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

- - - - -

HANSHOW AMERICA INC.,
HANSHOW TECHNOLOGY CO., LTD.,
Petitioners,
v.
SES-IMAGOTAG INC.
Patent Owner.

- - - - -

Case No.: IPR2024-00208
Patent No. 11,010,709

- - - - -

Deposition of RAJEEV SURATI, Ph.D.
Conducted virtually via Zoom
Friday, November 22, 2024
12:45 p.m. CST

Job No.: 560355
Pages: 1 - 118
Reported by: THERESA A. VORKAPIC,
CSR, RMR, CRR, RPR

1

2 Deposition of Rajeev Surati, Ph.D., conducted
3 virtually via zoom, pursuant to notice before
4 Theresa A. Vorkapic, a Certified Shorthand
5 Reporter, Registered Merit Reporter, Certified
6 Realtime Reporter, Registered Professional
7 Reporter and a Notary Public in and for the State
8 of Illinois.

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C O N T E N T S

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E X H I B I T S

(Attached to transcript.)

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P R O C E E D I N G S

RAJEEV SURATI, Ph.D.,

called as a witness herein, having been previously
duly sworn and having testified, was examined and
testified further as follows:

EXAMINATION (Resumed)

BY MR. WANG:

Q Dr. Surati, the procedure questions like
your background, I think we can agree that all
your answers won't be changed so we can refer to
the answers provided in the other case
including -- you know, we do not need to repeat
that.

Would that be okay?

MR. MOFFA: Counsel, objection to form.
Do you want to be clear about what you're are --

BY MR. WANG:

Q Let me ask the question to put on the
record.

So, Dr. Surati, you took the deposition
earlier today regarding the '340 patent. So all
the background, the answers you provided including

1 your personal background including your technical
2 background, all the answers you provided stay the
3 same for this case; is that a fair statement?

4 MR. MOFFA: Objection. Form. Sorry. I'm
5 still not clear what questions you're asking him.

6 BY MR. WANG:

7 Q You may answer.

8 A Oh, sorry. With regard to the questions
9 related to my background section and, yeah, I mean
10 I think for the background section, I don't think
11 anything would change in particular and they're
12 all the same answer. And I don't mind if you have
13 an additional question about it, but it would be
14 the same.

15 Q You agree we with refer back to the
16 transcript in that case for the purpose for this
17 case, which is a different IPR proceeding?

18 MR. MOFFA: Objection. Form. And
19 counsel, I'm objecting to that proposal.

20 BY MR. WANG:

21 Q I'm asking -- you may answer.

22 MR. MOFFA: Counsel, I'm sorry. I'm going

1 to let him answer the question and then I'm going
2 to interrupt.

3 MR. WANG: So, Counsel, do you want me to
4 ask questions again from the beginning?

5 MR. MOFFA: No. I want you to be clear
6 about what sections or specific testimony you're
7 asking him to incorporate. You keep changing the
8 definition of it and it's not making a clear
9 record and I think it's going to hurt you because
10 you're not going to have a clear record.

11 BY MR. WANG:

12 Q Let's put it this way. We incorporate
13 everything you provided in the previous case which
14 is for, let me see, IPR 2024-00189 to this case.
15 Do you agree with that?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A I think it could be confusing because
19 they're different patents. What I would suggest
20 is that we take the transcript where I'm asked
21 questions about my background and start maybe from
22 the very start up until I stop answering the

1 section about background information related to my
2 professional experience and incorporate that.

3 BY MR. WANG:

4 Q So other than those '304 patent specific
5 questions, any answers you provided in that case
6 you don't want to be incorporated into this case?

7 MR. MOFFA: Objection. Form.

8 BY THE WITNESS:

9 A Yeah, I just feel like it would be
10 confusing because even though I go over different
11 things, they're different patents with
12 different --

13 Q So you prefer we start from the beginning?

14 A No. I prefer that the background
15 information related to my professional experience
16 be incorporated, but you're allowed to use that,
17 but in terms of, you know, things like planogram
18 and other terms that I've defined that we do it in
19 the context of this new deposition just because
20 they're different patents.

21 Q Okay. That's fair enough.

22 MR. MOFFA: Before we dig in, I don't

1 think I have the realtime following anymore.

2 (Reporter clarification).

3 BY MR. WANG:

4 Q So Dr. Surati, fair to say anything
5 related to your resume, we won't go back again?

6 A That's fair.

7 Q That's related to your resume. We won't
8 go over your resume again; is that fair?

9 A That sounds great.

10 Q So everything related to the declaration
11 we'll go over this declaration rather than that
12 declaration.

13 Does that sound good to you?

14 A Yes.

15 Q Okay.

16 MR. WANG: Counsel, is that okay with you?

17 MR. MOFFA: Yes, that's fine.

18 MR. WANG: Mr. Williams, could you pull
19 the document which is declaration -- which is in
20 this case IPR 2024-00208, I believe, it is
21 Exhibit 2010. It's marked like 2010.

22 AV TECH WILLIAMS: Stand by.

1 MR. WANG: Could you open that document.

2 (A certain document was marked Surati
3 Deposition Exhibit 2010 for
4 identification, as of 11/22/2024.)

5 BY MR. WANG:

6 Q This is the document I sent to you or
7 uploaded?

8 AV TECH WILLIAMS: You said 2010, correct?

9 MR. MOFFA: Exhibit 2010 from the other
10 proceeding.

11 MR. WANG: I believe I uploaded earlier
12 today.

13 AV TECH WILLIAMS: Sorry. One second.
14 What is the document called?

15 MR. WANG: The name is kind of long but
16 the document I believe is called document -- let
17 me see, Surati Declaration-EX.2010.

18 AV TECH WILLIAMS: Apologies. I didn't
19 see the new documents uploaded. I apologize. Let
20 me upload that.

21 MR. WANG: Take your time. I believe I
22 uploaded earlier today. I received the

1 confirmation at 9:05.

2 AV TECH WILLIAMS: I'm downloading right
3 now.

4 BY MR. WANG:

5 Q Dr. Surati, is this document the
6 declaration you provided for IPR 2024-00208?

7 A Yes, sir.

8 Q Let's move down to the last page.

9 Dr. Surati, is that your signature?

10 A Yes, that is my signature.

11 Q So you signed on September 6, 2024; is
12 that right?

13 A I believe that's correct.

14 Q Okay. Thank you.

15 So let's go to Paragraph 54.

16 A 54.

17 Q 54, yeah. Page 21.

18 A I'm almost there. This will be under the
19 section locations in the document and you said 54?

20 Q Correct.

21 A Yes.

22 Q So in this paragraph, you said in my

1 opinion the intrinsic record supports the meaning
2 I provide above because the '709 patent described
3 a planogram as including a set of association data
4 among articles of a retail area and location of
5 said retail area; is that right?

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A That's correct.

9 BY MR. WANG:

10 Q What do you mean by including?

11 A I think including it means that it at
12 least has.

13 Q So you're meaning planogram at least has a
14 set of association data among articles in the
15 retail area and the locations of said retail, is
16 that what it meant?

17 MR. MOFFA: Objection. Form.

18 BY THE WITNESS:

19 A I think that's fair.

20 MR. WANG: Mr. Williams, let's look at
21 another document which ended with '709.

22 AV TECH WILLIAMS: Stand by.

1 MR. WANG: Okay.

2 (A certain document was marked Surati
3 Deposition Exhibit 1001 for
4 identification, as of 11/22/2024.)

5 MR. MOFFA: Counsel, what document is
6 this?

7 THE WITNESS: 1001, Exhibit 1001.

8 BY MR. WANG:

9 Q It's Exhibit 1001, you are absolutely
10 right, Dr. Surati.

11 A I think that's what he was looking for.

12 MR. WANG: Oh, no, not this one. The
13 other one. The one you just download.

14 AV TECH WILLIAMS: Sorry about that.

15 BY MR. WANG:

16 Q It is '709, Dr. Surati. Go to Page 6.
17 Looking at Column 2, Line 6 to Line 7, so,
18 Dr. Surati, let me direct your attention to Lines
19 6 to 7, it reads: A planogram is a set of
20 association data among articles of a radio area
21 and location of said radio area.

22 Do you see that?

1 A Yes.

2 Q Okay. So, I mean, here is this part of
3 the patent document that I just read?

4 A Yes.

5 Q In the patent document, it says a
6 planogram is a set of associated data among
7 articles of retail area and location of said
8 retail area.

9 Do you agree with that or disagree with
10 that definition?

11 MR. MOFFA: Objection. Form.

12 BY THE WITNESS:

13 A I think it's fair to say that that's what
14 the document says, so it's kind of expressed.

15 BY MR. WANG:

16 Q Do you have any objections to this
17 definition?

18 MR. MOFFA: Objection. Form.

19 BY THE WITNESS:

20 A That's what it says and I think it's
21 expressed there.

22 BY MR. WANG:

1 Q So it's your opinion consistent with this
2 definition?

3 MR. MOFFA: Objection. Form.

4 BY THE WITNESS:

5 A I think that's fair. The planogram
6 determines which products must be at which height
7 at which shelves and over how many linear meters.

8 There's another place that's kind of
9 interesting, for example, let me just see here.
10 Paragraph -- sorry, not paragraph, Column 8, Line
11 40, sir, do you want to get there? Column 8,
12 Line 40.

13 Q I don't want to go there.

14 MR. MOFFA: Counsel, he's still answering
15 the question. Don't interrupt him and let him
16 finish, please.

17 BY MR. WANG:

18 Q I'm going to a different part of the
19 document, okay.

20 MR. MOFFA: Counsel, so let's have it on
21 the record that you're --

22 MR. WANG: We'll put it on the record. I

1 don't want him to show me another part of the
2 document.

3 MR. MOFFA: You're not letting him answer
4 the question.

5 MR. WANG: He answered whatever he want to
6 answer.

7 BY THE WITNESS:

8 A Let me finish my answer. Can I do that?

9 BY MR. WANG:

10 Q You can finish your answer.

11 A Just to begin again for the court
12 reporter, I'm on Column 8, Line 40, the patent
13 says: The planogram preferably presents a listing
14 of the locations of the retail area taking the
15 form of a cadastre with location of said locations
16 by means of a referential or set of coordinates
17 representative of the spatial organization of the
18 retail area. For example, a first coordinate can
19 designate the shelf of the retail area while a
20 second can designate a section of the shelf, third
21 the level of the shelf and a fourth the order of
22 the location on this level. A section of the

1 shelf can especially be defined as being the
2 extent of the shelf over which the levels are
3 continued. A break in the tiering therefore means
4 to shift to another section.

5 So that's just something else that it
6 says.

7 BY MR. WANG:

8 Q So, you know, Dr. Surati, you know, what
9 you just said is not in Column 2, Line 6 to 7,
10 right?

11 A Yes. It's in Column 8 of the patent.

12 Q It's not in Column 2 and Line 6 to 7; is
13 that right?

14 A Yes, it's not in that -- it's not in that
15 part of the patent, but it's in another part of
16 the patent.

17 MR. WANG: Mr. Williams, let's go back to
18 the declaration. The other document. Go to
19 Paragraph 52.

20 BY MR. WANG:

21 Q So, Dr. Surati, it said that the meaning
22 of location requires that a representation in

1 units that allows the distance from a point of
2 reference in the retail area to be determined.

3 Do you see that?

4 MR. MOFFA: Objection. Form.

5 BY THE WITNESS:

6 A So you're talking about Paragraph 52, sir?

7 BY MR. WANG:

8 Q Correct.

9 A It says: In my opinion, a POSITA would
10 have understood that the plain and ordinary
11 meaning of locations requires that a
12 representation in units that allows distance from
13 the point of reference in the retail area to be
14 determined.

15 Q Okay. Representation in units. Do you
16 see that?

17 A I do.

18 Q What do you mean by representation in
19 units?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A So rather than being unit-less, I think

1 that the representation since this is dealing with
2 a digital representation of real life coordinates,
3 units would be things like units of measurement
4 like a meter or a centimeter or distance whereas
5 unitless things don't have such measures.

6 BY MR. WANG:

7 Q So you just explained that units should be
8 unit of measure; is that your testimony?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A It is what it says. It's in units and
12 there's some notion of distance so it's a unit of
13 distance if that's what you want to talk about.

14 BY MR. WANG:

15 Q I'm saying you just mentioned that units
16 means unit of measure, is that your testimony?

17 A My testimony is that it's units of
18 distance maybe.

19 Q So it said units, unit of measure, yes or
20 no?

21 MR. MOFFA: I have an objection, form to
22 this line of questions. You can answer.

1 BY THE WITNESS:

2 A Yeah, I would just say that it's units of
3 distance. If I said units of measures, I meant
4 units of distance.

5 BY MR. WANG:

6 Q So you're measuring by meters?

7 A It could be measured in any way that -- it
8 could be measured in metric units, it could be
9 measured in English units, but it needs to have so
10 many sort of measure.

11 Q Okay. So your testimony is measured by
12 some kind of unit of measure, which can measure
13 the distance, is that --

14 MR. MOFFA: Objection. Form.

15 BY THE WITNESS:

16 A Yeah, I think that's fair.

17 BY MR. WANG:

18 Q Let's go back to Paragraph 48, please.

19 A Uh-huh.

20 Q In Paragraph 48, you said: Philips --
21 under Phillips, the claim to be construed under
22 so-called Phillips standard, under which claim

1 terms are given their ordinary and customary
2 meaning as would have been understood by one of
3 ordinary skill in the art in light of
4 specification and the prosecution history.

5 Do you see that?

6 A Yes.

7 MR. MOFFA: Objection. Form.

8 BY MR. WANG:

9 Q So what do you mean by in light of?

10 A So in light of the specification and
11 prosecution history means that those things need
12 to be considered as additional scoping about what
13 a word might mean because they may give some more
14 information about beyond what was meant -- what
15 one would plainly and ordinarily understand from
16 the word, and they may give better scope about
17 what the meaning of that word means in the patent
18 and -- sorry, in the claim with respect to the
19 specification and prosecution history.

20 So you need to consider these documents
21 and what they say to maybe better hone in on what
22 was meant in the claim.

1 Q So, Dr. Surati, you said you've given a
2 number of declarations or wrote a number of
3 opinions in a number of cases, right, in the past?

4 A I think that's fair.

5 MR. MOFFA: Objection. Form.

6 BY MR. WANG:

7 Q You may answer. Your counsel can object
8 but you still need to answer.

9 A I did answer, but I'll restate what I
10 said. I said I think that's true.

11 Q So you said you wrote a number of opinions
12 or declarations on behalf of patent owners, right?

13 A I've written declarations for both patent
14 owners and patent -- people who were on the other
15 side of patent litigation, yes.

16 Q You mentioned in IPR proceedings all the
17 declarations you wrote for patent owner is saying
18 patents are invalid, is that true.

19 MR. MOFFA: Objection. Form.

20 BY THE WITNESS:

21 A It's true that I can't recall an instance
22 where I was not supporting a particular patent

1 claim, but I could be wrong.

2 BY MR. WANG:

3 Q So any of those opinions you said you
4 represent patent owners you're saying the patent
5 should not be valid?

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A Oh, no. I think what I meant was in all
9 those instances I've been supporting the point of
10 view that the patents should be valid.

11 BY MR. WANG:

12 Q So how many opinions you wrote for patent
13 owners, roughly?

14 A You mean in terms of IPRs?

15 Q Right.

16 A Okay. There might be 50 or 20, I'd have
17 to go through my case history to look and tell
18 you.

19 Q More than 10?

20 A More than 10 and probably less than 20.

21 Q Did you write any opinions regarding the
22 validity of a patent for patent owner in other

1 proceeding other than IPR?

2 A Yes.

3 Q Like in a District Court case or other
4 cases?

5 A In District Court, yes.

6 Q How many of them?

7 MR. MOFFA: Objection. Form.

8 BY THE WITNESS:

9 A Maybe 10, maybe 5, 5 or 10.

10 BY MR. WANG:

11 Q Roughly, more than 5 but less than 10,
12 somewhere in that range?

13 A Sorry --

14 MR. MOFFA: I'm not sure I heard the
15 question because he was still answering. Please
16 let the witness finish answering his questions.

17 MR. WANG: You keep talking, Counsel.

18 BY THE WITNESS:

19 A I was just going to say that some of the
20 cases have involved multiple patents.

21 BY MR. WANG:

22 Q So you said you wrote about more than five

1 opinions for District Court regarding validity of
2 patents; is that fair?

3 MR. MOFFA: Objection. Form.

4 BY MR. WANG:

5 Q So you wrote 10 -- again, just to make
6 sure, you wrote 10 opinions in IPR proceeding for
7 patent owners and you wrote probably more than 5
8 opinion letters for patent owners in this District
9 Court case, right?

10 MR. MOFFA: Objection. Form. Objection
11 relevance. Objection. Foundation.

12 BY THE WITNESS:

13 A I mean in that range. Those numbers sound
14 like they could be right.

15 BY MR. WANG:

16 Q Is there any cases for court or IPR like
17 PTAB?

18 MR. MOFFA: Objection. Form.

19 BY THE WITNESS:

20 A That I don't know off the top of my head
21 sir.

22 BY MR. WANG:

1 Q You said you wrote more than 10
2 declarations for patent owners in IPR proceedings.

3 Any of those cases end up finding the
4 patents invalid?

5 MR. MOFFA: Objection. Form.

6 BY THE WITNESS:

7 A I think that's true.

8 BY MR. WANG:

9 Q Any? How many?

10 A I actually don't know. I'm sorry.

11 Q At least some of them?

12 A I would say there are some cases that the
13 patents don't turn out.

14 Q How about in District Court cases?

15 A I can think of one where that was true.

16 Q Was true about what?

17 A That the patent in the District Court case
18 got tossed out.

19 Q You mean to say it's valid?

20 A I don't think it was based on a definition
21 of the a claim term.

22 Q That's fair. Let's go back at that

1 Paragraph 48.

2 Dr. Surati, what's your understanding
3 about the relationship between the claim and the
4 specification?

5 MR. MOFFA: Objection. Form. Objection.
6 Relevance. Objection. Foundation.

7 BY THE WITNESS:

8 A So you're asking my understanding of what
9 a specification and claim allow?

10 BY MR. WANG:

11 Q The relationship, how they relate to each
12 other.

13 MR. MOFFA: Objection. Form, relevance,
14 foundation.

15 BY THE WITNESS:

16 A So I think the specification talks about
17 the area of the invention and the claim is the
18 actual invention.

19 BY MR. WANG:

20 Q Okay. So when you know is the claim scope
21 limited to the specification?

22 MR. MOFFA: Objection. Form, foundation,

1 relevance.

2 BY THE WITNESS:

3 A It can be.

4 BY MR. WANG:

5 Q So you're saying the claim scope can be
6 limited to the specification; is that your
7 testimony?

8 A I think so.

9 MR. MOFFA: Same objections.

10 BY THE WITNESS:

11 A For example, if something has a plain and
12 ordinary meaning it could have a plain and
13 ordinary meaning in the claim and you could
14 interpret it that way.

15 BY MR. WANG:

16 Q So what I'm telling you, Dr. Surati, the
17 claim, it's settled case law, the claim
18 interpretation should not be limited to the
19 specification; does that surprise you?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A Okay.

1 BY MR. WANG:

2 Q Does that surprise you or not surprise
3 you?

4 A I haven't really thought about it.

5 Q Nobody told you regarding whether claim
6 interpretation should be limited to the
7 specification or not limited to the specification;
8 is that fair?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I've been told to consider the meaning of
12 the term in light of the specification and
13 prosecution history.

14 BY MR. WANG:

15 Q That's what I'm asking, what do you mean
16 by in light of? So you've not been told one way
17 or the other whether the claim interpretation
18 should be limited to the spec, specification or
19 not limit today the specification; is that fair?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A I mean, I would just say that I'm trying

1 to interpret what's been meant in that I'm just
2 considering what the specification says and at
3 least it can help me understand better what a
4 claim might mean.

5 BY MR. WANG:

6 Q But you're not sure whether the claim
7 interpretation should be limited to the
8 specification or not limited to the specification,
9 right?

10 MR. MOFFA: Objection. Form.

11 BY THE WITNESS:

12 A If you give me an example if you want me
13 to opine on what something means I'm happy to do
14 it.

15 BY MR. WANG:

16 Q For example, like a planogram, right, from
17 this claim there's a plan being mentioned. So
18 this planogram should be limited or should be
19 defined according to the -- limited to the
20 definition of the specification or should not be
21 limited to the specification provided in the
22 patent?

1 MR. MOFFA: Objection. Form.

2 BY THE WITNESS:

3 A I think the specification talks about
4 different embodiments what things mean, some kind
5 of scope for what planogram means.

6 BY MR. WANG:

7 Q So, Dr. Surati, in your view when you
8 interpreted the claim language you should go back
9 to the specification to make sure you can find the
10 embodiment or examples in the specification; is
11 that right?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A Embodiments or descriptions, paragraphs
15 that use the word that's in the claim and try to
16 determine from the context of what might be meant.

17 BY MR. WANG:

18 Q Okay. So, Dr. Surati, is it fair if you
19 read the claim, you know, if you cannot find a
20 preferred embodiment in the specification, you
21 won't interpret the claim outside the scope of the
22 specification?

1 MR. MOFFA: Objection. Form.

2 BY THE WITNESS:

3 A I see. So you're saying if there's a
4 preferred embodiment that it would be indicative
5 of what's meant by the claim as opposed to not; is
6 that what you're saying?

7 BY MR. WANG:

8 Q So my question is, Dr. Surati, when you're
9 looking at the claim, right, you interpret the
10 claim according to the preferred embodiment?

11 A Right.

12 Q Okay. So if it's a claim is not reflected
13 by the preferred embodiment or any embodiment
14 described in the specification, you don't think
15 the claim should be interpreted that way, right?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A Well, I think in that case, you know, if
19 it's not expressly defined and there's no
20 reference to it, then you have to go to extrinsic
21 evidence and what a POSITA would understand in
22 plain and ordinary terms what the meaning of that

1 word would mean.

2 BY MR. WANG:

3 Q Okay. But if there is a definition in the
4 specification, you should go along with it, right?

5 MR. MOFFA: Objection. Form.

6 BY THE WITNESS:

7 A I think you have to analyze what's
8 described, you have to understand what the scope
9 when the word is used and in what context, is it
10 all inclusive or is it partially defining it, how
11 many times the word appears, where it's used.
12 It's sort of a -- if it's not -- if there are six
13 mutually contradictory meanings of the term inside
14 the thing you have to consider all that. So
15 generally speaking I think you have to analyze the
16 patent if the words appear whether they're
17 relevant to the claims and then based on that you
18 can decide is it expressly decided and that's up
19 to a POSITA to decide based on reading what's in
20 the specification and the file history as to any
21 indication of what the inventor meant, et cetera.

22 BY MR. WANG:

1 Q So let's move to the Paragraph 47, please.

2 So Dr. Surati, do you see the last
3 sentence of this paragraph saying: The examiner
4 allowed the claim over the prior art that disclose
5 a mere ordering of ESLs. Do you see that?

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A I see the last sentence of what you said.

9 BY MR. WANG:

10 Q Can you explain?

11 MR. MOFFA: Objection. Form.

12 BY THE WITNESS:

13 A What it says is in response the applicant
14 amended the claims to remove the reference to
15 determining the locations of articles from the
16 order of the labels in the sequence of labels to
17 instead recite identifying a location
18 corresponding to the added shelf label on the
19 basis of an obtained location of the added shelf
20 label that is adjacent to a known reference label.
21 And then it says the sentence that you said, so
22 what I think that's indicating that the before

1 there were a reference to the statement that
2 talked about relative order and it was replaced by
3 something that talked about identifying a location
4 corresponding to the added shelf label on the
5 basis of an obtained location of an added shelf
6 label.

7 BY MR. WANG:

8 Q Dr. Surati, help me to understand, you're
9 saying examiner allowed the claim of prior art
10 that disclosed a mere ordering of ESLs.

11 So are you saying the examiner allowed the
12 claims because the claim claimed a mere ordering
13 of ESLs?

14 MR. MOFFA: Objection. Form.

15 BY THE WITNESS:

16 A I think that you're talking about the file
17 history and that the file history can have and in
18 this case some indication of what was meant when
19 you replace one thing with another and why
20 something is allowed.

21 BY MR. WANG:

22 Q So I'm not talking about -- I'm talking

1 about 47, Paragraph 47.

2 A Right.

3 Q Your sentence there is saying the examiner
4 allows the claims over prior art that disclosed a
5 mere ordering of ESLs.

6 So my question here is it's your opinion
7 that the examiner allowed the claims because the
8 claims disclosed a mere ordering of ESLs?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I think I'm stating what is stated here:
12 With this change and several others, the examiner
13 allowed the claims over prior art and disclosed a
14 mere ordering, and I note that that's how I
15 characterize from the order of the labels and the
16 sequence, and I think that that's fair.

17 BY MR. WANG:

18 Q Okay. So you think that's fair. Okay.

19 So are you a lawyer?

20 A I'm not, sir.

21 Q Okay. So do you know claims depend on
22 legal documents?

1 A Okay.

2 Q So if you're not a lawyer, how can you be
3 capable of construing legal documents?

4 MR. MOFFA: Objection. Form.

5 BY THE WITNESS:

6 A I mean, I can also just say that's -- I'm
7 saying there's a causal relation. I could just
8 say these are facts that are true, that after they
9 amended the claims, the claims were allowed.

10 BY MR. WANG:

11 Q So you construe the claim terms according
12 to your own opinion?

13 MR. MOFFA: Objection. Form.

14 Counsel, can I also point you to
15 Paragraph 9 of Attachment B of the PTAB Trial
16 Practice Guide. I want you to be careful about
17 this line of questioning.

18 MR. WANG: Noted. But I also noted that
19 counsel tried to use the objection to coach
20 witness I want to put on the record.

21 BY THE WITNESS:

22 A I mean, I don't know how to answer the

1 question which was I don't recall -- I'm not a
2 lawyer and what was the --

3 BY MR. WANG:

4 Q So my question is you construe the terms
5 according to your own opinion?

6 A Oh, I'm construing the terms as a POSITA.

7 Q So you're not providing any legal opinions
8 in your declarations, right?

9 A I can't.

10 Q So your declaration represents your
11 personal opinion; is that true?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A It's my opinion as a POSITA what a POSITA
15 would think.

16 BY MR. WANG:

17 Q Okay. So it's not a legal opinion, it
18 must be a personal opinion, do you agree?

19 MR. MOFFA: Objection. Form.

20 BY THE WITNESS:

21 A It's an opinion that I've rendered and
22 explained based on what the reasoning that I've

1 provided in this report.

2 BY MR. WANG:

3 Q Okay.

4 MR. MOFFA: Counsel, I want to take a
5 five-minute break and let's you and I speak
6 without the witness here so you don't accuse me of
7 coaching.

8 MR. WANG: I don't want you to -- I think
9 it's up to the witness. If the witness wants a
10 break, that's fine. It's not up to you.

11 THE WITNESS: I'd like a break.

12 MR. WANG: Okay. That's fine.

13 MR. MOFFA: Counsel, we need to confer so
14 I'm not saying something in front of the witness.

15 (A recess was had.)

16 BY MR. WANG:

17 Q Dr. Surati, thank you for coming back.
18 Sorry about this little bit episode. So hopefully
19 it won't affect you. Let's finish the question.

20 So are you familiar with the Phillips
21 standard?

22 A I've looked at it before, yes.

1 Q Who told you about that?

2 MR. MOFFA: Objection. Form, relevance,
3 foundation.

4 BY THE WITNESS:

5 A So the Phillips standard what I recall it
6 used to be a term in the prior IPRs where we used
7 to have broadest possible interpretation and then
8 the standard, this Phillips standard took over
9 which had to do with plain and ordinary meaning as
10 far as I recall in light of the specification and
11 so on and so forth.

12 BY MR. WANG:

13 Q Let's move to Paragraph 55. Oh, by the
14 way, let's show on the screen.

15 Do you Professor Surati, do you have the
16 document in front of you?

17 A I do.

18 Q Do you need to show it on screen? I have
19 a copy, we have a copy, we can go along with our
20 copy. I trust you have the proper copy. You
21 probably trust I have the proper copy. Can we
22 just go along with our own copy without looking at

1 the screen?

2 THE REPORTER: It helps me to follow along
3 if you wouldn't mind.

4 MR. WANG: That's fine, Theresa.
5 Mr. Williams, just show on the screen.

6 BY MR. WANG:

7 Q Let's move to Paragraph 55.

8 You said patent owner or user to determine
9 which product must be -- determine which product
10 must be at which height.

11 What do you mean by which products?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A Just one second. I'm quoting from the
15 patent so let me just -- so the paragraph sites
16 locating the terminal from the electronic shelf
17 labels supposes precise and correct knowledge of
18 the location of said ESLs. The layout of a retail
19 area is normally described by a planogram. The
20 planogram is a set of association data among the
21 articles of a retail area and locations of said
22 retail area. The planogram terms which products

1 must be at which light on which shelves and over
2 how many linear meters. So I think when it's
3 talking about products this has to be related to
4 the items, articles in the retail area.

5 BY THE WITNESS:

6 Q Further down the line in 55, it's saying
7 the location of each product can be measured.

8 Do you see that?

9 A Yes.

10 Q So this unit you meant unit of measure
11 before, right?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A I think --

15 BY MR. WANG:

16 Q I'm sorry. Strike that, strike that
17 strike that.

18 Are you saying the location of each
19 product can be measured. So the location of each
20 product, what's the product you refer here?

21 MR. MOFFA: Objection. Form.

22 BY THE WITNESS:

1 A Oh I see.

2 BY MR. WANG:

3 Q I just want to make sure --

4 A I'm thinking. I want to make sure I have
5 the context of what I'm quoting to make sure that
6 what I answer you is fair.

7 Q Sure. Absolutely.

8 A It's talking about the location of each
9 product to be measured with considerable precision
10 and that's referring to 1:44-2-2, and I'm just
11 trying to go there to make sure that -- oh, I see.

12 So I think that this patent is talking
13 about products that are grouped in front of an ESL
14 so we're trying to figure out and help users get
15 to particular products. That kind of means that
16 it's the grouping of the products and it's the
17 location of the ESL related to the products.

18 Q So location of each product, so each of
19 the products refer to each type of product or
20 single unit of product?

21 A Yeah, so I'm interpreting that as an ESL
22 being in front of a set of products so I think of

1 the type of product where one product group would
2 be distinguished from another maybe by packaging
3 amount or size. They just can't be the same
4 product.

5 Q So I just want to clarify. Doctor --

6 A Surati.

7 Q Sorry. Surati or Surati?

8 A Surati.

9 Q Surati. Thank you for keeping me honest.

10 So Dr. Surati, you meant each product, so,
11 for example, if you have a five bottles of Coca
12 Cola, it doesn't mean each of the bottles, you
13 mean the five, one type of product; is that fair?

14 MR. MOFFA: Objection. Form.

15 BY THE WITNESS:

16 A Yeah, I think that's fair.

17 MR. WANG: Mr. Williams, go to the other
18 patent, the other document, the '709 patent. Go
19 to the bottom of the patent with all the claims.

20 BY THE WITNESS:

21 A Okay.

22 BY MR. WANG:

1 Q Let's start from the top, Claim 1, not 18.
2 Start from one.

3 So Dr. Surati, is any of the claims has
4 language regarding the location -- a location must
5 be represented in units or anywhere talking about
6 a location it's represented units in the claim?

7 MR. MOFFA: Objection. Form.

8 MR. WANG: Mr. Williams, I meant keep
9 going down, keep going down. Page keep going
10 down, down down down, yeah, here, here, here, a
11 little up, a little bit. Yeah, that's good.
12 Yeah.

13 BY THE WITNESS:

14 A So the first mention that I think has a
15 notion of measurement would be the fact that
16 there's a planogram. There's a mention of
17 location and in the context of a planogram I
18 interpret that to mean that it has a notion of
19 measurement with a location and if they meant
20 something else there's probably a better choice of
21 words to use, nuanced and specific, but going back
22 to my patent -- sorry, to my document, I give you

1 how I interpret the word location based on reading
2 the specification, but, as I said, I do go on to
3 define what a planogram is, not define it but
4 explain about it in my declaration and it's within
5 that context the notion that I believe that
6 there's this notion of distance and location that
7 needs to be considered.

8 BY MR. WANG:

9 Q So, Dr. Surati, you would agree a location
10 is represented in units, it's not appear anywhere
11 in the claim language, right?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A So the word units is not expressly
15 mentioned in the claims. That's correct, however,
16 a POSITA would understand reading the claims, the
17 claim spec and the file history that that's what's
18 meant.

19 BY MR. WANG:

20 Q So that's your opinion, right?

21 A That's the opinion of a POSITA.

22 MR. WANG: Mr. Williams, sorry to going

1 back and forth. Let's go to the Paragraph 56 of
2 the, yeah, declaration, yes. Thank you.

3 BY MR. WANG:

4 Q So here, Dr. Surati, you said -- in
5 Paragraph 56, Dr. Surati, you mentioned you the --

6 MR. MOFFA: Counsel, I'm sorry. You
7 broke.

8 MR. WANG: It's broken.

9 MR. MOFFA: I couldn't understand your
10 question, either. Maybe it's a bad connection.

11 BY MR. WANG:

12 Q Paragraph 56 you mentioned measured
13 acceleration of the device as a function of
14 movement and time can be used to measure precise
15 displacements for deducting the distance between
16 product labels; is that right?

17 MR. MOFFA: Objection. Form.

18 BY THE WITNESS:

19 A That's what the paragraph says, yes, and
20 that's what I wrote.

21 BY MR. WANG:

22 Q So what do you mean by precise

1 displacements?

2 A So I'm trying to deduce the distance
3 between product labels and I'm using inertial
4 measurement units presumably inside of a phone and
5 that I can use that phone to, you know, try to get
6 it right within a few centimeters. It depends
7 on -- so the precision is a little bit -- the
8 precision is -- whatever the precision of the
9 phone is what I mean there.

10 Q You're saying precise displacement. You
11 mentioned centimeters?

12 A Yes.

13 Q Can you explain how to measure the precise
14 displacement, the displacements using the device?
15 Can you explain that a little bit?

16 MR. MOFFA: Objection. Form. Objection,
17 foundation.

18 BY THE WITNESS:

19 A So you're asking how a phone -- how I
20 could measure with a phone accelerometers the
21 difference in distance?

22 BY MR. WANG:

1 Q Right.

2 A Sure. So --

3 MR. MOFFA: Objection. Foundation.

4 Objection. Form.

5 BY THE WITNESS:

6 A Yeah, I don't, I didn't write it but
7 he'll -- I mean -- the accelerometers in phones so
8 you can integrate the value of the acceleration
9 twice and get some notion of a location and if you
10 have a set of these locations that you're
11 integrating you can say, oh, the difference
12 between these two places is one minus the other
13 and that gives you a sense of the distance and it
14 usually has some notion of measured distance
15 because you're trying to measure a distance but
16 you'll end up with a displacement of delta X,
17 delta Y and delta Z depending upon where your
18 phone is. If you put your phone in front of the
19 one ESL and then you move it over to the next ESL
20 then you can look at the X-Y coordinate that you
21 may get out of it you can subtract them and
22 hopefully get a displacement.

1 BY MR. WANG:

2 Q Dr. Surati, you used the relating
3 positioning of the phone. So, for example, the
4 phone move from position A to position B and then
5 calculate the difference in order to measure the
6 precise displacements; is that right, or you use a
7 certain acceleration?

8 MR. MOFFA: Objection. Form. Objection.
9 Foundation.

10 BY THE WITNESS:

11 A Yes, the answer is yes and yes, because
12 the acceleration is what's being measured by the
13 gyroscopes. They are mathematically integrated to
14 get to an X, a Y and a Z.

15 BY MR. WANG:

16 Q So you measured the accelerator but
17 actually the result -- end result is to measure
18 the distance from position A to position B, is
19 that your testimony?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A That's how I understand it.

1 BY MR. WANG:

2 Q I just want to make sure, you already
3 mentioned, so you used an accelerator inside a
4 phone to determine the physical positioning of a
5 phone and then you use the determination of that
6 to determine the position of the phone from
7 position A to position B and calculate the
8 difference between the two in order to precise --
9 let me go back to the word in order to measure
10 precise displacements; is that right?

11 MR. MOFFA: Form. Objection. Foundation.

12 BY THE WITNESS:

13 A I think generally what you said sounds
14 right.

15 BY MR. WANG:

16 Q Do you agree with that?

17 MR. MOFFA: Objection. Form. Objection.
18 Foundation.

19 BY THE WITNESS:

20 A I would just say that's generally how I
21 understand phones use accelerometers and how you
22 can get a displacement distance from using the

1 phone.

2 BY MR. WANG:

3 Q Thank you. Let's move to Paragraph 57.
4 So can you enlarge this, Mr. Williams? Enlarge
5 the map.

6 So Dr. Surati, what does this map show?

7 MR. MOFFA: Objection. Form.

8 BY THE WITNESS:

9 A So this map is depicting a generic
10 cadastre map identifying the fact locations of a
11 different property. By providing such locations
12 information '709 patent explains the store
13 managers who have highly precise knowledge of the
14 location of a product needed for order picking for
15 cycle counting or even tidying articles left
16 around the shop in their location and then I give
17 you some examples and this map is meant to kind of
18 be an explanation of how people think of cadastre,
19 but it's very similar to to I think figure --
20 there is a figure on Page 27 at the top where it
21 shows a top down notion of what you might call a
22 cadastre top down view of a retail space and it

1 goes on to say again.

2 Q So where is the top down mentioned
3 earlier?

4 A I believe we are looking at properties top
5 down on this figure whereas in figure -- on
6 Page 27 there is a top down at the top of the
7 page.

8 Do you see that?

9 Q Let me check. I'm asking this page.

10 A I understand. I'm just trying to explain
11 to you that I'm saying this one -- I'm trying to
12 explain what the meaning of cadastre is, top down
13 look, and I'm just pointing you to say this is
14 similar to when I start talking about retail areas
15 similar to a top down look like what you're seeing
16 in Figure 27.

17 Q This is from the patent down?

18 A Meaning the cadastre thing or --

19 Q It the drawing, the drawing we're seeing
20 on the screen?

21 MR. MOFFA: Objection. Form.

22 BY THE WITNESS:

1 A Page 23.

2 BY MR. WANG:

3 Q Yes.

4 A The word cadastre is used so I'm trying to
5 illustrate to people what it means.

6 Q Where did you get this drawing from?

7 A It's Exhibit 2015.

8 Q Remind me to ask the question here.

9 So in this declaration, did you list all
10 the documents you considered in section I believe
11 four and five?

12 A Just a moment. Let me just look, okay.
13 It's hard for me to compare all these things. So
14 I would say that if it's not listed in here I
15 referenced it in the document and I may have
16 looked at some stuff on the internet or things are
17 in my head but I don't recall anything in
18 particular.

19 Q According to to the best of your knowledge
20 you list all the documents you considered to form
21 the opinions in this declaration, right?

22 A Yeah, I think that's fair.

1 Q Let's go back to Paragraph 56.

2 No, wait.

3 A 57?

4 Q 57. So did you see 306 on the drawing?

5 A I'm going to have to blow it up.

6 Q 306.

7 A My eyes are not so good so maybe I can see
8 it on your screen.

9 Q Hold on. Yeah, make it a little bigger.

10 A That's helpful. Thank you. I see that.

11 Q What is it?

12 A I believe that is a property plot. I can
13 double check it.

14 Q Is it a property plot?

15 A That's how I would understand it. That's
16 typically how I would understand it, sure.

17 Q So you can see 306 on the map, right?

18 A Yes.

19 Q So you don't need to measure distance from
20 a reference point to identify 306 on the map,
21 right?

22 MR. MOFFA: Objection. Form.

1 BY THE WITNESS:

2 A So the question is using the map I don't
3 need to measure a distance, so it's true that if I
4 have a map, I don't need to measure a distance to
5 do much of anything, okay, but if I'm trying to
6 place labels in front of things and say where
7 there are, I need to measure something, and if I
8 want to decide how to create the map, I would have
9 to do some kind of measurement from point A to
10 point B to try to figure out where that B object
11 is and I can do it with relation to point A if I
12 know where point A is.

13 BY MR. WANG:

14 Q Okay. Let's go to Paragraph 61.

15 A 61?

16 Q 61, yes. So in 61 you said the term
17 planogram is a well-known term; is that right?

18 A I did say that in Paragraph 61, yes.

19 Q So you provide a -- you describe, you say
20 generally described the planogram as a dataset,
21 map, diagram, schematic or similar type of
22 information that allows retailers to accurately

1 plan out the placement of products in a retail
2 store in an effort to maximize sales.

3 Is that correct?

4 A That's what I wrote in Paragraph 61.

5 Q So is this your definition of the
6 planogram or you said general described, what do
7 you mean by generally described? Is this a
8 definition for the planogram or what do you mean
9 by generally described?

10 MR. MOFFA: Objection. Form.

11 BY THE WITNESS:

12 A So I'm just -- I try to describe the scope
13 of what the word planogram means in this section.
14 I don't definitively define it like I do location
15 and so I'm trying to give you a sense of like here
16 are some commonalities and here are some bounds
17 for what this notion of the a planogram means
18 because there are so many things people call
19 planograms and I don't want to disclude them,
20 et cetera, in describing what a planogram is, but
21 I go through this document, not the whole
22 document, Paragraphs 59 through, sorry, I believe

1 59 through 69, if I got that wrong I'm sorry, but,
2 yeah, 59 through 69 describing how I as I say
3 here, 69, Paragraph 69, that a POSITA would
4 understand that the term planogram has a plain and
5 generally understood meaning in the art that has a
6 set of common features which I've described above
7 and that the '709 patent was using the term
8 consistent with the plain meaning.

9 BY MR. WANG:

10 Q So is it fair to say you did not define
11 the term planogram in your declaration?

12 A I did not expressly define the word
13 planogram in my declaration, sir.

14 Q So in the sentence we just read, was it
15 accurately plan out the placement, do you see
16 that?

17 A That was Paragraph 59?

18 Q No, still 61.

19 A 61. I'm sorry. I just lost -- I had gone
20 to the other one. 61. We were talking about
21 maximizing sales; that's the first sentence.

22 Q Before that, so, Dr. Surati, please just

1 keep with the paragraph we're talking about.

2 A Yeah.

3 Q And before that there is accurately plan
4 out the placement, do you see that?

5 MR. MOFFA: Objection. Form.

6 BY THE WITNESS:

7 A So, yes. I think it's the first sentence
8 like I said before that says the term planogram
9 and then it says there it allows retailers to
10 accurately plan out the placement of products,
11 yes, I see that.

12 BY MR. WANG:

13 Q What do you mean by accurately plan out?

14 A So, you know, I think that means the idea
15 of planning out where to put -- you have a number
16 of products and you're a retailer and you are
17 trying to figure out the optimization problem of
18 maximizing revenue and you need to figure out
19 where to place this in the store where people are
20 heavily trafficking, there are places in the store
21 that certain types of people might go to so you
22 need to consider that when you put different

1 products in different places to take a couple of
2 things into consideration like what kinds of
3 people come to the store, is the front of the
4 store easier for the older people, maybe we'll put
5 older people products in the front of the store or
6 this product is very exciting, let's put it on the
7 end cap so that everyone sees it, all these
8 different considerations have to go but a dataset
9 map or diagram that lets you accurately plan out
10 the placement of products in a retail store in an
11 effort to maximize sales could be called a
12 planogram.

13 Q You meant accurately plan. In terms of
14 like a millimeter or centimeter or nothing like
15 that?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A I think I'm trying to accurately describe
19 different mechanisms. I don't know that it's
20 particularly specific to a distance but it could
21 include that notion like exactly where I'm going
22 to put this product but it could also be how many

1 products I'm going to put in the particular volume
2 or it could be how much of an area am I going to
3 plan out so there's a lot of different things but
4 I think distance could be considered part of the
5 term accurately.

6 BY MR. WANG:

7 Q So accurately plan, that you do not have
8 any unit of measure in mind when you said
9 accurately plan, right?

10 MR. MOFFA: Objection. Form.

11 BY THE WITNESS:

12 A I'd say accurately could not be specific
13 to linear dimension but it could definitely
14 include that concept.

15 BY MR. WANG:

16 Q You also mean maximize sales. What do you
17 mean by maximize sales?

18 MR. MOFFA: Objection. Form.

19 BY THE WITNESS:

20 A There are I'm talking about two concepts,
21 one is maximizing revenue or maximizing profit
22 with the idea to make as much money as possible.

1 BY MR. WANG:

2 Q So you mean maximize the revenue, not
3 maximize the profit, right?

4 MR. MOFFA: Objection. Form.

5 BY THE WITNESS:

6 A I think it could be either.

7 BY MR. WANG:

8 Q So maximize sales could be either maximize
9 the revenue and maximize the profit?

10 A Right.

11 MR. MOFFA: Form.

12 BY MR. WANG:

13 Q Let's go to Paragraph 62. Again, here you
14 said specifically planogram generally include
15 information regarding so you do not define the
16 planogram here, right?

17 A Not directly.

18 Q So you also mentioned in the No. 2 where
19 each product is placed on the retail shelf
20 segment, right?

21 A Yes.

22 Q So each product you mean each type of

1 product or each physical product?

2 MR. MOFFA: Objection. Form.

3 BY THE WITNESS:

4 A I mean type of product.

5 BY MR. WANG:

6 Q Each type of product. Okay. So, you
7 know, you have a general -- you said a planogram
8 generally including informations regarding one,
9 two and three, right?

10 A Yeah, I think that's what it says.

11 Q If we're missing two, would that also
12 consider a planogram or not?

13 MR. MOFFA: Objection. Form.

14 BY THE WITNESS:

15 A Let's first assume that there's shelves so
16 having a shelf segment makes sense I think if you
17 lost two in a store that has shelves where
18 multiple products could be on shelves in different
19 shelf segments if you didn't have that
20 information, it wouldn't be a planogram.

21 BY MR. WANG:

22 Q So you're saying one, two, three are

1 required for planogram, right?

2 MR. MOFFA: Objection. Form.

3 BY THE WITNESS:

4 A So in the particular example that I gave I
5 would say that a store with shelves and products I
6 would expect a planogram to include at least those
7 three.

8 BY MR. WANG:

9 Q At least those three. If missing anyone
10 of them, one, two or three, it's not a planogram
11 anymore, right?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A I wouldn't go -- I'm not trying to offer a
15 new opinion here. I'm just trying to say that the
16 hypothetical or the example that I gave with the
17 limitations I had I wouldn't consider it a
18 planogram so if there were other examples that
19 were very specific I could try to help understand
20 that, but, again, I'd have to look at the
21 particular example, see what it is, what data is
22 included and then I could tell you, but I feel

1 like given your question my answer that I just
2 gave you would be correct.

3 BY MR. WANG:

4 Q So, Dr. Surati, so maybe it's time to take
5 like a short break?

6 A Oh, good. I was hoping so.

7 MR. WANG: Let's do that. Maybe we come
8 back in 10 minutes.

9 THE WITNESS: Sure.

10 (A recess was had.)

11 BY MR. WANG:

12 Q Dr. Surati, I just want to make sure you
13 understand you're still under oath, right?

14 A I'm under the oath. I understood that.

15 Q Even though you did not -- the oath was
16 provided in the previous deposition, it still
17 applies to this testimony, this deposition, right?

18 A I think that's fair.

19 Q Let's go to Paragraph 63, Mr. Williams.
20 Paragraph 63, please?

21 BY MR. WANG:

22 Q It reads: A planogram can also be

1 presented in several ways such as top down map
2 that depicts how products are grouped together.

3 Do you see that?

4 A Yes.

5 Q And also you see a map underneath, right?

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A Underneath on the same page is.

9 BY MR. WANG:

10 Q Yes -- next page.

11 A So I'm looking at Page 27 and there is a
12 diagram of the top down and then below it are two
13 images of shelves and then there is a planogram as
14 a schematic and a planogram are live images.

15 Q Which image of the three are you referring
16 to as the example of planogram?

17 MR. MOFFA: Objection. Form.

18 BY THE WITNESS:

19 A So I talked about a planogram can be
20 presented in different ways and I'm showing you
21 different ways that it can be demonstrated so are
22 you asking which of these is a planogram based on

1 the discussion.

2 BY MR. WANG:

3 Q Correct. Are you saying all three
4 pictures are planograms?

5 A I think as long as they -- so with respect
6 to the patent or generally?

7 Q Your definition Dr. Surati.

8 MR. MOFFA: Objection. Form.

9 BY THE WITNESS:

10 A These are all examples of --

11 BY MR. WANG:

12 Q Let's correct that. Let's strike my
13 question earlier.

14 So let me be clear. So according to your
15 understanding, Dr. Surati, are all three pictures
16 shown in this page planograms?

17 A I see.

18 MR. MOFFA: Objection. Form.

19 BY THE WITNESS:

20 A I think these are examples of depictions
21 of planograms but there's probably additional
22 information you'd want in order to be able to

1 certify that they were planograms, like distances,
2 how big things are, and what they look like in
3 real life.

4 BY MR. WANG:

5 Q So it's your testimony, you know, any one
6 of them cannot be planogram by itself shown on
7 this page?

8 MR. MOFFA: Objection. Form.

9 BY THE WITNESS:

10 A I think that as long as they're providing
11 some notion of a way to maximize profit and helps
12 the users do stuff with that but with regard to
13 the patent I don't consider it that way because in
14 the patent the planograms are referring to helping
15 update them based on ESLs and things like that.

16 BY MR. WANG:

17 Q Let's try to ask this question a different
18 way. The first question has I don't know if it's
19 a horse or a dog, you see there picture, it is a
20 planogram according to your understanding?

21 A Right.

22 MR. MOFFA: Objection. Form.

1 BY MR. WANG:

2 Q Yes? Is the answer yes?

3 A Oh, I didn't quite get that. So yes, I
4 understood the question. I have not answered the
5 question. Sorry.

6 It's a depiction of a planogram. There
7 may be some other data associated with it. It
8 gives information about what products are going
9 where and it can be helpful in deciding where to
10 put products so from that point of view here it
11 talks about this being a 10,000 square foot space
12 so it gives you some sense of dimension, you can
13 measure the width and height to get the scale so I
14 think it could be considered that, however, in
15 terms of the actual patent and the use of the word
16 planogram there, it may need more specificity to
17 qualify as the planograms that the claims would
18 have to meet.

19 Q Dr. Surati, so you cannot tell whether
20 this picture is a planogram or it is not a
21 planogram, right?

22 MR. MOFFA: Objection. Form.

1 BY MR. WANG:

2 Q You do not know whether it qualifies as a
3 planogram, is that correct?

4 MR. MOFFA: Objection. Form.

5 BY THE WITNESS:

6 A Yeah. So all I'm saying is that these
7 pictures depict an exemplary top down planogram
8 but it's hard for my to say whether it is but I
9 think most of the information is there for to be a
10 planogram.

11 BY MR. WANG:

12 Q So you cannot be sure whether this is a
13 planogram; is that fair?

14 MR. MOFFA: Objection. Form.

15 BY THE WITNESS:

16 A I would say generally speaking I think of
17 it as a planogram, but I don't think of it as a
18 planogram in the sense that it might meet the
19 claim's limitations where you're putting
20 electronic store labels there because stable food
21 is so generic I wouldn't know which products go
22 where.

1 BY MR. WANG:

2 Q So the second picture, a little bit down
3 below on the left there is a yellow box, it's
4 saying planogram and a schematic.

5 Do you see that?

6 A Yes.

7 Q Is this a planogram according to your
8 understand?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A It's got a lot of the features on the left
12 and right. I can't actually see --

13 MR. WANG: Mr. Williams, can you enlarge
14 this drawing and make sure Dr. Surati can see it.

15 BY THE WITNESS:

16 A I'm assuming that -- let me just say this.
17 If I look at the image own the on the left.

18 BY MR. WANG:

19 Q Correct?

20 A I'm assuming that the product names that
21 are shown on the right that are depicted there are
22 different products whether they change color so

1 for example, if it's orange on the right and black
2 on the right it kind of shows that in the upper
3 lefthand corner that those are different types of
4 products, there's three demarcations of words at
5 the very top left and then on live image it's
6 depicting three types of products pretty clearly.

7 Q So is this drawing from your declaration?

8 A Yes, it is. I'm just trying to make sure
9 that my assumptions about how these two are
10 related because they seem to be related, you know,
11 that there's it looks like some kind of Orange
12 Crush in the upper left and some kind of Coke next
13 to it, but those depictions seem to be related to
14 drawing on the left that they're separate product
15 types, there's boxes with words in them I can't
16 read the words.

17 Q Although it's from your declaration you're
18 unsure whether the lefthand and the righthand side
19 talk about the same thing?

20 MR. MOFFA: Objection.

21 BY THE WITNESS:

22 A I'm pretty sure they do but I'm trying to

1 establish that -- I would say they do but I'm
2 trying to establish so you don't get confused
3 about the one on the right. I think together
4 they're similar in depicting different types of
5 products in the same place. That's all.

6 BY MR. WANG:

7 Q So, Dr. Surati, help me to understand
8 whether the left picture is a planogram?

9 A So I think that if we know -- I think
10 there's a sense of dimension if we happen to know
11 what those products are like it's a Coke bottle or
12 it's a Crush bottle that there is a notion of
13 dimension of vertical and horizontal in terms of
14 how wide it was so this could be a planogram for
15 one shelf of the store and you could say that's
16 the planogram if it's a one shelf store. If it's
17 a larger store you might want to include more
18 things like more shelves, but if it's just one
19 shelf I think that's fair.

20 Q So if it's one shelf, you're saying the
21 left picture depicts one shelf planogram; is that
22 fair?

1 A Maybe we can call it two shelves because
2 the left and right seem to be different shelves,
3 and then they have different shelves at different
4 heights so I don't want to get confused. Just say
5 oh, these are two shelves with different -- maybe
6 they're -- you know how a bookshelf has shelves,
7 let's call them the lefthand is a bookshelf but
8 it's really products you're putting instead of
9 books and next to it is this blue stuff, same
10 idea, that's a -- I'm trying to convey that's a
11 planogram that you can get a sense of the size
12 based on the products on the right-hand side but,
13 yeah, I would say that.

14 Q So the right picture and the left picture
15 are the same thing or they're different?

16 A I think they're the same thing.

17 Q They're the same thing. But you're saying
18 the left, you know, image or picture itself it's
19 qualified as one shelf planogram; is that true?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A Yeah, as long as -- in my mind as long as

1 you consider that you know the product size like
2 you can identify from the righthand side you can
3 see that Tide is somewhere and you know how big a
4 Tide box is.

5 BY MR. WANG:

6 Q Is the product size shown in the left
7 picture?

8 A Kind of but weirdly I guess if I could
9 read what it says and it says this is Tide bottles
10 of this product number then I could say what you
11 just said and I don't need to see the righthand
12 image.

13 Q On the righthand, is know picture.

14 A Right.

15 Q Is this a planogram?

16 A I think so.

17 Q So the righthand you think it's to use
18 your word as one shelf planogram?

19 A One shelf or it two shelves, however -- a
20 set of store shelves, however you want to call it.

21 Q Fair enough, it could be one shelf or two
22 shelves but you believe the righthand is a

1 planogram?

2 A Uh-huh.

3 MR. MOFFA: Objection. Form.

4 BY THE WITNESS:

5 A Yes.

6 BY MR. WANG:

7 Q Let's move up a little bit. Okay. It
8 reads as a planogram -- you can make it bigger
9 probably easier for everybody to read. Okay,
10 thank you, thank you, Mr. Williams.

11 It's saying a planogram can depict a shelf
12 segment that shows exactly which products are
13 supposed to be at which location. What do you
14 mean by exact?

15 MR. MOFFA: Objection. Form.

16 BY THE WITNESS:

17 A So the idea is that a depiction of a
18 planogram it can depict spacially where products
19 are and to what extent those products how many of
20 them there are on the shelf in that particular
21 location.

22 BY MR. WANG:

1 Q How exact is what I'm --

2 MR. MOFFA: Objection. Form.

3 BY THE WITNESS:

4 A I mean, I would say that within some
5 limitation with respect to the size of the shelf,
6 like, you know, arbitrarily I wouldn't want it to
7 be 10 percent off, but maybe I would tolerate
8 10 percent off if the size of the products are
9 quite big but, you know, within some reasonable
10 tolerance given the size of the shelf so that when
11 you put the products on the shelves they all fit.

12 BY MR. WANG:

13 Q So roughly as you mentioned 10 percent?

14 A That's an arbitrary number and it kind of
15 depends on how accurate the products are, so it'd
16 be depending on how good of the dimensions of the
17 products that I'm using and then how accurately I
18 can measure it. So 10 percent is an example,
19 maybe 5 percent is better, but to me it's more
20 about how exact product sizes are and how many you
21 can fit on the shelf and whether there's any
22 tolerance. The tolerance needs to take into

1 account if you put N numbers on the shelf that it
2 will at least fit in there.

3 Q Is there an industry standard regarding
4 the tolerance, 10 percent, 20 percent, 5 percent?

5 A I'm not aware of one.

6 MR. MOFFA: Objection. Form.

7 BY MR. WANG:

8 Q You know 10 percent is a number you pick.

9 A I just said that but so maybe I'll just go
10 back and say it needs to be something so that when
11 someone puts -- makes a decision about how many
12 products to put on a shelf at a particular
13 location that those products that you know to a
14 certain extent definitely fit in that area.

15 Q So you won't give a tolerance percentage?

16 A No. I'm giving you a relative mechanism
17 to decide what that tolerance needs to be in order
18 to work.

19 Q Okay. So it's not defined by centimeter
20 or millimeter, you know, generally in that spot
21 you think that should be fine, right?

22 MR. MOFFA: Objection. Form.

1 BY THE WITNESS:

2 A Yeah, I'm not sure what you mean by that.
3 What I'm trying to say if someone says I should be
4 able to fit 10 products in that space, the
5 accuracy needs to be such that if you say that,
6 you should be able to put definitely 10 products
7 in that space.

8 BY MR. WANG:

9 Q Fair enough. Thank you. Let's move to
10 Paragraph 65.

11 In the middle you said accurately
12 representing where products are located throughout
13 a retail area.

14 Do you see that?

15 A Uh-huh.

16 Q Again, accurately representing, what do
17 you mean by that accurately representing? Same
18 explanation you're going to give previously
19 regarding exact or something different?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A Are you referring to the last thing I was

1 talking about or --

2 BY MR. WANG:

3 Q No, no. I mean let's put it this way.

4 What do you mean by accurately representing?

5 A So I think -- let me just see something,
6 okay.

7 Q Okay.

8 A So I think the idea here is that the
9 invention improves the ability to take the
10 planogram that might be generic and you may have a
11 more accurate thing for your store and that more
12 accurately we talked about accurately kind of
13 gives what I was saying which is that just in the
14 prior discussion that it's more accurate and it
15 makes sure that if I say I want 9 products across
16 the shelf that those 9 products actually fit on
17 that shelf in that space that's been defined.

18 Q That's fair. So you do not mean this as
19 by centimeter, millimeters, micrometer or any
20 units; is that right?

21 A I think that it's implicit that it could
22 be in some sort of units, but what it does need to

1 do is there's a dimension to these products
2 whatever those dimensions are measured then if
3 they don't fit because there is an inaccuracy in
4 the planogram then that's not helpful to any kind
5 of profit maximization because then you may have
6 one less product than you plan to have there and
7 that would affect your calculation as to
8 maximizing revenue.

9 Q Okay. So if you saying accurately you
10 need to be represented by some sort of a unit of
11 measure, what kind of unit of measure is it in
12 your mind here, millimeter? Is it in millimeter,
13 is it in centimeter, is it in micrometer?

14 MR. MOFFA: Objection. Form.

15 BY THE WITNESS:

16 A I would say it's a dimension in length and
17 it doesn't matter so much which particular unit
18 measurement system you use as long as it's
19 consistent.

20 BY MR. WANG:

21 Q You're saying in your view it should be
22 represented in a unit of measure but how to -- how

1 precise you cannot tell; is that fair?

2 MR. MOFFA: Objection. Form.

3 BY THE WITNESS:

4 A How precise -- so unit measure of length
5 and distance but how precise needs to conform to
6 the constraints I discussed.

7 BY MR. WANG:

8 Q So you cannot provide a definite position?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I mean, it's hard to like provide a
12 definitive answer beyond what I just said.

13 BY MR. WANG:

14 Q You know, in Paragraph 65, the beginning,
15 you mentioned in my opinion a POSITA would
16 understand that the '709 patent uses the word
17 planogram consistent with this general
18 understanding, right?

19 A Yes, I did write that.

20 Q So does the '709 patent provide a
21 definition for planogram in your view?

22 A I think --

1 MR. MOFFA: Objection. Form.

2 BY THE WITNESS:

3 A I think it makes some express statements
4 about what the planogram like -- what it thinks
5 planograms include?

6 BY MR. WANG:

7 Q It does or does not provide a definition
8 in the '709 patent for the planogram?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I just said that there's multiple places
12 where they use a planogram and I could go over
13 them individually. There are multiple places
14 where it provides some more scope to what it means
15 by a planogram and one of them is the example you
16 gave at the original discussion which is a
17 planogram is a set of association data among
18 articles of a retail area in locations of said
19 retail area --

20 BY MR. WANG:

21 Q So you cannot say for sure whether '709
22 patent provides a definition or not?

1 MR. MOFFA: Objection. Form. Let the
2 witness answer.

3 BY THE WITNESS:

4 A I wasn't finished answering. Sorry. Hold
5 on.

6 BY MR. WANG:

7 Q Do you have the question?

8 A Yeah, I know -- and then it talks about --
9 from another place it talks about planograms
10 currently used are theoretical visions so there's
11 a whole paragraph describing what it thinks about
12 issues with planograms and why they're not that
13 great in the prior art, and then let me just --
14 give me a second here.

15 And then 40 it says the planogram presents
16 the a listing of the locations of the retail area
17 taking the form of an cadastre with location or
18 said locations by means of a referential set or
19 set of coordinates representative of the spacial
20 organization of the retail area, and then it goes
21 on to say things.

22 So it's providing some kind of guidance

1 about what the planogram includes. I don't think
2 they're mutually exclusive.

3 Q So Dr. Surati, is it your testimony '709
4 patent does not provide a definition for
5 planogram?

6 A I think -- I think it expressly provides
7 some indications of what the word planogram means
8 and I have provided them both to you so at least
9 it does that.

10 Q I think I want to understand your
11 position.

12 Dr. Surati, does '709 patent provide a
13 definition or it does not provide a definition or
14 you do not know?

15 MR. MOFFA: Objection. Form.

16 BY THE WITNESS:

17 A I'm not here to provide new opinions. I'm
18 just telling you what I wrote and I said that I'm
19 using this as a guidance on how -- what the word
20 planogram means within having certain commonality
21 and I pointed out some places where it explicitly
22 says what it prefers it to be and where it says

1 what it thinks it is at least minimally but it
2 doesn't -- I don't know that it gives an
3 exhaustive definition.

4 BY MR. WANG:

5 Q So Dr. Surati you're sitting here your
6 testimony '709 patent -- you cannot tell whether
7 the '709 patent provides a definition for
8 planogram, right?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A Yeah, no. I didn't say that. I said that
12 it provides some indication and scoping for what
13 the word planogram means.

14 BY MR. WANG:

15 Q But does it define planogram or not?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A I'm not providing any new opinions. I'm
19 telling you what I wrote.

20 BY MR. WANG:

21 Q So you refuse to say yes or no?

22 MR. MOFFA: Objection. Form.

1 BY THE WITNESS:

2 A I gave you an answer and I think the
3 answer is that it at least does this. I don't
4 know that it does more and what the word defines
5 means could be a little subjective.

6 BY MR. WANG:

7 Q So in your view it's not defined in the
8 '709 patent, right?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I didn't say that. I didn't say that.

12 BY MR. WANG:

13 Q So you cannot say one way to the other
14 whether it's defined or not defined?

15 MR. MOFFA: Objection. Form.

16 BY THE WITNESS:

17 A I said to you that there is some express
18 places where the word planogram appears with some
19 explanation of what it means, but I don't know
20 that it's a definitive definition that's all
21 exhaustive.

22 BY MR. WANG:

1 Q So you do not know whether it's defined or
2 not defined?

3 A I didn't say that.

4 Q So you're saying -- let me try to
5 understand your position, Dr. Surati.

6 You're saying it describes that but
7 there's no definition in the '709 patent; is that
8 fair?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I would just say that what I've said is --
12 Paragraph 69 for the reasons in my opinion a
13 POSITA would understand the term planogram has a
14 plain and generally understood meaning in the art
15 that has a set of common features which I've
16 described above and the '709 patent was using the
17 term consistent with that plain meaning and I have
18 several paragraphs on that that I could read off,
19 but in order for me to construe the claims to look
20 at whether or not the prior art provided an
21 obviousness basis for invalidating the claims,
22 that's as much as I needed to do and so that's why

1 I provided this information.

2 BY MR. WANG:

3 Q Dr. Surati, I guess my question is simple.
4 In your opinion, whether the '709 patent itself
5 provides a definition for planogram. Let me ask
6 it again.

7 MR. MOFFA: Objection. Form.

8 BY THE WITNESS:

9 A It provided me enough information for me
10 to be able to do what I was asked to do to prove
11 that invalidating -- so-called allegedly
12 invalidating prior art did or didn't meet a
13 POSITA's view of what would suffice as an
14 obviousness argument for things.

15 BY MR. WANG:

16 Q But can you not say whether it provides a
17 definition one way to the other in the '709
18 patent?

19 MR. MOFFA: Objection. Form.

20 BY THE WITNESS:

21 A I'm just saying I provided what I needed
22 and explained my reasoning and I don't know that I

1 need to know the definition explicitly to
2 invalidate the prior art.

3 BY MR. WANG:

4 Q Have you reviewed the '709 patent?

5 A Yes, I have.

6 Q After you reviewed the '709 patent, you
7 cannot tell whether the '709 patent provides a
8 definition for planogram, right?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I'm just saying that I'm not providing new
12 opinions about things and just that I've laid out
13 what I've said is my opinion about what the
14 meaning of planogram is so far as to come to the
15 conclusion that I came to.

16 BY MR. WANG:

17 Q Okay, Dr. Surati. You are unable to
18 provide an opinion regarding whether '709 patent
19 provide a definition for planogram or not, right?

20 MR. MOFFA: Objection. Form.

21 BY THE WITNESS:

22 A At this time I don't see it as necessary

1 to form the opinions that I've laid forth in my
2 document.

3 BY MR. WANG:

4 Q So you are unable to provide an opinion
5 for that?

6 MR. MOFFA: Objection. Form. I think
7 this is the same question 15 times and the witness
8 has given you an answer.

9 MR. WANG: Counsel, you are yelling at me
10 No. 1. Number 2, the witness does not answer my
11 question.

12 BY MR. WANG:

13 Q My question is one way the other whether
14 he thinks '709 patent provides a definition or
15 not, simple.

16 MR. MOFFA: Counsel, just for a clear
17 record, I'm not meaning to yell at you. We're
18 using one microphone in the room and the reporter
19 asked me to speak loudly and clearly to state my
20 objections.

21 MR. WANG: For the record, the counsel
22 from the patent owner keeps trying to interrupt

1 the deposition and also raise the voice and gives
2 the instruction to the counsel what question can
3 ask, what question cannot ask. Let's put that on
4 the record.

5 BY MR. WANG:

6 Q Dr. Surati, let's move on to Paragraph 87.

7 A 87 is as part of my analysis, sir?

8 Q 87, let me see. Yeah. 87 you say
9 petitioner -- let me read that. Okay.

10 You said: As part of my analysis, I have
11 considered the scope of content of prior art used
12 by petitioners and any differences between the
13 alleged invention and the prior art.

14 Do you see that?

15 A I do.

16 Q So what is alleged invention according
17 your understanding?

18 A Oh, the claims of the patent.

19 Q Can you describe what's your
20 understanding?

21 MR. MOFFA: Objection. Form.

22 BY THE WITNESS:

1 A I can read them to you, they are quite
2 explicit. The inventions are just one second, the
3 inventions are as claimed, a method for
4 intellectual property dating a planogram
5 registered in a computer system to reflect an
6 addition of a shelf label in the shelf a retailer.
7 I don't know that it's necessary for me to
8 describe it but each of those claims represents an
9 invention, the method according to Claim 1, Claim
10 2, Claim 3, the method according to Claim 3, Claim
11 4 the method according to Claim 1 further
12 comprising dot dot dot, Claim 5, the method
13 according to Claim 1 wherein the added shelf
14 label, blah, blah, blah, Claim 6 the method
15 according to Claim 5 wherein, et cetera, the
16 method according to Claim 1, wherein so on and so
17 forth, the method according to Claim 7 and so on
18 for each of the claims. I'm happy to go through
19 each of them, but I don't know that that's
20 necessary.

21 Q Mr. Williams, let's go back to
22 Paragraph 66. Okay.

1 So third line from the bottom which reads:
2 Examiner cited Okina as teaching the planogram?

3 Do you see that?

4 A It says to make the rejection the examiner
5 relied upon Okina which disclosed a database that
6 assigned each electronic shelf label positional
7 codes reflecting the relative order of ESLs and
8 then you're talking about but I did not see any
9 instance in which the examiner cited Okina as
10 teaching the planogram.

11 Q So the examiner does not cite to make the
12 rejection, right?

13 MR. MOFFA: Objection. Form.

14 BY THE WITNESS:

15 A So you're saying -- you're saying the
16 examiner -- I'm not sure I understood your
17 question.

18 BY MR. WANG:

19 Q My question is to make the -- in one, two,
20 three, four, five, six, lines from the bottom, you
21 say make the rejection, the examiner relying on
22 Okina.

1 Do you see that?

2 A Yes.

3 Q Did the examiner rely on Wu to make the
4 rejection or not?

5 A I'd have to look at it again.

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A So there were two times that the patent
9 was examined and the first time it had to do with
10 Wu.

11 BY MR. WANG:

12 Q Where did you see that?

13 A That is in Paragraph 45 I describe this.

14 Q Your opinion, Paragraph 45?

15 A Yes, I talk about the patent
16 application --

17 Q Let's go there. Mr. Williams --

18 A So Wu was done in the world but then in
19 the US they looked at Okina and they had access to
20 it and he used Okina to make the rejection.

21 Q Let's go to Paragraph 45 I think
22 Dr. Surati just mentioned. Yeah. So over here

1 you're saying '709 patent is a PCT application was
2 filed in the World Intellectual Property
3 Organization, is that what you refer to?

4 A Yes.

5 Q So in the WIPO you mentioned the examiner
6 look at the application, is that what you refer?

7 A Yes.

8 Q So I think go back to the Paragraph 66,
9 Mr. Williams.

10 Okay. So 66 you said there's a
11 prosecution history, right?

12 A Yeah. So let me just pull that up.
13 Sorry.

14 Q So in the prosecution history, did you see
15 the examiner rely on reference Wu?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A So I did not -- I don't know what's in the
19 heads of the examiner itself but in the
20 prosecution history I can't see the mention of the
21 word Wu but I did point out that Wu was looked at
22 in the WIPO.

1 BY MR. WANG:

2 Q In the US Patent prosecution history you
3 mentioned to make the rejection examiner relies on
4 Okina, right?

5 A Yes.

6 Q Does the examiner rely on Wu?

7 A As far as I can tell from the record they
8 don't appear to.

9 Q Let's go to the Paragraph 69.

10 A Just a moment.

11 Q 69. Okay. So you mention here the term
12 planogram has a plain generally understood meaning
13 in the art and it has a set of common features.

14 Do you see that?

15 A Yes, sir.

16 Q What common features do you refer to here?

17 A This is what I've described above and so
18 some examples include in fact that it's common --
19 let me just see.

20 So there's one thing where we're talking
21 about a dataset map or diagram schematic or
22 similar types of information that that allows

1 retailers to accurately plan out the placement of
2 products in a retail store in an effort to
3 maximize sales. I think that's one aspect of it
4 but it has to do with how products are displayed a
5 planogram is a layout or blueprint that assigns
6 different display locations on a specific display
7 fixture within a retail store to each product to
8 be displayed.

9 And then in 62 I talk about planograms
10 generally including information regarding how
11 similar products are grouped together and where
12 these groups of products are placed in a retail
13 store and where each product is placed on a retail
14 shelf segment assuming there are shelves including
15 relative to other products how high off the
16 ground, how prominent position, which products are
17 nearby in three, how much shelf space is dedicated
18 to each product and then I have in parenthesis
19 providing a given -- I give an example of
20 providing an overview of the different layers used
21 to build a planogram depending on the need and
22 data available including how products are grouped,

1 how much space should be allocated for each
2 product and product performance data to decide
3 which products to prioritize and I give a number
4 of other examples, but I think that gives you a
5 sense of what I was talking about.

6 Q All you mentioned are common features; is
7 that right?

8 MR. MOFFA: Objection. Form.

9 BY THE WITNESS:

10 A I think I mention common features that at
11 least incorporate that but the whole paragraph
12 would need to be read, set of paragraphs would
13 need to be read in whole.

14 In Paragraph 64, probably Paragraph 63 I
15 show some examples of planograms, pictures or
16 depictions of and then 64 features how they're
17 used, I talk about that and there is some notion
18 of distance that I talk about in Paragraph 65,
19 which products must be at which height on which
20 shelf and over how many linear meters. Those are
21 all I think things that talk about that and then
22 in 66 I talk about how relative order isn't enough

1 you need to have some idea of expanse to be able
2 to decide how many products you're putting on a
3 shelf facing someone.

4 And then in 67 I talk about a planogram
5 being a digital representation of the layout of
6 the retail area so I think that's a consistent
7 team but, yeah, I mean I think the common features
8 are certainly part of what needs to make up a
9 planogram.

10 BY MR. WANG:

11 Q So you mentioned a lot of features. The
12 question here is in 69, Paragraph 69 you mentioned
13 general understood meaning in the art for the
14 planogram, you cited common features, what are
15 common features?

16 MR. MOFFA: Objection. Form.

17 BY THE WITNESS:

18 A So at least it's -- 62 several provides an
19 explanation of at least those common features.

20 BY MR. WANG:

21 Q So your answer is Paragraph 62, one, two,
22 three are common features in here, right?

1 A Yeah. At least those and if there are
2 some others mentioned there they're there but I
3 think that it's a fair thing to say 62 comprises
4 most of what I would consider common features.

5 Q Anything else not included in 62?

6 MR. MOFFA: Objection. Form.

7 BY THE WITNESS:

8 A If there's no shelf space that might
9 change things but I think what I'm trying to
10 generally say is it if there's something else that
11 helps you maximize revenue that I didn't think of
12 here that has to do with placement of products,
13 then that may be included but I think those --
14 that at least what I'm saying in Paragraph 62
15 represents common features and I don't know
16 looking at this more whether there's more that I
17 can say.

18 MR. WANG: Do you want to take another
19 break or do you want to keep going?

20 THE WITNESS: I think a break would be
21 nice.

22 MR. WANG: Let's take 10 minutes.

1 (A recess was had.)

2 MR. WANG: Mr. Williams, let's turn over
3 to Paragraph 114 of the declaration we just
4 discussed. Mr. Williams, could you turn to
5 Paragraph 114 of Dr. Surati's declaration we just
6 discussed. 114, Page 55.

7 BY MR. WANG:

8 Q So, Dr. Surati, you know, in the first
9 sentence you you're saying the '709 patent also
10 explained the label identifies is different from
11 other relevant information about ESL.

12 What other relevant information you refer
13 here?

14 A I think later I talk about the '709 patent
15 also describes using the label identifier to say
16 associate other types of relevant information
17 including not only the location but also
18 specifications, dimensions, shelf space,
19 et cetera, about the article or products
20 associated with ESL to improve the representation
21 of a digital planogram to match the actual
22 arrangement of a product on a shelf.

1 Q So did you include that in your
2 declaration? Which paragraph?

3 A It's in there. Same paragraph where you
4 were. So it's one, two, three, four, five, six so
5 the first paragraph on the sixth line down, that's
6 a paragraph of Page 56.

7 Q Can you read it to me?

8 A The '709 patent also describes using the
9 label identifier to associate other types of
10 relevant information including not only a location
11 but also specifications, (dimensions, shelf space,
12 et cetera) about the article or product associated
13 with that ESL to improve the representation of a
14 digital planogram to match the actual arrangement
15 of products on a shelf.

16 Q So you refer to relevant information, not
17 only location but also the specification,
18 dimension shelf space and the like, right?

19 MR. MOFFA: Objection. Form.

20 BY THE WITNESS:

21 A Yes.

22 BY MR. WANG:

1 Q Let's move to Paragraph 115. In the
2 beginning you said specifically the '709 patent
3 explains that a system may use the label
4 identifiers combined with information about the
5 their location on shelf and the product
6 information. This combined with information this
7 information you mentioned is relevant information
8 you referred above?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A I think at least that's true.

12 BY MR. WANG:

13 Q And then you say combined with
14 informations about their location on the shelf and
15 the product information to create a planogram to
16 store with increased accuracy.

17 Do you see that?

18 A Yes.

19 Q So any other information you would need to
20 create a planogram or only the label identifier
21 and the relevant information you referred?

22 MR. MOFFA: Objection. Form.

1 BY THE WITNESS:

2 A I mean, I think it depends. The next
3 sentence I say: This example is not intended to
4 suggest, however, this is the only information
5 needed to build an accurate planogram. So I think
6 this is a good representation of data that you
7 might need like if you look at the label
8 identifier and the kinds of -- and there's a
9 location and you may happen to know where the
10 shelf actually is, what row it's in three
11 dimensions, what row, and then that it's a
12 toothbrush and how long or wide the package of the
13 toothbrush is, which way it's facing might be an
14 important thing to know in one dimension or two
15 dimension it is you're putting multiple toothpaste
16 boxes on the shelf. I think it's going to depend
17 a little bit on the orientation of the products,
18 how many you can put on a shelf. You know, they
19 give this example where there are multiple
20 toothpaste boxes but when they talk about shelf
21 space maybe that's the linear space, yeah, that's
22 the linear space so maybe that's enough there but

1 I would just say that at the end I say it's not
2 intended to suggest this is the only information
3 needed to build an accurate planogram.

4 BY MR. WANG:

5 Q But in this example, you opine, you
6 believe it's enough to use label identifier
7 combined with information to create a planogram,
8 right?

9 MR. MOFFA: Objection. Form.

10 BY THE WITNESS:

11 A Yeah, I mean, this example is done in the
12 context of you know, assuming that the position
13 actually gives you a location, what the article
14 is, how big it is, and how much shelf space I
15 think that at least is enough to provided I with
16 some way to make a planogram, that's done in the
17 context of a database but if there's some other
18 aspect you're looking for accuracy you might have
19 to add that other data but generally how I would
20 understand it I might -- if I'm trying to maximize
21 profits I might want to put how much profit
22 selling one of those is.

1 BY MR. WANG:

2 Q If fair to say in this case you think it's
3 sufficient, other cases there may be some
4 additional information?

5 MR. MOFFA: Objection. Form.

6 BY THE WITNESS:

7 A I think that's fair.

8 BY MR. WANG:

9 Q Let's move to Paragraph 116. You're
10 saying the '709 patent then explains that when a
11 new ESL is intended to be add today a shelf with
12 existing ESLs an operator uses a reader device to
13 acquire specific information to ensure the labels
14 and their associated articles are properly tracked
15 in the planogram.

16 Do you see that?

17 A Uh-huh, okay.

18 Q So an operator uses a read device. Is
19 operator anywhere in the claim language?

20 A So, you know, I think a POSITA would
21 understand reading the claims of the patent a that
22 if you're using the reader, a mobile reader then

1 someone or something would have to get placed near
2 the ESLs in order to do the require thing so
3 expressly, no word operator is used but I think
4 implicitly a POSITA would understand that somehow
5 this reader needs to get next to that ESL in order
6 to do this activity of adding an ESL to the
7 planogram.

8 Q So operator is a person, it's a human
9 being, it's a person, is that your understanding?

10 MR. MOFFA: Objection. Form.

11 BY THE WITNESS:

12 A I don't know that I -- let's go back --
13 which where is -- there is my declaration, okay.
14 So -- just one second. So the word operator is
15 used an awful lot in the specification but it
16 doesn't appear in the claims so I didn't -- I
17 would just take that to mean the plain and
18 ordinary meaning of a person or set of people are
19 trying to operate the reading device to acquire
20 things, et cetera.

21 BY MR. WANG:

22 Q Let me go back, what do you mean by

1 operator? Do you mean a person or persons? Is
2 that a true statement or is that fair?

3 MR. MOFFA: Objection. Form.

4 BY THE WITNESS:

5 A I haven't spent a lot of time thinking
6 about it, but I would just say that I'm trying to
7 use it the way they're using it in the
8 specification.

9 BY MR. WANG:

10 Q You agree that the claim language does not
11 require operator, right?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A I would agree that the claim language does
15 not have expressly the word operator in it, but
16 implicitly using the reading device as stated in
17 the specification likely involves a person or a
18 set of persons.

19 BY MR. WANG:

20 Q Let's move to Paragraph 149. Okay. So --

21 A I'm not there yes.

22 Q Okay. You can look at the screen, the

1 shared screen has that displayed if you would like
2 to see.

3 A Oh, yeah. I'm there now.

4 Q Okay. You said the claim requires a
5 displacement using measuring member that measures
6 displacement using label identifiers and distance
7 using the displacement of the reading device
8 itself and petitioners do not identify any art
9 that performs these measurements in the way
10 required by claims. What is the measurement
11 required by the claim? Can you explain?

12 MR. MOFFA: Objection. Form.

13 BY THE WITNESS:

14 A So I think I list those underneath there
15 and I've highlighted stuff related to that. Did
16 you see that?

17 BY MR. WANG:

18 Q What do you mean by that?

19 A So Claim 7 I've highlighted a displacement
20 measuring number determined by the reading devices
21 the displacement between the label identifier of
22 the adjacent shelf label whereas the location is

1 preliminarily shown of the label identifier of the
2 added shelf lame, there is I'm saying reading
3 device needs to determine a displacement that's
4 reading the labels and you have to put the label
5 close up next to it based on what I understand
6 20 centimeters means and that you need to -- that
7 the idea is that there's a displacement that you
8 need to make with the device in order to make that
9 measurement, and so we talked before about using a
10 mobile phone that has inertial motion units or
11 inertial something units to figure out what that
12 displacement is. So you would like in figure --
13 the figure in Paragraph 152, you would move the
14 device from label 1 to label 2 and then measure a
15 displacement that way.

16 Q So are you saying the displacement measure
17 is done by the reading device?

18 A In claim limitation 7-C says that
19 determining by the reading device.

20 Q That's also an opinion?

21 A That's what it says.

22 Q Does it require an operator or no?

1 MR. MOFFA: Objection. Form.

2 BY THE WITNESS:

3 A I think it's implicit that there's someone
4 causing this thing to move or something that's
5 controlled by some operator to move.

6 MR. WANG: Okay. I pass the witness.

7 MR. MOFFA: Let's take a five-minute
8 break, please.

9 MR. WANG: Okay. That's fine.

10 (A recess was had.)

11 EXAMINATION

12 BY MR. MOFFA:

13 Q Dr. Surati, you recall you were asked a
14 question whether you needed to measure distance
15 from a reference point to identify Item 306 in the
16 map diagram that was placed in Paragraph 57 of
17 your declaration?

18 A Yes, I do.

19 Q Are there any reasons that a cadastre
20 style map should allow you to measure distance?

21 A Generally a map like that is at scale and
22 it's in correct scale to allow you to measure

1 distances between points so, for example, if you
2 wanted to know how large an area 306 was, you
3 would this take out a ruler and measure it and
4 there'd be some scale that would tell you how to
5 convert the distances that you measure vertically
6 and horizontally to, you know, determine how wide
7 that area is or what the perimeter was or you
8 might it know exactly where the mailbox was on
9 that map and you'd be like, oh, you know, how do I
10 get to the mailbox of my next door neighbor? You
11 could take a ruler and measure out and decide what
12 the distances are.

13 Those are examples of where distance using
14 a ruler to measure distance could help you and if
15 you want to know what it's in real life you would
16 multiply it times some scale value that's based on
17 how the map was scaled down.

18 Q Thank you. Setting this paragraph of your
19 declaration aside, do you recall you were asked
20 some questions about how you construed the meaning
21 of the terms in the '709 patent?

22 A I do.

1 Q Can you describe what steps you took to
2 understand the meaning of those terms?

3 A Yeah. So when you're doing claim
4 construction, you know, you need to look at the
5 claim first and then you can then look towards the
6 intrinsic record which includes the patent
7 specification and then it also includes the patent
8 file history and if that's no indication, then you
9 need to consider what a POSITA would know and in
10 also extrinsic evidence that might exist that a
11 POSITA would consider relevant and based on that
12 you can try to come up with what a plain and
13 ordinary meaning would be for the term.

14 Q And in any of those constructions what
15 limit, if any, did the specification place on the
16 meaning of the terms?

17 A It just depends on the word you're looking
18 at, I'm thinking that it may. It could
19 potentially limit it, but you have to read it as a
20 POSITA and determine whether what's said in the
21 specification is relevant to the claim language in
22 the context of the claim. So you have to read the

1 context of the claim to understand if there's some
2 limitation placed on it if that limitation applies
3 in the specification.

4 MR. MOFFA: I pass the witness.

5 FURTHER EXAMINATION

6 BY MR. WANG:

7 Q I have a couple of short questions,
8 Dr. Surati.

9 Given the break, did you talk with your
10 counsel about the substance of your testimony here
11 that you provided?

12 MR. MOFFA: I'm going to instruct the
13 witness not to answer on the basis of privilege.

14 MR. WANG: I want to ask him whether he
15 talked with the counsel about the substance of the
16 testimony. I'm not asking what you discussed.
17 I'm asking did you discuss.

18 BY THE WITNESS:

19 A So I can answer?

20 BY MR. WANG:

21 Q It's a yes-or-no question.

22 A Kind of, sort of, we did, yeah.

1 MR. WANG: No more questions.

2 FURTHER EXAMINATION

3 BY MR. MOFFA:

4 Q I just want to be clear you're asking
5 about the break just had between the
6 cross-examination and redirect, correct?

7 A That's correct, otherwise we did not.

8 Q Right. Not on any other break.

9 MR. WANG: Okay. But you did discuss the
10 substance of your testimony before you come here?

11 THE WITNESS: You mean right before we
12 came here now?

13 MR. WANG: Right.

14 THE WITNESS: In this very last break, I
15 did do some discussion, yes.

16 MR. WANG: Okay. Fair enough. Thank you.

17 MR. MOFFA: Thank you.

18 (Deposition concluded at 3:41 p.m. CST.)

19

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22

1 CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC

2 I, Theresa A. Vorkapic, Certified
3 Reporter and Notary Public within and for the
4 State of Illinois do hereby certify:

5 That Dr. Rajeev Surati, the witness whose
6 deposition is hereinbefore set forth,

7 Was duly sworn by me before the
8 commencement of such deposition and that such
9 deposition was taken before me and is a true
10 record of the testimony given by such witness.

11 I further certify that the adverse
12 party, Patent Owner, was represented by counsel at
13 the deposition.

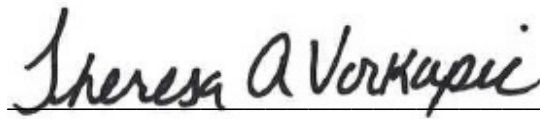
14 I further certify that the deposition of
15 Dr. Rajeev Surati, occurred virtually on Friday,
16 November 22, 2024, commencing at 12:45 p.m. CST to
17 3:41 p.m. CST.

18 I further certify the inspection,
19 reading and signing of said deposition was
20 waived on the record by agreement of all parties.

21 I further certify that I am not related
22 to any of the parties to this action by blood

1 or marriage, I am not employed by or an attorney
2 to any of the parties to this action, and that I
3 am in no way interested, financially or otherwise,
4 in the outcome of this matter.

5 IN WITNESS WHEREOF, I have hereunto set
6 my hand this 27th day of November, 2024.

7
8
9 
10 _____

11 Theresa A. Vorkapic

12 My commission expires November 6, 2027.

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