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Transcript of David Hilliard Williams

Date: April 23, 2024
Case: Google LLC -v- Geoscope Technologies Pte. Ltd.

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1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD
3
4 GOOGLE LLC,
5 Petitioner,
6 v.
7 GEOSCOPE TECHNOLOGIES PTE. LTD.,
8 Patent Owner.
9
10
11 Case No. IPR2023-01212
12 U.S. Patent No. 8,406,753
13
14 DEPOSITION OF DAVID HILLIARD WILLIAMS
15 Alexandria, Virginia
16 Tuesday, April 23, 2024
17 12:51 p.m. EDT
18
19
20 Job No.: 533808
21 Pages 1 - 72
22 Reported By: Joan V. Cain

1 Deposition of DAVID HILLIARD WILLIAMS, held
2 at the law offices of:
3
4 BUCHANAN INGERSOLL & ROONEY PC
5 1737 King Street
6 Suite 500
7 Alexandria, Virginia 22314
8 (703) 836-6620
9
10 Pursuant to Notice, before Joan V. Cain,
11 Court Reporter and Notary Public in and for the
12 Commonwealth of Virginia.
13
14
15
16
17
18
19
20
21
22

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1 A P P E A R A N C E S
2
3 ON BEHALF OF PETITIONER:
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1 A P P E A R A N C E S C O N T I N U E D
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22

1 C O N T E N T S

2 EXAMINATION OF DAVID HILLIARD WILLIAMS PAGE
3 By Mr. Desai 6

4

5 E X H I B I T S

6 (Retained by Counsel.)

7 PREVIOUSLY MARKED EXHIBITS REFERENCED
8 EXHIBIT 1001 U.S. Patent No. 8,406,753 12
9 EXHIBIT 1008 Declaration of David H. 7
10 Williams in Support of
11 Petition for Inter Partes
12 Review of U.S. Patent No.
13 8,406,753, 8/4/23
14 EXHIBIT 1028 Claim Construction 32
15 Memorandum Opinion & Order,
16 7/19/23

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20
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1 P R O C E E D I N G S
2 - - -
3 12:51 p.m. EDT
4 April 23, 2024
5 - - -
6 Whereupon,
7 DAVID HILLIARD WILLIAMS,
8 having been duly sworn under penalties of perjury by
9 the Notary Public, was examined and did testify as
10 follows:
11 EXAMINATION BY COUNSEL FOR PATENT OWNER
12 BY MR. DESAI:
13 Q Please state your name for the record.
14 A David Hilliard Williams.
15 Q All right. Mr. Williams, we've already
16 done a deposition earlier today. I want to just
17 restate a few ground rules, just to make sure things
18 run smoothly. You still -- you realize that you're
19 still under oath for this deposition as well?
20 A Yes.
21 Q And you understand that if you -- will you
22 ask me if you don't hear or understand one of my

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1 questions?
2 A Yes.
3 Q And if you answer one of my questions, you
4 understood and heard my question; is that fair?
5 A Fair.
6 Q And, again, just as I said this morning,
7 verbal answers are going to be beneficial for the
8 court reporter here, so no nodding.
9 A Understood.
10 Q Any reason at all that you can't give full
11 and completely truthful answers today?
12 A No.
13 Q I'm going to hand you what's been marked as
14 Exhibit 1008 in Case No. IPR2023-01212. And you can
15 take a look at it, but can you confirm for me that
16 this is your declaration from Case No. IPR2023-01212
17 regarding the U.S. Patent No. 8,406,753?
18 A Confirmed.
19 Q And just like we did this morning, I'd like
20 to establish some shorthand to make things a little
21 bit easier.
22 You understand that if I refer to the 1212

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1 proceeding, I'm referring to Case No. IPR2023-01212?
2 A I understand.
3 Q You understand that if I'm referring to the
4 '753 patent, I'll referring to U.S. Patent No.
5 8,406,753?
6 A Yes.
7 Q If I refer to your '753 declaration, I'm
8 referring to this declaration, Exhibit 1008, that
9 was submitted in the 1212 proceeding.
10 Do you understand that?
11 A Yes.
12 Q Can you turn to the final page before the
13 appendix, which is page 46. Is that your signature
14 on page 46 of this exhibit?
15 A It is.
16 Q And you signed this on August 4th, 2023; is
17 that right?
18 A Yes.
19 Q And, again, at a high level, how did you
20 prepare this declaration?
21 MR. CHESLOCK: Objection to form.
22 THE WITNESS: It's been -- been ten months,

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1 but probably the best way to characterize it is
2 iteratively with the attorneys.
3 BY MR. DESAI:
4 Q Did you do anything to prepare for this
5 current deposition regarding the '753 patent?
6 A Reviewed documentation and met with the
7 attorneys.
8 Q And what documentation did you review to
9 prepare for this deposition?
10 MR. CHESLOCK: Objection to form.
11 Foundation.
12 THE WITNESS: The declaration, the patent,
13 and materials listed on the exhibits page.
14 BY MR. DESAI:
15 Q How long did you spend meeting with
16 attorneys in connection with preparing for this
17 deposition?
18 A It was -- well, it was all kind of blended
19 in with the other first preparation. So the --
20 numerous hours. You know, it's packaged with the
21 other declaration, basically -- or other patents.
22 So --

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1 Q Aside from typos, are you currently aware
2 of any corrections that you need to make to your
3 '753 declaration?
4 A No.
5 MR. CHESLOCK: Objection to form.
6 THE WITNESS: No, I'm not.
7 BY MR. DESAI:
8 Q In your '753 declaration, can you turn to
9 paragraphs 54 and 55.
10 A Okay.
11 Q And you see here these paragraphs are
12 addressing the construction of the phrase "grid
13 point"; is that right?
14 A Correct.
15 Q So the term "grid point" is used in the
16 '753 patent, correct?
17 A Yes.
18 Q We spoke about it at length in the earlier
19 deposition today, but the construction of grid point
20 that you have for the '753 patent is the same as the
21 construction of the -- of the term "grid point" that
22 you have for the '104, '358, and '494 patents,

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1 correct?
2 MR. CHESLOCK: Objection to form.
3 THE WITNESS: I believe that's correct.
4 BY MR. DESAI:
5 Q And that's because the District Court
6 construed the term "grid point" across those four
7 different patents to have the same meaning, right?
8 A That's my understanding.
9 Q So you have the same construction for grid
10 point in the '104, '358, and '494 patents as you
11 have for the '753 patent. Were there any
12 differences in your analysis that resulted in
13 those -- your adopted constructions for the term
14 "grid point" across those proceedings?
15 MR. CHESLOCK: Objection to form. Compound
16 and scope.
17 THE WITNESS: I -- it's been quite a while,
18 but I don't believe so.
19 BY MR. DESAI:
20 Q I'm going to hand you what's been marked as
21 Exhibit 1001 in the 1212 proceeding. This is the
22 '753 patent. Just take a look at it and let me know

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1 if you recognize this.
2 A Yes.
3 Q Can you turn to -- so it's going to be all
4 the way in column 59, but I'd like you to turn to
5 claim 1, in the very end.
6 A Okay.
7 Q And you see that under claim 1, there's a
8 preamble that states: "A method of determining the
9 location of a mobile device in a geographic region
10 comprising the steps of," and underneath that there
11 are several limitations that are prefaced with a
12 letter.
13 Do you see that?
14 A Yes.
15 Q Okay. I'd like you to look at what's been
16 marked with -- or what's been identified as with
17 lower case B in this list of steps, and you see that
18 it says: "Generating one or more sets of grid
19 points for said calibration data," right?
20 A Correct.
21 Q Now, I'd like you to take a look at claim
22 32, and here there's a preamble that says: "A

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1 system for determining the location of a mobile
2 device in a geographic region comprising," right?
3 A Correct.
4 Q And if you look a little bit farther down,
5 there's a limitation marked with lower case letter
6 B, and then underneath that is another limitation
7 with -- marked with lower case Roman numeral I that
8 says: "Generate one or more grid points for said
9 calibration data," right?
10 A Yes.
11 Q All right. Is your understanding that
12 these are the only two independent claims in the
13 '753 patent?
14 MR. CHESLOCK: Objection to form.
15 THE WITNESS: That's my understanding.
16 BY MR. DESAI:
17 Q So every claim of the '753 patent requires
18 generating one or more sets of grid points for said
19 calibration data; is that fair?
20 MR. CHESLOCK: Objection to form.
21 THE WITNESS: Well, the two -- the two
22 independent claims in the '753 patent both have a

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1 limitation of generating one or more sets of grid
2 points for said calibration data.
3 BY MR. DESAI:
4 Q What is your interpretation of what it
5 means to generate one or more sets of grid points?
6 A Well, I discuss this on paragraph 76, which
7 is in the context of element 1.2, generating one or
8 more sets of grid points for said calibration data,
9 and I state: "The fingerprints of Spain are
10 generated as one or more sets of 'grid points.' My
11 understanding is that the [sic] Owner has indicated
12 this limitation requires generating a random grid
13 point such as a non-uniform grid
14 point...('generation and use of such non-uniform
15 grid points to create a more robust and denser 'map'
16 of known locations)...'" and it has a variety of
17 additional quotations on there, but I can read that
18 if you'd like.
19 Q That's fine. What I really wanted to focus
20 on was, I guess, primarily the word "generating," so
21 maybe I can go about this a different way.
22 You agree then that the claims of the '753

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1 patent require generating one or more sets of grid
2 points, right?
3 A That's the term that the claim limitation
4 uses, "generate."
5 Q So the claim grid points of the '753 patent
6 are something that is -- that are newly created; is
7 that right?
8 MR. CHESLOCK: Objection to form.
9 THE WITNESS: I'm not sure I'd agree with
10 the word "newly." It doesn't have an adjective
11 associated with that. It just says generating.
12 BY MR. DESAI:
13 Q Okay. So I'm asking you: What is your
14 understanding of what generating means? You
15 apparently don't agree that it requires something to
16 be newly generated. So can you just provide your
17 interpretation of what it means to generate one or
18 more sets of grid points?
19 MR. CHESLOCK: Objection to form. Asked
20 and answered.
21 THE WITNESS: Well, Spain -- the prior art
22 Spain discloses generation in a couple respects.

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1 One is by interpolation, and another is by
2 clustering of serving cell information.
3 BY MR. DESAI:
4 Q I'm not asking about Spain and the prior
5 art right now. I'm just focused on the '753 patent,
6 which is the one that's being challenged in the IPR.
7 So I'm trying to understand your interpretation of
8 what those words in the '753 patent mean.
9 So when the '753 patent claims require
10 generating one or more sets of grid points, that
11 requires creating something, right?
12 MR. CHESLOCK: Objection to form.
13 THE WITNESS: Repeat the question, please.
14 BY MR. DESAI:
15 Q When the '753 patent claims require
16 generating one or more sets of grid points, that
17 requires creating something, right?
18 MR. CHESLOCK: Objection to form.
19 THE WITNESS: I don't see the -- I don't
20 know that it has the word "creating" in there. It
21 just says the word "generating."
22 BY MR. DESAI:

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1 Q Do you know what the word "generating"
2 means?
3 A Well, it can include creation.
4 Q Okay. So I'm asking you -- you've opined
5 on what the scope of this patent is and how the
6 prior art apparently meets the limitations in this
7 claim. So I'm asking you for your interpretation
8 regarding generating one or more sets of grid
9 points.
10 In your opinion, what does that mean?
11 MR. CHESLOCK: Objection. Compound.
12 THE WITNESS: Well, as I state in the use
13 of Spain that I describe, there's two ways that
14 Spain generates grid points; one is in
15 interpolation, and another is in clustering of
16 serving cells. So I didn't have to define the metes
17 and bounds of what generation meant -- means. Those
18 two methods meet, in my opinion, the needs of the
19 term "generating."
20 BY MR. DESAI:
21 Q Okay. So when you talk about the
22 interpolation in Spain, is that generating a new

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1 point?
2 MR. CHESLOCK: Objection. Misstates the
3 testimony.
4 THE WITNESS: As stated in paragraph 77:
5 "Here, the two grid points are [sic] used to
6 interpolate an additional grid point or points and
7 to [sic] generate [sic] additional grid point or
8 points are collectively a generated 'set' of grid
9 points (i.e., a 'set' which includes...two
10 calibrated grid points and the associated
11 interpolated grid points."
12 BY MR. DESAI:
13 Q Okay. Focusing on what you wrote in
14 paragraph 77, are those additional grid points newly
15 created?
16 A Well, the two calibrated grid points were
17 existing, and then the associated interpolated grid
18 points was -- collectively that is making them
19 created -- generated. Excuse me.
20 Q You said, "collectively that is making
21 them...generated." What do you mean, "them"?
22 A Well, I -- excuse me.

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1 In paragraph 76, I said: "The fingerprints
2 of Spain are generated as one or more sets of 'grid
3 points.' My understanding is that Owner has
4 indicated this limitation requires creating [sic] a
5 random grid point such as a non-uniform grid point.
6 "In connection with this, Spain discloses
7 generation of sets of grid points whereas [sic] each
8 set includes newly interpolated grid points,"
9 specifically, "In an [sic] embodiment, the database
10 is built by taking fingerprint measurements at
11 predetermined locations and using intelligent
12 algorithms that interpolate (generate) the
13 fingerprints at all locations in between the sampled
14 locations (sets of grid points)."
15 Q Look back at claim 1 of the '753 patent.
16 A Okay.
17 Q The first limitation under the preamble
18 marked with lower case A says: "Providing
19 calibration data for each of one or more calibration
20 points in a geographic region, said calibration data
21 having one or more characterizing parameters."
22 Do you see that?

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1 A Yes.
2 Q So the calibration points in this claim are
3 distinct from the grid points; is that right?
4 MR. CHESLOCK: Objection to form.
5 THE WITNESS: They're related, as in
6 generating one or more sets of grid points for said
7 calibration data, and that gets -- that cites to the
8 construction as well.
9 BY MR. DESAI:
10 Q So when you say that the calibration points
11 and the grid points are related because the claim
12 recites generating one or more sets of grid points
13 for said calibration data, are you saying that the
14 grid points are based on the calibration data?
15 MR. CHESLOCK: Objection to form.
16 THE WITNESS: Well, the construction of
17 grid point is a point associated with representative
18 calibration data for an area. So it uses the
19 word -- the term "calibration data," and then
20 calibration data is modified or unmodified network
21 measurement data associated with a geographical
22 location.

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1 So that's how they're related.
2 BY MR. DESAI:
3 Q So focusing on that language, so, again,
4 the limitation that says: "Generating one or more
5 sets of grid points for said calibration data..."
6 and so now I want to focus on the second part of
7 that limitation, where it says: "...or said
8 calibration data," that means that the grid points
9 are generated based on the calibration data that was
10 collected in the prior step of the claim, right?
11 MR. CHESLOCK: Objection to form.
12 THE WITNESS: Repeat the question, please.
13 BY MR. DESAI:
14 Q The patent claims of the '753 patent
15 recite: "Generating one or more sets of grid points
16 for said calibration data." That means that the
17 grid points are generated based on the calibration
18 data that was collected in the prior step of the
19 claim, correct?
20 MR. CHESLOCK: Objection to form.
21 THE WITNESS: That's consistent with my
22 passage, for example, in paragraph 76, where I

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1 discuss: "...('the locations of and strengths of
2 signals from Wi-Fi hotspots and cell towers to find
3 additional locations that can be determined or
4 calculated based on the calibration data and
5 generates grid points associated with those
6 locations')."
7 BY MR. DESAI:
8 Q Well, let's take a look at the '753 patent
9 and just make sure that your understanding is
10 consistent with the language in the claims. So if
11 you can go back to claim 1 of the '753 patent, and
12 you see that the first limitation under the preamble
13 says: "...providing calibration data for each of
14 one or more calibration points in a geographic
15 region, said calibration data having one or more
16 characterizing parameters," correct?
17 A Correct.
18 Q So is it fair to say that this limitation
19 is describing the collection of calibration data at
20 one or more calibration points in a geographic
21 region, right?
22 A Correct.

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1 Q Then the next limitation says:
2 "...generating one or more sets of grid points for
3 said calibration data," right?
4 A Correct.
5 Q And so when it is referring to said
6 calibration data, that's referring to the
7 calibration data that was collected in the prior
8 step of the claim, right?
9 A It can, yes.
10 Q What else would that said calibration data
11 refer to, if not the calibration data that's been
12 collected in the prior step of the claim?
13 A Well, that's what it is.
14 Q So that means that the one or more sets of
15 grid points that are generated for said calibration
16 data are based on that calibration data that's been
17 collected at one or more calibration points in a
18 region in a -- in the previous step, correct?
19 A That's a fair statement.
20 Q So I'd like to turn you to column 2 and
21 line 26 of the '753 patent -- and actually --
22 sorry -- it'd be line 31. And there's a sentence

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1 that starts -- that states: "The calibration data
2 for these locations must be gathered and analyzed so
3 that particular points (e.g., 'grid points') within
4 the geographic region can be determined and
5 associated with a particular set or sets of
6 calibration data from, for example, one or more
7 NMRs."
8 Do you see that?
9 A Yes.
10 Q So this is describing calibration data
11 that's been collected at different locations in a
12 geographic region first, right?
13 MR. CHESLOCK: Objection to form.
14 THE WITNESS: "The calibration data for
15 these locations must be gathered and analyzed so
16 that particular points (e.g., 'grid points') within
17 the geographical [sic] region can be determined and
18 associated with a particular set or sets of
19 calibration data from, for example, one or more
20 NMRs."
21 BY MR. DESAI:
22 Q Right. So I'd just like to break down that

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1 language because there's a few different parts to
2 that.
3 So the first part of that that refers to:
4 "The calibration data for these locations must be
5 gathered..."
6 That's referring to the collection of
7 calibration data at various locations, right?
8 A I think that's fair.
9 Q Then the next part of that refers to the
10 calibration data that's been gathered being analyzed
11 so that particular points, referred to as grid
12 points, can be determined; is that right?
13 MR. CHESLOCK: Objection to form.
14 THE WITNESS: It says: "The calibration
15 data for these locations must be gathered and
16 analyzed so that particular" grid -- "particular
17 points (e.g., 'grid points') within the geographical
18 [sic] region can be determined and associated..."
19 BY MR. DESAI:
20 Q So this language in column 2 of the '753
21 patent that we're looking at is consistent with the
22 steps in claim 1 that we just looked at before,

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1 right?
2 MR. CHESLOCK: Objection to form. Asked
3 and answered.
4 THE WITNESS: I'm sorry. I don't
5 understand the question.
6 BY MR. DESAI:
7 Q Sure.
8 So in both the -- so in claim 1 we looked
9 at the limitations that are marked with lower case A
10 and lower case B.
11 Do you recall that?
12 A Yes.
13 Q And we had started by saying that the
14 limitation marked with lower case A is directed
15 towards collecting calibration data, right?
16 A Providing calibration data.
17 Q Okay. And then the next step in claim 1
18 is: "Generating one or more sets of grid points for
19 said calibration data," right?
20 A Correct.
21 Q So what I'm asking you is: Comparing that
22 to the language that we looked at in column 2, which

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1 describes calibration data being gathered and
2 analyzed so that grid points can be determined, do
3 you see any distinction between those two
4 descriptions of what's occurring in this claim?
5 MR. CHESLOCK: Objection to form.
6 Compound. Asked and answered.
7 THE WITNESS: Well, if I understand your
8 question, the key aspect of step 1(a), "providing
9 calibration data for each one or more calibration
10 points in a geographic region, said calibration data
11 having one or more characterizing parameters." So
12 with the characterizing parameters, as I discuss in
13 my declaration, the fingerprint of Spain can have
14 some of those characterizing parameters, such as
15 observed signal strength or possible serving cell
16 site, which is the identity of the serving cell.
17 So that's -- that -- those two elements are
18 just there. They're not necessarily having to be
19 analyzed in order to obtain them. They're just
20 there, observed signal strength or the serving cell
21 identification.
22 BY MR. DESAI:

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1 Q All right. So looking at the limitation of
2 claim 1, it says: "...generating one or more sets
3 of grid points for said calibration data."
4 What is your understanding of what's
5 generated under this claim language?
6 MR. CHESLOCK: Objection. Form. Asked and
7 answered.
8 THE WITNESS: Well, as I state in 77:
9 "...the two grid points used to interpolate an
10 additional grid point or points and the generated
11 additional grid point or points are collectively a
12 generated 'set' of grid points (i.e., a 'set' which
13 includes the two calibrated grid points and the
14 associated interpolated grid points.)"
15 BY MR. DESAI:
16 Q So in paragraph 77 you're just talking
17 about something from Spain, right?
18 MR. CHESLOCK: Objection. Form. Misstates
19 testimony.
20 THE WITNESS: That's the discussion of how
21 element 1.2, generating one or more sets of grid
22 points, is disclosed in Spain.

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1 BY MR. DESAI:
2 Q Right. So I'm not asking you about what
3 Spain is disclosing. What I'm asking you is: There
4 are certain words in this patent claim that have
5 meaning, right?
6 That's your understanding?
7 A Yes.
8 Q And so I'm trying to understand the meaning
9 of -- before we talk about the prior art or Spain,
10 the meaning of the terms in this patent, and so I'm
11 asking you, when the limitation says:
12 "...generating one or more sets of grid points for
13 said calibration data," what exactly is that
14 referring to generating?
15 MR. CHESLOCK: Objection to form. Asked
16 and answered.
17 THE WITNESS: Well, again, the -- the full
18 aspect of that limitation is: "...providing
19 calibration data for each of one or more calibration
20 points in a geographic region, said calibration data
21 having one or more characterizing parameters."
22 BY MR. DESAI:

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1 Q Do you understand that I'm talking about
2 the limitation that says: "...generating one or
3 more sets of grid points for said calibration data"?
4 A Yes.
5 Q So I'd like you to focus on that language.
6 But what exactly is being generated by this claim?
7 MR. CHESLOCK: Objection to form. Asked
8 and answered.
9 THE WITNESS: "...one or more sets of grid
10 points for said calibration data."
11 BY MR. DESAI:
12 Q Okay. And so in terms of what does it
13 actually mean that: "...one or more sets of grid
14 points for said calibration data," are being
15 generated? And just to clarify -- I'll reask the
16 question, but to clarify, is that a location that's
17 being generated? Is that some set of data that's
18 being generated? Is that some shape or boundaries
19 that are being generated?
20 So I'll reask the question, but I say that
21 for clarification.
22 What does it actually mean that one or more

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1 sets of grid points for said calibration data are
2 being generated by the claim?
3 MR. CHESLOCK: Objection to form.
4 Compound. Asked and answered.
5 THE WITNESS: Well, the phrase -- the grid
6 point is a point associated with representative
7 calibration data for an area, so grid points are a
8 plural of that.
9 BY MR. DESAI:
10 Q Okay. So the grid point is a location, in
11 your view?
12 MR. CHESLOCK: Objection to form.
13 THE WITNESS: It's a point associated with
14 a representative calibration data for an area.
15 BY MR. DESAI:
16 Q And is that point a particular location?
17 MR. CHESLOCK: Objection. Asked and
18 answered.
19 THE WITNESS: It's a point associated with
20 representative calibration data for an area.
21 BY MR. DESAI:
22 Q And how did you come to that construction

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1 of grid point?
2 A That's from the Markman order.
3 Q So I'm going to hand you what's been marked
4 as -- previously marked as Exhibit 1028 from the
5 1212 proceeding, and you can take a look at it and
6 just let me know if you recognize this.
7 A Okay.
8 Q So is this the same Markman order we looked
9 at earlier today in connection with the 1209, 1210,
10 and 1211 proceedings?
11 A Yes.
12 Q Is this the same Markman order -- strike
13 that.
14 So before I gave you this exhibit, I asked
15 you: "How did you come to your construction of grid
16 point?" You said: "That's from the Markman order."
17 Is this the Markman order that you were
18 referring to in answering my question?
19 A That's correct.
20 Q This is the Markman order from the related
21 District Court litigation involving Google and
22 Geoscope Technologies; is that right?

1 A It's the one Markman order.
2 Q All right. Can you turn back to page --
3 can you turn to page 18 of the Markman order that's
4 Exhibit 1028, and this is -- the bottom of this page
5 is the section of the District Court's Markman order
6 addressing the claim term "grid point, right?
7 A Yes.
8 Q And that continues until page 20, when the
9 section ends with a box that says: "Final
10 Construction," and in that box, it says: "'a point
11 associated with representative calibration data for
12 an area,'" right?
13 A Right.
14 Q Okay. And so the -- I believe we went over
15 this in the prior deposition, but the District Court
16 adopted as the construction of grid point for the
17 '104, '358, '494 and '753 patents "a point
18 associated with representative calibration data for
19 an area," correct?
20 A Correct.
21 Q So I believe you looked at the District
22 Court's Markman order in this section in connection

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1 with the prior deposition for a bit. Feel free to
2 take your time to look at it again.
3 Is there anything that's distinguishing how
4 the term "grid point" is used in the '104, '358, and
5 '494 patents versus how it's used in the '753 patent
6 in the District Court's analysis?
7 MR. CHESLOCK: Objection to form. Asked
8 and answered.
9 THE WITNESS: It's the same final
10 construction across all patents.
11 BY MR. DESAI:
12 Q Okay. So I understand it's the same final
13 construction across all patents. What I'm asking
14 you is: There's some text here that you agree is
15 where the District Court is explaining how it came
16 to its construction; is that fair?
17 A Yes.
18 Q So I'm asking you: In that text where the
19 District Court is explaining how it came to its
20 construction, is there any distinction that the
21 District Court drew between how the term "grid
22 point" is used in the '104, '358 and '494 patents

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1 versus how the term is used in the '753 patent?
2 MR. CHESLOCK: Objection to form.
3 Compound.
4 THE WITNESS: I'm not sure I understand
5 your question.
6 BY MR. DESAI:
7 Q Sure. Let me ask you a different question.
8 There's just a single section here in the
9 Markman order that's addressing the -- how the
10 District Court came to its construction of grid
11 point in the '104, '358, '494, and '753 patents,
12 right?
13 A Yes.
14 Q The District Court did not have distinct
15 sections for different -- for the use of the term
16 "grid point" in different parts of these patents,
17 correct?
18 A That's correct.
19 Q So earlier today at the prior deposition,
20 if you look at page -- well, if you look at page 20,
21 so earlier today in the prior deposition, we talked
22 about some of the language in the Markman order that

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1 the District Court included regarding the
2 phrase "representative calibration data."
3 Do you remember that?
4 A Yes.
5 Q Is there anything -- strike that.
6 So in forming your construction of the
7 term "grid point" for the '753 patent, did you
8 consider this language in the Markman order
9 regarding the phrase "representative calibration
10 data"?
11 MR. CHESLOCK: Objection to form. Asked
12 and answered.
13 THE WITNESS: I utilized that construction
14 in evaluating the patent claims and the prior art.
15 BY MR. DESAI:
16 Q Is there anything that you believe differs
17 in the District Court's description of the
18 term "representative calibration data" with respect
19 to the '104, '358, and '494 patents that we talked
20 about earlier today and the '753 patent?
21 MR. CHESLOCK: Objection to form. Asked
22 and answered.

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1 THE WITNESS: It's the same construction.
2 The claims, obviously, are -- are phrased
3 differently.
4 BY MR. DESAI:
5 Q So what I'm trying to -- what I'm trying to
6 ask you about is -- yeah, I understand that the
7 District Court came to a final construction -- we
8 see that here in the box on page 20, right?
9 A Right.
10 Q But the District Court did some analysis to
11 arrive at that construction; is that fair?
12 A They describe a logic process, I guess is
13 the best way to put it.
14 Q Okay. And part of what the District Court
15 described on page 20 is what the
16 phrase "representative calibration data," in its
17 construction of grid point means; is that correct?
18 MR. CHESLOCK: Objection to form. Scope.
19 THE WITNESS: That's part of the
20 description here on page 20.
21 BY MR. DESAI:
22 Q And so what I'm asking is: Is there

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1 anything with respect to the '753 patent, now that
2 I'm asking -- now that we're -- strike that.
3 Is there anything -- strike that.
4 So, previously, with respect to the '104,
5 '358, and '494 patents, I believe that you had
6 testified that there's nothing that you specifically
7 disagreed with in the District Court's analysis of
8 the term "grid point"; is that fair?
9 MR. CHESLOCK: Objection to form.
10 THE WITNESS: That's probably a fair
11 statement.
12 BY MR. DESAI:
13 Q Okay. And so now I just want to ask you
14 the same question with respect to the '753 patent so
15 there's a clear record. So I'll ask you the
16 question: Is there anything in the District Court's
17 analysis of the construction of the term "grid
18 point," specifically relative to the '753 patent,
19 that you disagree with?
20 MR. CHESLOCK: Objection to form.
21 THE WITNESS: Same answer. It's what it
22 is. I didn't see anything in particular that I

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1 disagreed with.
2 BY MR. DESAI:
3 Q And we're probably just under an hour.
4 Would it be okay to take a break here?
5 A Yeah.
6 (Recessed at 1:41 p.m.)
7 (Reconvened at 1:52 p.m.)
8 BY MR. DESAI:
9 Q All right. Mr. Williams, can you turn to
10 column 2 of the '753 patent, and it'll be line 46,
11 and you see that it says: "These non-uniform grid
12 points ('NUGs'), once determined, can be assigned
13 geographic coordinates so that the NUGs may be used
14 in determining the location of a mobile device
15 exhibiting certain attributes as discussed in more
16 detail below," right?
17 A Right.
18 Q So the '753 patent uses the acronym N-U-G,
19 or NUG, to refer to a non-uniform grid point, right?
20 A Correct.
21 Q And can you turn to column 10 of the '753
22 patent?

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1 A Okay.
2 Q All right. And if you look, starting at
3 line 39, like we looked a little bit at this
4 language earlier today, the prior deposition, we see
5 that there's a reference to a NUG generator, right?
6 A Yes. Actually, starting on line 29.
7 Q Right. Okay.
8 But I want to focus on the language
9 starting at 39. It says: "In any of these cases,
10 the NUG generator may evaluate the data vectors at a
11 particular (candidate) calibration point, or at a
12 fixed grid point to which the data vector(s) is/are
13 assigned."
14 Do you see that?
15 A Yes.
16 Q So this is referring to -- strike that.
17 Actually, let's look back at line 29, and
18 it says that: "A NUG generator or a method to
19 produce NUGs may begin the NUG generation
20 operation..." and then it continues on.
21 Do you see that?
22 A Yes.

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1 Q And so your understanding, NUG generator is
2 what the '753 patent is -- the terminology it's
3 using to describe what generates the non-uniform
4 grid point; is that fair?
5 MR. CHESLOCK: Objection to form. Asked
6 and answered.
7 THE WITNESS: It says: "A NUG generator or
8 a method to produce NUGs may begin the NUG
9 generation operation..."
10 BY MR. DESAI:
11 Q Okay. But in either case, it's referring
12 to a NUG generation operation, which would be a
13 process of generating one or more sets of grid
14 points; is that fair?
15 MR. CHESLOCK: Objection to form. Asked
16 and answered.
17 THE WITNESS: I think that's fair.
18 BY MR. DESAI:
19 Q All right. So do you have an understanding
20 of the term "data vectors"?
21 A In general, yes. I forget how this is
22 specifically used in this patent, though.

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1 Q Okay. So data vectors is not a claim term,
2 but if you look at column 10, line 39, it says: "In
3 any of these cases, the NUG generator may evaluate
4 the data vectors at a particular (candidate)
5 calibration point, or at a fixed grid point to which
6 the data vector(s) is/are assigned."
7 Is it your understanding here that data
8 vectors are -- "data vectors" is referring to
9 calibration data that's been collected?
10 MR. CHESLOCK: Objection to form.
11 Relevance and scope.
12 THE WITNESS: I do not recall that, one way
13 or another.
14 BY MR. DESAI:
15 Q Based on your understanding, and I
16 understand your caveat that there may be a different
17 context in the patent, but what would be the
18 distinction between data and data vectors?
19 MR. CHESLOCK: Objection to form. Scope.
20 THE WITNESS: I don't recall that at this
21 point.
22 BY MR. DESAI:

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1 Q So I asked you earlier, you know, "Do you
2 have an understanding of the term 'data vectors.'"
3 You said: "In general, yes." So I'm just trying to
4 understand that in this point.
5 MR. CHESLOCK: Objection to form.
6 THE WITNESS: I mean, I -- I've heard the
7 term before. I don't recall exactly what it meant
8 in this context.
9 BY MR. DESAI:
10 Q All right. If you look a little bit
11 farther down in that column, in line 46, it says:
12 "In particular, a determination may be made as to
13 whether the data vectors exhibit clustering."
14 Do you see that?
15 A Yes.
16 Q Do you have an understanding what
17 "clustering" means in this context?
18 And feel free to read more if you need.
19 A What was the question?
20 Q I asked if you have an understanding of
21 what "clustering" means in this context.
22 MR. CHESLOCK: Objection to form. Scope.

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1 THE WITNESS: Roughly, it's grouping.
2 BY MR. DESAI:
3 Q And grouping of what?
4 A Well, it depends on the context.
5 Q Okay. So in this example, if you've looked
6 at this language, it's talking about grouping data
7 from different calibration points; is that fair?
8 MR. CHESLOCK: Objection to form. Scope.
9 THE WITNESS: That's probably fair.
10 BY MR. DESAI:
11 Q All right. Can you turn to column 12, and
12 starting at line 4, it says: "The technique may be
13 repeated until all calibration grid points in the
14 region R are exhausted. At the end of this process
15 one has divided the region into a collection of
16 NUGs, where multiple co-located NUGs may exist. The
17 NUGs may fully cover the region R and each NUG may
18 have statistically similar data accumulated into
19 itself."
20 Do you see that language?
21 A Yes.
22 Q Okay. And then the next -- the next

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1 paragraph -- the next sentence says: "The
2 geometrical shape (i.e., the shape defined by the
3 union of locations of calibration points assigned to
4 the NUG) and the amount of data accumulated into
5 such NUGs is seen to be variable since these are
6 determined by the statistical similarity of the data
7 allocated to a NUG," right?
8 A I see that.
9 Q So the '753 patent is -- states that the
10 shape of a NUG is variable because it is determined
11 by the statistical similarity of data allocated to a
12 NUG, right?
13 MR. CHESLOCK: Objection to form.
14 THE WITNESS: It can be variable.
15 BY MR. DESAI:
16 Q So it can be -- the geometrical shape of a
17 NUG can be variable because it is determined by the
18 statistical similarity of the data allocated to the
19 NUG, right?
20 MR. CHESLOCK: Objection to form and scope.
21 THE WITNESS: I'm not sure I'm prepared to
22 answer that question.

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1 BY MR. DESAI:
2 Q Does determining the statistical similarity
3 of data that's allocated to a NUG require analyzing
4 that data?
5 MR. CHESLOCK: Objection to form. Scope.
6 Asked and answered.
7 THE WITNESS: No, I don't think it requires
8 it.
9 BY MR. DESAI:
10 Q So how would the -- how would statistical
11 similarity of a set of data be determined without
12 analyzing that set of data?
13 A Well, for example, if all the signals came
14 from a particular serving cell with an identifier
15 associated with that, that's just what it is. It
16 wouldn't require analysis.
17 Q Well, it would requiring knowing the -- you
18 just said that, in your example, it would require
19 knowing what particular serving cell the signals
20 came from, right?
21 MR. CHESLOCK: Objection to form.
22 THE WITNESS: That would just be observed

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1 data in the signal, as opposed to doing any analysis
2 of it.
3 BY MR. DESAI:
4 Q Okay. If you look back at claim 1 of the
5 '753 patent. And we've been talking about some of
6 the first steps under the preamble, the one that
7 starts: "providing calibration data..." and the
8 next one that starts: "generating one or more sets
9 of grid points..."
10 I want to ask you some of the other steps
11 in the claim here. Do you see what's marked with
12 lower case D? It says: "evaluating said at least
13 one network measurement report with each said set of
14 grid points as a function of said characterizing
15 parameters."
16 A Yes.
17 Q So this limitation, when it refers to
18 evaluating the network measurement port requires
19 evaluating it with respect to all of the sets of
20 grid points that were generated in the prior step;
21 is that correct?
22 MR. CHESLOCK: Objection to form.

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1 THE WITNESS: Repeat the question.
2 BY MR. DESAI:
3 Q When the claim talks about evaluating one
4 network measurement report, it requires evaluating
5 that with respect to all of the sets of grid points
6 that were generated in the prior step in the claim,
7 correct?
8 MR. CHESLOCK: Objection to form. Asked
9 and answered.
10 THE WITNESS: No. I would -- (d) is not
11 coupled with -- the sets of data that's evaluated in
12 (d) are not necessarily the ones that were generated
13 in (b).
14 BY MR. DESAI:
15 Q So you see that the claim language in (d)
16 says: "...said sets of grid points"? So what is
17 that referring to, if not the sets of grid points
18 that were previously generated in step (b)?
19 MR. CHESLOCK: Objection to form. Asked
20 and answered.
21 THE WITNESS: The overall method is about
22 trying to speed up a search process. So when it --

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1 the -- and through that, initially increasing the
2 density of the potential grid points that you can
3 search from, and then to subsequently doing an
4 analysis or an evaluation of those. It doesn't
5 require the -- what is evaluated in step (d) to be
6 using solely what was generated in step (b). It
7 can, but it doesn't have to be.
8 BY MR. DESAI:
9 Q So are you saying that step (d) does not
10 require evaluating each of said sets of grid points
11 with that said set of grid points referring to what
12 was generated in step (b)?
13 MR. CHESLOCK: Objection to form.
14 Misstates.
15 THE WITNESS: It says: "evaluating said at
16 least one network measurement report with each said
17 sets of grid points as a function of select ones of
18 said characterizing parameters."
19 So you have a characterizing parameter of a
20 serving cell, then you can evaluate the sets of data
21 that is associated with a serving cell.
22 BY MR. DESAI:

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1 Q Right.
2 But you would have to evaluate each of said
3 sets of grid points, correct?
4 A You would focus on what serving cell is --
5 is applicable and focus on that, and not all serving
6 cells.
7 Q So I'm just looking at the claim language
8 here. It says that the network measurement report
9 is evaluated with each of said sets of grid points,
10 right?
11 A As a function of: "...select ones of said
12 characterizing parameters."
13 Q Right.
14 So the grid points may have different
15 characterizing parameters. Is that what you're
16 explaining?
17 A That's definitely true.
18 Q Okay. So the grid points have different
19 characterizing parameters, but each of said sets of
20 grid points has to be evaluated with respect to
21 that -- a given characterizing parameter, right?
22 A So as I state in paragraph 91: "Spain

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1 discloses evaluating as a database search limitation
2 by using a current serving cell as a characterizing
3 parameter transmitted from the mobile unit. The
4 '753 Patent expressly claims 'the identification of
5 a serving cell' as a characterizing parameter in
6 dependent claim 9. Spain evaluates the 'fingerprint
7 structure' received from a mobile unit with each of
8 the sets of grid points generated through
9 interpolation (see element [1.2] above) as a
10 function of the identity of the characterizing
11 parameter, such as the current serving cell as the
12 characterizing parameter."
13 Q Okay. So you read a lot about what's
14 disclosed in Spain. Is it your understanding that
15 the claims of the '753 patent are defined by what's
16 in Spain?
17 MR. CHESLOCK: Objection to form.
18 THE WITNESS: No. I'm stating that Spain
19 meets the limitations described in the '753 patent.
20 BY MR. DESAI:
21 Q Okay. And so for you to opine that Spain
22 meets the limitations described in the '753 patent,

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1 you have to have some understanding of what the
2 limitations described in the '753 patent are; is
3 that fair?
4 A That's fair.
5 Q Okay. So I'm asking you what the
6 limitations described in the '753 patent are. I'm
7 not asking you about Spain right now, and we agree
8 that Spain does not define those limitations in the
9 '753 patent, correct?
10 MR. CHESLOCK: Objection to form.
11 THE WITNESS: It's providing an explanation
12 of how the prior art is -- or how the claim is met.
13 BY MR. DESAI:
14 Q You agree with me that Spain does not
15 define what the limitations of the '753 patent mean,
16 correct?
17 A Yes.
18 Q Okay. All right. So looking at the actual
19 claim language in the '753 patent and not looking at
20 Spain, step (d) recites: "evaluating said at least
21 one network measurement report with each of said
22 sets of grid points as a function of select ones of

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1 said characterizing parameters."
2 So what I'm asking you is: What is your
3 interpretation of the language: "...each of said
4 sets of grid points..." that does not require all of
5 the grid points that were generated in step (b) to
6 be evaluated as part of step (d)?
7 MR. CHESLOCK: Objection to form. Asked
8 and answered.
9 THE WITNESS: The key language is: "...as
10 a function of select one of said characterizing
11 parameters." So in the example of the serving cell,
12 that's what you focus on, in terms of doing the
13 evaluation, as opposed to every single point that
14 was generated in step (b).
15 BY MR. DESAI:
16 Q And so let's use that example.
17 Would you explain what the evaluation would
18 be using the example of a serving cell as the
19 characterizing parameter? So can you explain what
20 would be the evaluation that you're referring to?
21 A Well, as I state in paragraph 91, "Spain
22 discloses evaluating...a database search limitation

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1 by using a current serving cell as a characterizing
2 parameter transmitted from the mobile unit. The
3 '753 Patent expressly claims 'the identification of
4 a serving cell' as a characterizing parameter.
5 Spain evaluates the 'fingerprint structure' received
6 from a mobile unit with each of the sets of grid
7 points generated through interpolation...as a
8 function of the identity of a characterizing
9 parameter, such as the serving cell as the
10 characterizing parameter."
11 And then it goes on to discuss how that --
12 using that characterizing parameter, "The number of
13 possible locations of the mobile unit that must be
14 searched can be reduced when an approximate estimate
15 of the mobile unit's location is available. For
16 example, an approximate estimate of the mobile
17 unit's location can be determined from the identity
18 of the cell site serving the mobile unit. This
19 can," in turn, "reduce the number of possible
20 locations by a factor of one thousand or more."
21 Q So everything you just read to me is about
22 Spain. Are you contending that Spain is related to

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1 the '753 patent?
2 A No.
3 Q Okay. So, again, I'm trying to focus you
4 on the '753 patent here, and looking at step (d),
5 you see a phrase that says: "...said sets of grid
6 points."
7 And do you agree that that said sets of
8 grid points in step (d) of claim 1 refers to the one
9 or more sets of grid points that were generated in
10 step (b)?
11 MR. CHESLOCK: Objection to form. Asked
12 and answered.
13 THE WITNESS: Again, the said sets of grid
14 points as a function of select ones of the
15 characterizing parameters. So it is not -- it can
16 include what was generated in step (b), but it
17 doesn't have to be solely restricted to what was
18 generated in step (b).
19 BY MR. DESAI:
20 Q So are you saying that everything that was
21 generated in step (b) has to be evaluated, but more
22 could also be evaluated, or are you saying that not

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1 everything that was generated in step (b) has to be
2 evaluated in step (d)?
3 MR. CHESLOCK: Objection to form.
4 Compound.
5 THE WITNESS: The focus, again, is on the
6 said characterizing parameters. So if the -- what
7 was generated in step (b), for example, the serving
8 cell is not the one that you're focused on, then
9 that wouldn't necessarily have to be evaluated in
10 step (d).
11 Again, the whole point is to streamline the
12 search process and not have to evaluate every single
13 data point.
14 BY MR. DESAI:
15 Q Okay. So just so I understand the example
16 you're giving with the serving cell example, so some
17 grid points will have a characterizing parameter in
18 which they're associated with a particular serving
19 cell; is that fair?
20 MR. CHESLOCK: Objection to form.
21 THE WITNESS: Say that again.
22 BY MR. DESAI:

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1 Q So trying to use your example with the
2 serving cell, some grid points will have a
3 characterizing parameter of a serving cell that
4 corresponds to, let's say, Serving Cell 1; is that
5 fair?
6 A That's fair.
7 Q Other grid points may have a characterizing
8 parameter that corresponds to a different serving
9 cell, for example, Serving Cell 2 or 3 or so on; is
10 that right?
11 A Correct. Yeah.
12 Q So wouldn't evaluating the grid points to
13 understand which serving cell that a given grid
14 point is associated with require evaluating all of
15 those grid points?
16 A I wouldn't say it requires evaluating.
17 It's a data parameter that exists. It's one or not,
18 and if it's one, then it immediately narrows down
19 the pool of potential searches, as opposed to doing
20 some sort of analysis that would require you to go
21 through and identify, okay, that's actual Serving
22 Cell 1 versus 2. It's data that's right there.

1 Q So even in the answer you provided, you
2 just explained that if it's one, then it narrows
3 down the pool of searches. So there has to be some
4 determination of if the serving cell is one or
5 something else in your example, right?
6 MR. CHESLOCK: Objection to form.
7 Misstates.
8 THE WITNESS: Repeat the question.
9 BY MR. DESAI:
10 Q I'll ask you a different question.
11 So your opinion is that evaluation would
12 not encompass determining which serving cell that a
13 grid point is associated with; is that right?
14 MR. CHESLOCK: Objection to form.
15 THE WITNESS: I wouldn't say that.
16 Evaluation doesn't necessarily require analysis. So
17 if the data -- if the serving cell is -- that
18 information is right there in the network
19 measurement report, you don't need to do any
20 analysis to figure out if there's something
21 additional that you have to do. It's right there or
22 it's not. It's Serving Cell 1 or Serving Cell 2.

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1 BY MR. DESAI:
2 Q So the word "analysis" is not in step (d)
3 of claim 1, right? We're talking about the word
4 "evaluating," right?
5 A That's the word.
6 Q Okay. And so is it your position that
7 evaluating is not something that's done as part of
8 telling if -- as part of understanding if a grid
9 point is associated with one serving cell or
10 another?
11 MR. CHESLOCK: Objection to form.
12 Misstates.
13 THE WITNESS: I state: "Spain discloses
14 evaluating as a database search limitation by using
15 a current serving cell as a characterizing parameter
16 transmitted from the mobile unit. The '753 Patent
17 expressly claims 'the identification of a serving
18 cell' as a characterizing parameter...Spain
19 evaluates the 'fingerprint structure' received from
20 a mobile unit with each of the sets of grid points
21 generated through interpolation...as a function of
22 the identity of a characterizing parameter, such as

1 the current serving cell as the characterizing
2 parameter."
3 And it goes through a description about how
4 the process goes about reducing the -- the number of
5 possible locations that must be searched and can be
6 reduced when approximate estimate of the mobile
7 location -- mobile unit's location is available.
8 BY MR. DESAI:
9 Q Okay. So I think this is the third time
10 that you've read the language regarding what Spain
11 discloses in response to questions about what the
12 '753 patent claims cover. So again I'm just trying
13 to focus on what the '753 patents are actually
14 directed to -- the claims are directed to.
15 Is it your understanding that assessing a
16 grid point to determine which serving cell that it's
17 associated with is not an evaluation as required by
18 step (d) of claim 1?
19 MR. CHESLOCK: Objection to form.
20 Misstates.
21 THE WITNESS: No. I say Spain does
22 disclose the evaluating of a database search.

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1 BY MR. DESAI:
2 Q Are you able to answer my question without
3 referring to Spain, which is not what I'm asking
4 about?
5 A Do you want to rephrase it?
6 Q Well, the question was: So your
7 understanding that assessing a grid point in the
8 '753 patent claims -- strike that.
9 The question is that the '753 patent claims
10 recite: "evaluating said at least one network
11 measurement report with each of said sets of grid
12 points as a function of select ones of said
13 characterizing parameters."
14 Now, you've drawn some distinction between
15 evaluating and analyzing, but you understand that
16 this claim term recites: "evaluating...the [sic]
17 network measurement report with each said sets of
18 grid points as a function of select ones of said
19 characterizing parameters," right?
20 A Correct.
21 Q So focusing on that language that's
22 actually used in the claims, this step (d) requires

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1 evaluating each of said sets of grid points as a
2 function of select ones of said characterizing
3 parameters, right?
4 A That's what that step (d) says.
5 Q Okay. So using your serving cell example,
6 that would require considering what serving cell is
7 associated with each grid point -- with each set of
8 grid points that was generated in step (b), correct?
9 MR. CHESLOCK: Objection to form. Asked
10 and answered.
11 MR. DESAI: Strike that, actually.
12 BY MR. DESAI:
13 Q Using your example in which the serving
14 cell is the characterizing parameter, that would
15 require evaluation of what serving cell is
16 associated with each set of grid points that was
17 generated in step (b), right?
18 MR. CHESLOCK: Same objection.
19 THE WITNESS: It would potentially include
20 that if it was the same serving cell.
21 BY MR. DESAI:
22 Q So in your view, if something is a

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1 different serving cell, it cannot be evaluated as a
2 function of the said characterizing parameter?
3 MR. CHESLOCK: Objection to form.
4 Misstates prior testimony.
5 THE WITNESS: No, I didn't say that.
6 BY MR. DESAI:
7 Q Well, then, can you explain your answer as
8 to it would potentially include that if it -- strike
9 that.
10 Why would something have to be the same
11 serving cell to be evaluated with each of said sets
12 of grid points as a function of select ones of said
13 characterizing parameters?
14 MR. CHESLOCK: Objection to form.
15 Compound.
16 THE WITNESS: I'm not sure I understand the
17 question.
18 BY MR. DESAI:
19 Q You understand that a serving cell is one
20 possible characterizing parameter that could be
21 associated with the data associated with a grid
22 point, right?

1 A Yeah.
2 Q And that -- the identification of the
3 serving cell itself is a parameter; is that correct?
4 A That's fair.
5 Q And that parameter can have different
6 values, as in it could be Serving Cell 1, Serving
7 Cell 2, or Serving Cell 3, for example; is that
8 fair?
9 A Yes.
10 Q But to evaluate something with respect to
11 the parameter itself would require -- it doesn't
12 matter what the value of the parameter is, right?
13 MR. CHESLOCK: Objection to form. Scope.
14 THE WITNESS: Well, the whole point of
15 the -- or one of the key points of this patent is to
16 speed up the search. So part of that process is to
17 identify all the locations associated with a serving
18 cell and exclude the other ones.
19 BY MR. DESAI:
20 Q And you're saying that the whole point of
21 the '753 patent is to speed up the search.
22 Is that your position?

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1 A That's one of the benefits of the patent.
2 Q And you say that part of that process is to
3 identify all the locations associated with a serving
4 cell and exclude the other ones; is that right?
5 MR. CHESLOCK: Objection to form.
6 BY MR. DESAI:
7 Q Those are your words.
8 A Yeah, I know. I'm just trying to remember.
9 That's probably a mischaracterization.
10 Q All right. Well, I just want to clarify
11 some things.
12 So you said that one of the key points of
13 this patent is to speed up the search, right?
14 A Well, like I said, I'm not sure I'd
15 characterize that, on second thought.
16 Q Okay. So when you say -- so when you refer
17 to the key point of the patent in dispute of the
18 search, what I'm trying to clarify is, were you
19 referring to the '753 patent, or were you referring
20 to Spain?
21 A I probably was referring mostly to Spain.
22 That's why I said I mischaracterized it.

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1 Q So with that understanding in mind that it
2 was Spain that you're referring to as focused on
3 speeding up the search, so not the '753 patent, with
4 that understanding in mind, step (d) requires
5 evaluating each of said sets of grid points, meaning
6 the grid points that were generated in connection
7 with step (b) as a function of select ones of said
8 characterizing parameters, correct?
9 A Yes.
10 Q And each of said sets of grid points means
11 all of the sets of grid points that were generated
12 in connection with step (b) in claim 1, correct?
13 MR. CHESLOCK: Objection to form. Asked
14 and answered.
15 THE WITNESS: It can.
16 BY MR. DESAI:
17 Q What do you mean, "it can"? What
18 circumstances would it not mean -- in what
19 circumstances would each of said sets of grid
20 points, as recited in step (d), not refer to all of
21 the sets of grid points generated in connection with
22 step (b) of claim 1?

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1 A I'd have to think about that.
2 Q So you don't have any understanding of a
3 situation which could occur right now?
4 A Not off the top of my head.
5 Q Let's take a look at step (e) in claim 1.
6 And step (e) says: "selecting a set of grid points
7 as a function of a predetermined criteria."
8 Do you see that?
9 A Yes.
10 Q This is a separate step from step (d) in
11 the claim, right?
12 A Yes.
13 Q So the evaluating step -- strike that.
14 So the selecting step marked with lower
15 case E is something different is happening than
16 what's occurring in the evaluating step that's
17 marked with lower case D; is that fair?
18 A Yes.
19 Q And then the selecting step marked by lower
20 case E, this refers to: "selecting a set of grid
21 points as a function of a predetermined criteria,"
22 right?

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1 A Right.
2 Q So in step (e), there's now a subset of
3 grid points that's being selected; is that fair?
4 MR. CHESLOCK: Objection to form.
5 THE WITNESS: I think that's fair.
6 BY MR. DESAI:
7 Q So step (e) doesn't say selecting each of a
8 set of said grid points -- strike that.
9 So step (e) does not -- says "selecting a
10 set of grid points," but does not say each of said
11 sets of grid points; is that fair?
12 MR. CHESLOCK: Objection to form.
13 THE WITNESS: Correct.
14 BY MR. DESAI:
15 Q And then in step (f), the claim recites
16 "determining the location of a mobile device in said
17 geographic region as a function of said selected set
18 of grid points."
19 Do you see that?
20 A Yes.
21 Q And so that is referring to -- strike that.
22 So the said selected set of grid points is

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1 referring to the set of grid points that was
2 selected in step (e), correct?
3 A Correct.
4 MR. DESAI: Can we take just maybe a
5 five-minute break here? I'll see if there's
6 anything remaining.
7 MR. CHESLOCK: Is five minutes okay with
8 you?
9 THE WITNESS: Yeah.
10 (Recessed at 2:31 p.m.)
11 (Reconvened at 2:39 p.m.)
12 BY MR. DESAI:
13 Q All right. Mr. Williams, did you speak
14 with your counsel about the substance of your
15 testimony during any of the breaks during today's
16 deposition?
17 A No.
18 MR. DESAI: Okay. Pass the witness. Happy
19 to take another break if you guys would prefer.
20 MR. CHESLOCK: Yeah. We'll take a short
21 break and come right back.
22 (Recessed at 2:39 p.m.)

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1 (Reconvened at 2:58 p.m.)
2 MR. CHESLOCK: So we do not have any
3 redirect, and we reserve our ability to have
4 Mr. Williams review and sign the transcript.
5 MR. DESAI: Okay. We're done.
6 THE COURT REPORTER: Counsel, same orders?
7 Three business day rush and no rough for you,
8 Mr. Desai, but the rough for you Mr. Cheslock?
9 MR. CHESLOCK: Yes.
10 MR. DESAI: That's right.
11 (Signature having not been waived,
12 the deposition of David Hilliard Williams was
13 concluded at 2:58 p.m. EDT.)
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1 CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC
2 I, JOAN V. CAIN, court reporter and Notary
3 Public within and for the District of Columbia do
4 hereby certify:
5 That David Hilliard Williams, the witness
6 whose deposition is hereinbefore set forth, was duly
7 sworn by me before the commencement of such
8 deposition and that such deposition was taken before
9 me and is a true record of the testimony given by
10 such witness.
11 I further certify that the adverse party,
12 GOOGLE LLC, was represented by counsel at the
13 deposition.
14 I further certify that the deposition of
15 David Hilliard Williams, occurred at the offices of
16 BUCHANAN INGERSOLL & ROONEY PC, 1737 King Street,
17 Suite 500, Alexandria, Virginia 22314, on TUESDAY,
18 April 23, 2024, commencing at 12:51 p.m. to 2:58
19 p.m. EDT.
20 I further certify that I am not related to
21 any of the parties to this action by blood or
22 marriage, I am not employed by or an attorney to any

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of the parties to this action, and that I am in no way interested, financially or otherwise, in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 24th day of April 2024.

My Commission Expires: May 31, 2025

Joan V. Cain

_____

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VIRGINIA NOTARY REGISTRATION NO. 107144

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Buchanan Ingersoll & Rooney PC
1737 King Street, Suite 500
Alexandria, VA 22314-2727

Re: Deposition of **David Hilliard Williams**
Date: 4/23/2024
Case: Google LLC -v- Geoscope Technologies Pte. Ltd.

Dear Sir/Madam,

Attached please find the above-referenced deposition transcript. If applicable, signature is required within 30 days from the date of receipt of this letter.

In accordance with the disposition of signature at the deposition or the pertinent jurisdictional rules, the deponent should follow these instructions to complete the Errata Sheet:

(1) Read the transcript and indicate any corrections or changes in ink on the enclosed Errata Sheet. Please include page and line numbers. If more space is needed for corrections, please use a blank sheet of paper. If no corrections or changes are necessary, please indicate "no corrections" or "no changes" on the Errata Sheet.

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Sincerely,

Production Department
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Rockville, Maryland 20850

No. 533808

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Page	Line	Correction/Change and Reason
47	18	Change "port" to "report" - Typographical error

___May 2, 2024___
(Date)

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ACKNOWLEDGMENT OF DEPONENT

I, David Hilliard Williams, do hereby acknowledge that I have read and examined the foregoing testimony, and the same is a true, correct and complete transcription of the testimony given by me and any corrections appear on the attached Errata sheet signed by me.

__May 2, 2024_____ _____

(Date) (Signature)

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