embodiment</b><br>43:4,15<br><b>embodiments</b><br>76:17<br><b>employed</b> 4:21<br><b>engaged</b> 4:24<br>5:5,8 7:11<br><b>engagement</b><br>5:3<br><b>entirely</b> 52:10<br><b>entitled</b> 9:13<br><b>equally</b> 70:15<br><b>equipment</b><br>17:21,22,25<br>19:18,19<br><b>equivalent</b><br>69:12 71:24<br><b>errata</b> 82:7<br>85:1 | <b>esq</b> 2:6,8,11,19<br><b>essentially</b> 19:8<br>51:2 58:13<br>65:14 67:3,7<br>71:24<br><b>estimate</b> 5:12<br>5:19,20,20<br><b>estimated</b><br>55:12 56:12<br>60:23 61:7<br><b>estimating</b> 14:9<br><b>et</b> 39:5 55:13<br>61:7<br><b>evidence</b> 28:17<br>29:8 41:19<br>73:12<br><b>exactly</b> 39:19<br>49:17<br><b>examination</b><br>1:12 3:6 84:3<br><b>examined</b> 3:4<br><b>example</b> 41:2<br>54:18 58:22<br>59:25 67:16<br>76:20 77:3,12<br>78:11<br><b>examples</b> 49:20<br>55:15,22 56:15<br>62:13<br><b>except</b> 82:5<br><b>exception</b><br>69:22<br><b>excerpts</b> 8:3<br><b>executed</b> 37:5<br>37:10 38:22 | <b>exhaustive</b> 40:5<br><b>exhibit</b> 9:2 23:6<br>23:6,7,14,16,17<br>23:18,18,19,20<br>35:4,6,13 84:7<br><b>exhibits</b> 9:18<br>35:11<br><b>expected</b> 29:4<br><b>experience</b> 7:16<br><b>expert</b> 1:13<br>6:12 14:13<br>22:22,24 24:11<br>24:18,21,22<br>26:19 34:14<br>38:8<br><b>expires</b> 82:23<br>85:24<br><b>explain</b> 43:22<br>76:6 77:20<br><b>explorer</b> 2:9<br><b>extrinsic</b> 41:19<br><b>f</b><br><b>fabricant</b> 2:15<br><b>fabricantllp.c...</b><br>2:20<br><b>facing</b> 43:14<br><b>fact</b> 28:22,23<br>65:12 70:9<br><b>facts</b> 30:8,21<br><b>fair</b> 4:9,14,15<br>5:16 11:19,20<br>18:24,25 19:12<br>20:23 27:19<br>41:4 52:11<br>71:18 | <b>fairly</b> 3:20<br><b>fallacious</b> 32:8<br><b>far</b> 5:18 12:20<br>16:24 47:14<br>70:17,18<br><b>farabow</b> 2:3<br><b>farmers</b> 17:24<br><b>farming</b> 17:21<br><b>fault</b> 15:24<br><b>favor</b> 12:3,14<br><b>fax</b> 2:18<br><b>february</b> 1:14<br>83:18 85:3<br><b>feet</b> 50:19<br>57:25<br><b>felt</b> 15:21,23<br><b>fetched</b> 46:16<br><b>fetching</b> 46:25<br><b>fidelity</b> 19:20<br>23:8 24:3 84:7<br><b>figure</b> 43:11,22<br>44:16 49:10,11<br>49:12 57:3,12<br>60:14 67:16,17<br>67:19 68:23<br>72:19 73:9,13<br>77:3,7 78:14<br>79:14<br><b>figures</b> 68:12<br>72:17<br><b>file</b> 23:24 41:15<br>52:3<br><b>filed</b> 15:15<br>33:13 34:15,17 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>filing</b> 1:9<br><b>final</b> 16:8 23:7<br>24:5 84:7<br><b>find</b> 28:21 29:7<br>31:24 42:18,21<br>44:5 56:16<br><b>fine</b> 48:14<br><b>finish</b> 31:9<br><b>finnegan</b> 2:3<br>4:23,25 5:6,8,9<br>13:12 22:4,6<br><b>finnegan.com</b><br>2:7,8,11<br><b>firm</b> 4:23<br><b>first</b> 3:3 36:13<br>38:9 40:3,11<br>41:7 57:19<br><b>fis</b> 22:12,16,16<br><b>five</b> 50:20 58:3<br><b>fix</b> 27:23<br><b>floor</b> 2:12<br><b>fly</b> 50:5<br><b>focus</b> 73:3,3,4,6<br><b>folder</b> 9:2<br><b>follow</b> 80:25<br><b>following</b> 56:9<br>56:14 60:12,22<br><b>follows</b> 3:5<br>64:14<br><b>foregoing</b> 82:4<br><b>forget</b> 40:4<br><b>fork</b> 49:24<br>59:14<br><b>form</b> 20:24<br>28:14 30:16 | 31:3 33:9<br>34:12 37:7<br>50:5 54:3 63:6<br>66:12 71:23<br>72:11 73:22<br>75:15,21 76:2<br>76:9 79:2,13<br>79:23 80:9,15<br><b>format</b> 51:11<br>52:3<br><b>forth</b> 83:8<br><b>forward</b> 21:4<br>28:2,13<br><b>found</b> 41:7<br><b>foundation</b><br>66:9<br><b>foundational</b><br>66:11<br><b>fourth</b> 35:25<br><b>francisco</b> 76:21<br>76:22 77:2,8<br><b>fremd</b> 2:16<br><b>front</b> 18:14<br><b>fully</b> 51:20<br><b>further</b> 68:22<br>69:6 70:18<br>74:23 80:23<br>81:15 83:12<br><b>future</b> 21:13 | <b>gasoline</b> 50:2<br><b>general</b> 19:16<br>21:24 37:13<br>46:12 47:22<br>48:6 56:24<br>58:17 66:15<br>76:25<br><b>generally</b> 47:7<br><b>generated</b> 8:11<br><b>generating</b><br>23:24<br><b>georgia</b> 2:5<br><b>gestures</b> 4:2<br><b>given</b> 29:4,24<br>30:3,6 71:9<br>81:12 83:10<br><b>gives</b> 56:14<br><b>giving</b> 24:25<br><b>go</b> 3:18 5:2<br>7:15,16 12:4<br>12:17 17:13<br>21:2 30:2 39:7<br>41:25 42:4<br>49:16,19 55:3<br>57:6 60:6<br><b>goes</b> 80:20<br><b>going</b> 10:15,19<br>11:12 21:3<br>27:25 28:13<br>35:10,12 44:9<br>44:13 48:10<br>49:19 50:25<br>55:4 63:8<br>65:22 76:13<br>81:8 | <b>good</b> 3:7,8,21<br>28:15 48:17,20<br>48:21<br><b>gps</b> 43:5<br><b>grabbed</b> 48:2<br>50:5<br><b>graphics</b> 52:25<br><b>great</b> 42:20<br><b>green</b> 15:2<br>20:16<br><b>groove</b> 19:21<br>22:12 23:9<br>24:4 84:8<br><b>ground</b> 3:19<br><b>grounds</b> 8:6,18<br>8:22,23 10:4<br><b>guess</b> 18:16<br>41:21 43:8,9<br>68:14 69:22<br>73:6 77:23<br><b>guessing</b> 18:15 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>h</b>                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>h</b> 84:6<br><b>hand</b> 4:2 17:17<br>18:5,10,19<br>53:3 57:3,4<br>83:18<br><b>happened</b><br>14:20 21:12<br><b>happy</b> 8:25<br>12:14<br><b>hat</b> 3:20<br><b>head</b> 4:2 13:20<br><b>heard</b> 19:2                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>held</b> 12:3 17:17<br>18:5,10,19<br>21:17<br><b>help</b> 8:14 37:23<br>56:25<br><b>helpful</b> 49:11<br><b>henderson</b> 2:3<br><b>hereunto</b> 83:17<br><b>highly</b> 10:12<br><b>hillview</b> 2:12<br><b>history</b> 41:15<br><b>hits</b> 41:7<br><b>honestly</b> 9:10<br><b>hour</b> 5:15,22<br>48:11<br><b>hourly</b> 5:14<br><b>hours</b> 5:11,13<br>5:21 14:9<br><b>house</b> 79:18 | <b>imaginary</b><br>38:16<br><b>impact</b> 79:21<br>80:7<br><b>implemented</b><br>37:5<br><b>implementing</b><br>37:13<br><b>implied</b> 53:15<br>61:8<br><b>implies</b> 31:4,11<br>31:16<br><b>imply</b> 41:22<br>68:5<br><b>important</b><br>56:20 72:9<br><b>imprecise</b><br>52:14<br><b>improvement</b><br>21:10<br><b>inappropriate</b><br>10:12<br><b>include</b> 39:3<br>51:4 55:8 58:2<br>60:4,20 61:4<br>69:16,19,21<br><b>included</b> 50:10<br>61:17,18,22<br><b>includes</b> 56:8<br>60:11,11 62:12<br>62:14 64:8,25<br><b>including</b> 62:22<br><b>incredibly</b><br>12:13 | <b>independent</b><br>22:24 30:6<br><b>indicate</b> 4:12<br>43:23<br><b>indicated</b> 77:9<br><b>indicating</b> 72:7<br><b>indicator</b> 38:15<br>56:11 58:7<br>60:19,20 78:3<br>78:5,7<br><b>inform</b> 42:14<br><b>information</b><br>10:6,11 23:8<br>24:4 37:19,21<br>49:19 54:20,24<br>55:8,10,15,19<br>55:23 56:8,19<br>57:21 58:2,14<br>59:10,16,21<br>60:2,5,10 61:4<br>61:5,23,25<br>62:4,9,11,12,14<br>62:20,21 63:15<br>63:24,25 64:7<br>64:8,11,21<br>65:6,14 72:2<br>78:21 79:5,12<br>79:21 80:21<br>84:8<br><b>informed</b> 21:7<br>21:8<br><b>insist</b> 10:16,20<br><b>instance</b> 20:11<br><b>intellectual</b><br>16:14 | <b>interacts</b> 39:9<br><b>interest</b> 66:20<br>66:21<br><b>interested</b><br>83:15<br><b>interfaces</b><br>17:23<br><b>international</b><br>76:22<br><b>interpretation</b><br>63:2 78:20<br>79:20<br><b>interpreting</b><br>42:22<br><b>intrinsic</b> 39:17<br>40:12 41:14<br>45:10 47:3,25<br><b>introduce</b> 9:22<br><b>introduced</b><br>23:6<br><b>invention</b> 40:10<br>41:17 51:16<br>65:21 66:7,15<br>66:18 68:16<br>72:9,14,25<br>73:4,7 74:4<br><b>inventive</b> 71:15<br>71:21 73:18,20<br><b>involve</b> 47:21<br><b>involved</b> 25:25<br><b>involves</b> 47:7<br><b>ipc</b> 22:11<br><b>ipr</b> 6:2 17:12<br>21:15 26:5,14 |
| <b>i</b>                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>icon</b> 49:23,24<br>58:14 59:6,12<br>69:17 76:23<br>77:4<br><b>icons</b> 51:7,22<br>67:4 68:18,19<br>71:24 72:3<br>74:13 77:6<br><b>idea</b> 81:7<br><b>identification</b><br>23:10<br><b>iii</b> 2:19<br><b>image</b> 76:25<br>77:6                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                                                                                                                                                                                                             |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>iprs</b> 6:2 16:8<br><b>irrigation</b><br>17:22,24 19:18<br>19:19<br><b>issue</b> 1:9 6:24<br>8:7 17:15<br>19:12 20:16<br><b>issues</b> 18:5,17<br>19:3 27:24<br><b>item</b> 50:11<br><b>items</b> 62:22 | <b>kind</b> 9:9 26:2<br><b>knife</b> 49:24<br>59:14<br><b>know</b> 6:22 9:8<br>12:16 16:22<br>17:13 19:3<br>22:23 23:12<br>25:13 28:2,9<br>29:19 30:23<br>33:3 34:7<br>64:24 70:16                                                           | <b>length</b> 50:12<br><b>level</b> 17:18<br><b>library</b> 52:25<br><b>light</b> 79:18<br><b>lighthouse</b><br>68:25 69:3,20<br>70:11 72:21<br>78:17<br><b>likely</b> 20:18<br>50:4,14 57:5<br><b>limitation</b> 38:4<br>49:15 52:8<br>54:9 57:20<br>58:10 63:4<br>64:19 78:25<br>79:7<br><b>limitations</b> 7:4<br>35:23,25 36:3<br>40:8 75:8<br>76:12<br><b>lindsay</b> 16:20<br><b>line</b> 38:14 41:4<br>42:2,13 55:7<br>62:15 76:16<br>78:2 85:5<br><b>lines</b> 39:2 41:3<br>42:5 43:3<br>44:18 78:2<br><b>links</b> 76:17,18<br><b>lionel</b> 2:8 13:11<br>13:22<br><b>lionel.lavenue</b><br>2:8<br><b>little</b> 9:9 28:6<br>58:3 68:20 | <b>llc</b> 1:4,7<br><b>llp</b> 2:3,15<br><b>loaded</b> 37:9<br><b>local</b> 52:2<br>67:13<br><b>located</b> 1:13<br>59:6<br><b>location</b> 43:24<br>48:4 78:5,6,7<br><b>locations</b> 78:10<br><b>locked</b> 11:4,5<br><b>long</b> 14:5 19:4<br>19:4 25:10<br><b>look</b> 5:3 11:17<br>12:18 13:22<br>24:13 26:16,17<br>34:24 35:17,22<br>38:13 39:17<br>40:11,25 41:13<br>41:19 43:2,12<br>45:17 49:12<br>51:4 52:19<br>55:6,16 57:8<br>57:15 60:25<br>67:16 77:6<br><b>looked</b> 7:14<br>68:11<br><b>looking</b> 39:20<br>40:2 54:4 57:7<br>58:25 63:13,18<br>63:20 68:22<br>72:19 73:12<br>76:15,21<br><b>looks</b> 32:15 |
| <b>j</b>                                                                                                                                                                                                    | <b>knowledge</b><br>14:20 17:5<br>19:11,14,23<br><b>known</b> 27:17<br>78:8<br><b>krietler</b> 37:4,15<br>37:17 38:2,4<br>44:2,7,8,11,14<br>76:4,15 77:12<br>80:8,13,19                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>j</b> 2:19<br><b>jacobson</b> 44:12<br>44:15<br><b>jpegs</b> 52:2<br><b>judgment</b> 23:8<br>24:6 32:22<br>84:7<br><b>july</b> 1:9,9<br><b>jury</b> 11:23 12:3<br>12:11                                  |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>k</b>                                                                                                                                                                                                    | <b>label</b> 31:25<br><b>language</b> 61:2<br>63:21,22 64:4<br>64:16 69:13<br><b>large</b> 12:10<br>28:23<br><b>latest</b> 18:15<br><b>lavenue</b> 2:8<br><b>law</b> 4:22<br><b>lead</b> 2:16<br><b>left</b> 53:3 81:6<br><b>legal</b> 36:25 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>kara</b> 2:6 11:12<br>13:11,14 35:8<br><b>kara.specht</b> 2:7<br><b>keep</b> 19:13<br>21:20 27:13<br>44:9<br><b>kept</b> 12:21,21<br><b>kilometers</b> 68:7<br>68:25 69:2,4<br>70:13,14                  |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>lose</b> 29:19,22<br><b>lower</b> 15:4,6,11<br>15:13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>marriage</b> 83:14<br><b>matera</b> 1:15<br>83:4,23<br><b>materials</b> 10:21<br>29:24 30:5,7,9<br>57:11<br><b>matter</b> 83:16<br><b>mcnamara</b><br>30:2<br><b>mean</b> 7:13 12:6<br>41:11,12 44:7<br>46:22 53:25<br>61:11 64:23<br>66:2<br><b>meaning</b> 37:24<br><b>means</b> 12:25<br>13:5 32:17<br>36:22 38:11,24<br>40:17,19 54:11<br><b>meant</b> 44:12<br><b>media</b> 37:8<br><b>meeting</b> 11:8<br><b>meets</b> 64:3,15<br><b>memorized</b><br>7:13<br><b>message</b> 11:3<br><b>messaging</b> 11:9<br><b>met</b> 14:7 76:12<br><b>method</b> 37:12<br>44:24 55:25<br>56:3,6<br><b>methods</b> 43:4<br>44:22<br><b>michael</b> 2:22 | <b>miles</b> 59:3<br>68:24 70:11<br><b>mind</b> 22:8<br>45:24<br><b>minutes</b> 50:20<br>58:3 74:12<br><b>mischaracteri...</b><br>33:10<br><b>mispronounce</b><br>65:24<br><b>missed</b> 48:18<br><b>missing</b> 54:6<br><b>mistake</b> 21:2,7<br>21:9 31:8,23<br>32:5,11,14<br><b>mistakes</b> 28:13<br>30:24 31:5,6<br>31:12,13,17<br>32:7<br><b>mix</b> 29:3<br><b>mo</b> 56:9,10,12<br>58:8 60:16,16<br>61:5,5<br><b>mode</b> 11:7<br><b>modify</b> 6:20<br><b>moment</b> 38:12<br>43:21<br><b>mondelli</b> 2:22<br><b>money</b> 12:10<br>12:12<br><b>morning</b> 3:7,8<br><b>motivated</b> 27:8<br><b>mountains</b><br>68:21,23,24<br>69:2,6 | <b>move</b> 43:6<br>45:24<br><b>multiple</b> 47:18<br>49:9 56:14<br>71:17,19                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>m</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>n</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>m</b> 2:8<br><b>made</b> 21:2,7,8<br>30:24,25 31:5<br>31:5,8,12,14,15<br>31:16,23 32:5<br>32:6,10,14<br>33:4,6,19 82:9<br><b>mail</b> 11:14<br>13:17<br><b>maintain</b> 66:24<br><b>majority</b> 15:14<br><b>make</b> 26:15<br>28:12 29:8<br>43:5 48:12<br>52:20<br><b>makes</b> 52:24<br><b>map</b> 49:25<br>50:23 55:9,11<br>55:12 58:19<br>66:21,22 67:2<br>67:6,9,13,20<br>68:12 69:15<br>70:8,16 71:22<br>72:8 76:19<br>78:5,11<br><b>mapped</b> 8:6<br><b>march</b> 5:24<br><b>mark</b> 8:24 9:17<br>11:12,15,18<br><b>marked</b> 23:10 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>n</b> 3:2 84:1<br><b>name</b> 3:15 85:3<br>85:4<br><b>named</b> 16:13<br><b>navigate</b> 67:13<br><b>navigation</b><br>37:20<br><b>navigational</b><br>37:18<br><b>necessarily</b><br>12:15 30:21<br>31:22 46:20<br>51:19 68:4<br>74:20<br><b>necessary</b> 61:9<br><b>need</b> 5:2 12:4<br>17:10,13 18:20<br>42:11 46:3,20<br>48:11 50:15,21<br>51:20 52:17,22<br>65:8 69:10<br><b>needs</b> 52:9 60:3<br>64:4,6 74:10<br><b>neither</b> 70:21<br><b>network</b> 50:7<br>51:25<br><b>never</b> 28:18<br>45:24 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>new</b> 1:17 2:17<br/>8:10,12,15 9:8<br/>9:21 10:2,6,11<br/>83:5</p> <p><b>nods</b> 4:2</p> <p><b>nokia</b> 65:18,23<br/>66:3,7,16 67:3<br/>67:15,18 68:11<br/>68:17,20,23<br/>71:14,16,21<br/>72:7,9,15,25<br/>73:4,8,17 74:2<br/>76:5 77:25<br/>80:4</p> <p><b>non</b> 62:6</p> <p><b>north</b> 1:4 58:18</p> <p><b>northeast</b> 69:7</p> <p><b>northstar</b> 1:7<br/>30:14,25 33:4<br/>34:9 44:21<br/>75:7 78:19<br/>80:3 85:3</p> <p><b>notary</b> 1:16 3:4<br/>82:20 83:4<br/>85:23</p> <p><b>noted</b> 81:20<br/>82:6</p> <p><b>notorious</b><br/>17:10 19:7</p> <p><b>number</b> 28:23<br/>29:5 35:3,13<br/>53:2 68:5,7</p> <p><b>numbers</b> 6:3<br/>42:13</p> | <p><b>nw</b> 2:4</p> <p><b>nyshadham</b><br/>2:11</p> <p><b>o</b></p> <p><b>o</b> 3:2</p> <p><b>oo</b> 84:11</p> <p><b>object</b> 10:8,10<br/>50:23 55:9,12<br/>67:4,25 68:9<br/>68:19 69:7,11<br/>70:21 71:23,25<br/>72:18 73:2,10<br/>74:4,7,9,13,14<br/>74:19</p> <p><b>object's</b> 55:11</p> <p><b>objection</b> 10:14<br/>20:24 21:5<br/>28:14 30:16<br/>31:3 33:9<br/>34:12 36:24<br/>54:3 63:6 66:8<br/>66:12 72:11<br/>73:22 74:5<br/>75:15,21 76:2<br/>76:9 77:16<br/>79:2,13,23<br/>80:9,15</p> <p><b>objections</b><br/>77:22</p> <p><b>objects</b> 66:21<br/>67:6,9 69:15<br/>70:8 71:22<br/>78:6,7</p> <p><b>obtained</b> 37:18</p> | <p><b>obvious</b> 26:10<br/>26:20 27:18<br/>36:8 38:4,10</p> <p><b>obviously</b><br/>15:23</p> <p><b>obviousness</b><br/>26:16 27:2<br/>36:12 62:25<br/>64:22 79:22</p> <p><b>office</b> 1:2 8:9<br/>14:13,15,16<br/>16:2,4,9 18:22<br/>19:10 20:8,12<br/>20:17,19,22<br/>27:17 28:10,19<br/>31:8,18</p> <p><b>oh</b> 28:4 38:3<br/>44:9</p> <p><b>okay</b> 3:20 28:7<br/>34:21,25 35:14<br/>35:20 36:2<br/>45:12 48:13,25<br/>54:20,21 57:9<br/>65:24 74:22</p> <p><b>old</b> 3:20</p> <p><b>once</b> 6:20 14:20</p> <p><b>ones</b> 7:17 57:7</p> <p><b>opines</b> 26:19</p> <p><b>opinion</b> 25:2,2<br/>27:2 32:23<br/>36:7 39:23<br/>45:2,6 49:3<br/>52:7 65:11<br/>68:10 71:15<br/>73:21 75:17</p> | <p>77:21 79:4,9<br/>79:19 80:6</p> <p><b>opinions</b> 18:8<br/>26:8 28:18<br/>36:4</p> <p><b>opposing</b> 15:15</p> <p><b>opposite</b> 43:17</p> <p><b>optimal</b> 39:7<br/>42:4</p> <p><b>optional</b> 72:2</p> <p><b>order</b> 27:12<br/>40:22 45:14<br/>73:18 74:3</p> <p><b>ordinary</b> 25:2<br/>27:7</p> <p><b>orientation</b><br/>50:18 66:24<br/>67:5,10</p> <p><b>outcome</b> 83:15</p> <p><b>outcomes</b> 21:22</p> <p><b>outside</b> 66:22</p> <p><b>overall</b> 29:13</p> <p><b>ovi</b> 43:23 44:3<br/>45:19 48:2<br/>49:9,17,23<br/>50:10,23 51:12<br/>52:5,8,19,21<br/>53:24,24 54:2<br/>54:10 55:8,17<br/>55:18 58:21<br/>60:3 61:4<br/>75:10,20</p> <p><b>ovis</b> 42:16 43:5<br/>43:5,13,16<br/>44:23,25 46:13</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 46:15 47:14,16<br>47:17 49:13,14<br>49:20 52:6<br>58:17 67:3,8<br>68:18 69:13<br>70:8 71:2,9,25<br>76:18<br><b>own</b> 15:24<br><b>owner</b> 1:8 2:16<br><b>owner's</b> 44:20                                                                                                                                                                                                                                                              | <b>patent</b> 1:2,2,8,8<br>2:16 8:9 14:12<br>14:15,16 16:2<br>16:4,9 18:22<br>19:10 20:8,12<br>20:17,19,21<br>26:11 27:17<br>28:10,19 31:7<br>31:18 35:3,17<br>39:11 44:20<br>46:11 47:13,22<br>49:5 55:5<br>61:15 66:3,16<br>69:14 71:11,21<br><b>patents</b> 6:23<br>8:7 18:3 21:16<br>32:7 34:24,25<br>46:12,19 71:8<br>80:19<br><b>path</b> 38:17<br><b>patterns</b> 39:5<br><b>paying</b> 70:20<br><b>pdf</b> 35:18 41:6<br><b>people</b> 11:3<br>13:6<br><b>percent</b> 28:24<br>51:19<br><b>perform</b> 36:11<br><b>person</b> 11:17<br>13:20<br><b>personal</b> 18:9<br>18:18 19:11<br><b>persuaded</b> 27:6<br><b>petitioner</b> 1:5<br>2:4 21:15 | 26:14<br><b>petitioner's</b><br>23:18,19 24:10<br>24:18,21,22<br>26:19<br><b>petitions</b> 6:9<br><b>ph.d.</b> 1:12<br><b>phone</b> 11:6<br>48:12<br><b>phrase</b> 21:11<br>29:25 60:6<br><b>physical</b> 59:12<br><b>physically</b><br>13:15<br><b>pictorial</b> 50:3<br>52:4,23<br><b>picture</b> 59:13<br><b>piece</b> 25:16<br>60:4 64:10<br><b>pixel</b> 46:25<br><b>place</b> 44:4<br><b>placed</b> 46:13,17<br>71:2,3 74:14<br>77:10<br><b>placement</b> 42:8<br>42:15,24 44:3<br>44:23 45:4,8<br>45:15,19 46:9<br>47:8 53:24,25<br>54:10,25 56:23<br>58:11,20 59:5<br>59:12 75:9,14<br>75:20,25 77:15<br><b>places</b> 61:13<br>70:2 | <b>placing</b> 44:24<br>71:25<br><b>plaintiff</b> 12:9<br>23:2<br><b>plaintiffs</b> 21:25<br><b>please</b> 3:14 4:7<br>14:22 28:8<br>31:10 33:22<br>45:13<br><b>plopping</b> 49:7<br><b>pngs</b> 52:2<br><b>poi</b> 43:24<br><b>point</b> 7:17<br>42:12 44:6,13<br>44:16,17 51:5<br>51:22 53:2<br>54:5 65:21<br>77:23,23<br><b>pointed</b> 41:3<br>45:20 51:7<br>72:16<br><b>pointing</b> 40:13<br>56:11 58:7<br>64:24 77:11<br><b>points</b> 66:20,21<br>76:25<br><b>pop</b> 8:25<br><b>portion</b> 42:6<br><b>posita</b> 37:17<br>38:20 39:21<br>40:9,15 41:16<br>51:15 56:18<br><b>position</b> 45:19<br>46:15,18 47:8<br>47:17 48:2 |
| <b>p</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>p.m.</b> 81:20<br><b>pace</b> 22:11<br><b>page</b> 15:9<br>24:14,24 35:18<br>84:1,6 85:5<br><b>pages</b> 15:10<br><b>palo</b> 2:13<br><b>paper</b> 7:22,25<br>57:17<br><b>paragraph</b><br>37:2<br><b>park</b> 2:12<br><b>part</b> 41:11 45:3<br>51:19 59:15<br>63:25 65:13<br><b>particular</b> 17:8<br>53:13<br><b>particularly</b><br>62:7<br><b>parties</b> 83:13<br><b>pass</b> 81:16<br><b>passages</b> 6:25<br><b>past</b> 21:23 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 52:25 54:10,25<br>58:11,20 70:12<br><b>positioned</b><br>43:13 53:16<br>66:23 71:9<br><b>possible</b> 24:23<br>60:4 62:22<br><b>practice</b> 68:16<br><b>practicing</b><br>37:12 72:5<br><b>preferences</b><br>39:5<br><b>preliminary</b><br>44:20<br><b>preparation</b><br>9:15 10:22<br><b>prepared</b> 9:14<br>10:22<br><b>preparing</b> 14:6<br><b>present</b> 2:21<br><b>presented</b> 10:5<br>73:10,11<br><b>presenting</b> 72:8<br><b>prestored</b><br>46:15<br><b>presumably</b><br>50:2<br><b>pretty</b> 11:4<br><b>prevailed</b> 19:8<br>22:19,21 23:2<br>23:3,4<br><b>prevails</b> 22:22<br><b>prevented</b><br>21:12 | <b>preview</b> 23:24<br>24:2<br><b>previous</b> 34:16<br><b>previously</b><br>34:17<br><b>prior</b> 7:25 8:2<br>8:22 22:6 26:9<br>26:15 36:9,11<br>44:10 63:13,20<br>64:2,5,14,24<br>75:18<br><b>probably</b> 3:19<br>18:12,13 43:10<br><b>problem</b> 28:3<br><b>proceed</b> 10:7<br><b>proceeding</b> 9:7<br>21:16 22:11<br>23:16 26:14<br>28:11 29:17<br>30:13 33:7<br>34:10 35:5,14<br><b>proceedings</b><br>6:12 29:15<br>30:10,14 33:5<br>33:14<br><b>processor</b> 37:6<br>37:14,20 38:22<br>78:8<br><b>program</b> 37:7,9<br><b>proper</b> 50:17<br>77:11 78:19<br><b>provide</b> 4:17<br>6:7 22:24<br>28:15,16 29:12<br>66:19 | <b>provided</b> 18:8<br>30:5<br><b>ptab</b> 29:7 32:15<br>32:20<br><b>ptab's</b> 32:22<br><b>public</b> 1:17 3:4<br>82:20 83:4<br>85:23<br><b>pulling</b> 49:7<br><b>pump</b> 50:2<br><b>purely</b> 29:3<br>52:16 53:7<br><b>purpose</b> 37:13<br>80:13<br><b>purposefully</b><br>29:19<br><b>purposely</b><br>29:22<br><b>pushing</b> 68:20<br><b>put</b> 34:19 53:4<br>57:2 58:14<br><b>q</b><br><b>quality</b> 21:10<br><b>query</b> 27:13<br><b>question</b> 4:6,14<br>21:6 28:7<br>29:10 31:4,11<br>31:16 33:25<br>34:4,18 38:7<br>45:12 46:2<br>52:13,14 54:12<br>56:21,25 61:8<br>66:11 71:3<br>81:8 | <b>questioning</b><br>77:17<br><b>questions</b> 3:24<br>9:5,17,25 10:7<br>44:15 65:10,17<br>71:7 74:24<br>80:23 81:16,18<br><b>quick</b> 74:25<br><b>quite</b> 9:3<br><b>r</b><br><b>r</b> 3:2,2,2<br><b>radius</b> 72:22<br><b>rate</b> 5:14<br><b>rather</b> 23:3<br>57:13<br><b>read</b> 43:8 46:14<br>47:6 52:14<br>55:20 56:5<br>68:11 82:4<br><b>reader</b> 28:20<br><b>reading</b> 40:10<br>49:16 51:16,17<br>55:9 56:2<br>61:22 62:2,3<br>63:3<br><b>real</b> 68:7<br><b>really</b> 12:4,20<br>19:14 21:20<br>22:22 25:13,16<br>46:24 70:20<br>71:3<br><b>reask</b> 28:7<br><b>reason</b> 4:16<br>30:11 85:5 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                |                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>reasonable</b><br>41:9                                                                                                                                              | <b>reference</b> 38:2<br>58:5 65:18,18                                                                                                                                                  | 64:20 65:6,13<br>78:21 79:21                                                                   | <b>representation</b><br>25:24                      |
| <b>reasoning</b><br>29:12 64:21                                                                                                                                        | 66:7 67:15,19<br>68:11 71:14,16                                                                                                                                                         | 80:21 83:13                                                                                    | <b>represented</b><br>13:17 16:13,24                |
| <b>recall</b> 7:10 16:3<br>16:12,15,21,25<br>17:7,15,18<br>18:2,4,7,17,21<br>20:3,5,6,7,11<br>21:14,19 22:18<br>24:25 25:8,19<br>75:6,11 78:18<br>78:22 79:3<br>80:2,5 | 72:7,10,15<br>73:8,17 74:2<br>75:24 80:4,14<br><b>references</b> 26:9<br>36:9 44:10<br>76:7 79:10                                                                                       | <b>relation</b> 6:8<br><b>relative</b> 38:25<br>43:13 67:5<br><b>relatively</b> 67:12<br>70:15 | 21:15 78:6<br><b>representing</b><br>26:13          |
| <b>recalling</b> 44:5                                                                                                                                                  | <b>referencing</b><br>55:8 61:4                                                                                                                                                         | <b>relied</b> 75:18<br>79:10                                                                   | <b>represents</b> 52:4                              |
| <b>received</b> 25:7                                                                                                                                                   | <b>referred</b> 25:18<br>43:21 77:25                                                                                                                                                    | <b>rely</b> 9:19 10:21                                                                         | <b>require</b> 49:5<br>71:8 72:25<br>73:17,19 74:18 |
| <b>receiving</b> 25:15<br>25:21                                                                                                                                        | <b>referring</b> 6:2<br>37:25 43:10<br>78:13 79:15                                                                                                                                      | <b>relying</b> 42:7                                                                            | <b>required</b> 48:7<br>51:3 60:22<br>61:17 68:8    |
| <b>recollection</b><br>17:20 22:5<br>25:11,22 44:19<br>75:16                                                                                                           | <b>refers</b> 50:24                                                                                                                                                                     | <b>remember</b> 17:2<br>19:9,16,20<br>78:23                                                    | <b>requirement</b><br>60:3 64:9 70:7                |
| <b>record</b> 3:15 4:2<br>23:14 34:2<br>35:9 39:17<br>40:12 41:14<br>42:2 45:10<br>47:25 48:16<br>75:3,4 76:10<br>82:8 83:10                                           | <b>reflect</b> 76:11<br><b>reflection</b><br>13:21                                                                                                                                      | <b>reminds</b> 29:25                                                                           | <b>requires</b> 74:3                                |
| <b>records</b> 47:4                                                                                                                                                    | <b>reintroduce</b><br>35:10                                                                                                                                                             | <b>remote</b> 17:25<br>19:18                                                                   | <b>rescinding</b><br>81:13                          |
| <b>redirect</b> 81:10                                                                                                                                                  | <b>relate</b> 26:7                                                                                                                                                                      | <b>remove</b> 69:25                                                                            | <b>research</b> 2:12                                |
| <b>refer</b> 23:17<br>35:12 47:4<br>66:2                                                                                                                               | <b>related</b> 26:6<br>27:2 39:9<br>49:18 54:20,24<br>55:15,19,22<br>56:19 57:21<br>58:2 59:10,16<br>59:21,25 61:23<br>61:25 62:4,9<br>62:10,11,14,20<br>62:21 63:15,23<br>63:25 64:6,7 | <b>rendered</b> 26:8<br>26:10 36:4,7                                                           | <b>resource</b> 50:8                                |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>renders</b> 38:4                                                                            | <b>resources</b> 44:2<br>48:8                       |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>rephrase</b> 4:8,12<br>27:22 34:3,5<br>46:5 52:12                                           | <b>response</b> 44:21                               |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>report</b> 15:9,14<br>15:19,24 28:20<br>34:15 65:3,9                                        | <b>responsive</b> 71:6                              |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>reporter</b> 1:16<br>3:24 48:15<br>75:4                                                     | <b>restate</b> 20:25                                |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>reports</b> 33:15                                                                           | <b>restaurant</b><br>49:24 51:9                     |
|                                                                                                                                                                        |                                                                                                                                                                                         | <b>represent</b><br>16:16 22:13<br>67:8 69:8,15                                                | <b>reston</b> 2:10                                  |
|                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                | <b>results</b> 27:11<br>27:13                       |
|                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                | <b>retrieval</b> 52:18<br>53:7                      |
|                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                | <b>retrieved</b> 46:17                              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>retrieving</b><br>47:10,13<br><b>reuse</b> 6:24<br><b>review</b> 17:11<br>17:11,14 18:20<br>21:3 42:11<br><b>reviewed</b> 19:4<br>20:21 26:13<br><b>reviewing</b><br>44:20<br><b>revise</b> 45:11<br><b>revisited</b> 5:4<br>25:10<br><b>ridiculous</b> 9:10<br>9:12<br><b>right</b> 6:13 9:21<br>11:4,21,24<br>13:2,7 14:3<br>16:10,25 17:6<br>19:13 20:13<br>23:5 24:3,8,15<br>24:20 25:21<br>26:11 27:2<br>28:2 29:20<br>32:11 33:8<br>36:5,9,14,18<br>38:2,12 39:15<br>53:12 57:21<br>58:4,11,15<br>59:3,7,11,14<br>63:16 65:11,19<br>67:21 69:5<br>70:10 71:12<br>72:10 81:12,13<br>81:17 | <b>road</b> 39:4<br><b>robust</b> 33:5<br><b>role</b> 17:11<br><b>room</b> 13:9,15<br>14:2 81:6<br><b>rosenberg</b> 1:12<br>3:1,7,16 4:1,20<br>5:1,10 6:1 7:1<br>7:19 8:1 9:1,12<br>10:1,3,20,25<br>11:1,22 12:1<br>12:23 13:1<br>14:1 15:1 16:1<br>17:1 18:1 19:1<br>20:1 21:1 22:1<br>23:1,7,20,21<br>24:1,23 25:1<br>26:1 27:1 28:1<br>29:1 30:1 31:1<br>32:1 33:1,22<br>34:1,6,22 35:1<br>35:16 36:1<br>37:1 38:1 39:1<br>40:1 41:1 42:1<br>43:1 44:1 45:1<br>46:1 47:1 48:1<br>48:17 49:1<br>50:1 51:1 52:1<br>53:1 54:1 55:1<br>56:1 57:1 58:1<br>59:1 60:1 61:1<br>62:1 63:1 64:1<br>65:1 66:1 67:1<br>68:1 69:1 70:1<br>71:1 72:1 73:1 | 74:1 75:1,6<br>76:1 77:1 78:1<br>79:1 80:1 81:1<br>81:3 82:12<br>84:2,6 85:4,20<br><b>rosenberg's</b><br>8:17 27:6<br><b>rotate</b> 43:16<br><b>route</b> 39:7<br>61:11<br><b>routes</b> 42:4<br><b>rubino</b> 2:19 3:6<br>9:3,20 10:10<br>10:15 11:11<br>13:14,19 23:5<br>23:12 34:3<br>35:8 48:10<br>66:10 74:23<br>75:15,21 76:2<br>76:9 77:16,22<br>79:23 80:9,15<br>80:24 81:2,15<br>84:3<br><b>rules</b> 3:19<br><b>ruling</b> 32:22,24<br><b>run</b> 46:20 48:7<br><b>running</b> 47:7<br>47:21<br><b>rye</b> 2:17 | 65:6<br><b>satisfies</b> 64:19<br><b>satisfy</b> 45:3<br>63:4,15 78:24<br>79:6<br><b>saw</b> 59:16<br><b>saying</b> 19:14<br>25:17,24 37:23<br>40:21,24 47:9<br>47:11 56:13<br>59:20,23,24<br>68:15 71:20<br>72:24<br><b>says</b> 23:23<br>24:17 26:19<br>27:5 31:8 37:3<br>38:14 39:2<br>45:18,23 50:19<br>57:20 61:3,16<br>63:11 76:16<br><b>scale</b> 67:20,21<br>67:23,25 68:4<br>68:4,9,17 69:8<br>69:9,11 70:5,7<br>70:20,24 71:4<br>71:5,5,9,12<br>72:18 73:2,11<br>73:15 74:7,8<br>74:10,15,20<br><b>scales</b> 67:19,20<br>68:13,15 69:23<br>69:25 70:25<br>71:17,20 72:8<br>73:5,17,19,25<br>74:3,17,19 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>s</b> 3:2 84:6 85:5<br><b>san</b> 76:21,22<br>77:2,8<br><b>satisfied</b> 15:7<br>15:12 63:21                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>scaling</b> 80:3,7<br><b>scan</b> 54:6<br><b>scope</b> 36:13,17<br>36:21 38:8<br>39:25 40:17,23<br>41:12 45:7<br>75:22 76:3,10<br>76:13 77:17<br>79:24 80:10,16<br><b>score</b> 12:21<br>21:20<br><b>screen</b> 13:21<br>35:7,21 50:23<br>57:18 58:15,21<br>59:7 68:6<br>69:15<br><b>search</b> 65:8<br><b>searchable</b><br>41:6<br><b>searched</b> 41:5<br><b>seattle</b> 1:14<br><b>second</b> 25:5,14<br><b>section</b> 45:21<br><b>see</b> 12:8 13:13<br>13:20 20:22<br>23:13,22 24:3<br>24:17,19,23<br>25:9,15 26:18<br>26:23,24 27:4<br>27:14,15 36:2<br>41:15 43:18<br>47:24 48:8<br>49:13,20 50:11<br>52:6 53:8,21<br>54:5,8,8 57:22 | 58:17,23,24<br>60:2 62:15<br>65:9 68:12<br>69:17,19,24<br>71:7 72:4,6<br>73:9,12 78:14<br>78:16 79:14<br><b>seeing</b> 46:18<br>47:12 60:13<br><b>seem</b> 29:7<br>32:20<br><b>seems</b> 29:6 41:8<br>41:23 48:6<br><b>sense</b> 26:15<br>67:11 74:6<br><b>sent</b> 11:21<br><b>sentence</b> 26:18<br><b>sentences</b> 27:5<br><b>separate</b> 70:7<br><b>server</b> 25:7<br><b>servers</b> 25:15<br>25:20,21,25<br><b>services</b> 23:9<br>24:4 84:8<br><b>set</b> 30:8 83:8,18<br><b>several</b> 36:9<br>39:8 40:13<br>42:17 44:22<br><b>shades</b> 15:2<br>20:16<br><b>shapes</b> 43:6<br><b>share</b> 9:2<br><b>sheet</b> 8:3 82:7<br>85:1 | <b>sheets</b> 8:4<br><b>shorthand</b> 1:16<br><b>show</b> 8:5,21<br>28:17 29:11<br>64:4,6 70:5<br><b>showed</b> 72:17<br><b>showing</b> 17:9<br>31:20 32:3<br>64:14 67:14<br>69:12 70:6,8<br><b>shown</b> 51:10<br>66:25 69:4,5<br>72:21 76:17,19<br>77:3<br><b>shows</b> 21:21<br>50:12 64:3<br>67:19 78:4<br><b>shut</b> 81:7<br><b>side</b> 16:24 29:2<br><b>signature</b> 83:22<br><b>silver</b> 16:13,18<br><b>similarities</b><br>6:23 7:3 80:18<br><b>simple</b> 45:12<br><b>simpler</b> 45:5<br><b>single</b> 31:19<br>47:19 64:10<br><b>sir</b> 34:20<br><b>sitting</b> 11:16<br>12:17 13:9<br>30:23 32:25<br>36:16 38:7<br><b>six</b> 18:12<br><b>skill</b> 25:3 40:22<br>42:14 66:6 | 70:4<br><b>skilled</b> 27:7<br><b>slightly</b> 51:11<br>52:13 60:18<br><b>small</b> 12:11<br><b>sneha</b> 2:11<br>13:11,24<br><b>sneha.nyshad...</b><br>2:11<br><b>software</b> 20:2<br>26:3,6,7,10,11<br>78:12<br><b>somebody</b><br>16:13<br><b>sony</b> 22:10,15<br>22:17<br><b>sorry</b> 40:20<br>42:8 44:9<br>48:18 56:5<br>69:3<br><b>sounds</b> 3:21<br>10:10,11<br><b>south</b> 2:17<br>58:18 76:23,24<br>77:8,10<br><b>space</b> 26:10,11<br><b>speak</b> 12:22<br>21:20 29:25<br><b>spec</b> 51:17<br>62:13<br><b>specht</b> 2:6 8:14<br>8:24 9:11,24<br>10:13,19 11:20<br>13:16,24 20:24<br>21:5 28:14 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 30:16 31:3<br>33:9,21 34:12<br>35:15 36:24<br>48:14 54:3<br>63:6 66:8,12<br>72:11 73:22<br>74:5,25 75:5<br>79:2,13 80:22<br>81:17 84:4<br><b>special</b> 77:4<br><b>specific</b> 19:3,23<br>61:2 65:9<br>68:17<br><b>specifically</b><br>16:3 17:22<br>18:5 21:18,19<br>35:3,19 40:8<br>41:2 42:24<br>46:8 54:19<br>75:9<br><b>specification</b><br>39:20 40:13,14<br>40:25 41:14<br>42:7,12,13<br>51:5<br><b>specifics</b> 19:15<br>73:5<br><b>specifying</b><br>63:22,23<br><b>spend</b> 14:5<br><b>spent</b> 5:11<br><b>split</b> 21:25<br><b>stanford</b> 2:12<br><b>started</b> 40:3 | <b>starting</b> 43:10<br>55:7<br><b>state</b> 1:17 3:14<br>16:13,18 65:3<br>83:5<br><b>statement</b> 25:9<br>25:16 27:14,15<br>29:6,9 31:19<br>31:24 32:14,16<br>32:18 58:9<br><b>statements</b><br>25:4 26:21<br>27:9 29:13<br>31:15 33:4,6<br>33:24 34:8,10<br>41:22 82:9<br><b>states</b> 1:2<br><b>stating</b> 37:6<br><b>station</b> 50:3<br>51:9<br><b>statistically</b><br>29:4<br><b>step</b> 15:5,5,7,8<br>15:12,15,17,17<br>15:18,22 38:9<br><b>storage</b> 50:6<br>51:25 52:2<br><b>store</b> 26:20<br>27:9,11 52:23<br><b>stored</b> 25:5<br>47:10,13 51:24<br><b>straight</b> 59:19<br><b>strange</b> 28:7<br><b>street</b> 2:4,9 | <b>streets</b> 39:4<br><b>stricken</b> 15:25<br><b>stuart</b> 3:16<br><b>subject</b> 71:8<br>80:19<br><b>submitted</b> 6:12<br>8:9<br><b>subscribe</b> 82:7<br><b>subscribed</b><br>82:16 85:21<br><b>subsequent</b><br>6:21<br><b>success</b> 17:6<br>20:4<br><b>successful</b> 17:2<br>17:4<br><b>suite</b> 2:5,9,17<br><b>sum</b> 12:10,11<br><b>summary</b> 9:13<br><b>suomela</b> 65:17<br>65:21 66:3<br>67:3 76:5<br>77:14,20,24<br>78:13 79:15<br>80:4,7,12,14,19<br>80:20<br><b>sure</b> 9:3 14:16<br>14:22,25 17:13<br>35:2 38:23<br>42:20 43:2<br>46:7 47:2 49:2<br>52:20 54:15<br><b>sworn</b> 3:4<br>82:16 83:8<br>85:21 | <b>system</b> 37:4<br>50:15<br><b>systems</b> 1:7<br>46:23 47:2,4<br><b>t</b><br><b>t</b> 84:6<br><b>table</b> 8:21 11:7<br><b>tables</b> 8:16<br><b>take</b> 9:21 11:17<br>23:24 25:23<br>26:17 32:2<br>34:23 35:22<br>48:11 74:25<br><b>talk</b> 48:24<br>54:19 71:19<br><b>talked</b> 48:3<br><b>talking</b> 38:18<br>47:25 48:22<br>54:17 60:10<br>70:25 74:11<br><b>talks</b> 43:25<br>49:15 77:7<br><b>tangent</b> 74:16<br><b>tangible</b> 37:8<br><b>target</b> 25:4<br>27:12<br><b>teach</b> 76:5<br><b>technologies</b><br>16:14<br><b>technology</b><br>18:4 19:12,17<br>30:20 32:4<br><b>tel</b> 2:18<br><b>tell</b> 36:22 70:10 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>telling</b> 65:11<br>70:3<br><b>tells</b> 70:18<br><b>term</b> 37:24<br>39:18 41:13<br>42:25 45:7<br>48:24,25 49:4<br>54:5 65:5<br>78:20 79:20<br><b>terms</b> 7:20<br>36:18,21 39:15<br>39:22,24,25<br>40:11,16,17,17<br>40:21,24 41:11<br>42:23 45:17<br>48:23 70:23<br><b>testified</b> 3:5 7:5<br>11:23 20:15<br>75:12 76:8<br>77:13<br><b>testifies</b> 24:18<br><b>testifying</b> 7:15<br>78:23<br><b>testimony</b> 4:18<br>7:18 9:22 10:2<br>14:14 22:24<br>27:7 83:7,10<br><b>text</b> 53:4<br><b>thank</b> 34:19<br>80:22<br><b>thanked</b> 19:5<br><b>thanking</b> 17:3<br><b>theodore</b> 2:16<br><b>thing</b> 54:2,24<br>56:23 57:14 | 59:21 65:10<br><b>things</b> 61:12,24<br>63:19 78:15<br><b>think</b> 9:20<br>12:19 21:6<br>22:16 28:6<br>29:3 32:8,10<br>34:13 43:24<br>45:18,20 53:25<br>55:14 56:19,21<br>60:5 61:19<br>72:16 73:11<br>81:17,18<br><b>third</b> 35:24<br><b>thought</b> 40:6<br>40:23 71:13<br><b>three</b> 6:2,8,12<br>6:16,17,19,23<br>8:7 13:12 14:7<br>15:10 29:15<br>30:9,14 31:12<br>32:7 33:12,14<br>46:12 49:13,14<br>49:20 52:6<br>53:14 80:18<br><b>thursday</b> 14:10<br><b>time</b> 1:15 19:4<br>37:20 40:10<br>41:17 50:21<br>51:16 53:5,11<br>53:18,19 55:12<br>55:13 56:12<br>57:9 60:23<br>61:6,7,10<br>64:12 81:20 | <b>times</b> 3:12,13<br>5:21 6:19 7:8,9<br>7:12 12:2,3<br>16:3<br><b>today</b> 3:23 4:18<br>6:7 10:18<br>27:16 30:15,23<br>32:25 34:7<br>36:16<br><b>together</b> 25:17<br>27:13 64:12<br><b>tone</b> 41:22<br><b>top</b> 24:24 38:25<br>40:4 43:25<br>48:9 55:10,21<br>56:17 59:18<br>61:3<br><b>track</b> 12:21<br><b>trademark</b> 1:2<br><b>traffic</b> 39:5<br><b>transcript</b> 82:5<br>82:8 83:9<br><b>transmitted</b><br>25:6<br><b>transmitting</b><br>25:14,20<br><b>travel</b> 38:17<br>49:18 54:19,23<br>55:12,15,19,22<br>56:4,7,10,12,18<br>57:21 58:2,6<br>59:10,16,20,25<br>60:4,10,15,17<br>60:23 61:6,10<br>61:23,25 62:4 | 62:9,10,11,14<br>62:20,21 63:15<br>63:23,25 64:6<br>64:7,20 65:6<br>65:13 78:21<br>79:5,12,21<br>80:21<br><b>tremendous</b><br>80:18<br><b>trial</b> 1:2 7:6,17<br><b>trials</b> 11:23<br>12:18<br><b>tried</b> 27:23<br>29:18<br><b>true</b> 83:9<br><b>truthful</b> 4:17<br><b>try</b> 21:3 28:12<br>28:15,16,18<br>29:22<br><b>trying</b> 37:21<br>41:10 42:9<br>71:6<br><b>turn</b> 45:9<br><b>turned</b> 32:23<br>43:15<br><b>turns</b> 63:24<br><b>twice</b> 70:17,18<br>72:20<br><b>two</b> 14:8 22:6,7<br>35:23 36:2<br>41:7 50:20<br>52:5 61:13,24<br>63:18 67:19,19<br>68:12,14 69:23<br>69:25 72:8 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 73:17,19 74:3<br>74:18<br><b>type</b> 62:8 79:17<br><b>types</b> 77:5<br><b>typically</b> 47:6<br>58:17                                                                                                                                                                                                                                                                                                                                                                                             | <b>ups</b> 80:25<br><b>use</b> 10:20 19:7<br>21:10 68:25<br>69:13<br><b>used</b> 7:2 8:22<br>41:16 60:5<br>64:11 67:2<br><b>useful</b> 67:9<br><b>user</b> 17:23 39:5<br>43:14,15 66:20<br>66:23 67:10<br>76:20 77:9<br><b>uses</b> 10:16<br><b>using</b> 46:25<br>71:17 78:10                                                                          | 23:9 24:4<br>60:16 61:11<br>84:8<br><b>video</b> 3:24<br><b>view</b> 36:8 54:22<br><b>vincent</b> 2:19<br>8:15 9:11,24<br><b>virginia</b> 2:10<br><b>visual</b> 56:10<br>58:7 60:19,20<br>66:22<br><b>visualizing</b><br>71:22<br><b>visually</b> 76:18<br>76:19<br><b>vrubino</b> 2:20 | <b>ways</b> 42:15,17<br>43:18,19 47:19<br><b>wednesday</b><br>14:10<br><b>week</b> 14:11<br><b>welcome</b> 9:16<br>9:17<br><b>west</b> 58:19<br><b>whereof</b> 83:17<br><b>withdraw</b> 34:4<br><b>witness</b> 1:13<br>3:3 9:6 81:16<br>83:7,11,17<br>84:1<br><b>witness's</b> 85:4<br><b>word</b> 19:7<br><b>words</b> 45:5<br>62:24<br><b>work</b> 4:21 19:6<br>21:24 22:3<br>29:23 30:7<br><b>worked</b> 21:23<br>22:5 24:7<br>28:22 29:5<br><b>working</b> 4:22<br>5:23 12:8,12<br>13:12 30:4<br><b>world</b> 68:7<br><b>written</b> 16:8<br>24:5<br><b>wrong</b> 20:2,22<br><b>wrote</b> 15:9 |
| <b>u</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>v</b>                                                                                                                                                                                                                                                                                                                                                | <b>w</b>                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>u.s.</b> 35:3<br><b>ultimately</b> 17:2<br>32:23<br><b>unaware</b> 16:7<br><b>unclear</b> 4:7,13<br><b>understand</b> 4:4<br>21:11 25:3<br>36:13 37:16,17<br>38:21 39:21,21<br>40:7,15,16,22<br>41:11,16,18<br>42:9,22 51:18<br>56:18,20 65:20<br>65:25 66:4<br><b>understanding</b><br>6:6,10 36:17<br>36:20 39:14,18<br>41:9 47:23<br>53:22 54:11,13<br>64:18 66:5,14<br>66:17,25 67:5<br>67:10<br><b>understood</b><br>4:14<br><b>united</b> 1:2<br><b>unusual</b> 34:14<br><b>upper</b> 53:2 | <b>v</b> 1:6 16:19<br>19:21 85:3<br><b>valid</b> 21:17<br><b>valmont</b> 16:19<br><b>value</b> 46:25<br>47:11,14<br><b>values</b> 48:4<br><b>various</b> 6:25<br>8:5 21:22<br>42:15<br><b>vast</b> 15:14<br><b>vector</b> 50:11<br>51:3,4 52:3<br>53:17 56:22<br>58:3<br><b>verbal</b> 4:3<br><b>veritext</b> 85:2<br><b>versus</b> 15:2<br>20:16 22:10 | <b>wait</b> 23:25<br><b>want</b> 8:24<br>11:15,18 21:11<br>30:3 35:9 51:6<br>52:20 57:12,15<br>58:5<br><b>wanted</b> 12:9<br><b>wants</b> 9:19<br>10:21<br><b>war</b> 30:2<br><b>washington</b><br>1:14<br><b>way</b> 28:5 33:2<br>39:4 40:18<br>47:20 54:16,22<br>65:23 67:23<br>83:15 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <b>x</b>      |                               |
|---------------|-------------------------------|
| <b>x</b>      | 1:3,10 84:1,6                 |
| <b>y</b>      |                               |
| <b>yeah</b>   | 31:9<br>44:13                 |
| <b>years</b>  | 18:12                         |
| <b>york</b>   | 1:17 2:17<br>83:5             |
| <b>z</b>      |                               |
| <b>zoom</b>   | 11:8 13:6                     |
| <b>zoomed</b> | 67:12<br>67:20,21,24<br>74:20 |