

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

GCE GAS CONTROL EQUIPMENT INC.,)
)
 Plaintiff and Counter-Defendant,) Civil Action No.
) 8:22-cv-02550-TDC
vs.)
)
3B MEDICAL MANUFACTURING, LLC,)
)
 Defendant and Counter-Plaintiff.)

DEPOSITION UPON ORAL EXAMINATION OF
GEOFFREY DEANE

June 14, 2023
8:44 a.m.
421 W. Riverside Avenue
Spokane, Washington

TAKEN AT THE INSTANCE OF THE DEFENDANT

REPORTED BY:
AMY J. BROWN, RMR, CRR, WA CCR NO. 2133, ID CCR NO. 700

Fortz Legal Support
www.FortzLegal.com
844.730.4066

FORTZ
Legal

GCE Gas Control Equipment Inc. v. VBOX, Inc.

IPR2023-00326

VBOX, Inc. - Exhibit 2007 - Page i

FORTZ
Legal

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

GCE GAS CONTROL EQUIPMENT INC.,)
)
 Plaintiff and Counter-Defendant,) Civil Action No.
) 8:22-cv-02550-TDC
 vs.)
)
 3B MEDICAL MANUFACTURING, LLC,)
)
 Defendant and Counter-Plaintiff.)

DEPOSITION UPON ORAL EXAMINATION OF
GEOFFREY DEANE

June 14, 2023
8:44 a.m.
421 W. Riverside Avenue
Spokane, Washington

TAKEN AT THE INSTANCE OF THE DEFENDANT

REPORTED BY:
AMY J. BROWN, RMR, CRR, WA CCR NO. 2133, ID CCR NO. 700

1 APPEARANCES:

2
3 FOR THE PLAINTIFF AND COUNTER-DEFENDANT:

4 ERIK K. GILL
5 Sheppard Mullin Richter & Hampton LLP
6 12275 El Camino Real
7 Suite 200
8 San Diego, CA 92130
9 (858) 720-8900
10 egill@sheppardmullin.com

11 FOR THE DEFENDANT AND COUNTER-PLAINTIFF:

12 DAVID L. ATALLAH
13 TIMOTHY J. MURPHY
14 Carlson, Gaskey & Olds, P.C.
15 400 West Maple Road
16 Suite 350
17 Birmingham, MI 48009
18 (248) 988-8360
19 datallah@cgolaw.com
20 tmurphy@cgolaw.com
21
22
23
24
25

I N D E X

GCE GAS CONTROL EQUIPMENT INC. vs. 3B MEDICAL
MANUFACTURING, LLC
CIVIL ACTION NO. 8:22-cv-02550-TDC
June 14, 2023

T E S T I M O N Y

GEOFFREY DEANE	PAGE NO.
BY MR. ATALLAH	4
BY MR. GILL	221
BY MR. ATALLAH	233

E X H I B I T S

No.	Description	Page
1	Declaration of Geoffrey Deane, Ph.D.	18
2	Exhibit 1 to Mr. Deane's declaration, U.S. Patent 10,357,628 B2, Bates GCE0004074 - 4109	42
3	Exhibit 3 to Mr. Deane's declaration, U.S. Patent 11,389,614 B2, Bates GCE0002569 - 2605	43
4	Exhibit 15 to Mr. Deane's declaration, pages from The American Heritage Dictionary, Bates GCE0005901 - 912, 960 - 965	132
5	Exhibit 16 to Mr. Deane's declaration, pages from The New Oxford American Dictionary, GCE0005913 - 917, 951 - 959, 966 - 971	137
6	Exhibit 18 to Mr. Deane's declaration, pages from Webster's Dictionary, Bates GCE0005918 - 936, 978 - 983	190
7	Pages from Exhibit 12 to Mr. Deane's declaration, Bates GCE0004359 - 374	212

1 BE IT REMEMBERED that on Wednesday,
2 June 14, 2023, at 8:44 a.m., at 421 W. Riverside Avenue,
3 Suite 1010, Spokane, Washington, the deposition of
4 GEOFFREY DEANE was taken before Amy J. Brown, Certified
5 Court Reporter. The following proceedings took place:

6
7 GEOFFREY DEANE, being first duly sworn to tell
8 the truth, the whole truth and
9 nothing but the truth,
10 testified as follows:

11
12 EXAMINATION

13 BY MR. ATALLAH:

14 Q. Good morning, Mr. Deane.

15 A. Good morning.

16 Q. My name is David Atallah. I'm here on behalf
17 of 3B. We met before we got started here, but could you
18 just state your full name for the record?

19 A. Sure. Geoffrey Frank Deane.

20 Q. Okay. Have you had your deposition taken
21 before?

22 A. Yes, I have.

23 Q. About how many times?

24 A. Once, that I can recall.

25 Q. Okay. Been awhile?

1 A. Ten years.

2 Q. Okay. I'm just going to go over some just
3 general ground rules so we're on the same page going
4 forward.

5 A. Please.

6 Q. The court reporter is going to be taking down
7 everything that we say, so we need to try to speak one
8 at a time, so let me -- I'll try to finish my question,
9 let you answer, and I'll try not to interrupt your
10 answer. If you could do the same when I'm asking a
11 question so we're not talking over each other.

12 Does that sound good?

13 A. I agree.

14 Q. From time to time Mr. Gill might object. Let
15 him state his objection, but unless he instructs you not
16 to answer, you can then proceed and answer my question.
17 Good?

18 A. Understood.

19 Q. And the court reporter can't take down nods of
20 the head or "uh-huh," so verbal answers to the
21 questions, as well.

22 A. Understood.

23 Q. Okay. So I'll be asking you some questions
24 today. If any of my questions are unclear or you're not
25 sure what it means, let me know, and I'll try to clarify

1 it or ask a better question; fair?

2 A. I'll do that.

3 Q. And at the same time, if you answer my
4 question, I'm going to assume you understood my question
5 when you're answering it; fair?

6 A. Okay.

7 Q. If you need a break at any time, let me know,
8 we'll finish up whatever couple of questions we're on
9 and take a break; okay?

10 A. Great.

11 Q. Okay. Any reason you can't testify truthfully
12 today?

13 A. None.

14 Q. Okay. You mentioned you had your deposition
15 taken once before?

16 A. Yes.

17 Q. What kind of case was that?

18 A. A contract law case in Santa Barbara.

19 Q. Okay. Anything to do with oxygen
20 concentrators?

21 A. No.

22 Q. Okay. Have you ever been an expert before?

23 A. No. I assume you mean expert witness, but...

24 Q. Yeah. Yeah. That's a fair clarification.

25 A. Okay.

1 Q. So let me ask it again then. Have you ever
2 served as an expert in a patent case before?

3 A. No.

4 Q. Okay. Have you served as an expert in any kind
5 of litigation before?

6 A. No.

7 Q. Okay. Did you do anything to prepare for the
8 deposition today?

9 A. Yes.

10 Q. Okay. And can you -- without getting into any
11 conversations with your lawyers, can you tell me what
12 you did to prepare for the deposition?

13 A. Beginning several months ago, I read a long
14 list of documents. They're detailed in my disclosure.
15 Since then I've had several meetings going back and
16 forth talking about my disclosure and giving guidance as
17 to how to approach and how to discuss it. But in terms
18 of meetings specifically preparing for today, we had one
19 meeting.

20 Q. So it sounds like you had a bunch of work in
21 preparing the declaration that you submitted?

22 MR. GILL: Just objection and don't reveal --
23 BY MR. ATALLAH:

24 Q. Without. Yeah, I'm sorry, without getting into
25 any attorney -- you did -- the things you were just

1 describing were in preparing your declaration, and then
2 you had one meeting to prepare for the deposition today?

3 A. Correct.

4 Q. Other than your -- sorry.

5 A. I had two meetings. We met this morning just
6 to check in, so.

7 Q. Makes sense. Other than your lawyers, did you
8 speak to anyone else about your deposition today?

9 A. No.

10 Q. Other than your lawyers, did you speak to
11 anyone else in preparing your declaration?

12 A. No.

13 Q. We'll get to your declaration in a minute here.
14 Your declaration listed a number of exhibits that I
15 think you just mentioned; is that right?

16 A. Yes.

17 Q. Okay. Other than your declaration and those
18 exhibits, is there any other materials you've
19 prepared -- or, sorry, you've reviewed in preparing for
20 the deposition today?

21 A. Not specifically for the deposition today, but
22 I reviewed hundreds of documents over 20 years about
23 oxygen concentrators.

24 Q. Okay. But nothing specifically for --

25 A. No.

1 Q. -- your declaration --

2 A. No.

3 Q. -- or for the deposition?

4 A. No.

5 Q. Just want to kind of walk backwards a little
6 bit through your employment. So you're presently -- I
7 might pronounce this wrong -- at Ecellix?

8 A. Ecellix.

9 Q. Ecellix. And what does Ecellix do?

10 A. We make novel materials for lithium ion
11 batteries.

12 Q. Okay. And you started there in 2019?

13 A. 2019.

14 Q. And what's your role there?

15 A. Chief technology officer.

16 Q. What do you generally do as chief technology
17 officer?

18 A. I'm in charge of all the technical activity,
19 intellectual property, research and development,
20 strategy for the company.

21 Q. Okay. All right. And prior to that you -- is
22 it SEEVA Technologies?

23 A. Correct.

24 Q. What did you do with SEEVA?

25 A. I was chief technology officer.

1 Q. So same function?

2 A. Similar technologies -- similar
3 responsibilities.

4 Q. Different technology?

5 A. Different technology.

6 Q. What was that, generally?

7 A. It was around automotive vision systems for
8 autonomous vehicles.

9 Q. And it looks like you were with SEEVA for about
10 a year.

11 A. Year and a half.

12 Q. And then before that, you were with L'Oreal; is
13 that right?

14 A. L'Oreal, correct.

15 Q. And can you describe for me what you did with
16 L'Oreal?

17 A. I ran their innovation business around beauty
18 devices for skin care, so I was in charge of overseeing
19 research and developments, and deal acquisition for a
20 branch of the \$9 billion company.

21 Q. What -- what type of products were you doing
22 for L'Oreal?

23 A. They were medical devices applied to skin.

24 Q. Okay. And was that another year to year and a
25 half?

1 A. It was 12 months.

2 Q. 12 months. For SEEVA and for L'Oreal, were you
3 employed there or were you consulting?

4 A. I was employed in both.

5 Q. Okay. And prior to that you were with
6 Intellectual Ventures for a good period of time, it
7 looks like?

8 A. That's correct.

9 Q. About how long?

10 A. I started in 2008, and I left at the end of
11 2015, so I'd say about eight years.

12 Q. Okay. And what did you do for Intellectual
13 Ventures?

14 A. I was vice president and in charge of the R&D
15 division; it's called Intellectual Ventures Laboratory.
16 So I managed both the business operations for
17 Intellectual Ventures Laboratory, as well as their
18 technical R&D functions that happened there.

19 Q. What types of products or technology did
20 Intellectual Ventures do, or is it pretty broad?

21 A. It sounds like you know a little bit about
22 Intellectual Ventures. We didn't have any bounds on
23 where our research was, so I can give you some examples
24 of areas we worked. We worked from medical devices. We
25 worked in large-scale computing. We worked in satellite

1 communications, lasers and optics, food science.

2 Q. So a broad swath of technology?

3 A. Very large area of technologies. One of the
4 areas that we did work on in there was oxygen
5 concentrators, working for the Bill & Melinda Gates
6 Foundation.

7 Q. Okay. Was that -- was that the area you
8 worked -- you worked in?

9 A. I was the executive in charge of the entire
10 operation, and so I oversaw that project as well.

11 Q. Okay. And I just want to clarify so I'm
12 understanding. You mentioned the Intellectual Ventures
13 did stop stuff with oxygen concentrators. You were in
14 charge of that, but were you also in charge of
15 other -- you were in charge of that, correct, as part of
16 your responsibilities?

17 A. I was in charge of the division.

18 Q. Division. And then that division had other
19 technology areas?

20 A. I had -- I had 25 projects ongoing, of which I
21 was technically responsible for all of them.

22 Q. Okay. Okay. And what led you from
23 Intellectual Ventures to your later three employment
24 engagements, I guess we'll call them?

25 A. I was approached by a friend with a startup

1 concept, and it was time for me to move on.

2 Q. Did Intellectual Ventures ever release a
3 product in the oxygen concentrators space?

4 A. I left before I would know, and I didn't pursue
5 that answer afterwards.

6 Q. Okay. So to not --

7 A. When I left, it was still --

8 Q. Sorry. Go ahead.

9 A. When I left, it was still in development.

10 Q. Okay. So not to your knowledge while you were
11 there?

12 A. Additionally, it was never designed to be a
13 medical device in the United States. It was designed
14 for release to the developing world, the problems that
15 Bill & Melinda Gates Foundation face in Africa and
16 Southeast Asia.

17 Q. Okay. So the focus was not U.S.?

18 A. Correct.

19 Q. It was international?

20 A. But the technology was the same.

21 Q. Okay. And then prior to Intellectual Ventures
22 you were with Inogen?

23 A. I was with Inogen.

24 Q. And that was for about five years?

25 A. That's correct.

1 Q. Starting in 2003.

2 A. 2003 to 2008, although I consulted with them in
3 2002.

4 Q. Okay. Any consulting with them since then?

5 A. After I left, I consulted with them for a
6 period of several years, I'm going to say two, off and
7 on, and -- and then they didn't need me after that.

8 Q. Okay. So fair to say no involvement with
9 Inogen since 2011?

10 A. That's a reasonable guess.

11 Q. Okay. So you started consulting in 2002;
12 correct?

13 A. Uh-huh.

14 Q. And then went on full-time?

15 A. Yes.

16 Q. Sorry. And then went on full-time in 2003?

17 A. That's correct.

18 Q. Okay. And what were your job responsibilities
19 there?

20 A. When I started consulting, Inogen had come to
21 my company looking for technical expertise to help them
22 develop their product. The company was called
23 LaunchPoint Technologies in Goleta, California. I
24 became their interim CTO, their head of engineering, and
25 worked with consultants and contractors around the

1 country to develop the oxygen concentrator.

2 When we got our first Series A funding for the
3 company, I was offered a job as the full-time chief
4 technology officer, and so I held the job of CTO and
5 executive vice president of engineering.

6 In the executive vice president of engineering
7 role, I held three responsibilities. One was for
8 technology development and assessment. That means
9 keeping my eye on what was happening across the
10 industry, intellectual property, what others were doing.

11 The second thing that I had responsibility for
12 was product development. It's very heavily
13 FDA-regulated part of the business where you're
14 developing under design control. And the third part I
15 had responsibility for was manufacturing, where early on
16 I was responsible for standing up a manufacturing line,
17 and then I ran the manufacturing quality systems,
18 product improvement, cost reduction, and I had directors
19 running each of those three areas.

20 Q. Okay. When you -- when you started with Inogen
21 as an employee, were they more of a startup at that
22 point --

23 A. There were --

24 Q. -- I would assume.

25 A. There were five of us.

1 Q. Okay. All right. And those three roles you
2 described, and I'm going to just summarize them not --
3 in my own words, but IM, IP, FDA clearance,
4 manufacturing line, was that consistent through your
5 five years there, all three of those?

6 A. Yes. At times I added other functions. I was
7 the chief technology officer, so I was in charge of
8 going with the CEO and raising money, and I was also in
9 charge of technical sales, so I spent a lot of time in
10 contact with customers for our product.

11 Q. What led you to leave Inogen?

12 A. I had a call to come work for Bill Gates.

13 Q. And that would be the Intellectual Ventures?

14 A. Yes.

15 Q. Okay. Other than that two- to three-year
16 period of consulting, have you had any other
17 interactions with Inogen since 2011?

18 A. Not with Inogen as a company. I've kept in
19 contact with friends who work there.

20 Q. Sure. But nothing with the company officially?

21 A. No.

22 Q. Okay. Do you -- do you currently have any
23 agreements with Inogen that would be in effect today?

24 A. No.

25 Q. All right. So the case that we're here about

1 today, when did you first learn about this lawsuit?

2 A. I was contacted a few months ago, earlier in
3 the year. I had one or two calls where we had a
4 discussion about whether or not I felt this was
5 something I wanted to get involved in, and then I was
6 hired.

7 Q. Okay. And would that -- if you were
8 ballparking a month earlier this year?

9 A. March, February.

10 Q. Okay. And again, I don't want to -- I don't
11 want to know anything about any conversations you may
12 have had with your lawyers, but was it -- was it a
13 lawyer or someone else who contacted you about the case?

14 A. To the best of my recollection, it was an
15 attorney.

16 Q. Okay. Are you familiar with VBOX?

17 A. Not directly, no.

18 Q. What do you know about VBOX?

19 I know I -- V-B-O-X, sorry, in case I didn't
20 say that right.

21 What do you know about VBOX?

22 A. I understand their name is on this case.

23 Q. Other than that, no previous knowledge?

24 A. No.

25 Q. Were you even aware of them prior to being

1 retained on this case?

2 A. I would say that when I saw their name, it
3 wasn't the first time I had seen the name, though I'm
4 not sure I could place the context where I had seen
5 that.

6 Q. Okay. So you may have seen their name
7 somewhere, but no real knowledge of them; is that fair?

8 A. Yes.

9 Q. Okay. And how about 3B Medical, when
10 did -- are you familiar with 3B Medical?

11 A. More familiar today.

12 Q. All right. Let's go back. Other -- prior to
13 your involvement on this case, what was -- what was your
14 knowledge of 3B Medical?

15 A. Very little.

16 Q. Had you heard of them before?

17 A. I believe I had. Again, general familiarity,
18 but not anything specific.

19 Q. Okay. So similar to VBOX?

20 A. Yes.

21 (Exhibit 1 marked for identification.)

22 BY MR. ATALLAH:

23 Q. Okay. I'm going to mark as Exhibit 1 -- so I
24 just marked as Exhibit 1 a copy of a document titled
25 Declaration of Geoffrey Deane, Ph.D., In Support of GCE

1 Gas Control Equipment Inc.'s Opening Claim Construction
2 Brief.

3 Do you see that?

4 A. I do.

5 Q. And does this appear to be the declaration that
6 you prepared?

7 A. It does.

8 Q. And I'll note there's an Appendix A attached at
9 the back; correct?

10 A. There is.

11 Q. I believe there were a number of exhibits that
12 would probably be about 3 and a half feet tall, so what
13 you have is your declaration and Appendix A. I have not
14 attached all of the exhibits here in this exhibit for
15 the deposition; okay?

16 A. Okay.

17 Q. So if we turn to the -- it's page i, which I
18 think is the next page there, there's an exhibit list.
19 Do you see those?

20 A. I do.

21 Q. Okay. And it looks like 1 through 27.

22 A. Correct.

23 Q. Other -- actually, let me start over.

24 Did you review all these documents in preparing
25 your declaration?

1 A. Yes.

2 Q. Okay. Other than these documents, were there
3 any other documents that you reviewed to prepare the
4 declaration?

5 A. There aren't any documents I reviewed
6 specifically to prepare the declaration, although I've
7 reviewed many documents in the past. If you're
8 interested in knowing whether I'm familiar with them,
9 put them in front of me and I'll be happy to tell you
10 whether I'm familiar.

11 Q. And when you say "many documents in the past,"
12 let me just maybe ask a clarifying question. As part of
13 your role in this case, were there any other documents
14 that you reviewed as opposed to documents you may have
15 seen in past work or things like that?

16 A. No, I didn't review any other documents as my
17 role in this case.

18 Q. Okay.

19 A. I understand I'm here as a part of this case as
20 an expert, and that is what makes me an expert, so --
21 part of what makes me an expert.

22 Q. Sure. Can you turn to paragraph 7 real quick?
23 And here you're describing the information you
24 considered.

25 And obviously, not getting into the things that

1 you may know from past work, but is this summary here
2 just saying it's the things on the exhibit list, or is
3 there other, for example, extrinsic evidence that you
4 may have looked at or are relying on, I should say?

5 A. I believe paragraph 7 is accurate.

6 Q. So does this paragraph 7 just say I relied on
7 what's on the exhibit list?

8 A. Yes, it does.

9 Q. What type -- when you say in paragraph 7 you
10 relied upon your experience and background, what types
11 of things from your experience and background did you
12 rely on?

13 A. I've been involved in building oxygen
14 concentrator systems, reviewing other company's oxygen
15 concentrator systems as a consultant since I left
16 Inogen, for 20 years. I've seen many systems,
17 components, patents, papers, talked to their executives.
18 All of those things contribute to my -- my perspective.

19 Q. And so we talked about Intellectual Ventures
20 and I think you did a concentrator -- or you were
21 working in some fashion on a concentrator product there.
22 That employment ended in 2015.

23 Since 2015, have you done any work on
24 concentrators other than this case?

25 A. While I was with Intellectual Ventures and

1 since I have consulted with companies building oxygen
2 concentrators on issues of technology development,
3 design, reliability, and manufacturing. I can't -- I'm
4 not at liberty to tell you the names of those companies,
5 but I've probably on five or six instances, the last of
6 which being two and a half to three years ago.

7 Q. Okay. And is the reason -- what is the reason
8 you're not at liberty to give me the name of those
9 companies?

10 A. Their agreements with me say I can't.

11 Q. Okay. How many companies are there in that
12 time frame?

13 A. How many have I worked with? I think about
14 five or six.

15 Q. Okay. So when you say five or six instances,
16 you mean five or six companies?

17 A. Five or six companies.

18 Q. And that's 2015 to present or that's since --
19 in the last 20 years?

20 A. Since approximately 2011 when I stopped being
21 contractually beholden to east -- to Inogen. Sorry.

22 Q. Have you reviewed 3B's claim construction brief
23 in this case?

24 A. Yes, I have.

25 Q. Okay. And how about the evidence that 3B has

1 cited in this case for claim construction?

2 A. I have.

3 Q. Can we flip to the Appendix A real quick?

4 A. Sure.

5 Q. So just on I think at the top it's labeled
6 page 64 of 65. Do you see the blue ink? So you have
7 a -- this is your -- this appendix is essentially your
8 CV?

9 A. Correct.

10 Q. And you have a description of your work for
11 Inogen there; correct?

12 A. Correct.

13 Q. Okay. And one of the bullet points is that you
14 negotiate enclosed licensing and partnership agreements.
15 Do you see that?

16 A. Yes.

17 Q. What licensing negotiations were you part of
18 for Inogen?

19 A. I think I can say.

20 Q. And I don't -- I don't want to put you in a
21 position where you're having any problem, so if you are,
22 just tell me, but...

23 A. The largest conversation we had around
24 licensing was a license we completed with Air Products
25 out of Pennsylvania.

1 Q. Okay. Were those licensing negotiations -- you
2 understand when I say incoming or outgoing license? Do
3 you understand that?

4 Incoming being you are licensing, outgoing
5 being you are granting a license.

6 A. Incoming.

7 Q. Okay. Did you deal with both incoming and
8 outgoing licenses in your work there?

9 A. The conversations around incoming licenses were
10 about acquiring, about outgoing licenses were about
11 protecting our intellectual property.

12 Q. Okay. And did you have to -- did you have --

13 A. We never produced a license in that regard,
14 though that was always an option.

15 Q. But your role was to analyze those things?

16 A. Yes.

17 Q. Okay. And then in that bullet point right
18 beneath that you mention you establish and directed --
19 and I'm skipping to the end -- IP defense strategies.
20 Do you see that?

21 A. I did.

22 Q. So what -- what did you mean by that
23 description?

24 A. It was my responsibility to work with our
25 counsel to come up with a plan that focused not only on

1 how we developed our own IP but how we combined that IP
2 into a defensible strategy, and I worked with counsel
3 and then I brought that strategy to our board of
4 directors and our executive management team and got
5 their approval, and then it was my job to put it into
6 play.

7 Q. Okay. I assume that would involve filing
8 patents?

9 A. Yes.

10 Q. Okay. You were actually -- you're an inventor
11 on some patents?

12 A. A few.

13 Q. Across -- actually, I don't know, but I'm
14 assuming across a number of spaces?

15 A. Correct.

16 Q. Okay. To your knowledge, have any of your
17 patents ever been litigated?

18 A. Yes.

19 Q. Which of your patents have been litigated?

20 A. I don't recall the number, but there was a
21 patent that was litigated with another oxygen
22 concentrator's company I believe around 2010. I don't
23 know the details of it. I was not involved in it.

24 Q. You had left your employment at Inogen at that
25 point?

1 A. I had left and I was not asked to come
2 participate as a -- the other inventors on the patent
3 still were employed, so.

4 Q. Other than that one, any other instances?

5 A. That's the one that I'm aware of. I would
6 suspect that they've had more, based on the success
7 they've had as a company, that tends to follow, but I
8 don't know for sure.

9 Q. Do you have any knowledge of what -- how that
10 lawsuit was resolved?

11 A. I don't know the particular details of what was
12 settled, although I know that the people at Inogen felt
13 it was favorable.

14 Q. Okay. And you said -- you said you had no
15 involvement in that case?

16 A. No.

17 Q. And I assume -- just close the loop -- that the
18 patent you're referring to would have been an Inogen
19 patent?

20 A. Yes.

21 Q. Okay. All right. So let's take a look at
22 page -- paragraph 13. Let's go there in your
23 declaration.

24 So in this paragraph and the paragraphs around
25 it, are you generally describing how oxygen

1 concentrators might work?

2 A. A generalized system, correct.

3 Q. There's an image in this, in paragraph 13. Do
4 you see that?

5 A. I do.

6 Q. Where did that image come from?

7 A. I don't recall where it came from. It
8 represents everything that I know. It looks like
9 something that maybe was in one of our -- one of our
10 filings early on, though I couldn't place it.

11 Q. When you say one of our filings, what are you
12 referring to?

13 A. The Inogen filings or one of the Inogen
14 documents, although I don't know. It's a very
15 simplified version of this. Might have come out of a
16 textbook. I'm not sure.

17 Q. Do you know what the date of that figure is?

18 A. I do not.

19 Q. Is that something you had in your files?

20 A. No.

21 Q. Something that was provided to you?

22 A. Yes.

23 Q. Okay. All right. So let's flip
24 to -- apologize for jumping around here a little bit.
25 Paragraph 128, or just above it, I guess I should say.

1 It's on page 51.

2 A. Uh-huh.

3 Q. So this is a section titled "Legal Standards."

4 Do you see that?

5 A. I do.

6 Q. Okay. And so this -- this is the legal
7 principles that you applied in forming your opinions?

8 A. Yes.

9 Q. And that understanding was provided to you;
10 correct?

11 A. It was discussed with me first and then
12 provided to me, yes.

13 Q. Okay. And your opinions in this declaration
14 are based on the application of these legal principles?

15 A. Yes.

16 Q. Okay. So if you could take a look at
17 paragraph 132, and I'm looking at the latter half of
18 that paragraph.

19 Do you see where it says, "For example, because
20 claim terms are normally used consistently throughout
21 the patent, how a term is used in one claim can often
22 inform the meaning of the same term in other claims"?

23 Do you see that?

24 A. I do see that.

25 Q. It goes on to say, "Differences among claims or

1 claim terms can also be a useful guide in understanding
2 the meaning of particular claim numbers."

3 Do you see that as well?

4 A. I do see that.

5 Q. So your understanding here is that you would
6 look to -- you would look to other claims within a
7 patent in order to determine the appropriate
8 construction or scope of various claim terms?

9 A. I would look to other claims. I would also
10 look to the disclosure and the patent as a whole.

11 Q. Sure. But one place you would look is the
12 other claim terms to see how they're used?

13 A. Correct.

14 Q. And so -- so just as an example, if a
15 construction or -- if a construction of a claim term
16 made another claim term redundant, that would suggest to
17 you that -- that that construction is incorrect; right?

18 A. I would say I would have to interpret that in
19 the light of everything else that I'm reading in the
20 patent. I think that there's always multiple things
21 going in any application.

22 Q. Okay. Would you --

23 A. Or any patent, any description of an invention.

24 Q. Would you agree that if a construction made a
25 claim term redundant -- like completely redundant, that

1 probably is not the correct construction?

2 MR. GILL: Objection to the extent it calls for
3 a legal conclusion.

4 THE WITNESS: Repeat the question.

5 BY MR. ATALLAH:

6 Q. Sure. Is it your understanding that if a
7 construction of a claim term made another claim
8 redundant, that that construction is not correct?

9 MR. GILL: Same objection.

10 THE WITNESS: I think I'm not in a position to
11 answer that.

12 BY MR. ATALLAH:

13 Q. So you don't know?

14 A. I would say it would be something that I would
15 read and try to understand. But again, I think you have
16 to read the patent in its entirety and understand what's
17 being said in its entirety.

18 Q. Sure. No. But what I'm trying to understand
19 is do you think it's appropriate to construe a claim
20 term in a way that makes another claim completely
21 superfluous?

22 MR. GILL: Objection. Legal conclusion.

23 THE WITNESS: I don't believe I have the
24 background to say that. I'm being brought in as an
25 expert to testify on technical issues of oxygen

1 concentrator design, and words as they pertain to
2 interpretation of that. I don't think I have the
3 background or experience to be able to tell you that.

4 BY MR. ATALLAH:

5 Q. So if you, in that role, if you proposed a
6 claim construction that made a later claim redundant,
7 would that be okay in your opinion?

8 A. I don't know. I would have to actually have
9 the counsel of my attorney. I'd have to look to see
10 what the general case of it was.

11 Q. Okay. So it could be?

12 A. I don't know.

13 Q. Okay. These -- the two sentences I read from
14 paragraph 132 --

15 A. Okay.

16 Q. -- those legal principles, did you apply those
17 principles in this declaration?

18 A. Yes.

19 Q. Okay. Okay. Let's take a look at
20 paragraph 36. If you need a -- and I --

21 A. It's okay.

22 Q. If there's any point you want to read
23 something --

24 A. I'll --

25 Q. -- I'm pointing you, but feel free to read it;

1 okay?

2 So in paragraph 136, does paragraph 136 deal
3 with the legal principles surround indefiniteness?

4 A. I'm reading this. I believe it does address at
5 least part of that.

6 Q. Okay. Is there a part of it it doesn't
7 address?

8 A. I'm not sure.

9 Q. Okay. You see the second sentence where you
10 state, "Specifically, a claim is indefinite if a POSITA
11 would not understand the scope of the claim with
12 reasonable certainty"?

13 A. I do see that.

14 Q. And POSITA is a person of ordinary skill in the
15 art?

16 A. Correct.

17 Q. Okay. So can you tell me in your opinion what
18 it means to understand the scope of a claim with
19 reasonable certainty?

20 MR. GILL: Objection. Legal conclusion. You
21 can answer.

22 THE WITNESS: I'm thinking through how I answer
23 this. I would describe this as an inventor wants to
24 describe what's their property, like their backyard, and
25 I can tell you when a ball sits in the middle of the

1 backyard it's hard to know whether it sits in the
2 backyard when it's near the property line if there's no
3 fence.

4 And so when a claim isn't properly constructed
5 and I can't tell where that property line is, I can't
6 tell whether I'm in or out. And so it's really
7 important when I'm drafting a claim to not only be able
8 to define -- you know, as an expert I can look at
9 something and see whether a claim will read on that.

10 What's more interesting is, also important, is
11 to be able to know how it won't read on that. So when a
12 claim is written indefinitely, it means I can't tell
13 where the bounds of the interpretation of that claim
14 exist.

15 BY MR. ATALLAH:

16 Q. So is it -- is it -- just using your example,
17 is it your opinion that -- well, I think you said you
18 need to know whether you're in or outside the fence;
19 right?

20 A. That's correct.

21 Q. So you need to know with absolute certainty
22 where that fence is; right?

23 A. Yes.

24 Q. So fair to say that your understanding of
25 understanding the scope of a claim with reasonable

1 certainty would be being able to interpret the claim
2 with absolute certainty as to where the bounds are?

3 A. Yes. I would interpret that. I would look at
4 this and say, "Can I envision an embodiment?" I can
5 certainly envision an embodiment upon which a claim will
6 read. Can I envision an embodiment upon which I'm not
7 sure if it reads? And if that's the case, I would say
8 this is indefinite. We need to clarify this.

9 MR. ATALLAH: I just want to make sure I
10 understand you. Okay.

11 So can you read back my question?

12 I just want to make sure I understand you're
13 answering my question first, and then I want to ask you
14 about the rest of your answer.

15 (Last question read back.)

16 THE WITNESS: Repeating back how I understand
17 that question, you're asking whether I believe a claim
18 is definite when I understand the bounds clearly?

19 BY MR. ATALLAH:

20 Q. I'm -- so I'm just using I think what we were
21 talking about and trying to make sure I've got it right.
22 So when you're -- when you're looking at whether a claim
23 term is indefinite, you're trying to determine whether
24 you can tell with absolute certainty where the bounds of
25 that claim term are or not; is that -- is that fair?

1 A. "Absolute" is a hard word, but I would agree
2 with the rest of what you're saying. I'd say with
3 general certainty or general clarity, yes.

4 Q. Okay. And so you're saying even if you can
5 understand a variety of embodiments that would be within
6 the bounds, that is not enough?

7 A. My understanding of what "indefinite" means is
8 I don't understand where the bounds are and that means
9 the claim is not properly constructed.

10 Q. Okay. I think you mentioned you're an inventor
11 on a number of patents.

12 A. Yes.

13 Q. Right?

14 You would agree that -- let me back up. You're
15 familiar with claims of a patent?

16 A. Yes, I am.

17 Q. What those are?

18 A. I am familiar with claims.

19 Q. Okay. And you would agree that claims will
20 generally only include some of the features from the
21 rest of the specification?

22 A. Sure.

23 Q. Okay. Said another way, you don't need to
24 claim every feature that's described in a specification
25 in a particular claim?

1 A. I believe the claim should describe it and it
2 should be supported in the specification.

3 Q. Sure. But -- but you're not -- when you
4 write -- when you are -- when you're drafting or you're
5 putting together a claim for your patent or for a
6 patent -- let me just back up so I have a clear
7 question.

8 In a claim of a patent, that claim does not
9 need to include every single feature described in the
10 specification; right?

11 A. That's correct.

12 Q. Okay. In light -- keeping that in mind, you
13 would agree that it's not proper to add elements into a
14 claim that are not written in the claim just because
15 they're mentioned in the specification; right?

16 MR. GILL: Objection to the extent it calls for
17 a legal conclusion.

18 MR. ATALLAH: Go ahead.

19 THE WITNESS: I understand that there is a
20 principle that says "Do not add information into a claim
21 that's not there." I also understand that you can't
22 read claims without the specification. And insofar as
23 the specification defines the invention and not
24 permutations, not different embodiments, it defines the
25 invention as a singular entity, you have to read the

1 claim in terms of what's been specified.

2 BY MR. ATALLAH:

3 Q. So let me break that down into two parts.

4 You would agree that it's improper to just add
5 language into a claim --

6 MR. GILL: Objection.

7 Q. -- explicitly?

8 MR. GILL: Legal conclusion.

9 Q. Correct?

10 A. I would agree that there can be disagreement
11 over what the claim -- how the claim should be
12 interpreted or structured, and I think that the
13 specification, when there is lack of clarity as to
14 what's happening in the claim, what it's actually
15 describing, you have to look at the specification to
16 understand the claim. So to that regard, I think the
17 two are linked. You cannot read one in a vacuum.

18 Q. Sure. And maybe I'm asking a poor question.

19 I understand if we have a term in a claim --

20 A. Uh-huh.

21 Q. -- right, that you are saying you have to look
22 at that in view of the specification. But the question
23 I'm asking is, short of just interpreting a particular
24 claim, you wouldn't just go add language into a claim;
25 right?

1 A. Only if I felt -- I would only suggest such a
2 thing if I felt that the claim was insufficient without
3 it.

4 Q. Okay. So in your opinion, it is appropriate to
5 add -- add claim limitations to a claim that are not
6 written there, even not within the scope of interpreting
7 a presently existing claim term, but just to add words?

8 A. I believe what I said is it was around the
9 interpretation of the claim. I'm evaluating what a
10 claim means in the context of what's described in the
11 specification.

12 Q. Okay. So there -- again, just you don't see a
13 problem with adding words to a claim?

14 A. I don't believe I have a word processor that
15 allows me to do that. How would I add words to a claim?
16 I can argue that a claim should be interpreted
17 differently, that the construction of that claim in
18 terms of how we argue or how we read a claim should be
19 different. I'm -- it's not -- I'm not the drafter. I
20 can't add words to a claim.

21 Q. Okay. So you would agree you may -- you may
22 offer an opinion on how -- how words might be
23 interpreted, but you're not going to just add words in;
24 right?

25 MR. GILL: Objection. Vague and ambiguous.

1 THE WITNESS: Yeah, I don't think I understand
2 the question enough or the background enough to be able
3 to answer further.

4 BY MR. ATALLAH:

5 Q. Well, the answer you gave me before, what you
6 just said, you're not the drafter, what did you mean by
7 that?

8 A. What I meant is I receive a patent that I'm
9 being asked to interpret what that patent says.

10 Q. Uh-huh.

11 A. As an expert, I can look at what's -- what's
12 disclosed in the specification, I can look at the words
13 that are inside the -- inside the claim itself. I can
14 look at the prosecution history. I can try to interpret
15 based on what I know of oxygen concentrators in the
16 field, what this claim describes.

17 And to that effect, you're never looking at a
18 claim and trying to say word A, word B. You're trying
19 to say, okay, what -- what in total, how do I interpret
20 whether an embodiment of some object is inside the fence
21 or outside the fence.

22 So, we're always changing the words in our
23 minds as to how we look at things, though I'm not
24 suggesting you're changing the words in a patent.

25 Q. But again, you're not the drafter?

1 A. I'm not the drafter.

2 Q. So you're not going to add in new things to the
3 claim. You're just going to interpret what's there.

4 MR. GILL: Objection. Mischaracterizes
5 testimony.

6 THE WITNESS: Yeah, I'm not sure I understand
7 the nature of the question. That's why I'm pausing.

8 BY MR. ATALLAH:

9 Q. Okay. Take a look at 131, paragraph 131. This
10 is another paragraph about your -- some legal principles
11 that you applied for this declaration; correct?

12 A. Correct.

13 Q. Okay. And you say, "I understand that to
14 determine whether a term has special meaning, the
15 claims, the patent specification, and the prosecution
16 history are particularly important, and may show that
17 the inventor gave a term particular definition or
18 intentionally disclaimed, disavowed, or surrendered
19 claim scope."

20 Do you see that?

21 A. I do.

22 Q. And again, you applied that legal principle in
23 this declaration?

24 A. I did.

25 Q. Other than what you listed there, are there any

1 other ways that you've applied in this case a way to
2 give a term special meaning?

3 A. I think in looking to understand the meaning of
4 a word, you know, you first start off with does the word
5 have a plain and obvious interpretation. If it's not
6 clear, you go to the specification to see how the
7 specification has developed it. And if you can't make
8 sense of it in either of those, you have to -- you have
9 to try to read something into it.

10 I don't know that I've done anything beyond
11 going to the specification to look for clarity on a
12 word. I think there are times where we're using
13 dictionaries to help support, help identify what "plain
14 and ordinary" would mean.

15 Q. Sure. So and I understand that -- that you're
16 saying that's the analysis process you used here, but I
17 was just trying to understand, beyond what I read there
18 in paragraph 131, were there any other principles that
19 you applied to -- to give a term a special meaning?

20 A. I don't know of other principles so I don't
21 know the answer to that question.

22 Q. Well, if you don't know of any other
23 principles, then I don't want to put words in your
24 mouth, but you didn't apply anything else beyond that;
25 right?

1 A. I did not.

2 Q. Okay. All right. Okay. I'll mark as
3 Exhibit 2 -- we're marking as Exhibit 2 to this
4 deposition what is Exhibit 1 to your declaration.

5 A. Okay.

6 (Exhibit 2 marked for identification.)

7 BY MR. ATALLAH:

8 Q. I'm going to hand you that real quick. You've
9 seen that document before?

10 A. Yes, I have.

11 Q. Okay. What is it?

12 A. It's patent referred to as Patent '628. It's a
13 patent entitled Removable Cartridge For Oxygen
14 Concentrator, Patent 10,357,628 B2.

15 Q. Okay. And I'm going to refer to some, at
16 various times here, to some Bates numbers. Do you know
17 what Bates numbers are?

18 A. Reference numbers in columns and rows.

19 Q. So at the bottom of these pages, do you see --

20 A. Oh, that's what I meant.

21 Q. No, it's okay. There's a prefix with a number.

22 A. Okay.

23 Q. So other than the cover page, this exhibit goes
24 from GCE0004074 to 4109. Do you see that?

25 A. I do.

1 Q. And you're familiar with this document?

2 A. I am.

3 Q. It's one of the patents in suit here?

4 A. Yes.

5 (Exhibit 3 marked for identification.)

6 BY MR. ATALLAH:

7 Q. And I'm going to mark as Exhibit 3 what is
8 Exhibit 3 to your declaration. Have you seen that
9 document before?

10 A. Yes, I have.

11 Q. Okay. And what is it?

12 A. It's United States Patent 11,369,614.

13 Q. Okay. Can I steal that for one second? I
14 don't know if I gave you my copy or -- sorry. It's
15 fine. Okay.

16 And that's another one of the patents in suit
17 here?

18 A. It is.

19 Q. Are you familiar with this document?

20 A. Yes, I am.

21 Q. And other than the exhibit cover page, this has
22 Bates numbers GCE0002569 through 2605.

23 A. Correct.

24 Q. Okay. So as to these Exhibits 2 and 3 that
25 I've just introduced here, I'm just going to refer to

1 them generally as the patents in suit; is that fair?

2 A. Fair.

3 Q. And I think you mentioned some shorthand, but
4 the U.S. patent -- I'm sorry, we'll just say Exhibit 2
5 is the '628 patent; yes?

6 A. Yes.

7 Q. And Exhibit 3 is the '614 patent?

8 A. Correct.

9 Q. Okay. When did you first learn of either of
10 these patents?

11 A. When I was approached about whether I wanted to
12 become an expert for this case or support this case. I
13 was sent these patents to review, and then the second
14 call we discussed them.

15 Q. Okay. So you were not aware of them prior to
16 that?

17 A. I have a vague recollection of having seen
18 drawings in this patent some time ago, but not in -- not
19 at a workable level.

20 Q. And would that have been some of your prior
21 work?

22 A. Yes.

23 Q. No -- when you say not workable, meaning you
24 might remember it, but you don't have any specifics?

25 A. I wouldn't be able to recite the claims or what

1 was discussed in the patents. I recognize the drawings.

2 Q. Okay. And would you agree that the
3 specification for these two patents, if we -- the claims
4 are a bit different, but the specifications are
5 generally the same?

6 A. Very similar, yes.

7 Q. Okay. So walk me through your understanding of
8 how the technology in these -- in the patents in suit
9 work.

10 A. Can you be more specific?

11 Q. I just want to know -- describe for me -- I
12 think you might have some in your declaration, but just
13 describe to me how they work.

14 A. I sure can. And I can go to the declaration
15 and that probably has a more complete description, but
16 this is a portable oxygen concentrating system that's
17 designed to be a belt-worn system or a highly portable
18 system, comprised of subcomponents that are placed on
19 this belt in a way to make it light and transportable.

20 It has a number of requirements that are held
21 for this concentrator. They're detailed as part of the
22 2005 -- the summary of qualifications to be a portable
23 oxygen concentrator in 2005. I think that's right
24 before the claims, if I recall. I would have to go back
25 and look. There's an area where it details the

1 requirements of the 2005 Oxygen Consensus Conference. I
2 may not have that name quite correct, but I think you
3 understand what I'm referring to.

4 And so that's the generalized description of
5 what it's designed to be part of. It has some very
6 specific components that I felt were different from what
7 I had seen in other patents, but in general they're
8 trying to make a belt-worn oxygen concentrator system.

9 Q. Okay. You've reviewed these patents in detail;
10 correct?

11 A. Yes.

12 Q. Okay. So let's just use -- so that we don't
13 have to point to both, let's use Exhibit 2 for now, if
14 that's okay.

15 A. Great. Right here. Thank you.

16 Q. This is the '628 patent?

17 A. Great.

18 Q. Okay. Can you point me to where in the '628
19 patent the inventors of this patent gave a term a
20 particular definition?

21 A. A term a particular definition? Can you be
22 more clear?

23 Q. Yeah. I'm just wondering if there's any -- if
24 you can point me to anything in the '628 patent where
25 the inventors gave a particular definition to any claim

1 term or item described.

2 A. I believe they have a singular description of a
3 device that they reference throughout the document as a
4 single device and a single invention, and they're
5 defining it in everything that they say about it.

6 What are you asking? Can you clarify.

7 Q. Sure. So in your declaration, remember we were
8 looking at paragraph 131 --

9 A. Sure.

10 Q. -- and you said --

11 A. In the declaration, okay.

12 Q. Yeah. So we can go back to that real quick.

13 A. Sure. I just want to make sure I'm following
14 what you're asking. Okay.

15 Q. So you see in 131 where you said, "May show the
16 inventor gave a term a particular definition"? Do you
17 see that?

18 A. I do see that.

19 Q. Okay. So I'm just trying to understand if you
20 can point me to anywhere in the '628 patent that you're
21 alleging a what you called a particular definition, in
22 your declaration, was provided?

23 MR. GILL: Objection. Misstates testimony.

24 THE WITNESS: I'm still unclear on the
25 question.

1 BY MR. ATALLAH:

2 Q. Sure. So one of the legal principles you said
3 you applied are -- or is that in determining whether a
4 term has a special meaning, one thing that may show that
5 is an inventor gave a term a particular definition.
6 That's from your --

7 A. That's a general principle, yes.

8 Q. From your declaration. So what I'm asking is,
9 can you identify any specific particular definition in
10 the '628 patent that was applied here or that you
11 believe exists?

12 A. Are you asking me if the patent defines
13 something, or if you're looking for a single sentence
14 defining a term?

15 Q. Well, I mean, I'm just -- I'm just going off of
16 your declaration. So you said "a special meaning can be
17 shown by an inventor giving a term a particular
18 definition."

19 A. That's not linked to what I'm talking about
20 inside the patent. That's just saying it's a
21 general -- a general observation that I can understand
22 when a special definition has been given if someone says
23 that that's the case.

24 Q. Right. No. And what I'm asking is, is that
25 the case here? Did you -- did you --

1 A. I don't -- I don't believe there are special
2 definitions being provided in this application.

3 Q. In the patent?

4 A. In the patent. Sorry.

5 Q. The patent referring --

6 A. In the patents that we're reviewing.

7 Q. Okay.

8 A. Exhibit 2.

9 Q. Okay. So, okay, and how about -- what about
10 where the inventors -- and if you want to go back to
11 paragraph 131 just so we're on the same page.

12 What about where the inventors intentionally
13 disclaimed claim scope, do you have -- can you
14 point -- are you -- is there anything in the '628 patent
15 that you believe shows that that occurred?

16 A. Intentionally disclaimed claim scope. I'm not
17 sure that I can point to one right now, but it may come
18 up in our discussion as we move forward. As we bring up
19 something, I can point to it as I see it.

20 Q. Well, and if it comes up later in discussion,
21 that's fine, but what I want -- what I -- I mean, and if
22 you need to take time to look through it, that's fine.

23 I just -- but I would like to know if you are
24 pointing to anything that you believe is an
25 intentional -- where the inventors are intentionally

1 disclaiming claim scope.

2 A. I think there may have been some things which I
3 would interpret as doing that in the prosecution of part
4 of the intrinsic record when people -- when the
5 inventors have looked at this and said, "Okay, it's not
6 this, it's something else," but I'm not sure that I can
7 point to anything inside the patent specification
8 itself.

9 Q. Okay. So as to the specification, is your
10 answer no?

11 And we'll get to the file history in a second,
12 but just as to the specification.

13 A. It's that I -- I'm not -- I can't remember if
14 there's something where they do that.

15 Q. So as we're sitting here, you can't identify
16 anything right now?

17 A. Correct.

18 Q. And is that the same answer for, if you go back
19 to your declaration, a dis -- where the inventor has
20 disavowed claim scope, same answer?

21 A. You know, the only -- there are many ways to
22 disavow claim scope.

23 One way to disavow claim scope would be to
24 write down a sentence saying, "I disavow this claim
25 scope," and I would wager a bet that that is rarely the

1 way that people do this in filing a patent. It happens
2 through a combination of other things.

3 Another way of doing it is by describing your
4 patent so specifically and so unwaveringly that there's
5 only one way to read it. And so in that context, I
6 think that they have.

7 That's why I'm having a hard time interpreting
8 what you're saying. I think there's a number of places
9 where they have described their invention as a singular
10 device, a singular set of conditions, a singular set of
11 components.

12 Q. So what is your -- what is your understanding
13 of what is required to disavow claim scope?

14 I mean, can you kind of -- if I describe
15 preferred embodiments, am I disavowing claim scope as to
16 any other embodiments?

17 A. I think when you describe multiple embodiments
18 and someone skilled in the art can see the extension to,
19 hey, I've done A, I've done B, I've done C, I've done D,
20 E is similar, that's associated, I think that that is
21 probably something that a person skilled in the art
22 would be able to look at and say, "Yes, this is part of
23 the scope."

24 I would also say that if everywhere through
25 your patent you talk about having a red button, and it's

1 a red button everywhere else, and you get to the end and
2 you say "button" in your claim, you never mentioned that
3 it was anything other than the red button, and there was
4 a specific purpose for it and an intent, and it's a red
5 button.

6 Q. So --

7 A. So by purposely describing it only as red
8 throughout the disclosure and being consistent and
9 repeated in how you describe it, I only have one hope in
10 terms of how I can interpret that claim. So I think in
11 that nature, because of the choice you made in writing
12 your specification, you have -- you have limited your
13 scope.

14 Q. So in essence, you can read in that -- you can
15 read in that requirement into the claim in that
16 instance, in your opinion?

17 A. I believe a person skilled in the art will look
18 at what's described in the specification and use that to
19 understand what's written in the claim.

20 Q. Is it your understanding or is it your opinion
21 that understanding the claims means you need to read in
22 things based on the specification?

23 A. I believe that the claims are written and you
24 shouldn't include new things -- new items into a claim;
25 however, the claims cannot be read in a vacuum.

1 Q. Okay. And is it your opinion that if an
2 inventor only describes a single embodiment, they are
3 limited to that embodiment only?

4 A. I think it depends a great deal upon how they
5 describe their invention. Did they describe this as
6 this is one embodiment and there's multiple other
7 choices, or do they describe this as this is the
8 invention?

9 Q. Okay. So if I only -- if an inventor only
10 describes a single embodiment, let's just say that
11 alone, can there -- should -- is there claim -- must
12 their claim be limited to that embodiment?

13 A. You're asking for a generality in terms of
14 interpretation and I think it's a case-by-case situation
15 where if I look at a claim and I don't understand what a
16 claim is saying, the only thing I can do to define that
17 claim is to it look back at the specification to
18 understand it.

19 And if that -- if that specification only
20 describes something in one way, it's the only way to
21 understand what's being described in that claim. So
22 that's not adding new material to the claim, it's
23 understanding what the claim is based on a consistent,
24 repeatable pattern of describing the invention.

25 Q. Okay. Would you agree with me that if

1 inventors go through and describe their invention in a
2 disclosure, in a specification, but then say, "Although
3 I'm describing this in terms of, you know, a preferred
4 embodiment, the claim -- you know, there can be changes
5 to this, you know, in form or function or so forth that
6 are still within the scope of my invention," would you
7 agree then that you can't limit to one embodiment?

8 MR. GILL: Objection to the extent it calls for
9 a legal conclusion.

10 THE WITNESS: My view on it would be that every
11 patent, every inventor, wants their patent to be
12 interpreted as broadly as they possibly can.

13 And there are clauses that we put into patents,
14 such as the patent -- there are clauses in patents that
15 say -- they're boilerplate, every attorney I've ever
16 worked with puts something similar like that into them,
17 that says, "Although the invention has been
18 described" -- this is column 26, row 9 -- "Although the
19 present invention has been described with reference to
20 preferred embodiments, workers skilled in the art will
21 recognize that changes may be made in form and detail
22 without departing from the spirit and scope of the
23 invention. For example, larger flow rates may be
24 achieved by scaling the concentrator components to
25 achieve desired flow rates and the disclosed

1 efficiencies."

2 So I think you can put things into the -- into
3 this that tell me as a reader, hey, I intend you to
4 interpret these claims in this way, but you can't expect
5 me to read that paragraph and give you license to claim
6 anything you want.

7 And so if you're going to -- if you're going to
8 try to put something in there that says, "These are the
9 directions, I want you to be flexible," you need to give
10 me the directions that I need to be flexible. In this
11 particular paragraph, it says the degree I want you to
12 be flexible is in the flow rate of the concentrator.
13 All right.

14 It's not giving me a ton of other things.
15 Throughout the patent there are a few instances where
16 there are opportunities given to have something vary.
17 There's something provided about the choice of zeolite,
18 as an example, but many of the elements of this
19 invention are described in a singular form.

20 They are described in a singular form because
21 my experience when I read this as a person skilled in
22 the art, that singular form is required to produce the
23 invention that they're hoping to claim. The core
24 invention is a small, portable, continuous flow oxygen
25 concentrator that can be worn on belts and perform to

1 certain metrics.

2 My experience tells me -- slow down -- my
3 experience tells me that it would be impossible to build
4 a concentrator using these specifications if you did not
5 have some things put into place.

6 And the reason that the invention repetitively,
7 predictably describes itself in some of the
8 characteristics of the concentrator, is because those
9 things are required to produce the outcome which is the
10 core of what the invention is.

11 Q. The paragraph you're just referring to is in
12 column 26 of the '628 patent?

13 A. That's what I said, column 26, starting at line
14 9.

15 Q. And the flow rates you're referring to, that's
16 listed as a for example; correct?

17 A. Correct.

18 Q. Not limiting; right? It doesn't say "this
19 only"?

20 A. No, but it doesn't say anything else, either.

21 Q. And that paragraph actually specifically says,
22 "Although the present invention has been referred to
23 with regards to preferred embodiments, changes may be
24 made in form and detail"; right?

25 A. I'm not sure where it says "preferred

1 embodiments" in the rest of the document.

2 Q. Well, I'm just asking if that's what that
3 paragraph says.

4 A. Sure. And what I'm saying is I read this, and
5 I read this in all patents, to be a document that says,
6 hey, we want you to be able to interpret this more
7 broadly than what we're saying here, but I'm also saying
8 that I have to read what follows in light of what's
9 being -- has been discussed. And if you don't give me
10 flexibility in what you're discussing in your
11 disclosure, I can't read it in there just because you
12 ask me.

13 Q. So -- so in your opinion you can just ignore
14 this paragraph of the patent?

15 A. No, I'm not. You're saying, hey, when I've
16 given you variability in the design, please make sure
17 you understand, you know, what that variability can do
18 for the design as part of the -- part of the invention.

19 When you haven't given me variability in the
20 design, I can't read that into that paragraph.

21 Q. Where is the word "variability" in that
22 paragraph?

23 A. Embodiments that are described having some
24 change. You said, as an example, flow rates may be
25 achieved by scaling the concentrator, so we look to the

1 disclosure and say, "What other elements are you talking
2 about varying the design? What other elements do you
3 talk about varying the construction?"

4 If you're not talking about the fact that
5 something can be done multiple ways, I have a hard time
6 reading it and assuming that's what you're -- what
7 you're defining.

8 Q. So again, even though this paragraph says it's
9 referring to preferred embodiments and changes can be
10 made in form and detail, without departing from the
11 scope of the invention, you're saying if it's not
12 described, then I can't do that?

13 A. What I'm saying is without departing from the
14 scope of the invention depends on how you define the
15 invention. When the document, when the disclosure, the
16 specification, sorry -- use the right term -- when the
17 specification is consist and repeatedly defines the
18 invention as a singular item or a singular construction,
19 then I am deviating from the scope of the invention.

20 Q. So in your opinion, despite that paragraph, you
21 can still, in this patent, limit to a preferred
22 embodiment?

23 A. I can limit to what is described.

24 Q. Is that what you're doing, in your opinion,
25 you're limiting to just what's described?

1 A. In my opinion, when the patent says, "the
2 invention is," "the concentrator is," "the concentrator
3 has," it's "the," it's a singular. It's not an example
4 because there is no variability offered. I can't
5 interpret this in the realm of all things that could be
6 built in a concentrator. I have to interpret it in
7 terms of what's described.

8 Q. Sir, can you look at column 2 --

9 A. Sure.

10 Q. -- of the of the '628 patent?

11 A. Sure.

12 Q. See where it says, "Brief Summary of the
13 Invention"?

14 A. I do see where it says, "Brief Summary of the
15 Invention."

16 Q. Okay. And it describes a removable gas
17 separation cartridge includes a housing having an inlet
18 port, an outlet port, and a bed of absorbent material.

19 Do you see that?

20 A. I do.

21 Q. That's describing the invention; correct?

22 A. It is.

23 Q. Okay. And so I want to go back to the question
24 I was asking you before. We were talking about, in
25 paragraph 131 of your declaration, some language around

1 disavowal.

2 Can you point me to anywhere in the '628 patent
3 where there's an explicit disavowal of claim scope?

4 A. Explicit disavowal of claim scope. Let's
5 discuss column 3, line 40 -- line 38 to 44.

6 Q. 38 to 44, so let me read that.

7 A. Please.

8 Q. "The current invention relates to separation of
9 gases using vacuum swing absorption. Specifically,
10 disclosed as an oxygen concentrator for a patient who
11 requires a source of oxygen. The present invention is
12 further explained with reference to the drawn figures in
13 which like structures are referred to by numerals
14 throughout several views. Overview - Oxygen
15 Concentrator 100 (FIGS. 1-4)."

16 So that is an explicit disavowal of claim
17 scope?

18 A. In my experience, dealing with how patents are
19 drafted, it's understood how to draft a specification to
20 talk and say one embodiment is shown in the figures.
21 This document says the invention is shown in the
22 figures. The invention is explained in the figures, and
23 one permutation is shown. It's consistent. It's
24 repeated.

25 Q. Okay. So, again, in your opinion that

1 paragraph, that first paragraph under Detailed
2 Description, that is an explicit disavowal of claim
3 scope?

4 MR. GILL: Objection. Misstates testimony.

5 THE WITNESS: I think I can read that
6 paragraph, when I read that paragraph, I interpret this
7 as the inventors being very specific about what their
8 invention is.

9 When I say something is A, it's A. The
10 specification, the patent has to stand on its own. And
11 when I say this is the invention, it is shown in the
12 drawings, it is described further in what's following,
13 it's not this is an embodiment of the invention, this is
14 the invention.

15 And as a person skilled in the art, I have to
16 read it and try to understand why these components go
17 together the way they are. I have to understand that
18 they want to have a continuous flow concentrator. They
19 want it to be lightweight. They want it to be quiet.

20 As building that concentrator and having been
21 in that place before, there are things you can do and
22 you can't do. So, for example, you can't build a
23 concentrator that's lightweight and quiet and energy
24 efficient that meets the requirements of the Fifth
25 Consensus concert -- Fifth Consensus -- I'm going to

1 look for the name of it because I keep resaying it --
2 misstating it. "Conference," I think is what the word
3 is.

4 You can't build that concentrator with a single
5 column. And so when we look at this and we see multiple
6 columns throughout, it's obvious to me as to why.

7 BY MR. ATALLAH:

8 Q. Okay. So again, just looking at that
9 paragraph.

10 A. Sure.

11 Q. So it -- and let me back up maybe for a second.
12 What is a disavowal of claim scope?

13 A. How I would interpret that word, being an
14 engineer and not being an attorney, would be when I
15 describe an invention I'm suggesting it is one thing and
16 not another thing.

17 Q. So --

18 A. I can do that by only describing the thing that
19 it is, or I can -- or I can do that by describing the
20 thing that it isn't.

21 Q. Okay. Is it your opinion that -- or actually,
22 not opinion.

23 Is it your understanding that to disavow a
24 claim scope you have to explicitly say what you're
25 disavowing, or can you -- or is the fact that you only

1 describe a particular embodiment enough to disavow claim
2 scope?

3 A. As an engineering expert, I couldn't begin to
4 talk about -- couldn't begin to tell you the legal
5 theory behind that or the definition or how it's been
6 prosecuted. My interpretation, my understanding of this
7 is I can only read this patent based on what's written.

8 I understand, as an expert, what they're trying
9 to design. I understand what needs to go into that
10 patent to make it successful, -- go into that design to
11 make it successful. I understand that the description
12 of that invention, it's consistent with that throughout
13 the entire description, the drawings, and the claims are
14 not inconsistent with any of that.

15 And so as I read this, I have a pretty good
16 understanding of what it is they are filing. So the
17 attempt to try to make that be interpreted as something
18 broader I think already is limited based on what -- how
19 it is they're describing it. So whether you have an
20 active disavowal or a passive disavowal, I don't know
21 the legality of it. But when you're asking in general
22 terms have they limited their claims, I believe I can't
23 interpret this any way other than what they're saying
24 that they know how to do.

25 Q. Okay. So you had a long answer there, so let

1 me just break it down for a couple of things.

2 A. Please.

3 Q. Okay. So you're saying you read this
4 specification and you understand what they're inventing;
5 right? That's what you were saying first?

6 A. I believe that I do, yes.

7 Q. But you're saying that because of
8 your -- because of the way you're understanding it, here
9 the inventors cannot go beyond what is
10 explicitly -- what is explicitly written in the
11 specification and shown in the papers. It cannot be
12 read broader than that at all; is that right?

13 A. Never say "at all." Desire to put absolutes on
14 something isn't something I would tell you.

15 I say I have to read the entirety of the
16 document to understand its meaning, and particularly on
17 areas where I read a claim that does not have a clear
18 definition in of the art, I have to go back to look at
19 how it's described in the specification. That's what I
20 refer to.

21 Q. Other than that paragraph you just pointed to,
22 is there anything else where you're contending there's
23 an explicit disavowal of claim scope, to your
24 understanding?

25 MR. GILL: Objection. Objection. Misstates

1 testimony.

2 THE WITNESS: Again, I believe our definitions
3 of "disavowal" may be different, so I'm going to -- I'm
4 going to ask that I answer this in a slightly different
5 way.

6 Are there places in here where I believe the
7 patent chooses language that specifies that there is one
8 invention, that there is one idea and that idea is
9 consistent, and I believe there are a number of places
10 throughout the patent where that is -- that is talked
11 about.

12 In fact, you can look at just the descriptions
13 of the drawings where it says, you know, it's a front
14 view of the oxygen concentrator. It's not an oxygen
15 concentrator. It's not an embodiment of the oxygen
16 concentrator. And the inventors know how to talk about
17 embodiments because the inventors say that relevant to
18 the zeolite and the choice of zeolite. There's examples
19 there.

20 But when they go into this, they're very
21 specific: There's one invention, there's one drawing,
22 this is what we invented. I know there's a desire to
23 want to interpret claims as broadly as possible, but in
24 this particular case, when I don't know how to interpret
25 a claim -- interpret a word, the only thing I can do is

1 go back to look at how it's described in the
2 specification.

3 Q. Okay. So in your mind the entirety of the
4 specification, essentially, disavows broader -- broader
5 interpretation?

6 A. On specific elements, and we're going to get,
7 I'm sure, into those specific elements in a moment, but
8 we can talk in specific about how we interpret the term
9 "separation cartridge."

10 Q. Is your answer that you just gave to me in a
11 couple of questions as to disavowal the same for
12 surrender of claim scope, for paragraph 131 of your
13 declaration?

14 A. I don't disagree with that comment.

15 Q. And bear with me for a minute.

16 A. Sure.

17 Q. If I tell you that -- if I were to say to you a
18 disavowal requires an explicit statement saying it is
19 not this, or similar, can you point me to anything like
20 that in the specification as to any claim term?

21 Does my question make sense?

22 A. It does, again, but I ask for the
23 clarification. Are you suggesting that a disavowal says
24 that I am not this, or are you --

25 Q. I'm just giving it to you like -- so what I'm

1 saying is if you assume for a minute that --

2 A. Yes.

3 Q. -- a disavowal means you're describing
4 specifically what something is not as opposed to
5 describing what it is --

6 A. Okay.

7 Q. -- with that understanding, can you point me to
8 anything in the specification that you contend would be
9 a disavowal?

10 A. Can't do it at this moment, though, again, as
11 we go into this, we'll -- if I see it, I'll point it
12 out.

13 Q. But as of now, no?

14 A. As of now, no.

15 Q. With that understanding?

16 A. Sure.

17 Q. Okay. I think in your answers you -- you know,
18 that we talked about so far -- you mentioned there might
19 be something in a file history.

20 A. I think I referenced that in the -- in my
21 disclosure. Are you referencing something specifically?

22 Q. I'm just ask asking -- you referred to
23 something might be in a file history. I wasn't sure
24 what you were referring to.

25 A. I was referring to the few places where I talk

1 about prosecution history of patents that were inside of
2 the disclosure document.

3 Q. Disclosure document, you mean your declaration?

4 A. Declaration, I'm sorry. I'm using --

5 Q. That's fine. Okay. So beyond where you talked
6 about file histories in the declaration, you're not
7 referring to anything else beyond that?

8 A. No.

9 MR. ATALLAH: Is now a good time for a quick
10 break for everyone?

11 MR. GILL: Yeah. Good for me.

12 THE WITNESS: Sure.

13 MR. ATALLAH: Off the record.

14 (A brief recess was had.)

15 BY MR. ATALLAH:

16 Q. All right. Mr. Deane, I'm going to have you
17 take a look at exhibit -- I think we marked as Exhibit 3
18 the '614 patent.

19 A. Yes.

20 Q. Now, in forming your opinions about claim
21 construction in your declaration, am I correct to say
22 you reviewed all the claims of the patents in suit?

23 A. Yes.

24 Q. Okay. Easy question.

25 Okay. So let's go to the '614 patent and let's

1 take a look at claim 13.

2 A. Claim 13. Sorry.

3 Q. All right. You've seen claim 13 before?

4 A. Yes. Uh-huh. Correct.

5 Q. Okay. So this claim requires a first bed of
6 absorbent material configured to preferentially absorb
7 nitrogen; right?

8 A. You're asking me to confirm what you're
9 reading? Sure.

10 Q. I'm just saying that's --

11 A. Yes. Yes, that's where it starts.

12 Q. Okay. And then it says -- it also has, further
13 down, "a second bed of absorbent material configured to
14 preferentially absorb nitrogen." I'll try to slow down.
15 Sorry.

16 Correct?

17 A. Correct.

18 Q. Claim 13 does not say that they need to be in
19 the same cartridge; correct?

20 A. As written it does not say that.

21 Q. Okay. They could be; correct?

22 A. They could be, correct.

23 Q. But they don't have to be?

24 A. I would defer on my opinion on that.

25 Q. So you think they do have to be?

1 A. My -- I have a number of things I can say about
2 this, and I'm sure we'll get into many of them. One of
3 them is there are a number of components that are listed
4 here without definition of what they do, how they're
5 connected, what their relationship is to them, where I
6 look at this and I have a very hard time deciding or
7 describing what the connectedness is. Where is the
8 connected tissue in this claim?

9 And so when I -- when I read this, I look at it
10 and say, "How do I understand this claim?" I go back to
11 look at the specification to understand how are these
12 elements connected. And I don't think that there
13 are -- I think that some of the elements in this claim
14 are sufficiently ambiguous that you have to define them
15 in the context of a separation cartridge. You have to
16 define them in the context of how they're connected.

17 Q. Okay. So but for now I just want to -- I just
18 want to look at the first bed and the second bed, as
19 recited in claim 13.

20 A. We can do that.

21 Q. Okay. And is it -- is it your position that
22 those beds need to be contained in the same separation
23 cartridge?

24 A. Again, the claim lists a bunch of components
25 without talking about how any of them are contained.

1 Q. I'm just asking if that's your opinion as
2 to --

3 A. So I don't think -- I don't think the claim, as
4 written, restricts -- restricts where they're mounted or
5 how they're connected.

6 Q. Okay. So is your opinion as to a construction
7 of claim 13 that the first and second beds have to be in
8 the same cartridge?

9 A. I believe that, as written, this claim is -- I
10 don't know where the bounds are. I can't describe
11 what -- what embodiment of this is covered in the claim
12 and what is not covered in the claim. And so when I
13 look at this and say what does the specification
14 describe as to how I should look at this, if I want
15 to -- if I want to put them together, you know, how is
16 it described in the patent?

17 And in every instance we've got
18 multiple -- multiple beds in a single separation
19 cartridge. So when I look at it and say I think
20 it's -- I can't read this patent and understand where
21 the bounds are as it's written.

22 Q. So I'm not -- I'm not -- I'm not trying to, for
23 lack of a better way to put this, be rude here.

24 A. Please.

25 Q. But I just -- I don't -- I'm trying to

1 understand what your answer is to my question, which is,
2 is it your opinion that the appropriate construction of
3 claim 13 requires the first bed and the second bed to be
4 in the same separation cartridge?

5 A. I want to answer your question clearly, so let
6 me try. I believe that my interpretation of how that
7 claim should be written requires some connective
8 structure. So --

9 Q. Is that a yes?

10 A. When I then connect that thought to the next
11 thought, I do come to the answer yes.

12 Q. Okay. Okay. And so now let's take a look at
13 claim 16. Claim 16 depends from claim 13, and having
14 patents you understand what that means; correct?

15 A. Sure.

16 Q. That claim 16 will add something to claim 13,
17 but includes all of claim 13. Is that consistent with
18 your understanding?

19 A. I understand.

20 Q. Okay. So claim 16 says, "The portable oxygen
21 concentrator as recited in claim 13, wherein the first
22 and second beds are contained within a common separation
23 cartridge." Do you see that?

24 A. I do see that.

25 Q. So you wouldn't require claim 13 to have the

1 first and second beds in a common separation cartridge
2 because claim 16 says explicitly that; correct?

3 A. I would require them to be combined.

4 Q. Meaning you would require -- you would move the
5 requirements of claim 16 into claim 13?

6 A. I believe that claim 13 is not specific enough
7 without including that. I can't interpret the bounds of
8 claim 13 on its own, and so it's either too unclear or
9 it needs to have the modification for how the pieces go
10 together.

11 Q. Okay. So let me back up for a second.

12 A. Please.

13 Q. We talked earlier about one of the ways that we
14 determine correct claim scope is looking at other
15 claims; correct?

16 A. I agree.

17 Q. Okay. And you're saying that even though claim
18 16 says -- further says that the first and second beds
19 would be within a common separation cartridge, that
20 needs -- that limitation needs to be put into claim 13?

21 A. I believe that what I said earlier was that one
22 way of interpreting claims was to look at other claims.
23 I also said that another way of looking at claims is to
24 read the specification, and when the specification has
25 been consistent, almost redundant in how it describes

1 what's being placed in here in terms of giving the
2 connective tissue between elements of a claim, and
3 without that -- without that specification, I can't
4 interpret what this claim means. I don't know where the
5 bounds are.

6 I look at this and say I think the repetitive
7 consistency of the specification outweighs the fact that
8 I've got two claims here that appear to be -- it's -- it
9 outweighs the fact that I've got two claims. I believe
10 when I read claim 13, it doesn't have meaning without
11 other elements added to it.

12 Q. And we can come back to that.

13 A. Okay.

14 Q. But you would agree with me that at least on
15 its face the fact that claim 16 says -- adds the
16 requirement of the first and second beds contained
17 within a common separation cartridge, would suggest that
18 claim 13 doesn't require that; correct?

19 A. Per the words that are on here, there's nothing
20 in claim 13 requiring a -- the first and second beds to
21 be in a separation cartridge.

22 Q. Okay. And let's take a look at the '628 patent
23 that's Exhibit 2.

24 A. Okay.

25 Q. Actually, we'll look at two things here,

1 Exhibit 2 and your declaration.

2 A. All right.

3 Q. We're going to look at paragraph 43 of your
4 declaration as well.

5 A. Okay.

6 Q. And --

7 A. Sure.

8 Q. Before we start, I think we talked about this
9 earlier, but I just want to make sure we're on the same
10 page.

11 You would agree that claim terms within -- for
12 example, if we're talking about the term "absorbent
13 bed," "absorbent bed" should be interpreted the same
14 across the claims; correct?

15 A. Yes.

16 Q. Okay.

17 A. Yes.

18 Q. So let's take a look at in paragraph 43 of your
19 declaration, and I'm just -- there's an intro and then
20 you've got a bunch of pictures here.

21 A. Sure.

22 Q. Do you see that?

23 A. Right. I do.

24 MR. ATALLAH: And I'm going to pause for one
25 second. If we're talking over each other, just tell me,

1 I'll try to slow down.

2 COURT REPORTER: Okay.

3 BY MR. ATALLAH:

4 Q. Not you. I'm trying to make sure she gets a
5 clear record.

6 A. I do it as well.

7 Q. Okay. So in this beginning of paragraph 43,
8 you're talking about -- do you see where it says, "The
9 'separation cartridge' term is found in claims 1, 11 and
10 12 of the '628 patent"?

11 A. I do.

12 Q. And you show where that is disclosed in a
13 number of images.

14 A. Yes.

15 Q. And those images are copies of the claims?

16 A. Correct.

17 Q. And it looks like what you did was -- and you
18 did this for the '614 patent as well; right?

19 A. Correct.

20 Q. And it looks like for the '628 patent, you
21 copied 1 and 12 here in the images, is that right,
22 claims 1 and 12, with the highlights?

23 A. I'm looking. It appears to be correct. '628
24 and '614, yes.

25 Q. And 11, I guess, the first page. I missed

1 that.

2 A. Okay.

3 Q. So you got those three. And then the claims
4 that you listed for the '614; right?

5 A. Below it, yes.

6 Q. 1 to 3, 8, 9 and 12; correct?

7 A. Correct.

8 Q. Okay. Now, looking at the '628, I noticed you
9 did not list claim 21.

10 A. Okay.

11 Q. Is there any reason you didn't list claim 21?

12 A. Going back to remember reasons, I don't recall.

13 Q. Okay. So let's take a look at Exhibit 2 of the
14 '628 patent, and let's take a look at claim 21.

15 So claim 21 depends from claim 11?

16 A. Yes.

17 Q. Sorry.

18 A. I was questioning.

19 Q. That's fine. That's fine.

20 And it says, "The portable oxygen concentrator
21 as recited in claim 11, wherein the bed of absorbent
22 material is one of a plurality of beds of absorbent
23 material within the separation cartridge."

24 Do you see that?

25 A. I do.

1 Q. Okay. And so we would agree the term
2 "separation cartridge" is recited in claim 21; right?

3 A. Yes.

4 Q. And it's referring to the same separation
5 cartridge recited in independent claim 11?

6 A. Yes.

7 Q. Now, claim 21 adds the limitation that the bed
8 of absorbent material introduced in claim 11 is actually
9 one of a plurality of beds of absorbent material within
10 that cartridge; correct?

11 A. Are you asking me to read what it says?

12 Q. Is that your understanding of the claim?

13 A. Yes.

14 Q. All right. So doesn't that suggest to you that
15 claim 11 does not require there to be multiple beds of
16 absorbent material within the separation cartridge?

17 A. I think the -- having multiple claims can
18 inform how you interpret this, but when I go back and I
19 look at claim 11, I think the inclusion of a separation
20 cartridge is in here to define how, you know, the rest
21 of the elements of this description are crafted.

22 And, again, I go back to the specification and
23 I say: Is there anything substantive that would say
24 that there was more than one separation cartridge with a
25 single column? Was there anything in there that would

1 say there was a single -- a single separation column
2 inside of a cartridge?

3 Consistently and throughout the entire
4 disclosure, it says the invention is a device having a
5 separation cartridge with three columns.

6 Q. Okay. So, but getting back to my question,
7 does claim 21 suggest to you that claim 11 would not
8 require multiple absorbent beds within a separation
9 cartridge because claim 21 adds that limitation?

10 A. Again, I don't feel like I'm in a place where I
11 can evaluate what that means. What I say is I can look
12 at what 11 says, I can read what 21 says, and I can
13 think that 21 is additive and informative about the
14 invention. But when I look at claim 11, I can't read
15 claim 11 without believing that that is a multiple bed
16 cartridge.

17 Q. Well, but you have to look at claim 21 as well,
18 right, when interpreting claims?

19 A. Sure.

20 Q. So --

21 A. And I also have to look at the specification.

22 Q. All right. So, I mean, I understand you
23 are -- your opinion is that you look at the
24 specification and there must be multiple beds. I
25 understand that.

1 A. Okay.

2 Q. But what I'm asking is, does claim 21 suggest
3 that you wouldn't limit claim 11 that way?

4 A. Claim 21 adds a thought, yes.

5 Q. What does that mean?

6 A. It suggests that the portable oxygen
7 concentrator has a separation cartridge with multiple
8 beds.

9 Q. And looking at -- so your -- you've offered an
10 opinion regarding the term "separation cartridge";
11 correct?

12 A. Uh-huh. Yes.

13 Q. And if we're looking at claim 11, right,
14 you're --

15 A. Sorry.

16 Q. Oh, sure. You need a second?

17 A. No. I thought we were going back to the other
18 document. Forgive me. Forgive me. I'm just --

19 Q. No, no problem.

20 A. I jumped without paying attention.

21 Q. No problem.

22 A. Claim 11, okay.

23 Q. If we look at -- let's just take a look
24 at -- we're looking at 21 and 11; right?

25 A. I am.

1 Q. And your construction of "separation cartridge"
2 is that the separation cartridge has to
3 have -- actually, let's just read it so I don't
4 misparaphrase it here.

5 On page -- right above paragraph 41 in your
6 declaration, which is Exhibit 1; right? You offer a
7 construction for GCE's construction of "separation
8 cartridge"; correct?

9 A. I do.

10 Q. And it says, "A housing container that holds
11 multiple absorbent columns for gas separation and
12 provides separate inlet and outlet ports for each
13 absorbent column." Correct?

14 A. That is what it says.

15 Q. Okay. So tell me, and I am -- let's just
16 assume for a second that that construction were adopted;
17 okay?

18 A. Yes.

19 Q. You with me?

20 A. Uh-huh.

21 Q. What does claim 21 then add to claim 11, if
22 anything?

23 A. I don't know.

24 Q. Okay. Nothing you can identify right now?

25 A. No.

1 Q. Okay. And if we go back to the '614 patent, I
2 wanted to ask you one more question there, so, and
3 actually crossing with your declaration.

4 If we look at paragraph 43 again in your
5 declaration, this is where you list the claims that
6 recite "separation cartridge"; correct?

7 A. 43. Yes.

8 Q. Here you did not list claim 16; correct?

9 A. I did not.

10 Q. Of the '614 patent?

11 A. Did not.

12 Q. Okay. And if we go just briefly to -- so if we
13 go to page -- bear with me.

14 All right. If we go to just below paragraph 66
15 of your declaration.

16 A. Just below 66, yes.

17 Q. Okay. And here -- here we're looking at
18 claim -- I believe this is claim 13 of the '614 patent,
19 the construction that was being proposed by you for that
20 claim.

21 A. Okay.

22 Q. All right. And what you're doing here is
23 adding the words "a separation cartridge containing" at
24 the beginning, right, to suggest that each of those
25 elements has to be within the same separation cartridge?

1 Is that right?

2 A. Appears to be that, yes.

3 Q. So kind of -- same thing, can you identify for
4 me, looking now at '614 patent, can you identify
5 anything for me that claim 16 would add to -- to claim
6 13 if your construction were adopted?

7 A. Again, my interpretation is based on how I'm
8 reading the claim itself and I look at that claim and I
9 don't think it's -- let me take a moment.

10 Q. Sure.

11 A. Okay. As I discussed earlier, when I read the
12 first claim, which in this case was claim -- is it 13 on
13 the '614 patent? Okay. When I read that, you know, I
14 read that as not having enough structure in the way that
15 claim is written to understand it. And so in order to
16 understand that claim, I go back to the specification to
17 understand what that means.

18 The fact that you've got a claim 16 later that
19 further defines something that should have been defined
20 in claim 13 is, you know, it's informative that you
21 believe that the invention needs to have multiple beds,
22 but I think that without that part in claim 13, I don't
23 think that that claim describes an invention. I think
24 that that claim needs to have the specificity added into
25 it in order for it to be well-defined, otherwise I think

1 it's indefinite.

2 Q. Okay. So we can come back to indefiniteness.
3 But, just to get back to my question, is there anything
4 you can identify, assuming your construction for claim
5 13 in the '614 patent were adopted, is there anything
6 you can identify in claim 16?

7 Is there anything that claim 16 adds if that
8 construction is adopted?

9 A. No.

10 Q. Okay. All right. So you were talking -- let's
11 talk a little more about claim 13. Now, now, bear with
12 me.

13 A. Sure.

14 Q. Okay. Okay. Now, you were just talking a
15 minute ago about -- and I don't mean to paraphrase you
16 here, so feel free to correct me.

17 A. No, please. Yeah.

18 Q. You threw out the term "indefinite." You've
19 thrown you the term "ambiguous." Right? And I think
20 you refer to not understanding some of the structural
21 relationships in claim 13.

22 Is that generally what you're referring to?

23 A. Yes.

24 Q. Okay. And if we -- I think -- I think in your
25 declaration you say or you allege that there is a lack

1 of connective or supportive structure.

2 Do you see that in paragraph 69?

3 A. I do.

4 Q. Is that kind of what you're referring to?

5 A. It is.

6 Q. So let's maybe take a closer look at claim 13.

7 So your declaration says, no connective or supportive
8 structure with regards to inlets, outlets, and beds of
9 absorbent material; correct?

10 A. Correct.

11 Q. All right. Now, claim 13, let's just use the
12 first bed as an example; okay?

13 A. Okay.

14 Q. It introduces a first bed of absorbent material
15 configured to preferentially absorb nitrogen; correct?

16 A. That's correct.

17 Q. Okay. You understand what a -- what a bed of
18 absorbent material is; correct?

19 A. Yes, I do.

20 Q. All right. Now, it then goes on and says, "a
21 first inlet oriented in a direction"; right?

22 A. Yes.

23 Q. And it says, "The first inlet is configured to
24 direct a flow of ambient air to the first bed"; right?

25 A. Correct.

1 Q. So there, that phrase "a first inlet" all the
2 way to "the first bed," do you see where I'm reading?
3 Sorry, the second -- I'm going to back up here.

4 That phrase that I just read, where "a first
5 inlet" is introduced, do you see that?

6 A. I do see the paragraph.

7 Q. Sorry. I'm just trying to make sure --

8 A. I'm following you. I'm trying to figure out --
9 yeah.

10 Q. Okay. So that phrase actually describes a
11 relationship between the first inlet and the bed, first
12 bed; correct?

13 A. A bed of zeolite would implicitly have an
14 inlet, yes.

15 Q. Okay. And it's saying that there's a first
16 inlet to direct a flow of ambient air to that first bed;
17 right?

18 A. Correct.

19 Q. So, minimally, we know that the first inlet has
20 to direct ambient air to the bed or be configured to do
21 that; right?

22 A. Okay.

23 Q. Okay. So there is some relationship there
24 between the two; correct?

25 A. Correct.

1 Q. It's not -- the claim doesn't just say "a first
2 inlet"; correct? It has more?

3 A. It talks to half of it, yes.

4 Q. Okay. And then we go -- let's go to the next
5 phrase: "A first outlet oriented in a direction wherein
6 the first outlet is configured to expel product gas
7 flowing downstream of the first bed."

8 Do you see that?

9 A. I do.

10 Q. So again, the claim puts a relationship between
11 the first bed and the outlet; correct?

12 A. It does.

13 Q. And that relationship is that the outlet has to
14 be configured to expel the air from that bed?

15 A. Okay.

16 Q. Is that right?

17 A. That's what it reads.

18 Q. And it has to be -- it's expelling product gas.
19 Do you understand what product gas is?

20 A. I do.

21 Q. Is that gas where nitrogen has been removed?

22 A. Most of the nitrogen, yes.

23 Q. Okay. Flowing downstream of the first bed. So
24 it also orients it downstream of the first bed; correct?

25 A. Yes.

1 Q. Okay. So, minimally, you would agree with me
2 that the claim itself defines relationships between the
3 first bed, the first inlet, and the first outlet;
4 correct?

5 A. There's an inlet and an outlet to that bed,
6 yes.

7 Q. And it describes how they interact, at least in
8 part?

9 A. Sure. Gas flows into one and flows out of the
10 other.

11 Q. Okay. So then what exactly is -- can
12 you -- well, let me back up. So isn't that connective
13 structure between those elements?

14 A. No. That's a description of what the element
15 is. The element has an inlet and an outlet, and an
16 inlet from where? Outlet to where?

17 Q. Well, doesn't the claim tell you that?

18 A. No.

19 Q. It's an inlet to send flow to the bed?

20 A. If I had this bed by itself, can you tell me
21 how it's connected to the concentrator? Can you tell me
22 how it's connected to a set of valves? How would
23 it -- how is this oriented? How is it -- how is it
24 disposed?

25 None of -- all of this talks about generalized

1 comments of the elements that might be in a
2 concentrator, but none of it tells me how those elements
3 actually function. And when I read the disclosure of
4 the patent, again, I go back through and say, what is
5 the core of the invention?

6 One of the cores of the invention is a
7 removable cartridge. It is the thing to which these
8 things are connected. It's what the inlet comes from
9 and what the outlet goes to. So how do I interpret how
10 these things go without that.

11 Q. So -- so you mentioned some valves and things
12 like that. Are you saying that the patent owner had to
13 claim valves to describe a relationship?

14 A. No. I'm just saying that this does not
15 describe adequately the bounds of the invention.

16 Q. Okay. So would you agree with me that the
17 specification discloses an oxygen concentrator that has
18 a first bed and a second bed?

19 A. Yes.

20 Q. And it describes an oxygen concentrator having
21 a first bed and a second bed with an inlet and an outlet
22 to each bed?

23 A. Yes.

24 Q. Okay. And your proposed construction here is
25 to -- to add into the claim "a separation cartridge

1 containing" in front of all of this language, and I
2 think you added some Roman numerals to that language as
3 well; is that accurate?

4 A. Sure. Yes.

5 Q. Okay. So what connective structure does adding
6 that language -- how does adding that language clarify
7 any connective structure between the first bed inlet and
8 outlet?

9 A. Because the bed, in the claim as written, the
10 bed exists as a floating element on its own. When you
11 talk about where does the gas come from, where does the
12 gas go to, how is this bed a part of a system, you
13 require the connection on the other side. That's what
14 it adds. It adds the how is this configuration part of
15 a concentrator.

16 The power pack is removable from the portable
17 oxygen concentrator. It's an element that can be put in
18 and taken out. It's -- the pump is electrically coupled
19 to the power pack. I'm showing how it's connected to
20 the remaining of the system. I'm not showing how those
21 columns are connected to the remaining of the system.

22 Q. Can you explain to me what you mean by -- I'm
23 not following you when you say it's not explaining how
24 the columns are connected to the rest of the system.

25 A. What I've described here is a column that has a

1 top and a bottom and gas flowing through it. It doesn't
2 talk about how it interfaces or how it's a part of a
3 concentrator. It just says it's there. And because of
4 that, I don't know -- I can't look at another
5 concentrator and say, does that concentrator do this, or
6 does this concentrator not do this?

7 There are many ways of designing that system.
8 I have a very hard time understanding whether this would
9 be -- would this read on another design, and without
10 talking about how those parts are unique in some way or
11 how they are -- what is it that the invention describes.

12 Q. Well, you're not -- you're not opining on
13 whether these are unique; correct?

14 What you're opining on is the interpretation of
15 this claim; right?

16 A. Whether I understand the bounds.

17 Q. Okay. And so are you saying to me, with all of
18 your experience, that you don't understand a claim that
19 recites an oxygen concentrator having a bed with a
20 related inlet and outlet and some other components?

21 A. What I'm saying as an expert, I can go back to
22 the disclosure and figure out what you mean.

23 Q. And I think we already talked about this
24 but --

25 A. Not the disclosure, the specification. I'm

1 using the wrong term.

2 Q. No, I understand.

3 A. I'm sorry. Engineer.

4 Q. It's okay.

5 So I guess I'm -- we agree that the
6 specification discloses these features, so I'm trying to
7 understand why you would not be able to understand a
8 claim that lists these elements as part of an oxygen
9 concentrator and defines the flow relationship between
10 them, what they are configured to do, and also lists
11 additional components of the oxygen concentrator that
12 are separate from those.

13 A. I'm looking at it and trying to understand how
14 can I -- you know, what is this defining that -- if I
15 look at another concentrator, I pick another product off
16 the market and I look at this claim, can I tell where
17 the lines are that limit this -- that limit this? And I
18 have a hard time doing it.

19 I need to go back and -- again, what I do is I
20 go back and I look at the specification and I use the
21 specification to define it, and that's why I suggest a
22 modification to the -- to the construction of that
23 claim, is because I don't think that a configuration
24 with these elements, without that removable cartridge,
25 is supported in the specification.

1 Q. Well, the question isn't whether it's
2 supported. The question is what is the proper
3 interpretation of the claim.

4 A. Okay.

5 Q. So, I mean, we've already -- I think you've
6 already said the specification describes these elements.

7 A. It does.

8 Q. Okay. So, I mean, isn't -- isn't the better
9 understanding of this claim not to add limitations to it
10 but instead to say, I understand there's a bed, an inlet
11 and an outlet, and perhaps, perhaps when we look at how
12 broad this claim is, it's very broad, but I understand
13 it?

14 Isn't that the better interpretation here?

15 A. Put a claim in front of me and you ask me if I
16 can put bounds on the outside of this claim, and I
17 cannot.

18 Q. I didn't ask you to put bounds on it. You're
19 the one alleging that this is ambiguous unless you add
20 "separation cartridge" into the claim. So what I'm
21 trying to understand is it seems like you do understand
22 it but were just adding some language here --

23 A. I'm saying --

24 Q. -- to further define a fence, to use your
25 example, and I'm just trying to understand why you would

1 not be able to understand this claim without that.

2 A. I read this claim, I look for where the fence
3 is, I don't see it. I look to the specification and the
4 specification is consistent throughout it that there is
5 one way to see it. So when you ask me to interpret this
6 claim, I'm not interpreting it in a vacuum. I'm
7 interpreting it in combination with what I read in the
8 specification.

9 Q. So let me ask you about that then. You're not
10 proposing in this construction that -- that you need to
11 add a third bed, are you?

12 A. That's a question I have to spend a little more
13 time to think about whether that's there, but at the
14 moment, no, I was not proposing that.

15 Q. Would you agree with me the specification does
16 disclose an embodiment with three beds?

17 A. I believe that the specification only discloses
18 an embodiment of three beds, yes.

19 Q. Okay. I understand that's your opinion.

20 So how are you able to understand the bounds of
21 this claim without a third bed?

22 A. That's a good question. I think I -- just my
23 experience in building concentrators, I can look at
24 this, I can understand what's put there, I can go back
25 and look at the specification, and when I combine those

1 elements, I can understand what it means.

2 I hadn't thought about the fact that this claim
3 doesn't show three -- three beds. It's a good question.

4 Q. Okay. So fair to say here, at least based on
5 the proposed construction, there isn't a proposal that a
6 third bed be read into the claim, just the separation
7 cartridge, even though both are described, in your
8 opinion, as the what I'm going to call the preferred
9 embodiment of the specification; correct?

10 A. Correct.

11 Q. Okay. Now, if we look at -- let's go back.

12 Now, you've testified today, without getting to
13 too many specifics, but you have a lot of experience in
14 the past with oxygen concentrators, and I believe -- I
15 think you were looking for a date earlier, but if we
16 look at the face of one of the patents -- let's just
17 pick one.

18 A. Exhibit 3?

19 Q. Sure, Exhibit 3. Or Exhibit 2. Yeah,
20 Exhibit 3 is fine.

21 A. Either one.

22 Q. If you look at that patent, right on Bates
23 page -- or in column 1, it's on Bates 2592, it might be
24 the easiest place to look.

25 A. The other one. Exhibit 3, 2569?

1 Q. It's further. Just go --

2 A. I'm sorry.

3 Q. 2592. Sorry. It's --

4 A. Forgive me. Okay. Looking somewhere else
5 other than where I was looking. Okay. I got it now.
6 Okay.

7 Q. So there's a recital of a priority claim. Do
8 you see that?

9 A. Yes, I do.

10 Q. You're familiar with what a priority claim is?

11 A. Yes.

12 Q. That looks like, at least on the face, in the
13 spec here, the earliest date there is February 9th,
14 2005?

15 A. Correct.

16 Q. So as of that time --

17 A. Uh-huh.

18 Q. -- in your opinion, was it known to have a
19 cartridge that held a single bed of absorbent material?

20 A. None -- can you help me by defining what that
21 means?

22 Q. By defining "known"?

23 A. Yes.

24 Q. Would one of -- would one of ordinary skill in
25 the art have been aware of a cartridge that had a single

1 bed of absorbent material for oxygen concentrators?

2 A. A single bed of absorbent material standing by
3 itself?

4 Q. A cartridge with a single bed of absorbent
5 material.

6 A. So a removable cartridge with a single bed.
7 For what kind of concentrator?

8 Q. Well, let's start with any concentrator.

9 A. Yes, removable beds were known at that point in
10 time.

11 Q. Okay. And just to kind of get back to my
12 question, all I'm getting at is was it known to have a
13 cartridge with a single bed of absorbent material, as
14 opposed to the multiple beds that we've been talking
15 about, as of -- as of or before February 9th, 2005?

16 A. The reason why I'm pausing is I'm trying to
17 recollect our own internal R&D at Inogen and --

18 Q. And I'm not asking you to disclose it.

19 A. I know. I'm trying -- the question is, can I
20 point to something in the art or can I point to
21 something that I know about?

22 Q. So I'm asking more in the art. Like generally
23 in this field, you know, whether you want to consider
24 known patents, applications, whatever.

25 A. So I can't point to a document where that is,

1 but I can tell you that I've spoken with numerous
2 experts who were thinking along those lines of single,
3 multiple, removable cartridges dating back before that
4 point in time.

5 Q. I'm sorry. I missed the end of your answer
6 there. That knew of?

7 A. That knew of or had envisioned or had
8 experimented with removable cartridges.

9 Q. Okay. But ignoring -- I'm trying to get
10 to -- maybe I'm saying the question wrong.

11 So I'm just trying to understand. One of the
12 constructions you put forward is that the separation
13 cartridge has to have multiple beds.

14 A. Yes.

15 Q. In this patent.

16 A. Yes.

17 Q. Okay. I'm just trying to understand if prior
18 to the prior -- the earliest, on the face, priority date
19 of this patent, February 9th, 2005, it would have been
20 known to someone of skill in the art that a cartridge
21 with a single bed existed or was out there. Ignoring
22 removability, ignoring -- just in the oxygen
23 concentrator space, was that known?

24 A. I'm not aware of a product that had a removable
25 bed as a cartridge in 2005.

1 Q. Okay. How about a just a single bed in some
2 sort of tube, ignoring the word "cartridge"?

3 A. Are we talking about standing alone in concert
4 with others, or just by itself as a single bed in a
5 concentrator?

6 Q. Are you aware of any single bed within some
7 sort of container or housing in a concentrator?

8 A. Every concentrator had a combination of single
9 beds making them multiple beds.

10 Q. Okay. So are you aware of such a container
11 that just had one bed --

12 A. No.

13 Q. -- prior to this date?

14 A. I'm not aware of any concentrator being built
15 with one bed.

16 Q. Okay. So your opinion -- or your opinion or
17 understanding is that a cartridge -- and I'm using
18 "cartridge."

19 A. Uh-huh.

20 Q. Let's call it a housing, if that's more
21 comfortable.

22 A. Whatever. Yeah.

23 Q. A housing having a single bed of absorbent
24 material for use in a concentrator was not known prior
25 to February 9, 2005?

1 A. Again, I'm confused by the question, and let me
2 explain my confusion so you can help me.

3 Q. Sure. Sure.

4 A. Not trying to be difficult.

5 Q. No.

6 A. I'm just trying to explain.

7 So every concentrator -- I should clarify.
8 Every medical concentrator, and certainly every portable
9 medical concentrator of which I'm aware, has multiple
10 beds.

11 Q. Uh-huh.

12 A. All right. Can I describe those beds as a
13 combination of single beds? Of course. Does that
14 answer your question? I'm not --

15 Q. No. No.

16 A. That's where I'm getting confused.

17 Q. That's fair. Okay. So let me see if I can ask
18 a better question.

19 A. Okay.

20 Q. I'm just trying to understand -- I understand
21 that concentrators generally might have many beds. It
22 just depends on the concentrator.

23 What I'm trying to get at is, you know, as
24 we -- in your opinion as a person of skill, would you
25 have -- would you have been aware of, at that time,

1 let's call it a subcomponent within a concentrator where
2 it had a housing with a single bed as opposed to
3 multiple beds in that housing, and the housing doesn't
4 have to be the whole concentrator, I'm talking -- I was
5 trying to use a different word than cartridge,
6 but -- but a cartridge or something like that containing
7 a bed, but a single bed.

8 A. I'm still confused, but let me try. The AirSep
9 concentrator had two beds in it. They were discrete
10 beds with discrete housings laying on opposite sides of
11 the concentrator.

12 Q. Okay. So, discrete beds, maybe that's a way
13 --

14 A. Okay. I'm having a hard time understanding the
15 question.

16 Q. And I don't know what product you just referred
17 to. Can you spell it for her?

18 A. It was AirSep. It was a little, black
19 concentrator that looked like a tape recorder.

20 Q. So --

21 A. Lifestyle.

22 MR. GILL: Can you spell that, AirSep.

23 THE WITNESS: A-I-R dash S-E-P, and I believe
24 the product name was Lifestyle.

25 BY MR. ATALLAH:

1 Q. Okay. So that's a good, I think -- maybe
2 "discrete" is the way we can --

3 A. Sure.

4 Q. -- communicate the same thing.

5 So it would have been known to have a discrete
6 container with a single bed of absorbent material within
7 a concentrator prior to February 9th, 2005?

8 A. True.

9 Q. Okay. So that's something -- that's something,
10 as you're reading these patents, that's something you
11 would have been aware of --

12 A. Absolutely.

13 Q. -- in creating your understanding of the
14 specification of the patents in suit; correct?

15 A. Correct.

16 Q. Okay.

17 A. I'm sorry. I really was trying to help.

18 Q. You're fine. You're fine.

19 Okay. All right. So let's go to -- and let me
20 just ask you this. Generally, in the patents in suit,
21 what does the separation cartridge do?

22 A. It exchanges nitrogen.

23 Q. So when you say "exchanges," does that mean
24 removes or separates?

25 A. It absorbs it and releases it based on the

1 pressure in that column.

2 Q. Okay. And is that -- in the industry, is that
3 commonly referred to as separating gas?

4 A. Yes. When operated properly, yes.

5 Q. Okay. When operating?

6 A. Correctly, yes.

7 Q. Okay. So let's take a peek at -- all right.
8 Let's take a look at paragraph 42.

9 A. 42.

10 Q. And just the first sentence there.

11 A. Sure.

12 Q. So it says -- you say, "As an initial matter,
13 'separation cartridge' does not have a specific meaning
14 in the art"; correct?

15 A. Never heard that term before I got involved
16 with this.

17 Q. Okay. So is that your basis for saying it
18 doesn't have one, is just that you never heard it before
19 getting involved in this case?

20 A. When I read it, actually, I had to -- I had to
21 ask whether it was one of two different things or
22 referred to one of two different things, but I was not
23 familiar with it, and I'm pretty familiar with the terms
24 used.

25 Q. All right. So is that why you're saying --

1 A. Yes. Yes.

2 Q. Okay. So let's take a look at paragraph 44.
3 And this is referring to the '628 patent.

4 A. Sure.

5 Q. You say -- you describe some elements of
6 the -- of some of the '628 claims; right?

7 A. I do.

8 Q. And then you have a sentence about the '614
9 patent; correct?

10 A. I do.

11 Q. Okay. And then you say, "The claim language
12 does not otherwise clarify the structure of the
13 separation cartridge and/or whether it includes other
14 absorbent columns and associated inlets/outlets beyond
15 that recited."

16 Do you see that?

17 A. Read that just to be sure. Okay.

18 Q. Uh-huh.

19 A. I do see that.

20 Q. Okay. You -- and we looked at these claims a
21 little bit already, right, that recite "separation
22 cartridge"?

23 A. We did, yes.

24 Q. You would agree with me that these claims do
25 recite certain structural features of the cartridge,

1 right, the inlet, the outlet, the absorbent bed, that
2 it's removable?

3 It does recite certain structural features of
4 the separation cartridge; right?

5 A. I believe that's true.

6 Q. Okay. Is it your understanding that if a claim
7 doesn't actually claim something you should try to add
8 that language to the claim?

9 A. If a claim doesn't actually claim something?
10 Can you explain that more?

11 Q. Sure. Well, you say, in your last sentence
12 here, "it doesn't otherwise clarify the structure."
13 Right?

14 A. Uh-huh.

15 Q. And your proposed construction is to add
16 limitations as to the understanding or construction of
17 separation cartridge; right?

18 A. My suggestion is that I can't tell enough about
19 what the separation cartridge is without looking at
20 what -- how it's described in the -- in the
21 remainder -- remainder of the patent body.

22 Q. Sure. But so your construction is adding
23 multiple absorbent beds and it's adding multiple inlets
24 and multiple outlets; right?

25 A. It is.

1 Q. Okay. And so my question is, is it your
2 understanding that when a claim doesn't actually claim
3 something, you should try to add that language to the
4 claim?

5 MR. GILL: Objection. Vague and ambiguous.

6 THE WITNESS: Can you restate it in a different
7 way?

8 BY MR. ATALLAH:

9 Q. I mean, did you understand the question?

10 A. Maybe repeat it.

11 MR. ATALLAH: Can you repeat it for me?

12 (Last question read back.)

13 THE WITNESS: It's my understanding that in
14 trying to understand the definition of an element in a
15 claim, if it's -- I can't read the claim in a vacuum. I
16 have to go back to the specification to understand that
17 part. That's not reading something into the claim.
18 That's actually looking for the definition of the part
19 that's described inside the specification.

20 BY MR. ATALLAH:

21 Q. Okay. In your -- in paragraph 44 here, you're
22 saying, "The claim does not otherwise clarify the
23 structure of the cartridge," right, "and/or whether it
24 includes other absorbent columns and associated
25 inlet/outlets"? Right?

1 A. That is what this paragraph says.

2 Q. Okay. And is it your opinion that your
3 proposed construction clarifies that?

4 A. In my opinion, that proposed construction
5 certainly is more clear.

6 Q. Okay. So now, you would agree with me there's
7 no -- there's no contention here that "separation
8 cartridge" is indefinite; correct? That's not
9 your -- that's not an opinion you've given; correct?

10 A. Correct.

11 Q. Okay. So I would like -- I'm just trying to
12 understand. Let's take -- maybe we can take a look at,
13 just as an example --

14 A. Sure.

15 Q. -- let's look at claim -- let's take a look at
16 claim 1 of the '628 patent, for example.

17 A. '628.

18 Q. Okay. And I'm going to start just kind of
19 middle of the second clause. "The separation cartridge
20 comprising," do you see that, where I'm reading from,
21 starting there?

22 A. I do see where you're referring, yes.

23 Q. Okay. And so it says, "separation cartridge
24 comprising a case at least partially defining an outer
25 volume of the separation cartridge, an inlet oriented in

1 a second direction opposite the first direction, an
2 outlet oriented in the second direction, and a bed of
3 absorbent material configured to preferentially absorb
4 nitrogen, the cases partially surrounding the bed of
5 absorbent material."

6 Did I read that right?

7 A. You did.

8 Q. So here the claim already recites a case that
9 surrounds the bed, an inlet, an outlet, and a bed of
10 absorbent material; right?

11 A. It does.

12 Q. So I'm trying to understand how the proposed
13 construction of multiple beds with multiple inlets and
14 outlets clarifies the meaning of that claim in any way.

15 A. I'll explain to you how I have thought through
16 this. When I was reviewing this, I looked at the term
17 "separation cartridge" and I didn't recognize the term.
18 Even as described in your claim, I didn't understand
19 what that meant. There was -- there was a couple
20 ambiguities in how to interpret that.

21 I would specifically point to an ambiguity
22 saying that I don't know whether the cartridge is a
23 cartridge that is separated or a cartridge that
24 separates, and because of that I go look to -- I go look
25 for the definition of what that cartridge is when I go

1 looking at the specification.

2 From that point, once I -- once I go, I try to
3 understand what you mean by "a separation cartridge,"
4 and when I read, I read consistently through the
5 specification that you describe a cartridge with all the
6 things that are in the specification, but universally
7 holding three beds.

8 And in my expert opinion, when I read this,
9 there are a number of things about that that stepped
10 out. And I know I've said these before, and so, you
11 know, it stepped out that there weren't options given or
12 reasons for having different numbers of beds, and in
13 fact it said very clearly strongly preferred three beds,
14 and it matches my understanding of the art, you know, of
15 how these things are designed.

16 So everything in the specification was
17 consistent with my understanding. And when I look
18 at -- I look at the claim, I just look -- I look at that
19 and think that's not what's described in the
20 specification. So if we're looking for clarification on
21 a claim, to give that more meaning, I -- and I think it
22 doesn't describe what's -- what's in the specification
23 the way it was written.

24 MR. ATALLAH: So, again, why do I -- let me
25 back up. Can you reread my question real quick?

1 (Last question read back.)

2 BY MR. ATALLAH:

3 Q. And I understand your position, you know, and
4 what you're putting forward, alleging that it's always
5 three beds in the specification, but what I'm trying to
6 understand is I think we agree that the claim describes
7 separation cartridge with an inlet, an outlet, an
8 absorbent bed, and you're proposed construction just
9 makes it multiple of those.

10 How does that clarify the claim, other than
11 simply reading limitations from the spec into the claim?

12 A. Give me a moment. I'm just reviewing what
13 I -- my thoughts I had put down before.

14 Now, I think my comment is, and I'm trying to
15 remember it because I talk quite a bit about this, but I
16 think my comment is what is captured in paragraph 52 of
17 my disclosure document here, my declaration document
18 here.

19 And really what it's saying is that, you know,
20 while it's my understanding that the scope of a patent
21 claim should generally not be limited to a mere
22 exemplary aspects of the specification, I understand --
23 while it is my understanding that the scope of a patent
24 claim should generally not be limited to mere exemplary
25 aspects of the specification.

1 I also understand that claims should not be
2 construed more broadly than the purported invention.
3 Here, each and every embodiment in these patents, the
4 '628 and '614 patents, utilizes a separation cartridge
5 with multiple absorbent beds, each having a dedicated
6 inlet and outlet, and that configuration is what
7 provides the usability improvements to which the '628
8 patent is directed.

9 So what I'm suggesting in this is that is the
10 purported invention. So when I look for clarification
11 of how do I read this invention, that's what's
12 described.

13 Q. And I understand you were just reading from
14 paragraph 52 of your declaration.

15 A. That's correct.

16 Q. Okay. But I still am unclear as to what the
17 clarification is because I can understand you're saying
18 many, many times in here, I think --

19 A. Sure.

20 Q. -- in the declaration, you know, that you want
21 to read it based on what the specification specifically
22 says, and your opinion is it's three beds, or multiple
23 beds.

24 But, that said, I'm still trying to understand
25 what is unclear about the claim that just says "the

1 separation cartridge" with those elements recited. For
2 example, in claim 1 of the '628 patent where it already
3 includes an inlet, an outlet, an absorbent bed, and even
4 a case surrounding the bed. So I'm trying to understand
5 what clarification is even needed to understand that
6 claim that you appear to be referring to back in
7 paragraph 44.

8 How does adding that language clarify anything,
9 as opposed to just reading in embodiments of the rest of
10 the specification? I mean, is it that nothing is being
11 clarified? It's just that you think that those
12 limitations need to be in the claim?

13 A. Not that nothing is being clarified, but the
14 second half, I do believe those limitations need to be
15 in the claim. I believe that it -- without that
16 language in there, it's not supported in the
17 specification, and it is a concentrator that won't
18 perform the way it's supposed to perform per its claims
19 is what the goal of the invention is.

20 Q. So you're saying that that's what you think
21 needs to be clarified?

22 MR. GILL: Objection. Vague and ambiguous.

23 THE WITNESS: I think what's at question here
24 is the definition of the word "separation cartridge."
25 And when I read the term "separation cartridge" and I

1 read the claim as it's written, I don't find enough
2 detail in there to understand what that is in its
3 entirety, and so I go to the -- I go to the
4 specification to read that, and what I read in the
5 specification is more accurately described in GCE's
6 proposed construction than it is in 3B's proposed
7 construction.

8 BY MR. ATALLAH:

9 Q. So again, I'm still not sure what is being
10 clarified if your answer wasn't telling me what was
11 being clarified, but the clarification is that those
12 elements need to be read into the claim?

13 A. The clarification is a better definition of the
14 term "separation cartridge."

15 Q. Is there anything, if we look at what's
16 actually written in claim 1, that you don't understand?

17 A. Exhibit 1.

18 Q. I'm referring to claim 1 of the '628 patent.

19 A. Yeah. I think when I read this, and I'm trying
20 to go back and reconstruct my thinking that links what
21 you're asking, I think when I -- when I read this, I
22 look at this and I'm trying to understand what a
23 separation cartridge actually is. I see some parts
24 here. I don't know exactly what that is, and so I go
25 back and I look at the specification.

1 Q. Okay.

2 A. And that's the answer I can give you.

3 Q. And we talked about this before, but I think we
4 were in agreement that you don't have to claim every
5 feature that you put into a specification when you read
6 a claim; correct?

7 A. Correct.

8 Q. Okay. And this claim does lay out components
9 of the separation cartridge. We can at least agree on
10 that; correct?

11 A. Certainly lays out some, yes.

12 Q. Okay. And there are other components the
13 specification describes about the separation cartridge
14 that you don't include in a construction; correct? The
15 specification, I'll give you an example, the
16 specification describes a spring within the separation
17 cartridge; correct?

18 A. Within the separation bed, right.

19 Q. Which would be within the cartridge?

20 A. Okay. Yes.

21 Q. You're not suggesting that that limitation has
22 to be read into the definition of "separation
23 cartridge"; right?

24 A. No.

25 Q. So we're just picking multiple absorbent beds

1 and multiple inlets and outlets to include here,
2 not -- not every element that the specification
3 describes with regard to separation cartridges; right?

4 A. I think it's a pretty fundamental element.

5 Q. Okay. Would you -- would you agree with me
6 that as long as the -- as long as there's an inlet and
7 an outlet for each bed, it doesn't matter if there are
8 four beds, three beds, two beds?

9 A. Incorrect. Pardon me.

10 MR. GILL: Objection. Vague and ambiguous.

11 THE WITNESS: It doesn't matter, meaning what?

12 BY MR. ATALLAH:

13 Q. So let me back up. May be a better way to do
14 this.

15 If we look at your construction.

16 A. Yes.

17 Q. Right? Which is GCE's construction. GCE's
18 construction is that the separation cartridge -- make
19 sure I read it right -- is a housing/container that
20 holds multiple absorbent columns for gas separation and
21 provides separate inlet and outlet ports for each
22 absorbent column; correct?

23 A. That's what that says, yes.

24 Q. So maybe that will help clarify my question.

25 A. Okay.

1 Q. You would agree with me that, as to multiple
2 absorbent columns, it doesn't matter whether there are
3 three, four, two, as long as they're each has a separate
4 inlet and outlet port, and based on your construction;
5 correct?

6 A. That is correct. When I read this, to be
7 honest, I read this as all of the columns are in
8 the -- but I -- but that's not what it says. That's how
9 I interpreted it when I was reading it, so thanks for
10 that clarification.

11 Q. Okay. But we would agree --

12 A. Yes.

13 Q. -- four, three, two columns, it doesn't matter?

14 A. Right.

15 Q. Okay. So why -- why if there's only one is
16 that different?

17 A. Because a concentrator can't function per the
18 design with one column.

19 Q. Okay. Any other reason?

20 A. It's a pretty big reason.

21 Q. I know. I understand that's your opinion. I'm
22 just asking if there's any other reason.

23 A. We could go through the physics of why it
24 cannot, but there are no examples of concentrators being
25 built with a single column because they can't meet that

1 requirement.

2 And so when I look at this, what I think is
3 there are concentrators built with two, with three, with
4 six columns, but what I -- when I'm reading this, I
5 understand that the removable separation cartridge is
6 put there to make it easier to do maintenance on this
7 device, and all of the columns are part of that
8 separation cartridge for removal.

9 MR. ATALLAH: So would you agree with me that
10 if it could be done -- can you repeat his -- two answers
11 ago?

12 THE WITNESS: Please.

13 MR. ATALLAH: I just want to get the right
14 language.

15 THE WITNESS: Oh, sorry.

16 MR. ATALLAH: Something about the --

17 THE WITNESS: Uh-huh.

18 MR. ATALLAH: One -- you didn't say operate but
19 something like that. I'm sorry.

20 (Answer from page 116, line 17, read back.)

21 BY MR. ATALLAH:

22 Q. Okay. Would you agree with me that if the
23 concentrator could function in that design with one
24 column, that 3B's construction would be correct?

25 A. Yeah. You're asking me to take a side on a

1 question that I know there's only one answer to, and --

2 Q. Let me -- maybe I can ask it a different way.

3 Let me ask it a different way.

4 A. Please.

5 Q. Would you agree with me that if it could
6 function with one column, that GCE's construction would
7 be incorrect?

8 A. If the invention of this concentrator could
9 meet the needs of the Fifth Consensus Conference with a
10 single column, then that's all the columns that are in
11 the concentrator and that would be -- that would be
12 incorrect.

13 Q. GCE's would be incorrect?

14 A. Right.

15 Q. Okay.

16 A. And in that light, from what you -- I'm trying
17 to learn and listen.

18 Q. Yeah.

19 A. I'm telling you how I interpret this, and your
20 questions are helping me to understand. The way I
21 interpret that construction is that there are --
22 multiple columns are required and all of the columns in
23 the concentrator are in this housing.

24 Q. Okay. But I'm just asking based on your
25 previous answers. Right?

1 If it could function with a single column, then
2 GCE's proposed construction would be incorrect; right?

3 A. If there was only one column in the
4 device -- in the device, then there's one column in the
5 separation cartridge.

6 Q. Is that a yes?

7 A. Yes.

8 Q. Okay. And when we look at the claim language,
9 you would agree it doesn't say there can't be two
10 cartridges, right -- sorry.

11 It doesn't say there can't be two cartridges
12 each with a column; correct? It doesn't exclude that.

13 A. Again, I don't know where it would ever say
14 plural -- plural cartridges. The drawings don't show
15 it. The specification doesn't show it.

16 Q. So, but again, if we look at the claim
17 language, right, there's nothing that says you can't
18 have a second cartridge. Meaning it doesn't say -- none
19 of the claims say, for example --

20 A. It doesn't claim a --

21 Q. -- only one separation cartridge.

22 A. Okay. So you're now talking about a cartridge
23 module versus -- okay. Separation cartridge.

24 It doesn't, but neither does it describe
25 multiple separation cartridges, either in the claims or

1 in the disclosure -- or in the specification.

2 Q. Sure. I'm just --

3 A. Yeah.

4 Q. The claims don't exclude that there could be
5 two separation cartridges.

6 A. In my mind, and the part I'm trying to
7 understand, because -- because I'm not -- I'm really not
8 trying to be difficult. I'm just trying to understand
9 and be specific.

10 You know, it's like asking, you know, if my car
11 can fly then can I interpret this claim differently, and
12 it's a very hard thing to do because my car can't fly,
13 so.

14 Q. No, but we're just looking at the claim
15 language here.

16 A. Okay.

17 Q. And all I'm trying to get at is, I mean, you
18 have a number of patents.

19 A. Sure. Yeah.

20 Q. You have claims in those patents?

21 A. Of course.

22 Q. Okay. So if a claim doesn't exclude something,
23 then that could be in something meeting that claim;
24 right?

25 A. You would have to look to the specification to

1 understand whether it was predicted or whether or not
2 adding another one of them would be a novel invention.

3 Q. All right. I think we're talking past each
4 other so --

5 A. Okay.

6 Q. -- let me try it one more time.

7 A. Okay. Sure. I'm not trying to --

8 Q. No, I'm not saying you're being difficult. I
9 think I'm asking a bad question.

10 A. Okay.

11 Q. So all I'm getting at is generally claims will
12 describe what's in the -- claims have language that
13 describes what constitutes that claim; right?

14 And so it doesn't -- unless it says so, it
15 doesn't exclude things in addition to what's there; is
16 that right? Is that your understanding?

17 A. Correct. By itself the claim does not exclude
18 something that's omitted, yes.

19 Q. Okay. So all I'm asking now is here the claims
20 don't have that kind of exclusion. For example,
21 something having two separation cartridges would
22 still -- would not be excluded by the claims, for
23 example. Does that make sense?

24 A. It doesn't say it does not have two separation
25 cartridges.

1 Q. It doesn't say it can't?

2 A. It doesn't say it can't.

3 MR. ATALLAH: Okay. We've been going another
4 hour plus here. You want to take another break? What
5 do you guys want to do? Whatever you guys want.

6 MR. GILL: Yeah. Are you thinking we'll take a
7 break and then go again and then do lunch?

8 MR. ATALLAH: Totally up to you. We can do
9 lunch now, do another run here and then do lunch.
10 Whatever you want. We can go off the record.

11 (Lunch recess was had from 11:32 a.m.
12 to 12:20 p.m.)

13 BY MR. ATALLAH:

14 Q. Mr. Deane, I'm going to go on to another part
15 of -- or a part of your declaration, paragraphs 51 to
16 54.

17 A. Sure. Found it.

18 Q. Okay. And here, I think this kind of echoes
19 some things that you've -- or that you've said already
20 today, but you're talking about the patents. You know,
21 each and every -- for example, in 51, "each and every
22 embodiment of the '628 and '614 patents consistently
23 describes a single separation cartridge holding multiple
24 absorbent columns," and, you know, there's other
25 language like that as we go through these paragraphs.

1 A. Yes.

2 Q. And all the way down to 54, for example,
3 saying, "A POSITA" -- P-O-S-I-T-A -- "would have
4 understood that a single-bed cartridge would not have
5 been able to provide the functionality required for
6 continuous operation in '628 and '614 patents' POCs" --
7 P-O-C-S -- and so on.

8 Do you see that?

9 A. I do.

10 Q. Okay. And actually in that paragraph you go on
11 to say, "And if the inventors had contemplated
12 embodiments that differ from the multi-bed operation
13 described by the '628 and '614 patents and normally used
14 in the art, they would have mentioned it"; right?

15 A. Okay.

16 Q. Okay. Sir, let's take a look at Exhibit 2,
17 just for an example, for the specification, and that's
18 the '628 patent.

19 A. I have it.

20 Q. Okay.

21 A. What reference?

22 Q. Let's go to -- let's go to column 7. Okay. Do
23 you see -- do you see, starting at line 13, that
24 paragraph?

25 A. I see line 13, yes.

1 Q. It says, "This constitutes the general
2 principles of vacuum swing absorption (VSA) for gas
3 separation. All phases can be accomplished with a
4 single column or with a plurality of columns. If a
5 plurality of columns are used, it is preferable to have
6 a multiple of three (illustrated as 130a-130c in FIG.
7 5) that are sequenced out of the phase for the different
8 cycle phases in order to maintain constant product
9 flow."

10 Do you see that?

11 A. I do.

12 Q. So this paragraph describes a single column
13 embodiment; correct?

14 A. It certainly describes that all phases can be
15 described with a single column, yes.

16 Q. So that would be using a single column
17 to obtain what is being described here; correct?

18 MR. GILL: Objection. Vague and ambiguous.

19 BY MR. ATALLAH:

20 Q. Sure. Let me ask a better question.

21 This paragraph says you can use multiple
22 columns; correct?

23 A. Yes.

24 Q. And it also says you can use a single column;
25 correct?

1 A. Yes.

2 Q. And it's referring to absorbent columns or
3 beds; right?

4 A. Correct.

5 Q. Okay. Now, in your declaration, if we take a
6 look at paragraph 54, you also say, in that second to
7 last sentence, you say that -- that differ from the
8 multi bed operation described by the 628 and 614 patents
9 and normally used in the art.

10 Do you see that, that portion?

11 A. I do, yes.

12 Q. Okay. So when you say, "normally used in the
13 art," that means that there are uses in the art that are
14 not multi-bed; right?

15 A. Repeat the question after I've read this.

16 Q. Sure. Yeah. Yeah.

17 So in your declaration when you say "normally
18 used in the art," in that sentence, right, that means
19 that multi-bed operations are normally used in the art,
20 but there are non-multi-bed operations, single-bed
21 operations, they're just not as prevalent?

22 A. If they had seen something that wasn't normally
23 used in the art, they would have mentioned it.

24 Q. No. No. I'm sorry. Maybe I'm -- yeah, no,
25 no.

1 A. I'm sorry. I'm really --

2 Q. You're good. You're good.

3 So all I'm getting as is when you use the
4 phrase "normally used in the art there," in that second
5 to last sentence --

6 A. Yes.

7 Q. -- you're referring to the multi-bed operations
8 that you referred to earlier in the sentence; correct?

9 A. Correct.

10 Q. Okay. And you're saying multi-bed operations
11 are normally used in the art; right?

12 A. Correct.

13 Q. But that also means that there are operations
14 that are not multi-bed, they're just not as prevalent,
15 correct, in the art?

16 A. They're used in other applications of gas
17 separation, like industrial gas separation, but I've
18 never seen them used in anything relative to an oxygen
19 concentrator for medical use.

20 Q. Okay. Well, when you say normally used in the
21 art, what art were you referring to?

22 A. I would describe that as medical -- medical
23 oxygen concentrators.

24 Q. Okay. And I guess all I'm getting at is you're
25 saying the multi-bed operation, you know, that you're

1 referring to here is normally used in the art. You're
2 not saying it's always used in the art, meaning there
3 are other uses beyond multi-bed; correct?

4 A. "Other uses" meaning that -- I'm sorry. I'm
5 getting muddled on the words and I'm trying to sort them
6 out to be clear.

7 Q. Let me see if I can break it down a little
8 better.

9 A. Okay.

10 Q. So in this, in your declaration, you are saying
11 multi-bed operations are normally used in the art at
12 this point in time.

13 A. Multiple, and by "the art" I mean oxygen
14 concentrators for patient use.

15 Q. Right. But when you say "normally used in the
16 art," that suggests that there are non-multi-bed
17 operations also that would be used in the art, they're
18 just not as prevalent.

19 A. And I would modify this, reading this now, to
20 say exclusively used in the art. I'm unaware of any
21 concentrator that doesn't have multiple beds.

22 Q. Okay. When you say multi-bed operation here,
23 you're just referring to multiple beds within the
24 concentrator somewhere; is that right?

25 A. Yes.

1 Q. Okay. If we go to paragraph 65 --

2 A. Okay.

3 Q. -- you're saying -- in this paragraph you're
4 giving an opinion that a POSITA would not have
5 understood a separation cartridge based on the
6 construction proposed by 3B; correct?

7 A. Read that again to be sure.

8 Q. Sure.

9 A. Your question is I would not understand it as
10 proposed, and that's correct.

11 Q. Okay. You're not saying in that paragraph that
12 3B's construction is inaccurate; correct?

13 A. I'm saying that I don't understand the
14 definition of separation cartridge per the 3B
15 definition.

16 Q. Well, 3B's definition is a cartridge that
17 separates gas; right?

18 A. Is it? Can you refer to me where that would
19 be?

20 Q. Yeah. Page 16, I think, has the two
21 constructions in your declaration.

22 A. A cartridge configured to separate gas
23 versus --

24 Q. So I guess my question, just let me repeat
25 it --

1 A. Sure.

2 Q. -- is you're not saying that construction is
3 inaccurate; correct?

4 A. I'm saying that I have a hard time interpreting
5 it without understanding more.

6 Q. Okay. So --

7 A. And to extend, I -- the language as proposed
8 doesn't -- well, let me stop there. Just I have a hard
9 time understanding it as written.

10 Q. The construction as written?

11 A. "A separation cartridge containing," as 3B's
12 proposed --

13 Q. Oh, you're in a different claim.

14 A. I thought you said 6 -- I'm sorry. "A
15 cartridge configured to separate gas." Forgive me. I
16 think that there are multiple ways to interpret it and I
17 think we can do better.

18 Q. But you're not saying it's inaccurate, the
19 separation --

20 A. It's a cartridge that separates gas, sure, yes.

21 Q. Okay. And I think in paragraph 65 you say
22 something about it describing what it does instead of
23 what it is; right?

24 A. Uh-huh. Yes, I do.

25 Q. Would you agree with me -- the "what it is," I

1 think you're referring to structure; correct?

2 A. Yes.

3 Q. Okay. And would you agree with me that it's
4 used -- let's use claim 1 of the '628 patent again as an
5 example -- that the structural features of the
6 separation cartridge are actually in the claim?

7 And I can break it down. Actually, we won't
8 change that.

9 Would you agree that the structural features
10 are actually in the claim?

11 A. I think we discussed that there are some
12 structural features in that claim around the separation
13 cartridge.

14 Q. Okay. So the "what it is" is defined by the
15 rest of the claim language there; right?

16 A. Again, it's my opinion that it's incomplete,
17 that it's -- it doesn't describe enough for me to
18 understand it, and I go back to -- I go back to the
19 specification to understand.

20 Q. Okay. So -- and even if you disagree that
21 there's enough structural elements in there, you would
22 agree with me that there are structural elements in the
23 claim?

24 A. There are structural elements in the claim.

25 Q. Okay. All right. So let's turn back to

1 paragraph 38 of your declaration. And actually, you can
2 look at 37 and 38. I'm going to focus on 38, but maybe
3 take a quick read of 37 and 38.

4 A. Sure. Okay.

5 Q. So in these paragraphs you're describing your
6 opinion as to what a person of a skill in the art,
7 what -- what level of education or competency they would
8 have; correct?

9 A. That's correct.

10 Q. Okay. And you say, in paragraph 38, you say,
11 "A bachelor's degree or equivalent degree in mechanical
12 engineering, chemical engineering, or a related field,
13 and two to three years of experience in the research,
14 design or development of portable oxygen concentrators
15 and related hardware, software, and firmware, or
16 equivalent experience"; right?

17 A. It does say that.

18 Q. So putting aside whether that's correct or not,
19 you would agree with me that everything you described
20 there in terms of what constitutes someone being of
21 ordinary skill in the art would include a heavy degree
22 of mathematics being involved; right?

23 A. For sure.

24 Q. Okay. And that kind of goes likewise with the
25 design and manufacturing of portable oxygen

1 concentrators, that likewise has an extensive
2 application of mathematics; correct?

3 A. Yes.

4 Q. Now, let's take a look at paragraph 76. So in
5 paragraph 76 you're talking about the term "axis"?

6 A. Oh, okay. Yes, I am.

7 Q. And you're familiar with that term?

8 A. Yes.

9 Q. And in this paragraph you cite some dictionary
10 definitions about "axis"?

11 A. Yes.

12 Q. And one of those, down near the end of this
13 paragraph, it's labeled as Exhibit 15, American
14 Heritage; do you see that?

15 A. I do.

16 (Exhibit 4 marked for identification.)

17 BY MR. ATALLAH:

18 Q. Okay. I'm going to mark as Exhibit 4 what was
19 exhibit -- or what is Exhibit 15 to your declaration.

20 A. Great.

21 Q. Have you seen that document before?

22 A. I have.

23 Q. Okay. And just for identification purposes, it
24 has a cover page, Exhibit 15, and some Bates numbers
25 starting on the next page, GCE0005901 through 5965.

1 Do you see that?

2 A. That's correct.

3 Q. And let me clarify that because I think the
4 Bates numbers break. So it's actually 5901 through
5 5912, and then it jumps to 5960 through 5965.

6 So that's what you have in front of you?

7 A. Yes.

8 Q. Great. So this is a -- this is a dictionary
9 that you cite in your declaration in support of your
10 positions; correct?

11 A. Correct.

12 Q. Okay. Now, in this -- in this dictionary, if
13 you go to Bates number 5908, there's a definition of the
14 term "axis." Do you see that?

15 A. I do.

16 Q. And that's actually, in your declaration,
17 that's the page and definition you refer to; correct?

18 A. Correct.

19 Q. In paragraph 76?

20 A. Yes. Just double-checking.

21 Q. So in your declaration you pointed -- you have
22 a quote. Do you see that?

23 A. One starting, "2. Mathematics"?

24 Q. Yeah. Do you see that?

25 A. Yeah, I do.

1 Q. And you have, "2. Mathematics," and then "a."
2 And a definition. And then it goes four dots. Correct?
3 Dot, dot, dot.

4 A. I see that.

5 Q. And then you jump to number 3, correct, and you
6 have that?

7 A. I do.

8 Q. Okay. And we -- and that reads a portion of
9 what is in the definition of "axis" in Exhibit 4;
10 correct?

11 A. I believe that's correct.

12 Q. Okay. Now, as to the first part there, you
13 know, sub-letter a, little a, if you will, it says, "An
14 unlimited line, half-line, or line segment serving to
15 orient a space or geometric object, especially in a line
16 about which the object is symmetric"; right?

17 A. Correct.

18 Q. So in that part of the definition it's actually
19 saying there is a line or line segment that orients an
20 object; right?

21 A. Are you asking me to read it?

22 Q. Is that your understanding?

23 A. Yes. I believe that what it says is the line
24 is taken relative to the geometry of the object.

25 Q. Okay. And then it says, "especially in a line

1 about which the object is symmetric," so it could be in
2 a line about which the object is symmetric; right?

3 A. Correct.

4 Q. Okay. And then I notice -- let's go to
5 Exhibit 4. I notice you skipped over number 2.

6 A. Also numbers 4 through 10, but yes.

7 Q. Well, just -- and actually, let me rephrase. I
8 had that wrong. You skipped over the letter b of number
9 2.

10 A. Okay.

11 Q. You jumped right to 3. And you're right, you
12 left out 4 and 5 as well.

13 A. We're picking the definitions that we feel are
14 relevant to the word.

15 Q. Fair enough.

16 A. But, yes, I see b, 2 b.

17 Q. I'm sorry. We're talking over each other. I'm
18 trying to avoid it.

19 A. I didn't mean to.

20 Q. All right. So let's look at that quote, the
21 part that is omitted by the "..."

22 A. Great.

23 Q. And that's number 2 -- or, sorry, little letter
24 b, and it says, "b. A reference line from which
25 distance or angles are measured in a coordinate system";

1 correct?

2 A. That's what it reads, yes.

3 Q. And that's consistent with 3B's construction;
4 right?

5 A. I see it on page 30.

6 Q. Yes.

7 A. 3B's construction says "a reference line," and
8 this line says, "A reference line from which distances
9 or angles are measured in a coordinate system."

10 Q. So that definition from the dictionary you're
11 relying on would be consistent with 3B's definition;
12 correct?

13 A. If I put an axis into a coordinate system, then
14 it could be -- if I put a line into a coordinate system
15 and use it as a reference line in a coordinate system,
16 then it's an axis, but I have to define the geometry in
17 which I'm applying the reference line.

18 Q. Okay. So little a is also consistent with 3B's
19 definition, correct, because it's a line serving to
20 orient an object?

21 A. 2 a? "An unlimited line, half-line or line
22 segment serving to orient a space or geometric object,
23 especially a line about which the object is symmetric."

24 So I think you're leaving out all the
25 significance of the line relative to specific geometry.

1 Q. Well --

2 A. That's what it says.

3 Q. It says, "with regard to a geometric object";
4 correct?

5 A. It is a line relevant to a specific geometry,
6 whether it's a three-dimensional space, whether it's a
7 three-dimensional object. It is a reference line used
8 that is -- has significance. It becomes an axis because
9 of the presence of the geometric object.

10 Q. Okay. Would you agree that if we look
11 at -- let's take a look at claim 1 of the '628 patent
12 again, just as an example.

13 A. I have it in front of me.

14 Q. Okay. Near the end where I believe "axis" is
15 first introduced, would you agree that "axis" there is
16 in relation to a geometric object?

17 A. The object that it's in relationship to is a
18 cylindrical column of absorbent material.

19 Q. So it is -- in the claim, it is in reference to
20 a geometric object; right?

21 A. Right. And that object then defines the access
22 based on the geometry.

23 (Exhibit 5 marked for identification.)

24 BY MR. ATALLAH:

25 Q. Okay. All right. Let me mark as

1 Exhibit 5 -- let me mark as Exhibit 5 what I believe was
2 Exhibit 16 to your declaration.

3 A. Okay.

4 Q. And this is a cover page, Exhibit 16, and it
5 has Bates number GCE0005913 through 5917, and then it
6 skips to 5951 through 5959, and then it skips again to
7 5966 all the way to 5971. You're familiar with this
8 document?

9 A. Yes.

10 Q. Okay. And if we look at paragraph 76 of your
11 declaration, you also cite a definition from this
12 exhibit as well; right?

13 A. Yes.

14 Q. Okay. And it's referred to in your declaration
15 as the New Oxford?

16 A. Yes.

17 Q. Okay. All right. So if you take a look at
18 Bates -- Bates 5954.

19 A. Yes.

20 Q. All right. And actually 5953, the definition
21 of "axis" begins; do you see that? Right near the
22 bottom right.

23 A. I do.

24 Q. And then it goes on to 5954; right?

25 A. Yes.

1 Q. Okay. And again, in this dictionary, cited by
2 you in the declaration, there is a definition number 2;
3 do you see that?

4 A. Yes.

5 Q. And it says, "2, Mathematics. A fixed
6 reference line for measurement of coordinates," and it
7 guess on with an example. Do you see that?

8 A. I do see that.

9 Q. And 3B's proposed construction is a reference
10 line; correct?

11 A. Yes.

12 Q. So this definition would be consistent with
13 3B's proposed construction; right?

14 A. I don't think so. I don't think you're talking
15 about an axis or reference an axis that is a coordinate
16 system. You're talking about a single line.

17 Q. The definition in this context is a fixed
18 reference line?

19 A. I see that.

20 Q. And that is 3B's proposed construction; right?

21 A. For the measurement of coordinates. So for
22 coordinates I need to have a line that's crossing it
23 defining positive and negative, so I need more
24 than -- more than one axis in order to define a space on
25 a coordinate axis line.

1 Q. In your opinion, when I -- actually, let me
2 back up. When I say, "Plain and ordinary meaning," do
3 you know what I mean?

4 A. I do.

5 Q. You've heard that phrase before?

6 A. I have.

7 Q. Sorry. We're talking over each other.

8 Okay. And that's just a meaning a term would
9 ordinarily have; right?

10 A. Uh-huh. Uh-huh.

11 Q. Can you give me your basis, if you have one,
12 for saying that the plain and ordinary meaning of an
13 axis is not a reference line?

14 A. I believe the plain and ordinary meaning of an
15 axis is a reference line relative to specific geometry.
16 It does not become an axis line until it's taken in the
17 context of specific geometry.

18 Q. Okay. Okay. So in -- but you would agree that
19 it is a -- it is a reference line in the context of a
20 geometry?

21 A. Yes.

22 Q. Okay. All right. Now, let's go -- I hate
23 backtracking here, but I'm going to backtrack a little
24 bit. All right.

25 So you would agree that claims should not

1 be -- should not be construed in a way that makes them
2 indefinite or unclear; right?

3 A. I do.

4 Q. Okay. And I want to go back to your definition
5 of -- or the proposed construction of "separation
6 cartridge."

7 A. Okay.

8 Q. We can find that on page 16.

9 A. 16. I'm on page 16.

10 Q. And you have the proposed constructions there;
11 right?

12 A. I do.

13 Q. Okay. So if GCE's proposed construction is
14 adopted, and let's assume that for a second --

15 A. Okay.

16 Q. -- and then let's go back to -- and I hate to
17 jump around here for you, but let's look at claim 1 of
18 the '628 patent again.

19 A. Yes.

20 Q. You see where "Wherein the bed of absorbent
21 material is disposed along an axis," and it goes on. Do
22 you see that near the end of the claim?

23 A. Yes.

24 Q. Okay. So if GCE's proposed construction of
25 "separation cartridge" is adopted, which -- which of the

1 multiple absorbent beds are you saying is the claimed
2 axis?

3 A. Very interesting question. And when I read
4 this, this claim, what I read is it's defining a
5 cartridge so that it can define an axis. So that
6 this -- when I read this and I look at the description,
7 I interpret this as having three beds, each of them
8 having an axis, and so it's referencing geometry of the
9 inlets and the outlets relative to the central axis
10 of -- of the bed, of each bed.

11 Q. So I think that's something I haven't heard
12 before.

13 A. Okay.

14 Q. You're now saying it's your opinion that there
15 now must be multiple axes in the claim; is that right?

16 A. It is my opinion that the flow is
17 going -- well, you certainly talk about multiple lines.

18 Q. Can you show me where in claim 1 of this patent
19 there's multiple lines?

20 A. "Where the bed of absorbent material is
21 disposed along an axis, when the inlet and the outlet is
22 disposed along the access and the other of
23 the" -- sorry. Let me read more slowly.

24 "Where the bed of absorbent material is
25 disposed along an axis, one of the inlet and the outlet

1 is disposed along the axis, and the other of the inlet
2 and the outlet is spaced apart from the axis," so it's
3 at a point distant from the axis.

4 Q. So but you said there are multiple lines. That
5 claim only refers to an axis, right, one axis?

6 A. Wherein the first direction and the second
7 direction are substantially parallel to the axis, which
8 defines two lines --

9 Q. There --

10 A. -- spaced apart.

11 Q. There are directions. There's no claims of
12 lines. Correct?

13 A. Parallel is a line.

14 Q. No.

15 A. Parallel has no meaning without a line.

16 Q. All right. Let's go back through the claim
17 then and we'll come back to the question.

18 So the claim actually says that
19 there's -- there's movement relative to the receptacle
20 in a first direction. That's a direction, it's not a
21 line; right?

22 Then there is an inlet oriented in a second
23 direction. It's a direction, not a line. And then
24 there's an outlet oriented in the second direction.
25 Again, a direction not a line. And then down -- down

1 near the bottom where we were talking about, it says
2 that the bed of absorbent material is disposed along an
3 axis, and it says that the first and second directions
4 would be parallel to that axis.

5 So there's no multiple lines. There's one axis
6 in this claim. Correct?

7 A. It says that the first and second directions
8 are parallel to each other because they're parallel to
9 the axis, and that I have two objects located on
10 different lines that are parallel.

11 Q. Are directions lines?

12 A. A vector has a linear component for sure.

13 Q. There's no line claimed in this claim
14 explicitly; right? There's a direction claimed.

15 A. There are two directions that are parallel to
16 an axis.

17 Q. Sure.

18 A. If I were to draw a line through your parallel
19 vector, the line would be parallel to the axis.

20 Q. Okay. And without getting into some discrete
21 mathematics here, my question remains.

22 Let's go back to the question I originally
23 asked, which is: If the separation cartridge, if GCE's
24 proposed construction is adopted, requires multiple
25 absorbent columns, each with an inlet and outlet, but

1 then the rest of the claim just says "the bed of
2 absorbent material is disposed along an access," where
3 is the axis when there's multiple beds?

4 A. It's referencing the axis of the bed.

5 Q. Which bed?

6 A. It says, "Wherein the bed of absorbent
7 material."

8 Q. I understand, but GCE's construction there's
9 multiple beds --

10 A. So this is referencing for each bed. I'm
11 saying I have an exemplary bed in my cartridge and I'm
12 calling out the fact that a bed exists and I'm calling
13 out that there's an axis to the bed.

14 Q. So are you now saying that this language now
15 must be amended to say "wherein each of the beds of
16 absorbent material is disposed along an axis"?

17 Is that your understanding?

18 A. I would have to think more about it, if I can,
19 for a moment.

20 Q. Sure.

21 A. That would be one way to solve it.

22 Q. It's not a construction GCE has proposed,
23 though; right?

24 A. No.

25 Q. Okay. Isn't it kind of more likely that if

1 GCE's proposed construction of "separation cartridge" is
2 adopted, it becomes a little unclear which bed the axis
3 might refer to?

4 A. I still don't think so.

5 Q. Because you're reading the claim to require
6 that the words "each of the absorbent beds" now being
7 referred to as part of the separation cartridge, must
8 have their own axis?

9 A. Because I'm reading it saying there's a bed of
10 absorbent material and there's an axis defined relative
11 to that bed. It doesn't preclude the -- the additional
12 beds or the additional axes. It's just saying that
13 there's an inlet and outlet for this bed and those
14 inlets and outlets are arranged relative to how it's
15 described.

16 Q. Well, you've been -- I don't want to say
17 adamant, but fairly adamant today that there must be
18 multiple beds --

19 A. I still am, yeah.

20 Q. -- with multiple inlets and outlets; right?

21 A. Yes.

22 Q. And nowhere in this claim does it recite
23 multiple axes. In fact it refers to the single
24 absorbent bed that is introduced in this claim, and then
25 references the relationship with some components based

1 on that axis that's claimed; right?

2 A. That's what this reads, yes.

3 Q. So for GCE's proposed construction to work, you
4 would also have to further amend the claim to add
5 multiple axes, one for each bed; correct?

6 A. There may be multiple ways to make them work,
7 but that would be one way.

8 Q. What other ways can you think of?

9 A. I'm not at a place where I've been asked this
10 question and given time to think about it. I would have
11 to have more time.

12 Q. So as we sit here today, you don't have
13 -- there's no other reason you can think of right now?

14 A. I don't have an answer to that, no.

15 Q. Okay. Would you agree that if -- if the -- if
16 adding additional language of multiple axes for each bed
17 is not also added to the claim, if that's not added,
18 GCE's proposed construction makes the claim less clear,
19 because you're not really sure which axis the
20 bed -- which bed the axis goes with?

21 A. Again, I think you're arguing a case that one
22 way -- one problem is more -- is worse than another
23 problem.

24 I look at this and I think I can easily
25 interpret, because the word "bed" and "axis" are used in

1 a single paragraph, that the axis is relative to a bed.
2 I understand your argument that you would want to say
3 there was an axis and each bed having an axis. I'm
4 not --

5 Q. Let me be clear. I'm not arguing there should
6 be multiple axes. I'm asking you how -- to me the claim
7 as written is very straightforward. I don't think any
8 of this needs to be added, but I'm trying to ask you
9 that if your proposed construction of "separation
10 cartridge" is adopted, how does the rest of the claim
11 work without adding more language?

12 A. I would say that I'm not an expert in
13 drafting -- drafting claims language. I am certain that
14 there's a way to make that claims language be
15 consistent. When I read it, I don't see the conflict in
16 this as being as large as the conflict of the
17 inconsistency with the design of the separation
18 cartridge.

19 Q. But as we sit here, without adding additional
20 language to the claim, you can't tell me how it -- how
21 that claim works with GCE's construction of separation
22 cartridge; correct?

23 A. Define "works."

24 Q. How the rest of the claim with regards to axis
25 makes sense. Correct?

1 A. I think you would argue that it adds ambiguity
2 and I would argue it doesn't.

3 Q. And how -- so, okay, then if there are
4 multiple -- again, if we don't add a bunch of additional
5 language requiring each -- each of the multiple beds to
6 have an axis, if we don't add that, then which bed is
7 the axis referring to?

8 A. I understand what you're saying and okay.

9 Q. What does that mean?

10 A. It means that I feel the ambiguity at the top
11 is more severe than the ambiguity that would create, and
12 you don't, so I understand your -- I understand your
13 argument and I concede that that is an argument. I know
14 the question is is one problem worse than the other. I
15 don't know.

16 Q. GCE is not proposing here that "separation
17 cartridge" is ambiguous; correct?

18 A. They are not proposing it's ambiguous.

19 Q. So the ambiguity of the two that was just
20 described is really with regards to axis, right, in
21 terms of what we were just discussing?

22 A. If you choose to feel it's ambiguous. I think
23 the bed of absorbent material has an axis. And I
24 understand your comment that says which bed, but I -- I
25 look at this and say okay.

1 Q. Okay. Let's turn to paragraph 87 of your
2 declaration.

3 A. I'm at page 87 -- paragraph 87.

4 Q. Yeah. So do you see the term under section D
5 on that page?

6 A. I do.

7 Q. Okay. And you're suggesting that these terms
8 are indefinite?

9 A. I'm suggesting that I can design several
10 configurations of a concentrator that are not bounded by
11 the language as written.

12 Q. Does being able to design something that you
13 don't think meets claim language make that claim
14 language indefinite?

15 A. No, but knowing where the bounds of the claim
16 lie is important for making it definite.

17 Q. So if we take a look at paragraph 88 --

18 A. Okay.

19 Q. -- and kind of going all the way down. Let's
20 go 88 all the way down to 92 or so.

21 A. Okay.

22 Q. You're walking through some analysis here with
23 regard to these claim terms.

24 A. Sure.

25 Q. And so, for example, if we look at page 37, you

1 took some figures from the specification of the patents
2 in suit and annotated them; correct?

3 A. Correct.

4 Q. And so, for example, we're talking about some
5 lines here in this claim; right?

6 A. Refer to what you're --

7 Q. The claim language we're talking about
8 is -- makes reference to first and second lines.

9 A. Yes.

10 Q. And it's in some claims third and fourth lines?

11 A. Yes.

12 Q. And so if we look at, for example, page 37, you
13 took some figures there and you're able to annotate
14 those lines; right?

15 A. Yes.

16 Q. Okay. And -- and if we take a look at the
17 actual -- let's look at one of the claims. Let's look
18 at -- let's go to claim 1 of the '614 patent. So you
19 allege in your -- well, so if we take a look at claim 1,
20 for example, it describes those same first and second
21 directions early in the claim; right?

22 A. Uh-huh. Yes.

23 Q. All right. And then it says there's a first
24 line extending parallel to the first and second
25 directions; right? Passes through the outlet.

1 A. Correct.

2 Q. And then a second line, spaced apart from the
3 first line, extending parallel to the first line passes
4 through the inlet.

5 A. Correct.

6 Q. Okay. So that's structurally defining the
7 positions of those lines; correct?

8 A. Relative to the inlet and the outlet.

9 Q. Right. You're placing those lines relative to
10 the inlet and outlet; correct?

11 A. Correct.

12 Q. Okay. So in that sense it's not abstract where
13 the placement of the lines are. They're being described
14 with regards to the inlet and the outlet.

15 A. They are.

16 Q. Okay. Now -- now, if you take a look back at
17 90 to 92 paragraphs in your declaration --

18 A. Okay.

19 Q. -- you walk through, or at least -- I don't
20 want to put words in your mouth, but you walk through an
21 explanation of the flow paths that are being described
22 in some of these claims.

23 A. Yes.

24 Q. Is that right?

25 A. Give me a moment to read to be sure. So I'm

1 depicting lines that I believe represent what's shown in
2 the claims.

3 Q. Sure. In those paragraphs along with that,
4 you're generally describing the flow paths that are
5 being, in your mind, claimed; correct?

6 A. How do you come to that conclusion?

7 Q. I'm just asking in your declaration if that's
8 what you're describing.

9 A. And I'm asking you to point to where I say
10 that. I'm just trying to read it.

11 Q. Yeah. Paragraph 92, starting there.

12 A. Thank you.

13 Q. Sure.

14 A. Okay. I've read it. Can you repeat the
15 question.

16 Q. So in those paragraphs, including 92, you're
17 generally describing the flow paths that the claims are
18 referring to; correct?

19 A. Lines that the flow is at least partially on,
20 yes.

21 Q. Okay. Is that -- and paragraph 92, is that --
22 is your understanding there; is that -- is that
23 accurate?

24 A. I just read it. I believe it's accurate.

25 Q. Okay. So now, if we look at claim 1 again in

1 the '614 patent --

2 A. Okay.

3 Q. -- so after it defines, you know, the -- after
4 it defines the lines, that last clause is what I'm
5 looking at; do you see that?

6 A. Yes.

7 Q. It says, "So wherein the separation cartridge
8 is configured such that when fluid flows through the
9 separation cartridge, fluid flowing along the first line
10 contacts absorbent material of the bed, and fluid
11 flowing along the second line does not contact absorbent
12 of the bed"; right?

13 A. I do see that.

14 Q. All right. So this is all qualified by when
15 fluid is flowing; correct?

16 A. Yes.

17 Q. Okay. Now, you've alleged two ambiguities;
18 correct?

19 A. That's correct.

20 Q. Okay. Is it your position that the claim
21 language as written just has too many unanswered
22 questions?

23 A. In reviewing what I have here, I believe that's
24 not an inaccurate way to represent what I'm saying.

25 Q. Okay. Now, let's turn to what you phrase as

1 ambiguity number 1.

2 A. Okay.

3 Q. Now, this is referring to the first/third
4 lines, which I think first line is in both claims, third
5 is in one of the other claims, but -- does that make
6 sense?

7 A. Pardon me one moment. There we go. It came
8 unstapled.

9 Q. Sorry.

10 A. You were asking about paragraph 93?

11 Q. Yeah. Let's start there.

12 A. Okay.

13 Q. So you were talking about the first -- first
14 and/or third lines; correct?

15 A. Okay.

16 Q. Okay. Is that right?

17 A. The first/third purple lines, yes.

18 Q. Okay. And in our claim, let's use the first
19 line as an example.

20 A. Okay.

21 Q. The first line is -- when fluid is flowing
22 along the first line, it contacts the absorbent
23 material; right? That's what the claim says?

24 A. That is what it says.

25 Q. Okay. And that is, just to back up, that is

1 when -- that's, again, with the same qualification we
2 talked about, which is that the separation cartridge is
3 configured such that when fluid is flowing through the
4 separation cartridge, this is what occurs; right?

5 A. Yes.

6 Q. Okay. And that would -- fluid will only be
7 flowing through the separation cartridge when it's in
8 the oxygen concentrator and the oxygen concentrator is
9 on or active?

10 A. Yes.

11 Q. Okay. Now, you would agree with me, looking at
12 the language of claim 1, for example, there is no
13 requirement that it contact at every position along the
14 line; correct?

15 A. It's ambiguous. I don't know.

16 Q. Well, does the claim say that, that it must
17 contact at every position along the line?

18 A. It says, fluid -- "fluid flowing along the
19 first line," which means fluid that is flowing along
20 that line is in contact with the absorbent material.
21 And I believe there are times when fluid is flowing upon
22 that line where it is not in contact with that absorbent
23 material.

24 Q. Well, that's not -- that's not --

25 A. It's not what it says?

1 Q. So -- right. And so when fluid is flowing, at
2 some point it will contact the absorbent material along
3 that line; correct?

4 A. It doesn't say "at some point." It says it
5 contacts.

6 Q. It does. Fluid flowing along that line will
7 contact.

8 A. No.

9 Q. Correct?

10 A. You're putting --

11 Q. No, I'm asking you if that's what happens.

12 A. It will contact it at some point in time, yes.

13 Q. Okay. Does the claim say where it has to
14 contact the absorbent material?

15 A. Fluid flowing along the line, so any fluid
16 flowing along that line by this -- by this language, is
17 in contact with the absorbent material.

18 Q. So the claim doesn't require a particular
19 location; correct?

20 A. It doesn't say where it is. It just says fluid
21 flowing along the line contacts the material.

22 Q. And we would agree that -- we would agree that
23 in terms of when, it's when fluid is flowing through the
24 separation cartridge; correct? Like we just talked
25 about?

1 A. When there is fluid flowing in the device, it
2 will be flowing through the separation cartridge and it
3 will be flowing along that line, and at least some time
4 along that line it will contact the absorbent material.

5 Q. Okay. Now, let's take a look at the second
6 line, which is the line where the claim says "when fluid
7 is flowing through the separation cartridge, the
8 separation cartridge configured" -- let me back up.
9 Strike that.

10 Let's take a look at the second line, which I
11 believe in your -- in your figure is the green line.

12 A. Okay.

13 Q. Do you see that?

14 A. I see the green lines.

15 Q. Okay. And that would be the line where, in the
16 clause we've been discussing, fluid flowing along the
17 second line does not contact absorbent material of the
18 bed; correct?

19 A. That's correct.

20 Q. Now, am I understanding your -- so you allege
21 an ambiguity here as well; correct?

22 A. I do.

23 Q. Okay. And I want to make sure I understand it.
24 You're saying that because eventually the fluid flowing
25 along the second line will turn and then flow along the

1 first line, it's unclear whether it does or doesn't
2 contact absorbent material; correct?

3 A. Are you referring to ambiguity 1 or number 2?

4 Q. Number 2.

5 A. Thank you. Speed things up. So can you repeat
6 your question?

7 MR. ATALLAH: Can you repeat it for me?

8 THE WITNESS: Thanks.

9 (Requested material read back.)

10 THE WITNESS: I'm still not entirely sure I
11 understand the question. I will try.

12 I understand that fluid flows along the purple
13 line, the first line, contacts the material, and fluid
14 that flows along the green line does not contact the
15 absorbent material. I think there's an awful lot of
16 other flows going on and at some times, the way that
17 this reads is true and at some times it's not so sure.
18 And again, I think we can work it out by going back and
19 looking at the drawings and reading the specification
20 and then we can understand it.

21 BY MR. ATALLAH:

22 Q. Okay. So with the specification, you're able
23 to understand it; correct?

24 A. I think so.

25 Q. Okay. And you said "other flows going in."

1 What other flows were you referring to?

2 A. Just meaning that the gas is not always in
3 contact. When it's on that line, it's not always in
4 contact with the absorbent bed and there's more
5 happening that we don't -- that isn't clarified by the
6 way this is described.

7 Q. When you say "that line," are you referring to
8 the first or the second line? Sorry.

9 A. Let me go back and read it again.

10 As I say hear, the claim language requires the
11 fluid flowing along the second line does not contact the
12 absorbent material of the bed, but it doesn't have any
13 temporal. That means while the fluid is within the
14 inlet or spatial, between the ends of the inlet
15 limitation, and to me what that means is there are
16 things that are going on along those lines that are not
17 as described.

18 Q. So let's break that down.

19 A. Okay.

20 Q. When fluid is flowing through the inlet, is it
21 contacting absorbent material?

22 A. Is it contacting absorbent material? You could
23 argue that it is.

24 Q. Is that what the specification shows?

25 A. No. I would read it from the specification

1 that it does not.

2 Q. Let -- maybe we can take --

3 A. From the drawings, I can tell you that it does
4 not.

5 Q. So let's look at your annotations. How about
6 that? Let's look at this. Let's look at page 37.

7 A. Okay.

8 Q. And the second line we're referring to is the
9 green line; correct?

10 A. Yes.

11 Q. Okay. So when it -- when fluid is flowing
12 along that green line; right?

13 A. Yes.

14 Q. It won't -- it's not going to contact
15 absorbent. The absorbent is in the column; right?

16 A. Correct.

17 Q. So what is ambiguous about that?

18 A. I think that part of the description I
19 understand.

20 Q. Okay. So it's really the second part, the
21 purple line?

22 A. I think the flow as it's going through here is
23 more complex than represented.

24 Q. Okay. But if we look at the claim language,
25 what is -- what is unclear?

1 What is ambiguous about the claim language that
2 you can't understand?

3 A. What page am I on? Again, as it says, fluid
4 that's flowing upon -- let's talk about the first
5 line --

6 Q. Uh-huh.

7 A. -- is in contact with the bed.

8 Q. Where is fluid on the first line in contact
9 with the bed?

10 A. When the fluid is inside the bed.

11 Q. Except that the claim just says that, as
12 defined, fluid on that first line does not contact the
13 absorbent.

14 A. Excuse me. I'm meaning the other line.

15 Q. Oh, you're referring to the second line?

16 A. Maybe I am. Sorry if I'm crossing that. Let
17 me go back.

18 MR. GILL: See, it's indefinite.

19 MR. ATALLAH: We disagree.

20 THE WITNESS: Deconstructing language certainly
21 is not simple.

22 Fluid flowing along the first line contacts the
23 absorbent material of the bed, and fluid flowing along
24 the second line does not contact the absorbent material
25 of the bed, so when we go look at the fluid flowing

1 along the first line.

2 MR. ATALLAH: Sure.

3 THE WITNESS: -- per the specification, per the
4 drawings, there's time when it's contacting the bed and
5 time when it's still moving on that line and not
6 contacting the bed.

7 Q. Okay. So that's what we're focused on with
8 this argument; correct?

9 A. Sure.

10 Q. And what -- when is -- when is that unclear?
11 Meaning, when is it not contacting the absorbent
12 material?

13 A. When it's not inside the material.

14 Q. Well, when does it not contact absorbent but
15 it's flowing along the line?

16 A. If I look at the drawing, it's going to -- it's
17 going to pass through 284f to 80f, 286c. Excuse me.
18 Those may not be the ones directly in line. I'm looking
19 at the purple line. So yes, the purple line, there are
20 other elements in this flow path that are not the bed.

21 Q. Okay. So the claim actually says "contacts the
22 absorbent material of the bed," so we're not referring
23 to the elements that are not the bed in the claim.

24 A. Right. And so the -- and let's go back to the
25 claim again. Sorry, my thing is falling apart.

1 Q. No, you're good.

2 A. Just keeping my pages organized. When fluid
3 flows through the separation cartridge, the fluid
4 flowing along the first line contacts the absorbent
5 material of the bed, and sometimes -- and my comment is
6 there is fluid flowing along the first line that does
7 not contact the absorbent material of the bed. It has
8 passed beyond. It's no longer in contact.

9 Q. So is the flow -- when fluid is flowing through
10 the separation cartridge, is it just supposed to stop in
11 the bed?

12 A. I don't know what it does based on how it's
13 written.

14 Q. Well, as a person of ordinary skill, you would
15 understand that fluid will be inlet, it will pass
16 through a bed, and it will be outlet as product gas;
17 right?

18 A. Yes.

19 Q. Okay. So with that background understanding,
20 which I'm sure -- I'm sure you have, based on your
21 experience --

22 A. Sure.

23 Q. -- wouldn't you be able to look at this claim
24 and understand that when a line -- when that first line
25 says "contacts the absorbent material of the bed," it's

1 talking about that when fluid is flowing through the
2 separation cartridge, that fluid, it's configured so
3 that that fluid will flow through the bed and contact
4 material along that line?

5 MR. GILL: Objection. Vague and ambiguous.

6 THE WITNESS: I'm struggling because what I'm
7 saying back is that, yes, by design the gas is supposed
8 to contact the bed, and then there are other elements
9 that are put in plain words not contacting the bed but
10 still remaining on that line. So I'm just saying that
11 it's not clear.

12 BY MR. ATALLAH:

13 Q. But you at least understand that flowing along
14 that line it will contact the bed?

15 A. I think I can go back to the drawings inside
16 the document and observe what's written and how it is to
17 see that's what's going on.

18 Q. Okay. And you would agree with me that there's
19 nothing in the claim that says -- that says it can't
20 pass through other elements; right? It just says that
21 when it's flowing --

22 A. It's in contact with the bed, which it's not.

23 Q. It contacts the bed, not that it's in contact.

24 A. Well, contacts is an active verb.

25 Q. Well, but it's, again, qualified by when fluid

1 is flowing to the separation cartridge, that cartridge
2 is configured so that.

3 A. So that the gas is in contact with the bed when
4 it's on that line, and I'm just saying I could
5 design -- I could design a concentrator where -- it just
6 feels very unclear to me.

7 Q. So you were going to say you can design a
8 concentrator where that doesn't occur? Or I don't want
9 to put words in your mouth. What were you going to say
10 there?

11 A. Well, I'm trying to understand where the bounds
12 of it are, and the way I read this is the gas always has
13 to be in contact with the bed and it certainly isn't in
14 the design.

15 Q. Does the -- does the claim say that the gas
16 must always be in contact with the bed along -- along
17 the first line?

18 A. "Fluid flowing along the first line
19 contacts" -- active -- "the absorbent material of the
20 bed." You can read that as contacts once or you can
21 read that as contacts the entire time, and that to me is
22 an ambiguity.

23 Q. Okay. But you're at least able to understand
24 that language; right?

25 A. I think when I go back to the -- go back to the

1 specification and I read the drawings, I see the
2 drawings, I can understand it.

3 Q. Okay. Now, let's take a look at claim 8.

4 A. Okay.

5 Q. Claim 8 is the pending claim.

6 A. Yes.

7 Q. Correct?

8 A. I can see claim 8.

9 Q. And again, we have the language of "separation
10 cartridges configured such that"; right?

11 "When fluid flows through the separation
12 cartridge, fluid flows along the first line in a second
13 direction and flows along the second line in a first
14 direction."

15 Do you see that?

16 A. Yes.

17 Q. Okay. So -- so this actually provides more
18 detail about where the fluid is flowing and in what
19 direction; right?

20 A. When I'm operating an oxygen concentrator, gas
21 flows in both directions at different points in time.
22 So the same bed that will be flowing in one direction at
23 one point in time will be flowing in the opposite
24 direction in another point in time, and that's how the
25 cycle is operated.

1 So fluid -- so when is the fluid flowing in one
2 direction, when is the fluid flowing in the other
3 direction? I understand that it's going back and forth
4 across those lines. I still read that as not clear.

5 Q. Okay. But it does provide some more detail
6 about the flow that we're talking about; correct?

7 A. It provides more detail. Whether I would
8 evaluate the detail as being helpful is another
9 question.

10 Q. Okay. And the first -- the -- in claim
11 8 -- no, actually, let me ask you this.

12 A. Sure.

13 Q. When -- when the fluid exits the bed, it's
14 actually coming out of the cartridge; correct?

15 A. You need to be more specific.

16 Q. Sure. So like, for example, if we take a look
17 at some of your annotations, right, it looks like that
18 when we flow along that first line where it's going to
19 contact absorbent material, that when it exits the bed,
20 it's also exiting the separation cartridge; is that your
21 understanding?

22 A. Yes. When gas goes from the bed to the
23 separation cartridge, it is intended to pass through the
24 separation cartridge, so it will also exit the
25 separation cartridge.

1 Q. Okay. So you would agree with me that when gas
2 exits the separation cartridge, it's no longer fluid
3 flowing through the separation cartridge; correct?

4 A. Except that many oxygen concentrators are
5 designed where fluid does flow through the -- through a
6 manifold that is connecting multiple beds to share
7 pressure between them or to move gas back and forth
8 between them.

9 Q. Okay.

10 A. So I would say I don't know. I certainly have
11 seen enough concentrators that do that.

12 Q. Okay. In your declaration on
13 paragraph 94 -- no. Hold on.

14 A. Sure.

15 Q. So in paragraph 93 you talk about in that first
16 ambiguity, you're talking about at some -- you say, "At
17 other times does not contact the absorbent columns (when
18 it's passing through the head space)."

19 Do you see that?

20 A. I do.

21 Q. Okay. Is fluid flowing in the second direction
22 when it's sitting in the head space?

23 A. Let's get a definition of the directions again.
24 I need you to clarify what you're asking. I'm sorry.

25 Q. You're saying in your declaration -- all right,

1 so let me back up.

2 A. Please.

3 Q. In the claim, the second -- the claim recites,
4 in the independent claim, a second direction; right?

5 A. Independent claim, the second direction. Okay.

6 Q. And opposite the first direction?

7 A. Yes.

8 Q. Okay. And in claim 8 we say fluid flows on the
9 first line in that second direction, and that fluid
10 flows along the second line in the first direction.

11 A. Reversing the direction of flow.

12 Q. And we're saying along -- so the second line is
13 where there's no contact.

14 A. Yes.

15 Q. And the first line is where there is contact.

16 A. Got it.

17 Q. Is that right?

18 A. That is.

19 Q. So in your declaration, you say -- you make
20 mention of "there are times when it does not contact
21 absorbent columns," in paragraph 93, "e.g., when it is
22 passing through the head space."

23 Do you see that?

24 A. Yes.

25 Q. Okay. Is fluid flowing in the second direction

1 when it's passing through the head space, or does it hit
2 the bed when it goes in that direction?

3 A. Is it flowing in the second direction. If the
4 second direction -- upstream or downstream of the bed
5 when it's flowing in the second direction?

6 Q. I believe -- I believe in your annotations it
7 would be downstream.

8 A. Thank you.

9 So gas -- gas coming out of the bed will flow
10 into the head space.

11 Q. That's not what -- I think your declaration is
12 saying that -- well, I actually don't know what your
13 declaration is saying.

14 You're talking about a head space here. What
15 head space are you talking about?

16 A. Head space is any volume that exists at the end
17 of -- either end of the column that has to be
18 pressurized and depressurized in a given cycle, but it's
19 not occupied by absorbent material.

20 Q. Okay.

21 A. So there's head space on either end of the
22 column.

23 Q. Okay.

24 A. So if gas is flowing in the bed, sometimes gas
25 is flowing in the head space, depending on the state at

1 which you're absorbing gas. It's very temporal.

2 Q. Okay. So but for gas to -- if the gas is
3 coming into the bed and going through the bed and then
4 to a head space, it would have to have contacted that
5 absorbent before it gets to that --

6 A. It did contact it at some point in time. I
7 think we established that.

8 Q. Okay. Let's take a look at paragraph 96 real
9 quick.

10 A. Sure.

11 Q. And I just -- my question is, the focus there
12 is just 3B had proposed or had said these are the plain
13 and ordinary meanings of a couple of these terms.

14 Do you see that?

15 A. I do.

16 Q. Is there anything about 3B's construction of
17 "contact/do not contact" that you disagree with?

18 A. I have to look. I don't think it matters. I
19 think it's fine.

20 Q. Okay. And same question with regards to 3B's
21 proposed construction of "fluid" and it's "flowing" or
22 "flows," depending on where you're finding it, "along,"
23 any issue with that construction?

24 A. Ask that again, if you would.

25 Q. Yeah.

1 A. Sorry.

2 Q. No. No. I just --

3 A. Getting into nuances.

4 Q. No. Similar question to the "contact/do not
5 contact," but in this proposed claim term that we're
6 talking about in whole, right, 3B proposed some plain
7 and ordinary meanings of a couple of terms within your
8 larger terms, and my understanding is your opinion is
9 that these larger terms are indefinite; is that correct?

10 A. Yes.

11 Q. Okay. And my question more is, just looking at
12 the small terms that 3B said have these plain and
13 ordinary meanings, we just talked about "contact/do not
14 contact," but same thing for "fluid," "flowing" or
15 "flows along," do you disagree with that construction at
16 all, outside of the context of your allegation that the
17 larger claim terms are indefinite?

18 A. Fluid flows along what?

19 Q. It's in your terms.

20 A. Sorry. I'm just trying to...

21 I think -- I think the differences are small.

22 Q. When you say differences, maybe --

23 A. There's some different language that's proposed
24 here in my declaration, and I -- I'd have to understand
25 more as to how they're being applied to understand what

1 the differences were.

2 Q. Let me ask it a different way then.

3 A. Okay. Please.

4 Q. Maybe I can simplify this.

5 With the caveat that in your declaration you
6 say that 3B's constructions do not resolve the alleged
7 ambiguities that you're putting forth, with that caveat,
8 do you otherwise disagree that 3B's constructions are
9 the plain and ordinary meaning of those sub-terms?

10 A. Okay. Thank you. I don't have a problem with
11 the way those are described.

12 Q. Okay.

13 A. Thank you for clarifying.

14 MR. ATALLAH: Got to ask it the right way
15 sometimes to get on the same page. Okay. Let's take a
16 quick break.

17 (A brief recess was had.)

18 BY MR. ATALLAH:

19 Q. All right. So let's turn to -- we're going
20 back to your declaration, which is Exhibit 1, I believe,
21 that we now have clipped. Let's look at page 40. And
22 there's a term here, "receptacle."

23 Do you see that?

24 A. Sure. Yes.

25 Q. Okay. Now, there are, in your table here,

1 there are two alternative constructions proposed by GCE;
2 correct?

3 A. I see two, yes.

4 Q. Okay. So let me just start with can you tell
5 me what the difference between them are, to your
6 understanding?

7 A. Well, functionally what I understand is one was
8 proposed and rejected and the second one was proposed as
9 a second offering. If I'm reading the language, one of
10 them refers to interfacing with inlets and outlets and
11 the other one just talks about a structure configured to
12 receive and release the separation cartridge.

13 Q. All right. So the first one is -- would you
14 say the first one is narrower than the second one?

15 A. Sure.

16 Q. Requires more?

17 A. It's more specific, yes.

18 Q. Okay. Now, which -- in your opinion, which of
19 those two constructions do you believe is correct, or
20 neither?

21 A. I think either would be fine.

22 Q. Well, in this process the court has to provide
23 the correct meaning to claim terms that are disputed, so
24 which one, in your opinion, is the correct, or which one
25 of these three, I guess I'll say, giving 3B's there as

1 well?

2 A. My short answer and my basis for making the
3 conclusion, if that can help, is that a receptacle is
4 not just something into which you put something else.
5 It is defined by the interaction between the two things
6 that go together.

7 So a plastic bag is not a receptacle for a
8 screwdriver. That's -- it's a bag. It's a container,
9 but the receptacle is something that has some relation
10 that goes on there. So when I talk about a trash
11 receptacle, it's a container designed to retain trash
12 and keep flies out and whatever else. When I talk about
13 a like an electrical outlet, I can say it's a receptacle
14 for a plug because it's designed to interface in some
15 way.

16 And so the plain and ordinary meaning, which is
17 a space configured to receive and contain something, I
18 think that's not the plain and ordinary meaning because
19 the plain and ordinary meaning is specific to a geometry
20 or to a use.

21 So when I read either of these two things, it's
22 a structure that's designed to receive, you know, in the
23 context of this invention. It's a structure designed to
24 receive and retain the separation cartridge, because
25 that's what that receptacle does.

1 If we want to look and say what makes it a
2 receptacle? What are the features that define what it
3 is? Well, it interfaces with it. And how does it
4 interface? It interfaces with these -- the inlets and
5 the outlets so the gas can be exchanged, the same way
6 the receptacle for the battery would interface with the
7 battery by having a positive and negative terminal.

8 So that's -- that's the basis and more or less
9 the depth of what I would suggest, is that I think
10 either of these talks about the relationship between the
11 receptacle and that which goes in it, and I think, you
12 know, loosely speaking the other one just talks about
13 being a container.

14 Q. So let me digest that a little bit.

15 A. Please.

16 Q. So nothing in -- if we look at the claims where
17 "receptacle" is recited, which I believe are the two
18 independent claims of the '628 and the first independent
19 claim of the '614, I believe, nothing in there requires
20 any kind of interface with an inlet or an outlet, right,
21 nothing in those claims?

22 A. I'm looking for the claims you're referencing
23 just so I can just be sure. You're asking me to
24 confirm.

25 Q. I think you actually have them copied on the

1 next two pages --

2 A. Okay. Then I can do that easier. And your
3 question was?

4 Q. So my question is: Nothing in those claims
5 where "receptacle" is recited requires any kind of
6 interfacing with an inlet or outlet; correct?

7 A. Okay.

8 Q. Is that right?

9 A. There is -- there is nothing specific to the
10 interaction between the inlets and the outlets. The
11 inlets and outlets are quoted to exist. The receptacle
12 is quoted to exist as something that interfaces with the
13 cartridge.

14 Q. Okay. And you're -- okay. So at least as to
15 inlet/outlet, there's nothing that has any relationship
16 to interfacing with the inlet and outlet in the claims;
17 correct?

18 A. Correct.

19 Q. Okay. Now, I think I -- we can break down the
20 kind of explanation that you're giving us just into
21 pieces.

22 I think part of what you're saying, if I'm
23 understanding you correctly, is that a receptacle has to
24 have a structure, and I think you see that in both of
25 GCE's proposed constructions; correct?

1 A. I think if we're looking to define the word
2 "receptacle," "receptacle" is defined relative to that
3 which it receives.

4 Q. Okay. Now, we talked a lot today about claims.

5 A. Uh-huh.

6 Q. And again, I think we agree that you have to
7 read claim terms in a claim relative to other parts of
8 the claim; correct?

9 A. I agree. Yes.

10 Q. Okay. So let's go to -- let's look at -- let's
11 say we look at claim 11, just as an example, of the
12 '628, it's actually on the second page there if you want
13 to just use that. And this is in your declaration.

14 A. Yes.

15 Q. You have a highlighted version of claim 11. Do
16 you see that?

17 A. I do see that.

18 Q. In paragraph 101; correct? So we're looking at
19 the same thing?

20 A. Yes.

21 Q. Okay.

22 A. I'm still reading and I realized you asked me.

23 Q. No, that's fine. Okay. So in this claim,
24 there is a housing claimed; correct?

25 A. Cartridge module comprising a housing. The

1 cartridge module has a housing and the housing is -- is
2 the housing part of the cartridge or is the housing part
3 of the receptacle? I think the receptacle interfaces
4 with the housing. Okay.

5 Q. So let me -- the part I'm focused on here is
6 the claim says, "The housing defining a receptacle"; do
7 you see that?

8 A. I do see that.

9 Q. Okay. So would you agree with me that the
10 housing is a structure defining the receptacle?

11 A. Okay.

12 Q. Yeah, you would agree with that?

13 A. I -- you know, the question is whether or not
14 it's clear and definitive enough to know what the
15 receptacle is, and debating what a receptacle is, again,
16 I go back to look at the -- look at the remainder of the
17 patent, but I don't have a problem with the way that's
18 written.

19 Q. Okay. But we would agree it says, "the housing
20 defining a receptacle"; correct?

21 A. "Cartridge module comprising a housing. The
22 housing defining a receptacle." Okay.

23 Q. Okay. Now, wouldn't that suggest, because the
24 housing is the structure, that the receptacle is
25 actually just the space?

1 A. The structure. The receptacle is a --

2 Q. Is the space, consistent with 3B's proposed
3 construction.

4 A. No. The space isn't the thing. It contains
5 the space. It's shaped to mate with the object that it
6 holds, but why would that be -- why would the space be a
7 receptacle?

8 Is the space inside of a garbage can a
9 receptacle or is the garbage can the receptacle.

10 Q. Well, what I'm asking you is I'm looking at the
11 two constructions from each side.

12 A. Right. Yeah.

13 Q. Actually, three. GCE's construction says "a
14 structure"; right?

15 A. Yes.

16 Q. But that structure is already in the claim, so
17 is that a different structure?

18 A. There is a structure. There's a structure
19 defined as a housing, some container, some physical
20 container. I'm --

21 Q. I'm trying -- so, look, if we take -- if we
22 take either of GCE's proposed constructions.

23 A. Yes.

24 Q. Right? Both of them require the receptacle be
25 a structure. But the claim already says that the

1 housing defines the receptacle, and we've just talked
2 about the housing is a structure.

3 So is GCE proposing that the receptacle must be
4 a different structure or is it just a superfluous term
5 in the construction?

6 A. Again, I think you guys are looking for a
7 definition you can agree on, and I look at this and say
8 I don't think it's a -- I don't think a receptacle is a
9 space. You know, it is -- it is a structure defined
10 relative to the thing it contains, which is -- it can be
11 defined based on what it contains or what it contains
12 and it does.

13 Q. So if I take GCE -- let's just use the second
14 one.

15 A. Okay.

16 Q. "A structure configured to releasably receive
17 and at least partially contain the separation
18 cartridge." That's GCE second proposed construction.

19 A. Yes.

20 Q. If I were to put that into the claim in place
21 of "receptacle," would the structure being referred to
22 there be the housing or something else, or would we not
23 know?

24 A. "The housing defining the structure configured
25 to releasably receive." So if I read this, doing what

1 you've asked, I think, tell me if I'm incorrect.

2 Q. Sure.

3 A. I'm trying to understand the question. If I
4 reread this, it would say, "A cartridge module
5 comprising a housing. The housing defining a structure
6 configured to releasably receive and at least partially
7 contain the separation cartridge."

8 What's wrong with that?

9 Q. I'm trying to understand, "the structure" that
10 you just read there when you put it into the claim, is
11 that the housing itself or is that something else?

12 A. So the cartridge module is a housing and the
13 housing is a receptacle, and the housing is defined by
14 what it does.

15 Q. Okay. So you think -- in your mind, that's
16 consistent?

17 A. I don't see a problem with that.

18 Q. Okay. So under GCE's proposed construction, if
19 a -- if something has a housing, according to this
20 claim, then it has the receptacle because it has the
21 structure; right? Is that your understanding?

22 A. A housing is a structure and then it becomes a
23 receptacle relative to the thing that you're putting
24 into it.

25 Q. So if a housing is a structure, then

1 aren't -- isn't this claim interpretation saying a
2 structure defining a structure?

3 A. Are you asking me to rewrite this or to choose
4 which one I like better?

5 Q. No. We'll get back to that. I'm actually just
6 trying to understand how -- both of the constructions
7 proposed by GCE use a structure, and I'm trying to
8 understand how to interpret that with regards to
9 housing, which is also a structure.

10 A. "Cartridge module comprising a housing. The
11 housing is defined -- is defining a structure configured
12 to releasably receive and at least partially contain the
13 separation cartridge."

14 I suppose you could say -- and I don't want to
15 get into the place of recrafting this. I was asked to
16 evaluate which one I thought was more clear and why.

17 You could say, "A cartridge module comprising a
18 housing, the housing configured to releasably receive
19 and at least partially contain the separation
20 cartridge," but that gets you away from the word
21 "receptacle," which you want to use later on.

22 So in defining the word "receptacle," defining
23 it relative to what it receives and how it receives it.

24 Q. Okay.

25 A. That seems preferable to me.

1 Q. So I want to come back to the defining what it
2 receives in a second.

3 A. Sure.

4 Q. But if we take 3B's construction --

5 A. Sure.

6 Q. -- and let's maybe do the same thing.

7 Doesn't it make a little more sense, a housing
8 defining a space configured to receive and contain
9 something?

10 A. But the space isn't the receptacle.

11 Q. The housing is defining that space. Wouldn't
12 that be what the claim says?

13 A. I guess this is one where you're asking me
14 which one I do feel is more clear, and I've told you,
15 but I'm not going to take a strong side to say I think
16 that's the way -- your 3B suggested is uncomprehensible,
17 incomprehensible.

18 "A space configured to receive and retain a
19 cartridge module containing the housing, the housing
20 defining a space configured to receive and contain
21 something," versus "A cartridge module comprising a
22 housing, the housing defining a structure configured to
23 releasably receive and at least partially contain the
24 separation cartridge."

25 The latter feels much more clear to me.

1 Q. Okay. Now, let's move on to the other part of
2 either of these constructions. GCE's proposed
3 constructions say either, depending on which one we're
4 looking at, "releasably receives" or -- sorry,
5 "releasably receive" or "releasably interfaces."

6 Correct?

7 A. GCE says -- correct.

8 Q. Okay. And you made some mention here about
9 talking about what the receptacle is receiving a little
10 bit. Am I accurate with that?

11 A. Okay.

12 Q. You've mentioned --

13 A. I think a receptacle is, again, relative to
14 what it's receiving.

15 Q. Okay. Now, what is -- what is the basis to
16 require -- and let's start with the first construction,
17 "releasably interfacing with an inlet and outlet,"
18 what's the basis for that construction?

19 A. Again, I think, in my interpretation of
20 "receptacle," it is -- a receptacle is defined relative
21 to the thing it receives, and so how it receives it
22 matters. So an outlet is not a receptacle for a plug
23 unless it has a way to interface with that plug. That's
24 what defines it as a receptacle for a plug.

25 Q. So here the claim did not claim it's receiving

1 a releasably interfacing with an inlet and outlet, but
2 it did talk about what the receptacle --

3 A. And to my understanding --

4 Q. -- is receiving; right?

5 A. I believe that GCE heard your objection and
6 came back with an alternate proposal.

7 Q. Well, but again, even -- you're talking about
8 the second proposal, GCE's second proposal there?

9 A. Yeah.

10 Q. It still says "releasably received"; right?
11 Why does that need to be in the claim when the
12 claim already says a separation cartridge is selectively
13 removable from the receptacle?

14 What is the basis to add that additional
15 language?

16 A. In -- okay. I'm going to come down and I'm
17 going to argue -- I'm going to suggest that my opinion
18 is based on which one I think more clearly defines what
19 makes it a receptacle, and in this case it's designed to
20 hold and contain and plug into the separation cartridge
21 to make it function as an oxygen concentrator.

22 And when I go and I look to see what does the
23 receptacle do, what is the intent of it, I look at the
24 specification. I see that the receptacle is the object
25 into which you put your separation cartridge, and the

1 separation cartridge cannot function without a number of
2 features. And I think these define those features as
3 described in the specification, but again, I --

4 Q. Doesn't the claim already say "selectively
5 removable"? It says, "An already defined separation
6 cartridge in relation to the receptacle."

7 A. Sure, it does.

8 Q. Okay. So is GCE -- when GCE uses, for example,
9 "releasably receive," is that adding something else?

10 A. I read it as synonymous with the other.
11 Selectively removable, releasably receive, meaning that
12 it goes in and I can choose to take it out. Again, it
13 was defining what makes it a receptacle.

14 Q. Okay. Is there any reason "releasably receive"
15 would be necessary if it's synonymous with "selectively
16 removable," which is already in the claim?

17 A. Only insofar as it describes how the two
18 interface with each other, that they're not just one
19 placed on the other, that they are contained, they are
20 held. So again, looking to try to get a definition of
21 how these two things interact, how they interface, you
22 go back and you can look and see how it's described.

23 Q. Okay.

24 A. Yeah.

25 Q. And I just -- I want to make sure I've got an

1 understanding of what -- you know, I understand your
2 declaration here.

3 A. Good.

4 Q. In terms of these two constructions, which one
5 are you putting forward to the Court as the correct
6 construction, the two GCE constructions? Because they
7 are different; correct?

8 A. My understanding of where we stand was that the
9 first had been rejected and the second had been
10 proposed, and I was asked which do I think is better and
11 why, and I went through and I looked at it and I thought
12 about what a receptacle was, and I think that either of
13 the two things in the left-hand column are preferable to
14 what's on the right.

15 But if GCE has said that they would take either
16 of those, then I think the question goes back to you.

17 Q. I would like to know, in your expert opinion,
18 which of those two GCE constructions you believe is
19 correct, as opposed to better than 3B's?

20 A. So if I read the word "receptacle" as being
21 unclear because it doesn't define how it interfaces or
22 it sits in, what makes it unique, then I would look at
23 this and say, okay, to better define "receptacle" I
24 would want to have more definition as to what it does.

25 So I would prefer the first over the second in

1 terms of just understanding, because that's what's
2 described. It is a container for a separation cartridge
3 that interfaces with the inlets and outlets and contains
4 a separation cartridge, and I don't -- I don't have -- I
5 don't see anything that's wrong with that and I think
6 that defines what a receptacle means relative to
7 the "I'm putting this thing in a bag."

8 That being said, the second -- the second one,
9 to me, also defines it as something that it says, okay,
10 this is at least something about how this interfaces or
11 is contained. I'm less favorable about the one that
12 defines it as a space or a space that's defined by a
13 housing. That's my opinion.

14 Q. Okay. I'm going to mark as 6 -- I'm going to
15 mark as Exhibit 6, I think this was Exhibit 18 to your
16 declaration.

17 (Exhibit 6 marked for identification.)

18 THE WITNESS: Great.

19 BY MR. ATALLAH:

20 Q. And this is the cover page of Exhibit 18, and
21 it's Bates number GCE0005918 through 5936, and then it
22 skips to 5978 through 5983.

23 Do you see that?

24 A. I do see this.

25 Q. And again, you've seen this document before?

1 A. Yes.

2 Q. Okay.

3 A. I preferred the PDF where I could zoom.

4 Q. So, all right, well, I'm looking at -- at Bates
5 number 5921.

6 A. Okay.

7 Q. Oh, I'm sorry. Wrong page.

8 A. I thought, maybe.

9 Q. My bad. We're in the afternoon. My apologies.
10 All right. I'm actually looking at -- I think we're
11 looking -- there we go -- 5923. My apologies.

12 A. Yes.

13 Q. Okay. Top right, there is a definition of
14 "receptacle"; do you see that?

15 A. Maybe. Top right.

16 Q. Top right, about -- it's the first word, third
17 line down.

18 A. I got it.

19 Q. All right. I know we got to squint to see it.
20 And in your declaration, in paragraph 99, this was a
21 dictionary you relied on to define "receptacle"; right?

22 A. Yes.

23 Q. Okay. And if you want to be able to see it a
24 little bit better, you can see in your declaration you
25 quoted it.

1 A. Yes. Thank you.

2 Q. Might be able to see it a little better.

3 A. All right.

4 Q. Second -- the next page, I believe, right at
5 the top of Exhibit 18. Do you see that?

6 A. Yes.

7 Q. Okay. And you quoted, defining "receptacle"
8 as, e.g., "one that receives and contains something."

9 Do you see that?

10 A. I do.

11 Q. Okay. And that is almost exactly what 3B is
12 proposing; correct?

13 A. You defined it as a space and it defines it as
14 one, or something, that receives and contains something,
15 but okay.

16 Q. So I guess putting aside whether one would be a
17 space or a structure, like we've talked about, but the
18 rest of that is entirely consistent with 3B's proposed
19 construction?

20 A. It is one -- one definition among many, and you
21 have to look at them all to figure out how do they go
22 together and how do you read them collectively.

23 Q. And what basis is there for saying that
24 definition is incorrect?

25 A. Well, the basis that other definitions are

1 different. I mean, on the basis of trying to understand
2 the meaning of a word, we look to more than one source.
3 We try to find what that looks and how it's used.

4 A fitting connected to a power supply and
5 equipped to receive a plug, so a container that holds
6 items or manner that's specific to something, they're
7 two parts that go together. Okay.

8 Q. Okay.

9 A. Yeah.

10 Q. Now, we talked a little bit about defining
11 terms consistently --

12 A. Uh-huh.

13 Q. -- across patents; right?

14 A. Yeah.

15 Q. So now I want to -- let's take a look at
16 paragraph 103 of your declaration.

17 A. Paragraph 103, okay.

18 Q. And you discuss here what the specification
19 talks about in terms of receptacles; do you see that?

20 A. Yes, I do.

21 Q. And you actually describe how the specification
22 discloses that there is also a receptacle for receiving
23 a power pack; correct?

24 A. Yes.

25 Q. Okay. So if -- having looked at the

1 specification as one of ordinary skill --

2 A. Sure.

3 Q. -- you wouldn't define "receptacle" to
4 reference "separation cartridge" because the receptacle
5 referred to for a power pack would not be receiving a
6 separation cartridge; right?

7 A. Can you ask that a different way?

8 Q. Yeah. We talked -- maybe I can take a step
9 back.

10 We talked a little bit about how the claim
11 already talks about the separation cartridge is
12 selectively removable from the receptacle; right?

13 A. Yes.

14 Q. But the construction of "receptacle" needs to
15 be consistent in viewing the entire patent; right?

16 A. Yes.

17 Q. Okay. And "receptacle" is also used to
18 describe something that would receive a power pack,
19 correct, in the specification?

20 A. It is.

21 Q. So if the definition of "receptacle" as
22 proposed by GCE is adopted, how would that -- how would
23 that construction work with regards to a power pack?

24 A. So you're looking for a common definition
25 across two terms that introduces ambiguity as to what

1 they're holding?

2 Q. No. I'm asking, "receptacle"
3 should -- "receptacle" is described both as something
4 that would potentially go with a separation cartridge
5 and with a power pack, right, in the spec?

6 A. Okay.

7 Q. I mean, that's I think what you're saying --

8 A. No. Okay. Yeah.

9 Q. -- put in your declaration.

10 A. Yes.

11 Q. So don't we need a definition of "receptacle"
12 that would encompass both of those?

13 A. You know, quick answer would be sure. Longer
14 answer would be the word "receptacle" has different
15 meanings in each of those two cases, so I
16 understand -- I understand the conflict.

17 I'm not sure what the resolution is other than
18 to say the receptacle as referred to for the separation
19 cartridge and the receptacle as referred to the battery
20 pack are different entities because they interface with
21 different things.

22 Q. But your declaration refers to both of them as
23 that receptacle being described in that paragraph we
24 just looked at; right?

25 A. My declaration refers to the fact that the

1 patent refers to both as receptacles.

2 Q. Yep.

3 A. Yep.

4 Q. Okay. And you would agree with me that
5 GCE -- either of GCE's constructions are adopted, they
6 would not make sense with regards to a receptacle for a
7 power pack; correct?

8 A. Certainly.

9 Q. Okay. But if we look at 3B's proposed
10 constructions, it would work for either one, correct,
11 for either a power pack or a separation cartridge?

12 A. Rather than -- so my quick answer is I don't
13 know, but I would also say they could both then be
14 called containers or bags.

15 Q. Well, but --

16 A. But the word "receptacle" means something more,
17 and so maybe the word is being misused.

18 Q. Well, let's look at 3B's proposed construction,
19 because we are referring to the term "receptacle."

20 A. Okay.

21 Q. 3B says that it should be its plain and
22 ordinary meaning, which is, "A space configured to
23 receive or contain something."

24 So as to a separation cartridge, I think we
25 talked about it, that would work; right?

1 A. Yes.

2 Q. And as to a power pack, that would still be a
3 space that's configured to receive and contain
4 something, just the power pack there; right? The
5 something changes but it covers either one.

6 A. Okay.

7 Q. Is that fair?

8 A. Okay. Sure. Yes.

9 Q. Okay. All right. Let's go to page --

10 A. The only thing that I'm going to add to that,
11 and just for a thought, is that just because the patent
12 uses the same word and declares it as equivalent in two
13 places, doesn't mean that the word is equivalent in two
14 places, and I understand your argument and I've said
15 "sure."

16 Q. Okay.

17 A. I'm just saying that, you know, we could argue
18 that we create a conflict in the patent as written, or I
19 can argue that the patent was written using the wrong
20 terms, and I'm not going to make that argument at the
21 moment. I'm just saying I -- receptacle is not a
22 generalized container, but we can move on.

23 Q. Okay. If you turn to page 45 of your
24 declaration.

25 A. Okay.

1 Q. Section F, "Selectively removable [from a
2 receptacle]."

3 A. Sure.

4 Q. Do you see that term?

5 A. I do.

6 Q. And again, here GCE proposes two constructions
7 and 3B proposes a different one; correct?

8 A. I do see that, yes.

9 Q. Okay. So again, can you tell me the difference
10 between GCE's two constructions?

11 A. Okay. I've scanned through what I wanted to
12 read. Can you repeat what my question was?

13 Q. Yeah. I think my --

14 A. Sorry. I know.

15 Q. I think my question -- my question was, can you
16 tell me what the difference is between GCE's two
17 constructions?

18 A. The way it reads is one says, "Withdrawable or
19 separable as a whole from the receptacle," and the other
20 one says, "Can be individually chosen to be withdrawn
21 from the receptacle."

22 Q. Is there a difference?

23 A. Not a substantial one.

24 Q. Are they saying the same things in different
25 words?

1 Is that -- when you say "not a substantial
2 one," is that what you mean?

3 A. No. It means I -- it's subtle. The first one
4 says I'm going to take something out of something else,
5 I'm going to grab it and remove it, separate it,
6 presumably in this case for service or replacement.

7 The second one would be it's an item that
8 isn't -- again, I can pick it to be picked and taken
9 out, removed, again, presumably from service, and just
10 separate it from the -- how it's interfacing with the
11 receptacle. And -- yeah. Okay.

12 Q. And the phrase "from a receptacle" in all of
13 these constructions, they're for context?

14 A. I understand.

15 Q. Is that right?

16 A. I understand that's what the bracket means
17 here, yes.

18 Q. Okay. So you believe there's a subtle
19 difference between them?

20 A. "Inseparable as a whole" versus "individually
21 chosen" depends on the context in which I'm reviewing
22 that, but I think that they both refer to taking the
23 separation cartridge out of the separation cartridge
24 receptacle, differentiated from the battery receptacle,
25 and taking it out to be replaced, serviced, handled in

1 some other way.

2 Q. Okay.

3 A. I'm not sure what else you're looking for.

4 Q. Just to understand what the difference is.

5 A. Yeah. Okay.

6 Q. Which one of these two is the correct
7 construction according to GCE? Actually, let me
8 rephrase that.

9 In your opinion, which one of these two GCE
10 constructions is the correct one?

11 A. In my opinion, they're interchangeable. And I
12 think that GCE has proposed either/or as acceptable.
13 I'm not sure that necessitates a determination of
14 correct. It was -- we think this -- either of these is
15 good construction.

16 Does one have to be better than the other? One
17 was rejected another one was proposed. I don't
18 know -- that doesn't necessarily mean that it was
19 preferred, it just means it felt like it's okay.

20 Q. Well, I can understand the procedure that
21 occurred here, but I'm just trying to get to an
22 understanding, so that we know on 3B's side, which of
23 these constructions GCE actually thinks is the correct
24 one, as opposed to either one with subtle differences is
25 okay.

1 A. I'm going to assume that the first one that
2 they proposed is the one that they believe is the
3 correct one. I've been asked to look at them and I
4 don't see a huge difference between the two on the left.
5 I look at that relative to what's on the right and I see
6 a subtle difference from that. Not huge either, so.

7 Q. So -- so -- all right. Let's take a look at
8 the first one then. If we ignore the phrase "from a
9 receptacle" and just look at the words before that, so
10 "withdrawable or separable as a whole."

11 A. Okay.

12 Q. Okay. That's removable; correct?

13 A. But not in pieces, yes.

14 Q. Okay. So how is the word "selectively"
15 addressed in that construction?

16 A. Again, I think the term selectively is one that
17 is a little bit unclear, but I think when you are
18 withdrawing or removing an object you have selected it.

19 Q. Okay.

20 A. And the next construction, it says, "chosen,"
21 which incorporates a little bit more of the word
22 "selectively."

23 Q. In the second one, it says "chosen."

24 A. Uh-huh.

25 Q. So what -- so what is the difference, if we

1 look at the second one that just says "chosen to be
2 withdrawn," what is the difference between chosen to be
3 withdrawn and withdrawable or separable?

4 A. One defines its structure, that it
5 is -- is -- it is removable, and the other one says I
6 can -- I can pick to remove it. Besides that, it's --

7 Q. And I notice in your declaration, you say, in
8 paragraph 112, that "The party's proposed constructions
9 appear conceptually somewhat similar."

10 Do you see that?

11 A. I do.

12 Q. Okay. Did GCE's -- or, sorry, 3B's proposed
13 construction is "can be chosen to be removed"; right?

14 A. That's what the proposed construction is, yes.

15 Q. So what is incorrect about 3B's proposed
16 construction, if anything?

17 A. Well, rather than read you the next three pages
18 of detail, you know, that's what I was hoping that you
19 would read and understand from here. I think there's a
20 series -- series of arguments that go into this, and I
21 can go back -- like I said, I will go back and read
22 them, if you like, but I think that the declaration,
23 hopefully, tells you on what basis I thought one was
24 better than another.

25 Again, I think it's subtle and they seem very

1 similar. Any differentiation that I'm drawing here is
2 one that is --

3 Q. I mean, I -- I can appreciate that you have,
4 like, five pages here on --

5 A. I can too.

6 Q. -- conceptually somewhat similar constructions.

7 A. Yes.

8 Q. But again, I'm just trying -- like, I'm just
9 trying to understand from your declaration here what it
10 is about 3B's construction that you believe is
11 incorrect.

12 A. How I receive that question is you'd like me to
13 read this, because I feel like that's the case that I
14 made in here.

15 Q. If you need to read your declaration to answer,
16 that's fine.

17 A. It's an argument that takes five pages to
18 develop and so, like I said, it's a very subtle one and
19 it's --

20 Q. I mean, if you need to go ahead and read it,
21 then let's do that and I'll re-ask the question. I just
22 want to know what -- again, I'm just looking to find out
23 what, in your opinion, is incorrect about 3B's proposed
24 construction. That's all.

25 Actually, let me -- maybe I can speed this up.

1 Let me see. If we look at paragraph 126 --

2 A. Right.

3 Q. -- I think you're saying because it uses
4 "removed" that's not okay.

5 A. Defining the term "removable" with the term
6 "removed" is sort of circular.

7 Q. Okay. And that's not the case if you use the
8 word "withdrawn" or -- "withdrawn," for example?

9 A. Again, it's subtle.

10 Q. Okay. So let me -- maybe I can ask it this
11 way. Can you withdraw something without removing it?

12 A. Interesting question to think about, the
13 etymology, but I suppose yes.

14 Q. So there is a difference between the two
15 constructions?

16 A. Sure. The -- yes.

17 Q. Okay. And the claim says "removable" not
18 "withdrawable," correct, the claim term itself?

19 A. What's that?

20 Q. The claim term we're talking --

21 A. Sorry.

22 Q. That's okay. I'll ask it again.

23 The claim term we're talking about says
24 "removable" not "withdrawable"?

25 A. Yes, selectively removable, which can be

1 removed as a whole from the receptacle, withdrawal
2 from -- or separable as a whole from the receptacle.
3 It's a very fine line.

4 Q. But again, withdrawing isn't necessarily
5 removing, in your opinion?

6 A. Again, you know, the only reason I would change
7 the word is -- from what I use -- is defining the term
8 with the same word or a different construction of the
9 word is -- I understand it to be generally frowned upon.

10 At least that's -- you know, you guys can make
11 that call as you go back and forth, but I look at it and
12 say if I'm defining something and saying "selectively
13 removable" is defined as something to be removed, those
14 words are -- anyway.

15 Q. Okay. Beyond that, you don't have any issue
16 with the word removed?

17 A. I don't.

18 Q. Okay. And then I think, if you look at
19 page 51 -- so I just want to understand GCE's position.
20 I think it was intended to say 3B's proposed
21 construction there.

22 A. Uh-huh.

23 Q. But what is GCE -- what is GCE saying is not
24 supported in terms of part-by-part removal? What does
25 that mean?

1 A. You're talking about page 50 and 51, the
2 paragraph that goes between them, or where are we --

3 Q. Yeah. It's at the end of paragraph 126.

4 A. Okay. Thank you.

5 I think what I'm referring to there is that
6 "removed" could be I can take apart the separation
7 cartridge and pull it apart piece by piece and remove
8 it, versus I am withdrawing the entire assembly as one
9 piece.

10 Q. Okay. So turning back,
11 paragraph 36 -- actually, maybe 34 is a better place to
12 start.

13 A. Okay.

14 Q. But 34 through 36, you identify some file
15 histories. Do you see those?

16 A. I do.

17 Q. And you reviewed those file histories as well?

18 A. I did.

19 Q. So -- and one of those file histories is the
20 file history for the '614 patent; right?

21 A. It is.

22 Q. Okay. Are you aware of the examiner finding
23 any terms in the file history of the '614 as to be
24 indefinite?

25 A. I don't recall, so no, I'm not aware.

1 Q. Okay. You're not aware. Okay. Now, can
2 you -- you've looked at, it looks like, one, two, three,
3 six file histories?

4 A. Yes, that's what's reflected.

5 Q. Can you -- are you able to identify even a
6 single spot in any of those file histories where the
7 patent applicant explicitly argued that a separation
8 cartridge must have more than one bed?

9 A. Sorting all of the things I've read becomes
10 challenging. Here, while sitting at the table, no, I
11 cannot -- I cannot recall that.

12 Q. Okay. And how about the inverse? Can you
13 point me to anything in any of those file histories
14 where the patent owner explicitly said that a separation
15 cartridge can only have one bed?

16 A. Except as I have argued, that the inventors
17 have repetitively said that the invention is as
18 described. I don't recall enough of the specifics of
19 these to be able to recall that right now.

20 Q. So you're talking about specification in terms
21 of repetitively?

22 A. And how they argue it in --

23 Q. What you were just referring to, though, in
24 your answer was with regard to the specification,
25 though?

1 A. And also in terms of how they -- how they argue
2 it. They describe -- and how they describe it and
3 what's being referred to in the comments.

4 Q. Are you talking about file histories?

5 A. Yes.

6 Q. Okay. So can you point me to where the patent
7 owner has explicitly said a separation cartridge can
8 only have one bed in any file history in this patent
9 family?

10 A. I cannot.

11 Q. Okay. Now, let's take a look at paragraph 59.
12 You see paragraph 59?

13 A. Yes.

14 Q. And I think you made a -- I don't recall
15 offhand. I don't mean to like -- but you made some
16 reference to something like this, I want to say,
17 earlier, perhaps.

18 A. I believe that's what I was referencing, yes.

19 Q. So you're familiar with -- with that file
20 history?

21 A. I have reviewed that file history.

22 Q. Okay. And you suggest in this declaration that
23 the examiner compared the separation cartridge to a
24 sieve bed in Warren; right?

25 A. Yes.

1 Q. And is a sieve bed a cartridge, in your
2 opinion?

3 A. Not necessarily.

4 Q. Okay. And what -- and you go on to say, "This
5 time, applicant did argue the examiner had not
6 identified a separation cartridge in Warren."

7 Do you see that?

8 A. I do.

9 Q. Do you remember seeing that -- do you remember
10 specifically seeing that in the file history?

11 A. I do.

12 Q. All right. So what was written was the
13 examiner has not even identified a separation cartridge;
14 right?

15 A. I don't have it in front of me but I will
16 accept that that's true.

17 MR. ATALLAH: All right. So
18 let's -- let's -- don't hate me.

19 Go off the record for one second?

20 (A brief recess was had.)

21 BY MR. ATALLAH:

22 Q. Okay. Sir, you have, as Exhibit 12 to your
23 declaration, it's the -- one of the file histories we
24 were just talking about; correct?

25 A. Yes.

1 Q. And I believe in paragraph 36, that is the file
2 history for the '669 patent, according to the chart you
3 have there.

4 A. Correct.

5 Q. Okay. And we're looking at it and it's quite
6 voluminous; is that fair?

7 A. Yes.

8 Q. Okay. And that is, in paragraph 59, the file
9 history you are referring to?

10 A. Correct.

11 Q. Now, I'm going to -- this is Bates-numbered and
12 it's Bates numbered from GCE0004110 all the way to
13 GCE0005220. So I'm going to -- here you cite,
14 paragraph 59, it looks like, pages 297 to 298.

15 Do you see that?

16 A. I do.

17 Q. As well as -- okay. So that's what the -- when
18 the examiner is saying something; right?

19 A. Yes.

20 Q. Okay. And we've talked about that. And then
21 you cite pages 255 to 256 in the next sentence; right?

22 A. Yes.

23 Q. Okay. And I will represent to you that looking
24 through the PDF, 255 to 266 should align with Bates 4365
25 to 4366 or so.

1 A. I'll accept that.

2 Q. And so let me read -- actually, 4364 to 4365, I
3 think, is actually correct, and I'll show you that page
4 right here. You can kind of see that's the argument
5 being made about Warren.

6 Do you see that?

7 A. I do see that.

8 Q. Now, I'm going to read a quote from this
9 argument that I think you're referring to.

10 A. Uh-huh.

11 Q. "It is worth noting that the examiner does not
12 even identify a 'separation cartridge' in Warren and
13 instead generally refers to Figures 7 and 8. See final
14 at 8." Okay. And --

15 A. Yes.

16 Q. -- if you'd like to.

17 A. Uh-huh.

18 Q. So what the applicant was saying there is that
19 the examiner's reduction didn't even identify the
20 separation cartridge, which was the send point to the
21 sieve bed; right?

22 A. Okay.

23 Q. Is that right?

24 A. I think so.

25 Q. Okay. And so where -- did you see anywhere in

1 that argument or those arguments where the applicant was
2 saying that a cartridge with a single absorber bed was
3 not a separation cartridge, or was the applicant just
4 saying "you've pointed to a sieve bed, you're not even
5 identifying the separation cartridge"?

6 A. So in looking at the histories and looking at
7 the interchanges beyond here, this is one page out of
8 600, going through. I'd have to read it again and read
9 it more carefully.

10 MR. ATALLAH: All right. How about I do this.
11 I'm going to just mark as -- and, Eric, I can copy
12 exhibits if you want it. But maybe this. I'm just
13 going to try to mark as Exhibit 7, okay, I'm going to
14 mark a sub-piece of your Exhibit 12 to your declaration.

15 THE WITNESS: Correct.

16 (Exhibit 7 marked for identification.)

17 BY MR. ATALLAH:

18 Q. And that is going to be marked from pages
19 GCE4359 through -- through 43 -- it's 4374, but it
20 really ends at 4373. It's just front and back printed.
21 So I'm going to mark this as Exhibit 7. I'm going to
22 hand you that.

23 Now, if you could take a look at that. That
24 should encompass the pieces of the file history with the
25 pages you cited in paragraph 59.

1 A. It's certainly familiar, yes.

2 MR. ATALLAH: So my question before, could you
3 reread it?

4 Why don't you take -- why don't you review that
5 and then let me have it reread.

6 THE WITNESS: Please. Is there a particular --

7 MR. ATALLAH: Portion?

8 THE WITNESS: -- portion you'd like me to focus
9 on? If you do, it makes it more --

10 MR. ATALLAH: Sure. Read whatever you want but
11 I think the piece that my understanding of what you're
12 referring to in your declaration starts right here.

13 THE WITNESS: Okay. Trying to look at what
14 you're directing me to look at, so you tell me where you
15 want me to read. I've read this page. Is that what --

16 MR. ATALLAH: You can keep going until that
17 section ends. Review the rest of it as you need.

18 THE WITNESS: Thanks.

19 Okay. I've read that.

20 MR. ATALLAH: Okay. So may I have you read the
21 question then?

22 (Question beginning at page 211, line 25,
23 read back.)

24 THE WITNESS: I think that's an accurate
25 statement, that -- you're going to correct me if I'm

1 wrong in how I'm reading this, but I think they're
2 saying you just identified the sieve bed and not a
3 separation cartridge.

4 Q. Okay. Okay. I'm done with that one.

5 Now, okay, so I want to go back now, early part
6 of your declaration, paragraph 15, just for a second.
7 And --

8 A. Uh-huh.

9 Q. -- you talk about -- this is kind of some
10 background I think you did.

11 A. Yeah. Sure.

12 Q. Is that fair?

13 A. Comfortable.

14 Q. All right. So in paragraph 15, you talked
15 about some background about oxygen concentrators.

16 A. I do.

17 Q. Okay. And you say, "Prior to 2002, POCS" --
18 P-O-C-S, which are portable oxygen concentrators?

19 A. Correct.

20 Q. "Were not considered technically viable
21 products by the established industry"; right?

22 A. Yes.

23 Q. And you go on to say, "The market dramatically
24 changed in 2004 when the Inogen One product I invented
25 (see Exhibit 5) was released"; right?

1 A. Correct.

2 Q. Now, let's go to paragraph 19. And why don't
3 you just give that a read and I'll ask you a question.

4 A. Okay. I've read the paragraph.

5 Q. Okay. So the last sentence, you say, "Indeed
6 the POC" -- P-O-C -- "field was crowded with prior art
7 by 2005."

8 Do you see that?

9 A. Yes.

10 Q. So which was it, were they not viable as of
11 2002 and that dramatically changed in 2004, and I
12 believe your device was released sometime in October of
13 2004, five months before the priority date on the face
14 of this patent, or was it that this is a crowded field
15 of art?

16 A. It was both. So there was a broad collection
17 of people filing claims and filing applications
18 regarding portable oxygen concentrators and what they
19 thought they would do with them and what was relevant to
20 the field. Putting them together into a device had
21 proven very difficult, and there had been several
22 instances of people trying them and failing them,
23 failing at doing that, which is why by and large when we
24 spoke to people outside, I had -- I had people say to
25 me, "Oh, not another person that's trying to build a

1 portable oxygen concentrator, because that will never
2 work."

3 And so the industry did not react strongly to
4 thinking that the portable oxygen concentrator market
5 was going to take off and be broad, and there were
6 several reasons that were not technical or not about
7 intellectual property about that. I don't want to waste
8 time. Is that okay to continue?

9 Q. Whatever answer you want to give.

10 A. Sure. I'll just give you this other
11 information.

12 At that point in time, most of the portable
13 oxygen concentrator -- most of the oxygen concentrator
14 industry or oxygen therapy industry in the United States
15 was dominated by home medical equipment providers,
16 durable medical equipment providers, and most of their
17 service -- most of their product that they were
18 providing was service based, and so a portable oxygen
19 concentrator in its very nature was challenging the
20 business model of our customer, so the industry was not
21 prepared to accept a portable oxygen concentrator.

22 Medicare did not know how to handle the
23 portable oxygen concentrator before 2002. The first
24 product that came out that got it -- that had a device
25 that would function a little bit, that did some of the

1 things that were required, was this AirSep Lifestyle
2 that showed up just before the Inogen One was released,
3 and I think it started to show people that you could
4 build something and once you put it out into the field
5 people started to accept it more.

6 All of this prior art that had been out there
7 in the patent world started to try to find its way to
8 the market, and within about five years of the 2004/2005
9 timeline, we found ourselves with a very crowded market
10 of people trying to build portable oxygen concentrators
11 around the world.

12 So those inventions, those ideas, many of them
13 were out there, and as we went out at Inogen to design
14 our concentrator, we had to work around and be aware of
15 a number of different pieces of prior art.

16 Q. Okay. So in your -- in your opinion, what does
17 it mean to be a crowded field of art, as you describe in
18 your declaration?

19 A. It's one that you can easily search. So what
20 I'm saying -- I'm saying that you could do it and
21 quantify this. This wasn't the generalized "you," this
22 was a personal "you," which is I can go off and I can
23 look to see how many patents were existing, and it is
24 something that can be seen.

25 You can look at the patents that we filed and

1 how many -- how many patents or pieces of prior art we
2 referenced in doing it. You can look at these patents
3 under suit and look at how many patents they're
4 referencing in terms of just two or three pages of them.

5 So in my mind, when I'm trying to define a
6 crowded intellectual property space, it was one where as
7 we were designing a device we had to be careful. We had
8 to be cognizant of what was out there and we had to be
9 aware and we had to -- we had to work with it.

10 Q. Okay. I did want to ask about, in this
11 paragraph, that you mentioned some references here, and
12 as well as -- and when you say "our patents" here from
13 Inogen, I'm assuming that --

14 A. Inogen.

15 Q. Okay. On the face of these patents, the
16 patents in suit, the -- your patents are listed;
17 correct?

18 A. I believe they are.

19 Q. Okay. And then these ones you list in
20 paragraph 19, I think, unless I'm mistaken, all but one
21 of them are actually listed on the face of the patent;
22 is that right?

23 A. I have to go back and crosscheck, but I think
24 that's true.

25 Q. Okay. So when you say, "Fails to mention any

1 of these designs," they were cited in the patents in
2 suit; correct?

3 A. In looking -- yes.

4 Q. Okay. Okay. Fair enough.

5 Now, you say, I think -- actually, I don't know
6 that you say it. Give me one second.

7 Let me ask this. You've had patents in that
8 time frame. You know, obviously we have these patents
9 in the 2000 -- patents in suit in the 2005 time frame.
10 You've referenced a number of other ones.

11 Is it your opinion that just because there were
12 a number of references that it default means that
13 patents have to be given narrow interpretations from
14 that time frame?

15 A. There's no -- any question you ask me that says
16 "default" I'm going to say no --

17 Q. Okay.

18 A. -- because that kind of generalization is --
19 obviously I always find an exception. I do think that
20 there was quite a bit out there.

21 Q. Okay. And obviously patents would have
22 to -- patents going forward, in view of that prior art,
23 would have to define around it; fair?

24 A. Yes.

25 Q. But that doesn't mean, for example, that you

1 would import limitations from a specification because of
2 that; right?

3 A. I'm not sure I understand that question.

4 Q. Sure. It doesn't mean just because -- let's
5 say -- you're alleging it's a crowded art field; right?

6 A. Yes.

7 Q. Okay. So that doesn't mean that you take
8 pieces from a specification and put it into the claims
9 because it was a crowded prior art field. That's still
10 improper. Correct?

11 A. Pieces of someone else's specification?

12 Q. No, the prior -- you know what, strike it.
13 It's fine. I'm not trying to --

14 A. I'm sorry. I'm really trying to get you.

15 MR. ATALLAH: Let's take a, like, two minute
16 break. I just want to go through my notes.

17 THE WITNESS: Okay.

18 (A brief recess was had.)

19 BY MR. ATALLAH:

20 Q. Just a couple last questions for you and then
21 we can wrap up for me.

22 A. Please.

23 Q. Without getting into -- I know you mentioned
24 some companies you can't reveal the names of.

25 A. Uh-huh.

1 Q. I just wanted to see if we could confirm that
2 prior to this engagement one of those companies was or
3 was not GCE.

4 A. No, I've had no previous engagement with GCE.

5 Q. Okay. And other than what -- other than what's
6 stated in your declaration and what we've discussed
7 today, is there any other reason you have for asserting
8 that any of 3B's proposed constructions as to the
9 disputed terms in this case are incorrect?

10 A. I honestly have no stake. I came in, I was
11 offered this and asked to give an opinion, and so put
12 together those opinions and no other -- no other reason
13 why.

14 MR. ATALLAH: Okay. That's all I have. Thank
15 you for your time.

16 THE WITNESS: Sure. Sorry for when it got
17 difficult today.

18 EXAMINATION

19 BY MR. GILL:

20 Q. We talked about some -- earlier today we talked
21 about some legal principles that you were provided and
22 that are set forth in your declaration, and those are
23 near the back of your declaration, and I wanted to look
24 at paragraph 132 in particular.

25 A. Okay.

1 Q. And the end of that paragraph says,
2 "Differences among claims or claim terms can also be a
3 useful guide in understanding the meaning of particular
4 claim terms."

5 What is your understanding of that sentence and
6 how did you apply it?

7 A. On a first level what I'm saying is that when I
8 see claims that have differences or apparent conflicts,
9 I look at them, I try to understand what they're saying,
10 and I read that in the context of the overall patent and
11 try to understand how do they fit.

12 And I -- it's sometimes difficult to understand
13 where do you put the weight, where do I -- you know,
14 where do I -- what argument trumps what argument, but
15 in -- in this particular case, what I think it means is
16 you have to read the whole thing together.

17 Q. The whole thing of what?

18 A. Meaning you're reading the specification,
19 you're reading the claims, you're reading claims that
20 appear a little discordant or appear to be superfluous,
21 understanding how the claims go together. You know,
22 reading those claims, it's a guide. It's one of many
23 inputs.

24 Q. So you looked at the claims themselves and you
25 also looked at the specification; is that what you're

1 saying?

2 A. Yes, so the entire intrinsic record.

3 Q. Okay. Earlier today we talked about your
4 construction of claim 13 of the '614 patent.

5 A. Yes.

6 Q. Can you flip to that?

7 A. '614 patent, 13.

8 Q. And your construction is basically of a number
9 of these claim elements, I think it's the first five or
10 six claim elements, and your construction says those are
11 all part of a separation cartridge.

12 Do you recall that?

13 A. I do recall that.

14 Q. And you were asked some questions about whether
15 you were importing a third bed into the separation
16 cartridge as well. Do you recall that?

17 A. I do recall that.

18 Q. To understand the metes and bounds of claim 13,
19 did you need to import a third bed into the claim?

20 A. I don't think I did.

21 Q. Okay. Why not?

22 A. I think having the multiple -- the multiple
23 beds that were there, but I think that when I read this
24 and I read about what is being claimed, I read about the
25 portable oxygen concentrator having a separation

1 cartridge with three beds. So maybe I'm not
2 understanding the question or the language that you're
3 using.

4 Can you ask that a different way? Sorry.

5 Q. Yes. So -- so why does your construction
6 specify that the beds and the inlets and the outlets are
7 part of the separation cartridge?

8 A. Because that's the only thing that's described
9 inside the specification.

10 Q. Okay. Earlier today you were asked some
11 questions about single-column versus multiple-column
12 oxygen concentrators and you testified about some
13 requirements that are described in the specifications of
14 the patent, some -- they came from some conference, and
15 I think there were a couple different requirements that
16 are described in the patent.

17 Do you recall that?

18 A. I do recall. There are numerous requirements.

19 Q. Okay. At the time of these patents in 2005,
20 could a POC have met those requirements with a single
21 column?

22 A. No.

23 Q. Why not?

24 A. There's a number of reasons that compound that
25 get into the design of a concentrator. So a portable

1 oxygen concentrator, less than 10 pounds, producing a
2 continuous flow of oxygen, as specified in the
3 requirement for the Fifth Consensus Oxygen Conference,
4 going to a single bed imports inefficiencies in how I'm
5 running my compressor, how pressure is maintained in the
6 system, and it leads to a place where the energy
7 consumption of the cycle becomes too high.

8 In combination with that, one of the
9 requirements of the Fifth Consensus Conference is that
10 you have a concentrator that is quiet or acceptable to
11 be in a public place.

12 And having a single-bed column implicitly has a
13 cyclic element to it, meaning that because you don't
14 have two things that are giving offsetting -- offsetting
15 pressures in the cycle, your device is going through
16 performance changes during the course of a pressure
17 swing absorption cycle. When that happens, the pressure
18 goes up, the compressor noise changes, the device
19 becomes really extremely difficult to use. The noise,
20 it just makes the device a nonfunctional, nonacceptable
21 portable oxygen concentrator.

22 And one of the things that the patents, that
23 the '614 and the '628 patent discuss is that this
24 invention complies with that -- that standard, and so
25 that means you have to read the invention as saying,

1 okay, it's doing the things required to make it that and
2 someone skilled in the art who's tried to build an
3 oxygen concentrator before, knowing what's available,
4 knowing what can be done, a single -- a single column is
5 completely a nonstarter for a portable oxygen
6 concentrator system.

7 Q. Okay. Thank you. I want to talk a little bit
8 about the "separation cartridge" term on page 16 of your
9 declaration.

10 A. Okay.

11 Q. And on page 16, you show GCE's proposed
12 construction and 3B's proposed construction. Do you see
13 that?

14 A. I do.

15 Q. And you understand that the parties disagree on
16 what the meaning of "separation cartridge" is; correct?

17 A. I do.

18 Q. Which party's construction here, in your
19 opinion, is correct?

20 A. GCE's construction is correct.

21 Q. Okay. Why is that?

22 A. Because you can't build a concentrator that
23 meets the needs of being a portable concentrator, which
24 is what this invention is about, using a single
25 cartridge, and so having -- having that container

1 holding -- it can't hold a single cartridge. It must
2 hold multiple cartridges, multiple columns. Excuse me.
3 A single cartridge must hold multiple columns.

4 Q. So then you disagree with 3B's construction?

5 A. I do.

6 Q. Okay. Also, on the "separation cartridge"
7 term, you were asked some questions about whether your
8 construction renders the remainder of the claim
9 discussing the axis and the inlet and the outlet
10 unclear. Do you recall that?

11 A. Vaguely.

12 Q. So there -- there were some questions about if
13 there are multiple beds then which bed --

14 A. Yes, I do recall that.

15 Q. -- does the axis relate to.

16 A. Sorry. Yes, I do recall that.

17 Q. Okay. So if your construction were adopted
18 and -- were adopted, would a POSITA, looking at the
19 claim with your construction applied, looking at the
20 specification, understand how the axis or axes and other
21 claim elements following the separation cartridge, would
22 a POSITA understand the claim?

23 A. Yes. That's what I had discussed before. I
24 believe that's true.

25 Q. And that's clarified by the specification?

1 A. Yes.

2 Q. Okay. You were also asked some questions about
3 the fluid flowing along a line. Do you recall that,
4 generally?

5 A. I do.

6 Q. And I just want to turn to where that's
7 discussed in your declaration. It starts on page 35.

8 A. Okay.

9 Q. And this relates to claim 1 of the '614 patent.
10 Does the claim specify how long the first and second
11 lines are? In absolute or relative or any other term,
12 does the claim specify how long the lines are?

13 A. No.

14 Q. Does the claim specify where within the
15 separation cartridge the fluid is flowing when it's
16 flowing on the first line?

17 MR. ATALLAH: Objection. Vague. Go ahead.

18 THE WITNESS: No.

19 BY MR. GILL:

20 Q. Did you review your -- and it's your opinion
21 that the fluid flowing along term -- all the terms that
22 you've listed there in section D, in the heading in
23 section D, render these claims indefinite; correct?

24 A. Correct.

25 Q. And did you review the specifications of the

1 patents in forming that opinion?

2 A. Yes.

3 Q. Okay. So -- okay. So is it your opinion that
4 a person of ordinary skill in the art, looking at these
5 claims, looking at the specification, would be unable to
6 discern with reasonable certainty the metes and bounds
7 of the claim?

8 MR. ATALLAH: Objection. Legal conclusion. Go
9 ahead.

10 THE WITNESS: I believe it's very hard to know
11 what the edges are of what falls under the
12 interpretation of the claim.

13 BY MR. GILL:

14 Q. Okay. And in your declaration you list a
15 couple of different -- you describe a couple of
16 different ambiguities resulting from the claim language
17 here; correct?

18 A. I do.

19 Q. Can you describe why ambiguity number 2 renders
20 the claim indefinite, the claims?

21 A. I'm reading for a moment.

22 Yes. It's because it says that fluid flowing
23 along one line does not contact the absorbent in the
24 bed, but that fluid does at some point in time contact
25 the absorbent of the bed, that is the design of the

1 concentrator, and so it's missing the time element of
2 when it's contacting that element of the bed. The fluid
3 that is flowing on that line contacts it at some point
4 in time.

5 Q. And earlier when you were testifying about this
6 aspect of your declaration, counsel for 3B asked you
7 about claim 8 of the '628 patent. Do you recall that?

8 A. I think I do.

9 Q. Sorry, not of the '628. Claim 8 of the '614.

10 A. I'll look again. I have it in front of me.

11 Q. Okay. Does claim 8 resolve any of the
12 ambiguities you've identified here?

13 A. No.

14 Q. Okay. Why not?

15 A. It just reverses the flow. It doesn't solve
16 that temporal problem.

17 Q. When gas exits the absorbent bed, when it
18 flows -- sorry, when fluid flows through the absorbent
19 bed and exits the absorbent bed, is there still a space
20 within the separation cartridge that the fluid flows
21 through before it exits the separation cartridge in the
22 patents?

23 A. Yes.

24 Q. So the fluid flows through the absorbent bed,
25 through some other space or elements within the

1 separation cartridge, and then out of the separation
2 cartridge. Is that your understanding?

3 A. Yes.

4 Q. Okay. And now I want to talk a little bit
5 about the receptacle term that you construe.

6 A. Okay.

7 Q. What's the relationship between -- between a
8 receptacle and a separation cartridge?

9 A. A separation cartridge won't function without
10 an interface to the receptacle through which gas is
11 passed.

12 Q. Why does -- why do your constructions of
13 "receptacle" reference the separation cartridge?

14 A. Refer me to where your -- the section you're
15 asking about. I just want to look at the constructions
16 again.

17 Q. It's on page 40.

18 A. 40, thank you.

19 Yeah. I believe the constructions that are in
20 there are there because the receptacle has function
21 relative to the cartridge. It interfaces with it, and
22 the gas must flow from one to the other. Without
23 any -- actually, without any interface between the two,
24 the separation cartridge is pointless. It's a brick.

25 Q. Okay. And you were asked, also, about this

1 construction in the context of the claim and whether a
2 housing is a structure and a separation and a receptacle
3 is a structure. Do you recall that?

4 A. I do.

5 Q. Can a structure define another structure?

6 A. I'm not sure I know the answer to that
7 question. Can a structure define another structure? A
8 structure can certainly modify the understanding of
9 another structure, so yes.

10 Q. You were also asked some questions about the
11 use of the term "receptacle," not only in the claims but
12 in the specification, and there were -- there were two
13 different types of receptacle described in the
14 specification, one for a power pack and one for a
15 separation cartridge.

16 Do you recall that?

17 A. I do.

18 Q. So the receptacle in the claim, does that
19 relate to a separation cartridge or a power pack, the
20 receptacle you're construing in your declaration?

21 A. Certainly to the separation cartridge.

22 Q. Does not relate to a power pack?

23 A. Does not relate to a power pack.

24 MR. GILL: Okay. Thanks. That's all I have.

25 ///

1 FURTHER EXAMINATION

2 BY MR. ATALLAH:

3 Q. Got a couple of quick ones for you.

4 Going to page 35 of your declaration, I heard
5 something in your answers just now that I want to make
6 sure I understand because I thought it might be
7 different than what you said before.

8 A. Okay.

9 Q. So you were talking about -- you were asked
10 about a line, which -- along which there's flow that
11 does not contact absorbent material.

12 A. Correct.

13 Q. Mr. Gill was just asking you that.

14 A. Yes.

15 Q. So in the claim that should be the claim second
16 line; right?

17 A. Yes.

18 Q. When we talked earlier, you had said that part
19 I thought you understood, but it's not what I just heard
20 maybe, so I just want to clarify.

21 That part you understand, it's the contact part
22 that you don't?

23 A. I was asked what was the ambiguity number 2
24 about, and the ambiguity number 2 was suggesting that
25 there is a volume of gas which exists inside that empty

1 return tube, the empty -- empty space, that it's
2 described as gas flowing on that line but at some point
3 in time gas is flowing on a different line, it's
4 flowing -- it is flowing through zeolite, and there is
5 no definition of the time, and that makes it, in my
6 understanding, something that needs further clarity.

7 Q. Okay. So -- so when we look at the claims,
8 it's on page 36 --

9 A. Please.

10 Q. -- we're talking about the second line there?

11 A. Page 36.

12 Q. Yeah. I just want to make sure we're talking
13 about the same thing.

14 A. Is the second line in this the line that does
15 not contact the zeolite?

16 Q. That's what it says, yes.

17 A. Okay. Yes.

18 Q. Now, you're saying that -- I thought I asked
19 this earlier and maybe I didn't, but you're saying that
20 it flows along that second line and eventually will turn
21 and contact absorbent material; correct?

22 A. Correct.

23 Q. Okay. Is it flowing along the second line once
24 it's turned, or is it flowing perpendicular to that?

25 A. In order -- because the lines are disparate

1 lines, it has to turn to flow back on the other line.

2 Q. No, I understand.

3 A. Yeah. I'm --

4 Q. I understand. But my point is, all this claim
5 says is that fluid flowing on the second line does not
6 contact the absorbent material of the bed; correct?

7 A. Correct.

8 Q. Okay.

9 A. But it does eventually.

10 Q. But not when it's flowing along the second
11 line; correct?

12 A. That's an interpretation of the words and
13 that's where I find the ambiguity.

14 Q. Well, it's not an interpretation. Is it your
15 position that when it's along the other line after it
16 has turned to get to that line, it's still flowing along
17 the first -- the second line? Said another way --

18 A. So if I've got a -- if I've got a volume of gas
19 and it's flowing through the tube that does not have
20 zeolite in it, it is flowing along that, but this claim
21 says it does not -- it does not contact the absorbent
22 material, and the fact is that it does, it just does it
23 a half second later.

24 Q. So let me ask you this.

25 A. Yeah.

1 Q. When it's flowing along that line, right, it's
2 not contacting absorbent material.

3 A. I agree. When you define the time and the
4 contact as being concurrent, then I would say --

5 Q. And when it's in the absorbent material, is it
6 still on that line?

7 A. It's on the other line.

8 Q. So then it would not be flowing along that line
9 at that point. So when it contacts, it is not flowing
10 along the second line; correct?

11 A. But it's a continuum of gas, and so a gas that
12 starts here ends up there, and a gas that starts there
13 end up here.

14 Q. Well, I understand that, but this doesn't say
15 that when it goes from the second line to the first line
16 it still doesn't contact absorbent. It just says when
17 it's flowing along the second line it doesn't contact
18 the absorbent; right?

19 A. "Fluid flowing along the first line contacts
20 the absorbent material of the bed, and fluid flowing
21 along the second line does not contact the absorbent
22 material of the bed."

23 And my -- you're asking me to look for
24 things -- or I'm looking for things that I think are
25 inconsistent or ambiguous. It's an opinion that I have.

1 And what I'm expressing is that gas flowing along the
2 second line where there is no zeolite does at some point
3 in time flow where there is zeolite. It does move.
4 It's not on that line anymore, but the gas was
5 first -- those molecules were defined as being on the
6 line, and at some point in time later it's not required
7 that they still be on the line.

8 Q. Well, is it your position that once it's
9 contacting the absorbent material, like you say -- like
10 you say it eventually does, it's still on the second
11 line?

12 A. No. I think to contact the absorbent material,
13 you're on the first line.

14 Q. Okay. Now I want to go back to the
15 paragraph -- I think you were referring to that
16 conference --

17 A. Yes.

18 Q. -- in the specification.

19 A. Have you found it?

20 Q. Yeah. So pick one of the patents.

21 A. Yes. Thank you.

22 Q. I think if you take a look at the paragraph of
23 column 2 right above "A Brief Summary of the Invention,"
24 is that what you're referring to?

25 A. One, two.

1 "The industry has developed a set of
2 recommendations for systems targeted to provide portable
3 oxygen for ambulatory patients, the Fifth Oxygen
4 Consensus Conference," and then it goes on.

5 Q. Okay. So this is providing some background;
6 correct?

7 A. Yes.

8 Q. Okay. I'm looking, just for example, 1, 2, 3
9 in that paragraph. Do you see those?

10 A. I do.

11 Q. Okay. Do the independent claims here require
12 that the equipment weigh less than 10 pounds?

13 A. The independent claims do not.

14 Q. Okay. Do some of the dependent claims?

15 A. No.

16 Q. What about that the equipment provide the
17 equivalent of 2 liters per minute of continuous flow, is
18 that in the claims?

19 A. It's not.

20 Q. What about the flow rate must be maintained for
21 four hours or more, is that in the claims?

22 A. It is not.

23 Q. All right. So just because the claims don't
24 recite some of the standards from this conference does
25 not make them indefinite; correct?

1 A. Except for what it says here at the end of that
2 paragraph, is it defines the invention, and it says the
3 present invention conforms to these requirements of the
4 conference. It meets and exceeds these standards.

5 Q. Sure.

6 A. So if you are defining a concentrator that
7 can't meet and exceed those standards, then that's not
8 this present invention.

9 Q. This is giving some background as to the
10 parameters that this invention wants to meet; fair?

11 A. No. It says it meets and exceeds them.

12 Q. It wants to meet these but --

13 A. It doesn't say want. It says does.

14 Q. So is it your contention that these claims
15 require all of those three things? Are you reading that
16 into the claims?

17 A. I am reading the specification in addition to
18 the claims, and when I go look to see what are you
19 building and how are you building it, I have to
20 incorporate what is in the specifications.

21 Am I reading something -- am I inserting
22 something in the claims? No. I'm just saying that the
23 concentrator is not the concentrator described unless it
24 meets those requirements.

25 Q. So in claim 1 of -- let's look at -- what are

1 we looking -- which patent are you looking at?

2 A. I've got '628.

3 Q. All right. So in claim 1 of the '628, is it
4 your contention that claim 1 must be construed that all
5 of that equipment weigh less than 10 pounds?

6 A. I believe they've defined that invention as
7 saying a portable oxygen concentrator and they told me
8 what a portable oxygen concentrator was.

9 Q. Can you answer my question?

10 A. So yes, I believe that they have -- they've
11 given me a definition to interpret that.

12 Q. So claim 1 requires that all -- everything
13 claimed there is less than 10 pounds, in your opinion?

14 A. Yes.

15 Q. All right. So where is that -- but it's not in
16 the claims?

17 A. It says, "a portable oxygen concentrator."

18 Q. Okay. But there's no -- there's no -- nothing
19 in the claims that requires it be less than 10 pounds;
20 right?

21 A. But a portable oxygen concentrator is defined.

22 Q. And? I don't --

23 A. It's defined as less than 10 pounds.

24 Q. So are you reading that requirement into the
25 claims or not?

1 A. I'm looking for the definition of "portable
2 oxygen concentrator" in the claim. I go back to the
3 specification to try to understand what the
4 specification says about the definition of what a
5 portable oxygen concentrator is. It's very clear what
6 it says it is. It's called out -- they chose to put
7 that paragraph in there and they chose to say the
8 present invention is this.

9 Q. Uh-huh. But again, we've talked about this.
10 Is it your contention that now everything that's in the
11 specification must be in a claim or required by a claim?

12 A. I think when you define the invention, when you
13 define elements of a claim, you define it as the
14 invention, it deserves special consideration.

15 Q. So earlier when you said that, no, you don't
16 have to claim every element described in a
17 specification, was that not true, or was that true?

18 A. I don't think the two things I just said are in
19 conflict.

20 Q. Well, you're saying to me that these claims now
21 require something be less than 10 pounds, and that's not
22 in the claims, so I'm trying to understand what your
23 basis is.

24 A. I thought I explained my basis. I read -- I
25 read the claim, it defines a term oxygen concentrator --

1 "portable oxygen concentrator," which is defined in the
2 specification clearly and consistently. So when I read
3 "portable oxygen concentrator" and they say the
4 invention is this and we meet these requirements, I
5 expect that that's going to -- that is the definition of
6 your invention.

7 Q. Okay. So you would agree that wherever it says
8 something is your invention, that can be relied on to
9 interpret the claims?

10 A. I certainly think it can be relied on to
11 inform.

12 Q. But you wouldn't read elements into the claim;
13 right? At least that's what you said in your
14 declaration; right?

15 A. I'm not modifying the claim.

16 Q. You're not adding elements to the claim?

17 A. I'm not modifying the language of the claim.
18 I'm seeking to understand what the claim is meaning by
19 using what was provided.

20 MR. ATALLAH: I don't have anything further.
21 Thank you.

22 MR. GILL: Nothing further.

23 (Proceedings concluded at 3:45 p.m.)

24 (Signature is reserved.)
25

1 CHANGES IN FORM AND SUBSTANCE REQUESTED BE MADE
2 IN THE FOREGOING ORAL EXAMINATION TRANSCRIPT:

3 (NOTE: If no changes desired, please sign and
4 date where indicated below.)

5 PAGE	6 LINE	7 CORRECTION AND REASON
--------	--------	-------------------------

17 I, GEOFFREY DEANE, hereby declare under penalty
18 of perjury that I have read the foregoing deposition and
19 that the testimony contained therein is a true and
20 correct transcript of my testimony, noting the
21 corrections above.

22 GEOFFREY DEANE

23 Date

24 See: Wash. Reports 34A, Rule 30(e), USCA 28, Rule 30(e)

25 PLEASE RETURN TO: Central Court Reporting:
421 W. Riverside Ave., Suite 1010, Spokane, WA 99201

C E R T I F I C A T E

STATE OF WASHINGTON)
)
COUNTY OF SPOKANE)

This is to certify that I, Amy J. Brown,
Registered Merit Reporter, Certified Realtime Reporter
and Certified Court Reporter in and for the States of
Washington and Idaho, residing at Spokane, reported the
within and foregoing deposition; said deposition being
taken before me on the date herein set forth; that
pursuant to RCW 5.28.010 the witness was first by me
duly sworn; that said examination was taken by me in
shorthand and thereafter under my supervision
transcribed, and that same is a full, true and correct
record of the testimony of said witness, including all
questions, answers and objections, if any, of counsel.

I further certify that I am not a relative or
employee or attorney or counsel of any of the parties,
nor am I financially interested in the outcome of the
cause.

IN WITNESS WHEREOF I have set my hand this 16th
day of June, 2023.

Amy Brown

AMY J. BROWN, RMR, CRR
WA CCR NO. 2133, ID CCR NO. 700

Exhibits	116 117:20	2004 214:24 215:11,13
Exhibit 1 3:12 18:21,23,24 42:4 81:6 113:17 174:20	11:32 122:11	2004/2005 217:8
Exhibit 2 3:13 42:3,6 44:4 46:13 49:8 74:23 75:1 77:13 95:19 123:16	12 3:24 11:1,2 76:10,21,22 77:6 209:22 212:14	2005 45:22,23 46:1 96:14 97:15 98:19,25 99:25 102:7 215:7 219:9 224:19
Exhibit 3 3:15 43:5,7,8 44:7 68:17 95:18,19,20,25	126 204:1 206:3	2008 11:10 14:2
Exhibit 4 3:17 132:16,18 134:9 135:5	128 27:25	2010 25:22
Exhibit 5 3:19 137:23 138:1 214:25	12:20 122:12	2011 14:9 16:17 22:20
Exhibit 6 3:22 190:15,17	13 26:22 27:3 69:1,2,3,18 70:19 71:7 72:3,13,16,17,21, 25 73:5,6,8,20 74:10,18,20 82:18 83:6,12,20,22 84:5,11, 21 85:6,11 123:23,25 223:4,7, 18	2015 11:11 21:22,23 22:18
Exhibit 7 3:24 212:13,16,21	130a-130c 124:6	2019 9:12,13
\$	131 40:9 41:18 47:8,15 49:11 59:25 66:12	2023 3:3 4:2
\$9 10:20	132 3:17 28:17 31:14 221:24	21 77:9,11,14,15 78:2,7 79:7,9, 12,13,17 80:2,4,24 81:21
1	136 32:2	211 213:22
1 3:12,13 18:21,23,24 19:21 42:4 76:9,21,22 77:6 81:6 95:23 107:16 112:2 113:16,17, 18 130:4 137:11 141:17 142:18 151:18,19 153:25 155:1 156:12 159:3 174:20 228:9 238:8 239:25 240:3,4,12	137 3:19	212 3:24
1-4 60:15	14 3:3 4:2	221 3:7
10 135:6 225:1 238:12 240:5, 13,19,23 241:21	15 3:17 132:13,19,24 214:6,14	233 3:8
10,357,628 3:13 42:14	16 3:19 72:13,16,20 73:2,5,18 74:15 82:8 83:5,18 84:6,7 128:20 138:2,4 141:8,9 226:8, 11	25 12:20 213:22
100 60:15	17 117:20	255 210:21,24
101 179:18	18 3:12,22 190:15,20 192:5	256 210:21
1010 4:3	19 215:2 218:20	2569 95:25
103 193:16,17	190 3:22	2592 95:23 96:3
11 76:9,25 77:15,21 78:5,8,15, 19 79:7,12,14,15 80:3,13,22, 24 81:21 179:11,15	2	26 54:18 56:12,13
11,369,614 43:12	2 3:13 42:3,6 43:24 44:4 46:13 49:8 59:8 74:23 75:1 77:13 95:19 123:16 133:23 134:1 135:5,9,16,23 136:21 139:2,5 159:3,4 229:19 233:23,24 237:23 238:8,17	2605 3:16 43:22
11,389,614 3:15	20 8:22 21:16 22:19	266 210:24
112 202:8	2000 219:9	27 19:21
	2002 14:3,11 214:17 215:11 216:23	284f 163:17
	2003 14:1,2,16	286c 163:17
		297 210:14
		298 210:14
		3
		3 3:15 19:12 43:5,7,8,24 44:7 60:5 68:17 77:6 95:18,19,20, 25 134:5 135:11 238:8
		30 136:5
		34 206:11,14
		35 228:7 233:4

36 31:20 206:11,14 210:1 234:8,11	51 28:1 122:15,21 205:19 206:1	65 23:6 128:1 129:21
37 131:2,3 150:25 151:12 161:6	52 110:16 111:14	66 82:14,16
374 3:24	54 122:16 123:2 125:6	669 210:2
38 60:5,6 131:1,2,3,10	59 208:11,12 210:8,14 212:25	69 85:2
3:45 242:23	5901 133:4	7
3B 3:2 4:17 18:9,10,14 22:25 128:6,14 172:12 173:6,12 185:16 192:11 196:21 198:7 230:6	5908 133:13	7 3:24 20:22 21:5,6,9 123:22 211:13 212:13,16,21
3b's 22:22 113:6 117:24 128:12,16 129:11 136:3,7,11, 18 139:9,13,20 172:16,20 174:6,8 175:25 181:2 185:4 189:19 192:18 196:9,18 200:22 202:12,15 203:10,23 205:20 221:8 226:12 227:4	5912 133:5	76 132:4,5 133:19 138:10
	5917 138:5	8
	5921 191:5	8 77:6 167:3,5,8 168:11 170:8 211:13,14 230:7,9,11
	5923 191:11	80f 163:17
	5936 190:21	87 150:1,3
	5951 138:6	88 150:17,20
	5953 138:20	8:22-cv-02550-tdc 3:3
	5954 138:18,24	8:44 4:2
	5959 138:6	9
4	5960 133:5	
4 3:7,17 132:16,18 134:9 135:5,6,12	5965 132:25 133:5	
40 60:5 174:21 231:17,18	5966 138:7	
41 81:5	5971 138:7	
4109 3:14 42:24	5978 190:22	9 54:18 56:14 77:6 99:25
42 3:13 103:8,9	5983 190:22	90 152:17
421 4:2	6	912 3:18
43 3:15 75:3,18 76:7 82:4,7 212:19	6 3:22 129:14 190:14,15,17	917 3:21
4364 211:2	600 212:8	92 150:20 152:17 153:11,16,21
4365 210:24 211:2	614 44:7 68:18,25 76:18,24 77:4 82:1,10,18 83:4,13 84:5 104:8 111:4 122:22 123:6,13 125:8 151:18 154:1 177:19 206:20,23 223:4,7 225:23 228:9 230:9	93 155:10 169:15 170:21
4366 210:25	628 42:12 44:5 46:16,18,24 47:20 48:10 49:14 56:12 59:10 60:2 74:22 76:10,20,23 77:8, 14 104:3,6 107:16,17 111:4,7 112:2 113:18 122:22 123:6,13, 18 125:8 130:4 137:11 141:18 177:18 179:12 225:23 230:7,9 240:2,3	936 3:23
4373 212:20	64 23:6	94 169:13
4374 212:19		951 3:21
44 60:5,6 104:2 106:21 112:7		959 3:21
45 197:23		96 172:8
		960 3:18
5		965 3:18
5 124:7 135:12 137:23 138:1 214:25		966 3:21
50 206:1		971 3:21
		978 3:23
		983 3:23

99 191:20

9th 96:13 97:15 98:19 102:7

A

A-I-R 101:23

a.m. 4:2 122:11

able 31:3 33:7,11 34:1 39:2
44:25 51:22 57:6 92:7 94:1,20
123:5 150:12 151:13 159:22
164:23 166:23 191:23 192:2
207:5,19

about 4:23 7:16 8:8,22 10:9
11:9,11,21 13:24 16:25 17:1,4,
11,13,18,21 18:9 19:12 21:19
22:13,25 24:10 34:14,21 40:10
44:11 47:5 48:19 49:9,12
51:25 55:17 58:2,3,4 59:24
61:7 63:4 65:11,16 66:8 67:18
68:1,6,20 70:1,25 73:13 75:8,
12 76:8 79:13 84:11,15 88:25
90:11 91:2,10,23 94:9,13 95:2
97:15,21 99:1,3 104:8 105:18
109:9 110:15 111:25 114:3,13
117:16 119:22 122:20 129:22
132:5,10 134:16 135:1,2
136:23 139:15,16 142:17
144:1 145:18 147:10 151:4,7
155:10,13 156:2 157:25 161:5,
17 162:1,4 165:1 167:18 168:6
169:15,16 171:14,15 172:16
173:6,13 175:11 176:10,12
177:10,12 179:4 182:2 186:8,9
187:2,7 189:12 190:10,11
191:16 192:17 193:10,19
194:10,11 196:25 202:15
203:10,23 204:12,23 206:1
207:12,20 208:4 209:24
210:20 211:5 212:10 214:9,15
216:6,7 217:8 218:10 221:20,
21 223:3,14,24 224:11,12
226:8,24 227:7,12 228:2
230:5,7 231:5,15,25 232:10
233:9,10,24 234:10,13 238:16,
20 241:4,9

above 27:25 81:5 237:23

absolute 33:21 34:2,24 35:1
228:11

Absolutely 102:12

absolutes 64:13

absorb 69:6,14 85:15 108:3

absorbent 59:18 69:6,13
75:12,13 77:21,22 78:8,9,16
79:8 81:11,13 85:9,14,18
96:19 97:1,2,4,13 99:23 102:6
104:14 105:1,23 106:24 108:3,
5,10 110:8 111:5 112:3 114:25
115:20,22 116:2 122:24 125:2
137:18 141:20 142:1,20,24
144:2,25 145:2,6,16 146:6,10,
24 149:23 154:10,11 155:22
156:20,22 157:2,14,17 158:4,
17 159:2,15 160:4,12,21,22
161:15 162:13,23,24 163:11,
14,22 164:4,7,25 166:19
168:19 169:17 170:21 171:19
172:5 229:23,25 230:17,18,19,
24 233:11 234:21 235:6,21
236:2,5,16,18,20,21 237:9,12

absorber 212:2

absorbing 172:1

absorbs 102:25

absorption 60:9 124:2 225:17

abstract 152:12

accept 209:16 211:1 216:21
217:5

acceptable 200:12 225:10

access 137:21 142:22 145:2

accomplished 124:3

according 183:19 200:7
210:2

accurate 21:5 90:3 153:23,24
186:10 213:24

accurately 113:5

achieve 54:25

achieved 54:24 57:25

acquiring 24:10

acquisition 10:19

across 15:9 25:13,14 75:14
168:4 193:13 194:25

ACTION 3:3

active 63:20 156:9 165:24
166:19

activity 9:18

actual 151:17

actually 19:23 25:10,13 31:8
37:14 56:21 62:21 74:25 78:8
81:3 82:3 86:10 89:3 103:20
105:7,9 106:2,18 113:16,23
123:10 130:6,7,10 131:1
133:4,16 134:18 135:7 138:20
140:1 143:18 163:21 167:17
168:11,14 171:12 177:25
179:12 180:25 181:13 184:5
191:10 193:21 200:7,23
203:25 206:11 211:2,3 218:21
219:5 231:23

adamant 146:17

add 36:13,20 37:4,24 38:5,7,
15,20,23 40:2 72:16 81:21
83:5 89:25 93:9,19 94:11
105:7,15 106:3 147:4 149:4,6
187:14 197:10

added 16:6 74:11 83:24 90:2
147:17 148:8

adding 38:13 53:22 82:23
90:5,6 93:22 105:22,23 112:8
121:2 147:16 148:11,19 188:9
242:16

addition 121:15 239:17

additional 92:11 146:11,12
147:16 148:19 149:4 187:14

Additionally 13:12

additive 79:13

address 32:4,7

addressed 201:15

adds 74:15 78:7 79:9 80:4
84:7 90:14 149:1

adequately 89:15

adopted 81:16 83:6 84:5,8
141:14,25 144:24 146:2
148:10 194:22 196:5 227:17,
18

Africa 13:15

after 14:5,7 125:15 154:3
235:15

afternoon 191:9

afterwards 13:5

again 7:1 17:10 18:17 30:15
38:12 39:25 40:22 58:8 60:25

62:8 65:2 66:22 67:10 70:24
78:22 79:10 82:4 83:7 87:10
89:4 92:19 100:1 109:24 113:9
119:13,16 122:7 128:7 130:4,
16 137:12 138:6 139:1 141:18
143:25 147:21 149:4 153:25
156:1 159:18 160:9 162:3
163:25 165:25 167:9 169:23
172:24 179:6 180:15 182:6
186:13,19 187:7 188:3,12,20
190:25 198:6,9 199:8,9 201:16
202:25 203:8,22 204:9,22
205:4,6 212:8 230:10 231:16
241:9

ago 7:13 17:2 22:6 44:18
84:15 117:11

agree 5:13 29:24 35:1,14,19
36:13 37:4,10 38:21 45:2
53:25 54:7 73:16 74:14 75:11
78:1 88:1 89:16 92:5 94:15
104:24 107:6 110:6 114:9
115:5 116:1,11 117:9,22 118:5
119:9 129:25 130:3,9,22
131:19 137:10,15 140:18,25
147:15 156:11 157:22 165:18
169:1 179:6,9 180:9,12,19
182:7 196:4 236:3 242:7

agreement 114:4

agreements 16:23 22:10
23:14

ahead 13:8 36:18 203:20
228:17 229:9

air 23:24 85:24 86:16,20 87:14

Airsep 101:8,18,22 217:1

align 210:24

allegation 173:16

allege 84:25 151:19 158:20

alleged 154:17 174:6

alleging 47:21 93:19 110:4
220:5

allows 38:15

almost 73:25 192:11

alone 53:11 99:3

along 98:2 141:21 142:21,22,
25 143:1 144:2 145:2,16 153:3
154:9,11 155:22 156:13,17,18,
19 157:2,6,15,16,21 158:3,4,

16,25 159:12,14 160:11,16
161:12 162:22,23 163:1,15
164:4,6 165:4,13 166:16,18
167:12,13 168:18 170:10,12
172:22 173:15,18 228:3,21
229:23 233:10 234:20,23
235:10,15,16,20 236:1,8,10,
17,19,21 237:1

already 63:18 91:23 93:5,6
104:21 108:8 112:2 122:19
181:16,25 187:12 188:4,5,16
194:11

also 12:14 16:8 29:1,9 33:10
36:21 51:24 57:7 69:12 73:23
79:21 87:24 92:10 111:1
124:24 125:6 126:13 127:17
135:6 136:18 138:11 147:4,17
168:20,24 184:9 190:9 193:22
194:17 196:13 208:1 222:2,25
227:6 228:2 231:25 232:10

alternate 187:6

alternative 175:1

although 14:2 20:6 26:12
27:14 54:2,17,18 56:22

always 24:14 29:20 39:22
110:4 127:2 160:2,3 166:12,16
219:19

am 35:16,18 43:2,20 51:15
58:19 66:24 68:21 80:25 81:15
111:16 132:6 146:19 148:13
158:20 162:3,16 186:10 206:8
239:17,21

ambient 85:24 86:16,20

ambiguities 108:20 154:17
174:7 229:16 230:12

ambiguity 108:21 149:1,10,
11,19 155:1 158:21 159:3
166:22 169:16 194:25 229:19
233:23,24 235:13

ambiguous 38:25 70:14
84:19 93:19 106:5 112:22
115:10 124:18 149:17,18,22
156:15 161:17 162:1 165:5
236:25

ambulatory 238:3

amend 147:4

amended 145:15

American 3:17,20 132:13

among 28:25 192:20 222:2

Amy 4:4

analysis 41:16 150:22

analyze 24:15

and/or 104:13 106:23 155:14

angles 135:25 136:9

annotate 151:13

annotated 151:2

annotations 161:5 168:17
171:6

another 10:24 25:21 29:16
30:7,20 35:23 40:10 43:16
51:3 62:16 73:23 91:4,9 92:15
121:2 122:3,4,9,14 147:22
167:24 168:8 200:17 202:24
215:25 232:5,7,9 235:17

answer 5:9,10,16 6:3 13:5
30:11 32:21,22 34:14 39:3,5
41:21 50:10,18,20 63:25 65:4
66:10 72:1,5,11 98:5 100:14
113:10 114:2 117:20 118:1
147:14 176:2 195:13,14
196:12 203:15 207:24 216:9
232:6 240:9

answering 6:5 34:13

answers 5:20 67:17 117:10
118:25 233:5

any 5:24 6:7,11 7:4,10,25 8:18
11:22 14:4 16:16,22 17:11
20:3,5,13,16 21:23 23:21
25:16 26:4,9 29:21,23 31:22
40:25 41:18,22 44:24 46:23,25
48:9 51:16 63:14,23 66:20
70:25 77:11 90:7 97:8 99:6,14
108:14 116:19,22 127:20
148:7 157:15 160:12 171:16
172:23 177:20 178:5,15
188:14 203:1 205:15 206:23
207:6,13 208:8 218:25 219:15
221:7,8 228:11 230:11 231:23

anymore 237:4

anyone 8:8,11

anything 6:19 7:7 17:11 18:18
41:10,24 46:24 49:14,24 50:7,
16 52:3 55:6 56:20 64:22
66:19 67:8 68:7 78:23,25

81:22 83:5 84:3,5,7 112:8
113:15 126:18 172:16 190:5
202:16 207:13 242:20
anyway 205:14
anywhere 47:20 60:2 211:25
apart 143:2,10 152:2 163:25
206:6,7
apologies 191:9,11
apologize 27:24
apparent 222:8
appear 19:5 74:8 112:6 202:9
222:20
appears 76:23 83:2
appendix 19:8,13 23:3,7
applicant 207:7 209:5 211:18
212:1,3
application 28:14 29:21 49:2
132:2
applications 97:24 126:16
215:17
applied 10:23 28:7 40:11,22
41:1,19 48:3,10 173:25 227:19
apply 31:16 41:24 222:6
applying 136:17
appreciate 203:3
approach 7:17
approached 12:25 44:11
appropriate 29:7 30:19 38:4
72:2
approval 25:5
approximately 22:20
area 12:3,7 45:25
areas 11:24 12:4,19 15:19
64:17
aren't 20:5 184:1
argue 38:16,18 149:1,2
160:23 187:17 197:17,19
207:22 208:1 209:5
argued 207:7,16
arguing 147:21 148:5
argument 148:2 149:13 163:8

197:14,20 203:17 211:4,9
212:1 222:14
arguments 202:20 212:1
around 10:7,17 14:25 23:23
24:9 25:22 26:24 27:24 38:8
59:25 130:12 141:17 217:11,
14 219:23
arranged 146:14
art 32:15 51:18,21 52:17 54:20
55:22 61:15 64:18 96:25
97:20,22 98:20 103:14 109:14
123:14 125:9,13,18,19,23
126:4,11,15,21 127:1,2,11,13,
16,17,20 131:6,21 215:6,15
217:6,15,17 218:1 219:22
220:5,9 226:2 229:4
Asia 13:16
aside 131:18 192:16
ask 6:1 7:1 20:12 34:13 57:12
65:4 66:22 67:22 82:2 93:15,
18 94:5,9 100:17 102:20
103:21 118:2,3 124:20 148:8
168:11 172:24 174:2,14 194:7
204:10,22 215:3 218:10 219:7,
15 224:4 235:24
asked 26:1 39:9 144:23 147:9
179:22 183:1 184:15 189:10
201:3 221:11 223:14 224:10
227:7 228:2 230:6 231:25
232:10 233:9,23 234:18
asking 5:10,23 34:17 37:18,23
47:6,14 48:8,12,24 53:13 57:2
59:24 63:21 67:22 69:8 71:1
78:11 80:2 97:18,22 113:21
116:22 117:25 118:24 120:10
121:9,19 134:21 148:6 153:7,9
155:10 157:11 169:24 177:23
181:10 184:3 185:13 195:2
231:15 233:13 236:23
aspect 230:6
aspects 110:22,25
assembly 206:8
asserting 221:7
assessment 15:8
associated 51:20 104:14
106:24
assume 6:4,23 15:24 25:7

26:17 67:1 81:16 141:14 201:1
assuming 25:14 58:6 84:4
218:13
Atallah 3:7,8 4:13,16 7:23
18:22 30:5,12 31:4 33:15 34:9,
19 36:18 37:2 39:4 40:8 42:7
43:6 48:1 62:7 68:9,13,15
75:24 76:3 101:25 106:8,11,20
109:24 110:2 113:8 115:12
117:9,13,16,18,21 122:3,8,13
124:19 132:17 137:24 159:7,
21 162:19 163:2 165:12
174:14,18 190:19 209:17,21
212:10,17 213:2,7,10,16,20
220:15,19 221:14 228:17
229:8 233:2 242:20
attached 19:8,14
attempt 63:17
attention 80:20
attorney 7:25 17:15 31:9
54:15 62:14
automotive 10:7
autonomous 10:8
available 226:3
Avenue 4:2
avoid 135:18
aware 17:25 26:5 44:15 96:25
98:24 99:6,10,14 100:9,25
102:11 206:22,25 207:1
217:14 218:9
away 184:20
awful 159:15
awhile 4:25
axes 142:15 146:12,23 147:5,
16 148:6 227:20
axis 132:5,10 133:14 134:9
136:13,16 137:8,14,15 138:21
139:15,24,25 140:13,15,16
141:21 142:2,5,8,9,21,25
143:1,2,3,5,7 144:3,4,5,9,16,
19 145:3,4,13,16 146:2,8,10
147:1,19,20,25 148:1,3,24
149:6,7,20,23 227:9,15,20

B	Bates 3:14,16,18,22,24 42:16, 17 43:22 95:22,23 132:24 133:4,13 138:5,18 190:21 191:4 210:12,24	22
B2 3:13,15 42:14	Bates-numbered 210:11	beds 70:22 71:7,18 72:22 73:1,18 74:16,20 77:22 78:9, 15 79:8,24 80:8 83:21 85:8 94:16,18 95:3 97:9,14 98:13 99:9 100:10,12,13,21 101:3,9, 10,12 105:23 108:13 109:7,12, 13 110:5 111:5,22,23 114:25 115:8 125:3 127:21,23 142:1,7 145:3,9,15 146:6,12,18 149:5 169:6 223:23 224:1,6 227:13
bachelor's 131:11	batteries 9:11	been 4:25 6:22 21:13 25:17,19 26:18 37:1 44:20 48:22 50:2 54:17,19 56:22 57:9 61:20 63:5 73:25 83:19 87:21 96:25 97:14 98:19 100:25 102:5,11 122:3 123:5 146:16 147:9 158:16 189:9 201:3 215:21 217:6
back 7:15 18:12 19:9 34:11, 15,16 35:14 36:6 45:24 47:12 49:10 50:18 53:17 59:23 62:11 64:18 66:1 70:10 73:11 74:12 77:12 78:18,22 79:6 80:17 82:1 83:16 84:2,3 86:3 88:12 89:4 91:21 92:19,20 94:24 95:11 97:11 98:3 106:12,16 109:25 110:1 112:6 113:20,25 115:13 117:20 130:18,25 140:2 141:4,16 143:16,17 144:22 152:16 155:25 158:8 159:9,18 160:9 162:17 163:24 165:7,15 166:25 168:3 169:7 170:1 174:20 180:16 184:5 185:1 187:6 188:22 189:16 194:9 202:21 205:11 206:10 212:20 213:23 214:5 218:23 221:23 235:1 237:14 241:2	battery 177:6,7 195:19 199:24	before 4:4,17,21 6:15,22 7:2,5 10:12 13:4 18:16 39:5 42:9 43:9 45:24 59:24 61:21 69:3 75:8 97:15 98:3 103:15,18 109:10 110:13 114:3 132:21 140:5 142:12 172:5 190:25 201:9 213:2 215:13 216:23 217:2 226:3 227:23 230:21 233:7
background 21:10,11 30:24 31:3 39:2 164:19 214:10,15 238:5 239:9	bear 66:15 82:13 84:11	begin 63:3,4
backtrack 140:23	beauty 10:17	beginning 7:13 76:7 82:24 213:22
backtracking 140:23	became 14:24	begins 138:21
backwards 9:5	because 28:19 36:14 52:11 55:20 56:8 57:11 59:4 62:1 64:7,8 65:17 73:2 79:9 90:9 91:3 92:23 108:24 110:15 111:17 116:17,25 120:7,12 133:3 136:19 137:8 144:8 146:5,9 147:19,25 158:24 165:6 176:14,18,24 180:23 183:20 189:6,21 190:1 194:4 195:20 196:19 197:11 203:13 204:3 216:1 219:11,18 220:1, 4,9 224:8 225:13 226:22 229:22 231:20 233:6 234:25 238:23	behalf 4:16
backyard 32:24 33:1,2	become 44:12 140:16	behind 63:5
bad 121:9 191:9	becomes 137:8 146:2 183:22 207:9 225:7,19	beholden 22:21
bag 176:7,8 190:7	bed 59:18 69:5,13 70:18 72:3 75:13 77:21 78:7 79:15 85:12, 14,17,24 86:2,11,12,13,16,20 87:7,11,14,23,24 88:3,5,19,20 89:18,21,22 90:7,9,10,12 91:19 93:10 94:11,21 95:6 96:19 97:1,2,4,6,13 98:21,25 99:1,4,6,11,15,23 101:2,7 102:6 105:1 108:2,4,9 110:8 112:3,4 114:18 115:7 125:8 141:20 142:10,20,24 144:2 145:1,4,5,6,10,11,12,13 146:2, 9,11,13,24 147:5,16,20,25 148:1,3 149:6,23,24 154:10,12 158:18 160:4,12 162:7,9,10, 23,25 163:4,6,20,22,23 164:5, 7,11,16,25 165:3,8,9,14,22,23 166:3,13,16,20 167:22 168:13, 19,22 171:2,4,9,24 172:3 207:8,15 208:8,24 209:1 211:21 212:2,4 214:2 223:15, 19 225:4 227:13 229:24,25 230:2,17,19,24 235:6 236:20,	being 4:7 17:25 22:6,20 24:4,5 30:17,24 34:1 39:9 49:2 52:8 53:21 57:9 61:7 62:13,14 74:1 82:19 99:14 112:10,13 113:9, 11 116:24 121:8 124:17 131:20,22 146:6 148:16 150:12 152:13,21 153:5 168:8 173:25 177:13 182:21 189:20 190:8 195:23 196:17 208:3 211:5 223:24 226:23 236:4 237:5
bags 196:14	become 44:12 140:16	believe 18:17 19:11 21:5 25:22 30:23 32:4 34:17 36:1 38:8,14 47:2 48:11 49:1,15,24 52:17,23 63:22 64:6 65:2,6,9
ball 32:25	becomes 137:8 146:2 183:22 207:9 225:7,19	
ballparking 17:8	bed 59:18 69:5,13 70:18 72:3 75:13 77:21 78:7 79:15 85:12, 14,17,24 86:2,11,12,13,16,20 87:7,11,14,23,24 88:3,5,19,20 89:18,21,22 90:7,9,10,12 91:19 93:10 94:11,21 95:6 96:19 97:1,2,4,6,13 98:21,25 99:1,4,6,11,15,23 101:2,7 102:6 105:1 108:2,4,9 110:8 112:3,4 114:18 115:7 125:8 141:20 142:10,20,24 144:2 145:1,4,5,6,10,11,12,13 146:2, 9,11,13,24 147:5,16,20,25 148:1,3 149:6,23,24 154:10,12 158:18 160:4,12 162:7,9,10, 23,25 163:4,6,20,22,23 164:5, 7,11,16,25 165:3,8,9,14,22,23 166:3,13,16,20 167:22 168:13, 19,22 171:2,4,9,24 172:3 207:8,15 208:8,24 209:1 211:21 212:2,4 214:2 223:15, 19 225:4 227:13 229:24,25 230:2,17,19,24 235:6 236:20,	
Barbara 6:18	become 44:12 140:16	
based 26:6 28:14 39:15 52:22 53:23 63:7,18 83:7 95:4 102:25 111:21 116:4 118:24 128:5 137:22 146:25 164:12, 20 182:11 187:18 216:18	becomes 137:8 146:2 183:22 207:9 225:7,19	
basically 223:8	bed 59:18 69:5,13 70:18 72:3 75:13 77:21 78:7 79:15 85:12, 14,17,24 86:2,11,12,13,16,20 87:7,11,14,23,24 88:3,5,19,20 89:18,21,22 90:7,9,10,12 91:19 93:10 94:11,21 95:6 96:19 97:1,2,4,6,13 98:21,25 99:1,4,6,11,15,23 101:2,7 102:6 105:1 108:2,4,9 110:8 112:3,4 114:18 115:7 125:8 141:20 142:10,20,24 144:2 145:1,4,5,6,10,11,12,13 146:2, 9,11,13,24 147:5,16,20,25 148:1,3 149:6,23,24 154:10,12 158:18 160:4,12 162:7,9,10, 23,25 163:4,6,20,22,23 164:5, 7,11,16,25 165:3,8,9,14,22,23 166:3,13,16,20 167:22 168:13, 19,22 171:2,4,9,24 172:3 207:8,15 208:8,24 209:1 211:21 212:2,4 214:2 223:15, 19 225:4 227:13 229:24,25 230:2,17,19,24 235:6 236:20,	
basis 103:17 140:11 176:2 177:8 186:15,18 187:14 192:23,25 193:1 202:23 241:23,24	become 44:12 140:16	

71:9 72:6 73:6,21 74:9 82:18
83:21 94:17 95:14 101:23
105:5 112:14,15 134:11,23
137:14 138:1 140:14 153:1,24
154:23 156:21 158:11 171:6
174:20 175:19 177:17,19
187:5 189:18 192:4 199:18
201:2 203:10 208:18 210:1
215:12 218:18 227:24 229:10
231:19 240:6,10

believing 79:15

below 77:5 82:14,16

belt 45:19

belt-worn 45:17 46:8

belts 55:25

beneath 24:18

Besides 202:6

best 17:14

bet 50:25

better 6:1 71:23 93:8,14
100:18 113:13 115:13 124:20
127:8 129:17 184:4 189:10,19,
23 191:24 192:2 200:16
202:24 206:11

between 74:2 86:11,24 87:10
88:2,13 90:7 92:9 160:14
169:7,8 175:5 176:5 177:10
178:10 198:10,16 199:19
201:4 202:2 204:14 206:2
231:7,23

beyond 41:10,17,24 64:9
68:5,7 104:14 127:3 164:8
205:15 212:7

big 116:20

Bill 12:5 13:15 16:12

billion 10:20

bit 9:6 11:21 27:24 45:4
104:21 110:15 140:24 177:14
186:10 191:24 193:10 194:10
201:17,21 216:25 219:20
226:7 231:4

black 101:18

blue 23:6

board 25:3

body 105:21

boilerplate 54:15

both 11:4,16 24:7 46:13 95:7
155:4 167:21 178:24 181:24
184:6 195:3,12,22 196:1,13
199:22 215:16

bottom 42:19 91:1 138:22
144:1

bounded 150:10

bounds 11:22 33:13 34:2,18,
24 35:6,8 71:10,21 73:7 74:5
89:15 91:16 93:16,18 94:20
150:15 166:11 223:18 229:6

bracket 199:16

branch 10:20

break 6:7,9 37:3 64:1 68:10
122:4,7 127:7 130:7 133:4
160:18 174:16 178:19 220:16

brick 231:24

brief 19:2 22:22 59:12,14
68:14 174:17 209:20 220:18
237:23

briefly 82:12

bring 49:18

broad 11:20 12:2 93:12
215:16 216:5

broader 63:18 64:12 66:4

broadly 54:12 57:7 65:23
111:2

brought 25:3 30:24

Brown 4:4

build 56:3 61:22 62:4 215:25
217:4,10 226:2,22

building 21:13 22:1 61:20
94:23 239:19

built 59:6 99:14 116:25 117:3

bullet 23:13 24:17

bunch 7:20 70:24 75:20 149:4

business 10:17 11:16 15:13
216:20

button 51:25 52:1,2,3,5

C

California 14:23

call 12:24 16:12 44:14 95:8
99:20 101:1 205:11

called 11:15 14:22 47:21
196:14 241:6

calling 145:12

calls 17:3 30:2 36:16 54:8

came 27:7 155:7 187:6 216:24
221:10 224:14

can 4:24 5:16 7:10,11 10:15
11:23 20:22 23:3,19 28:21
29:1 32:17,21,25 33:8 34:4,6,
11,24 35:4 37:10 38:16 39:11,
12,13,14 43:13 45:10,14
46:18,21,24 47:6,12,20 48:9,
16,21 49:13,17,19 50:6 51:14,
18 52:10,14 53:11,16 54:4,12
55:2,25 57:13,17 58:5,9,21,23
59:8 60:2 61:5,21 62:18,19,25
63:7 65:12,25 66:8,19 67:7
70:1,20 74:12 78:17 79:11,12
81:24 83:3,4 84:2,4,6 88:11,
20,21 90:17,22 91:21 92:14,16
93:16 94:23,24 95:1 96:20
97:19,20 98:1 100:2,12,17
101:17,22 102:2 105:10 106:6,
11 107:12 109:25 111:17
114:2,9 117:10 118:2 120:11
122:8,10 124:3,14,21,24 127:7
128:18 129:17 130:7 131:1
140:11 141:8 142:5,18 145:18
147:8,13,24 150:9 153:14
159:5,7,18,20 161:2,3 165:15
166:7,20 167:2,8 174:4 175:4
176:3,13 177:5,23 178:2,19
181:8,9 182:7,10 188:12,22
191:24 194:7,8 197:19,22
198:9,12,15,20 199:8 200:20
202:6,13,21 203:3,5,25
204:10,11,25 205:10 206:6
207:1,5,12,15 208:6,7 211:4
212:11 213:16 217:19,22,24,
25 218:2 220:21 222:2 223:6
224:4 226:4 229:19 232:5,7,8
240:9 242:8,10

can't 5:19 6:11 22:3,10 33:5,
12 36:21 38:20 41:7 50:13,15
54:7 55:4 57:11,20 58:12 59:4
61:22 62:4 63:22 67:10 71:10,

20 73:7 74:3 79:14 91:4 97:25
105:18 106:15 116:17,25
119:9,11,17 120:12 122:1,2
148:20 162:2 165:19 220:24
226:22 227:1 239:7

cannot 37:17 52:25 64:9,11
93:17 116:24 188:1 207:11
208:10

captured 110:16

car 120:10,12

care 10:18

careful 218:7

carefully 212:9

cartridge 42:13 59:17 66:9
69:19 70:15,23 71:8,19 72:4,
23 73:1,19 74:17,21 76:9
77:23 78:2,5,10,16,20,24 79:2,
5,9,16 80:7,10 81:1,2,8 82:6,
23,25 89:7,25 92:24 93:20
95:7 96:19,25 97:4,6,13 98:13,
20,25 99:2,17,18 101:5,6
102:21 103:13 104:13,22,25
105:4,17,19 106:23 107:8,19,
23,25 108:17,22,23,25 109:3,5
110:7 111:4 112:1,24,25
113:14,23 114:9,13,17,19,23
115:18 117:5,8 119:5,18,21,
22,23 122:23 123:4 128:5,14,
16,22 129:11,15,20 130:6,13
141:6,25 142:5 144:23 145:11
146:1,7 148:10,18,22 149:17
154:7,9 156:2,4,7 157:24
158:2,7,8 164:3,10 165:2
166:1 167:12 168:14,20,23,24,
25 169:2,3 175:12 176:24
178:13 179:25 180:1,2,21
182:18 183:4,7,12 184:10,13,
17,20 185:19,21,24 187:12,20,
25 188:1,6 190:2,4 194:4,6,11
195:4,19 196:11,24 199:23
206:7 207:8,15 208:7,23
209:1,6,13 211:12,20 212:2,3,
5 214:3 223:11,16 224:1,7
226:8,16,25 227:1,3,6,21
228:15 230:20,21 231:1,2,8,9,
13,21,24 232:15,19,21

cartridges 98:3,8 115:3
119:10,11,14,25 120:5 121:21,
25 167:10 227:2

case 6:17,18 7:2 16:25 17:13,
19,22 18:1,13 20:13,17,19

21:24 22:23 23:1 26:15 31:10
34:7 41:1 44:12 48:23,25
65:24 83:12 103:19 107:24
108:8 112:4 147:21 187:19
199:6 203:13 204:7 221:9
222:15

case-by-case 53:14

cases 108:4 195:15

caveat 174:5,7

central 142:9

CEO 16:8

certain 56:1 104:25 105:3
148:13

certainly 34:5 100:8 107:5
114:11 124:14 142:17 162:20
166:13 169:10 196:8 213:1
232:8,21 242:10

certainty 32:12,19 33:21 34:1,
2,24 35:3 229:6

Certified 4:4

challenging 207:10 216:19

change 57:24 130:8 205:6

changed 214:24 215:11

changes 54:4,21 56:23 58:9
197:5 225:16,18

changing 39:22,24

characteristics 56:8

charge 9:18 10:18 11:14 12:9,
14,15,17 16:7,9

chart 210:2

check 8:6

chemical 131:12

chief 9:15,16,25 15:3 16:7

choice 52:11 55:17 65:18

choices 53:7

choose 149:22 184:3 188:12

chooses 65:7

chose 241:6,7

chosen 198:20 199:21
201:20,23 202:1,2,13

circular 204:6

cite 132:9 133:9 138:11
210:13,21

cited 23:1 139:1 212:25 219:1

CIVIL 3:3

claim 19:1 22:22 23:1 28:20,
21 29:1,2,8,12,15,16,25 30:7,
19,20 31:6 32:10,11,18 33:4,7,
9,12,13,25 34:1,5,17,22,25
35:9,24,25 36:1,5,8,14,20
37:1,5,11,14,16,19,24 38:2,5,
7,9,10,13,15,16,17,18,20
39:13,16,18 40:3,19 46:25
49:13,16 50:1,20,22,23,24
51:13,15 52:2,10,15,19,24
53:11,12,15,16,17,21,22,23
54:4 55:5,23 60:3,4,16 61:2
62:12,24 63:1 64:17,23 65:25
66:12,20 68:20 69:1,2,3,5,18
70:8,10,13,19,24 71:3,7,9,11,
12 72:3,7,13,16,17,20,21,25
73:2,5,6,8,14,17,20 74:2,4,10,
15,18,20 75:11 77:9,11,14,15,
21 78:2,5,7,8,12,15,19 79:7,9,
14,15,17 80:2,3,4,13,22 81:21
82:8,18,20 83:5,8,12,15,16,18,
20,22,23,24 84:4,6,7,11,21
85:6,11 87:1,10 88:2,17 89:13,
25 90:9 91:15,18 92:8,16,23
93:3,9,12,15,16,20 94:1,2,6,21
95:2,6 96:7,10 104:11 105:6,7,
8,9 106:2,4,15,17,22 107:15,
16 108:8,14,18 109:18,21
110:6,10,11,21,24 111:25
112:2,6,12,15 113:1,12,16,18
114:4,6,8 119:8,16,20 120:11,
14,22,23 121:13,17 129:13
130:4,6,10,12,15,23,24
137:11,19 141:17,22 142:4,15,
18 143:5,16,18 144:6,13 145:1
146:5,22,24 147:4,17,18
148:6,10,20,21,24 150:13,15,
23 151:5,7,18,19,21 153:25
154:20 155:18,23 156:12,16
157:13,18 158:6 160:10
161:24 162:1,11 163:21,23,25
164:23 165:19 166:15 167:3,5,
8 168:10 170:3,4,5,8 173:5,17
175:23 177:19 179:7,8,11,15,
23 180:6 181:16,25 182:20
183:10,20 184:1 185:12
186:25 187:11,12 188:4,16
194:10 204:17,18,20,23 222:2,
4 223:4,9,10,18,19 227:8,19,
21,22 228:9,10,12,14 229:7,

12,16,20 230:7,9,11 232:1,18
233:15 235:4,20 239:25 240:3,
4,12 241:2,11,13,16,25
242:12,15,16,17,18

claimed 142:1 144:13,14
147:1 153:5 179:24 223:24
240:13

claims 28:22,25 29:6,9 35:15,
18,19 36:22 40:15 44:25 45:3,
24 52:21,23,25 55:4 63:13,22
65:23 68:22 73:15,22,23 74:8,
9 75:14 76:9,15,22 77:3 78:17
79:18 82:5 104:6,20,24 111:1
112:18 119:19,25 120:4,20
121:11,12,19,22 140:25
143:11 148:13,14 151:10,17
152:22 153:2,17 155:4,5
177:16,18,21,22 178:4,16
179:4 215:17 220:8 222:2,8,
19,21,22,24 228:23 229:5,20
232:11 234:7 238:11,13,14,18,
21,23 239:14,16,18,22 240:16,
19,25 241:20,22 242:9

clarification 6:24 66:23
109:20 111:10,17 112:5
113:11,13 116:10

clarified 112:11,13,21 113:10,
11 160:5 227:25

clarifies 107:3 108:14

clarify 5:25 12:11 34:8 47:6
90:6 100:7 104:12 105:12
106:22 110:10 112:8 115:24
133:3 169:24 233:20

clarifying 20:12 174:13

clarity 35:3 37:13 41:11 234:6

clause 107:19 154:4 158:16

clauses 54:13,14

clear 36:6 41:6 46:22 64:17
76:5 107:5 127:6 147:18 148:5
165:11 168:4 180:14 184:16
185:14,25 241:5

clearance 16:3

clearly 34:18 72:5 109:13
187:18 242:2

clipped 174:21

close 26:17

closer 85:6

cognizant 218:8

collection 215:16

collectively 192:22

column 54:18 56:12,13 59:8
60:5 62:5 78:25 79:1 81:13
90:25 95:23 103:1 115:22
116:18,25 117:24 118:6,10
119:1,3,4,12 123:22 124:4,12,
15,16,24 137:18 161:15
171:17,22 189:13 224:21
225:12 226:4 237:23

columns 42:18 62:6 79:5
81:11 90:21,24 104:14 106:24
115:20 116:2,7,13 117:4,7
118:10,22 122:24 124:4,5,22
125:2 144:25 169:17 170:21
227:2,3

combination 51:2 94:7 99:8
100:13 225:8

combine 94:25

combined 25:1 73:3

come 14:20 16:12 24:25 26:1
27:6,15 49:17 72:11 74:12
84:2 90:11 143:17 153:6 185:1
187:16

comes 49:20 89:8

comfortable 99:21 214:13

coming 168:14 171:9 172:3

comment 66:14 110:14,16
149:24 164:5

comments 89:1 208:3

common 72:22 73:1,19 74:17
194:24

commonly 103:3

communicate 102:4

communications 12:1

companies 22:1,4,9,11,16,17
220:24 221:2

company 9:20 10:20 14:21,22
15:3 16:18,20 25:22 26:7

company's 21:14

compared 208:23

competency 131:7

complete 45:15

completed 23:24

completely 29:25 30:20
226:5

complex 161:23

complies 225:24

component 144:12

components 21:17 46:6
51:11 54:24 61:16 70:3,24
91:20 92:11 114:8,12 146:25

compound 224:24

compressor 225:5,18

comprised 45:18

comprising 107:20,24 179:25
180:21 183:5 184:10,17
185:21

computing 11:25

concede 149:13

concentrating 45:16

concentrator 15:1 21:14,15,
20,21 31:1 42:14 45:21,23
46:8 54:24 55:12,25 56:4,8
57:25 59:2,6 60:10,15 61:18,
20,23 62:4 65:14,15,16 72:21
77:20 80:7 88:21 89:2,17,20
90:15,17 91:3,5,6,19 92:9,11,
15 97:7,8 98:23 99:5,7,8,14,24
100:7,8,9,22 101:1,4,9,11,19
102:7 112:17 116:17 117:23
118:8,11,23 126:19 127:21,24
150:10 156:8 166:5,8 167:20
187:21 216:1,4,13,19,21,23
217:14 223:25 224:25 225:1,
10,21 226:3,6,22,23 230:1
239:6,23 240:7,8,17,21 241:2,
5,25 242:1,3

concentrator's 25:22

concentrators 6:20 8:23
12:5,13 13:3 21:24 22:2 27:1
39:15 94:23 95:14 97:1 100:21
116:24 117:3 126:23 127:14
131:14 132:1 169:4,11 214:15,
18 215:18 217:10 224:12

concept 13:1

conceptually 202:9 203:6

concert 61:25 99:3

concluded 242:23

conclusion 30:3,22 32:20
36:17 37:8 54:9 153:6 176:3
229:8

concurrent 236:4

conditions 51:10

conference 46:1 62:2 118:9
224:14 225:3,9 237:16 238:4,
24 239:4

configuration 90:14 92:23
111:6

configurations 150:10

configured 69:6,13 85:15,23
86:20 87:6,14 92:10 108:3
128:22 129:15 154:8 156:3
158:8 165:2 166:2 167:10
175:11 176:17 182:16,24
183:6 184:11,18 185:8,18,20,
22 196:22 197:3

confirm 69:8 177:24 221:1

conflict 148:15,16 195:16
197:18 241:19

conflicts 222:8

conforms 239:3

confused 100:1,16 101:8

confusion 100:2

connect 72:10

connected 70:5,8,12,16 71:5
88:21,22 89:8 90:19,21,24
193:4

connectedness 70:7

connecting 169:6

connection 90:13

connective 72:7 74:2 85:1,7
88:12 90:5,7

Consensus 46:1 61:25 118:9
225:3,9 238:4

consider 97:23

consideration 241:14

considered 20:24 214:20

consist 58:17

consistency 74:7

consistent 16:4 52:8 53:23
60:23 63:12 65:9 72:17 73:25
94:4 109:17 136:3,11,18
139:12 148:15 181:2 183:16
192:18 194:15

consistently 28:20 79:3
109:4 122:22 193:11 242:2

constant 124:8

constitutes 121:13 124:1
131:20

constructed 33:4 35:9

construction 19:1 22:22 23:1
29:8,15,17,24 30:1,7,8 31:6
38:17 58:3,18 68:21 71:6 72:2
81:1,7,16 82:19 83:6 84:4,8
89:24 92:22 94:10 95:5
105:15,16,22 107:3,4 108:13
110:8 113:6,7 114:14 115:15,
17,18 116:4 117:24 118:6,21
119:2 128:6,12 129:2,10
136:3,7 139:9,13,20 141:5,13,
24 144:24 145:8,22 146:1
147:3,18 148:9,21 172:16,21,
23 173:15 181:3,13 182:5,18
183:18 185:4 186:16,18 189:6
192:19 194:14,23 196:18
200:7,15 201:15,20 202:13,14,
16 203:10,24 205:8,21 223:4,
8,10 224:5 226:12,18,20
227:4,8,17,19 232:1

constructions 98:12 128:21
141:10 174:6,8 175:1,19
178:25 181:11,22 184:6 186:2,
3 189:4,6,18 196:5,10 198:6,
10,17 199:13 200:10,23 202:8
203:6 204:15 221:8 231:12,15,
19

construe 30:19 231:5

construed 111:2 141:1 240:4

construing 232:20

consultant 21:15

consultants 14:25

consulted 14:2,5 22:1

consulting 11:3 14:4,11,20
16:16

consumption 225:7

contact 16:10,19 154:11

156:13,17,20,22 157:2,7,12,
14,17 158:4,17 159:2,14
160:3,4,11 161:14 162:7,8,12,
24 163:14 164:7,8 165:3,8,14,
22,23 166:3,13,16 168:19
169:17 170:13,15,20 172:6,17
173:5,14 229:23,24 233:11,21
234:15,21 235:6,21 236:4,16,
17,21 237:12

contact/do 172:17 173:4,13

contacted 17:2,13 172:4

contacting 160:21,22 163:4,
6,11 165:9 230:2 236:2 237:9

contacts 154:10 155:22
157:5,21 159:13 162:22
163:21 164:4,25 165:23,24
166:19,20,21 230:3 236:9,19

contain 176:17 182:17 183:7
184:12,19 185:8,20,23 187:20
196:23 197:3

contained 70:22,25 72:22
74:16 188:19 190:11

container 81:10 99:7,10
102:6 176:8,11 177:13 181:19,
20 190:2 193:5 197:22 226:25

containers 196:14

containing 82:23 90:1 101:6
129:11 185:19

contains 181:4 182:10,11
190:3 192:8,14

contemplated 123:11

contend 67:8

contending 64:22

contention 107:7 239:14
240:4 241:10

context 18:4 38:10 51:5
70:15,16 139:17 140:17,19
173:16 176:23 199:13,21
222:10 232:1

continue 216:8

continuous 55:24 61:18
123:6 225:2 238:17

continuum 236:11

contract 6:18

contractors 14:25
contractually 22:21
contribute 21:18
control 3:2 15:14 19:1

conversation 23:23
conversations 7:11 17:11
24:9

coordinate 135:25 136:9,13,
14,15 139:15,25

coordinates 139:6,21,22

copied 76:21 177:25

copies 76:15

copy 18:24 43:14 212:11

core 55:23 56:10 89:5

cores 89:6

correct 8:3 9:23 10:14 11:8
12:15 13:18,25 14:12,17 19:9,
22 23:9,11,12 25:15 27:2
28:10 29:13 30:1,8 32:16
33:20 36:11 37:9 40:11,12
43:23 44:8 46:2,10 50:17
56:16,17 59:21 68:21 69:4,16,
17,19,21,22 72:14 73:2,14,15
74:18 75:14 76:16,19,23 77:6,
7 78:10 80:11 81:8,13 82:6,8
84:16 85:9,10,15,16,18,25
86:12,18,24,25 87:2,11,24
88:4 91:13 95:9,10 96:15
102:14,15 103:14 104:9 107:8,
9,10 111:15 114:6,7,10,14,17
115:22 116:5,6 117:24 119:12
121:17 124:13,17,22,25 125:4
126:8,9,12,15 127:3 128:6,10,
12 129:3 130:1 131:8,9,18
132:2 133:2,10,11,17,18
134:2,5,10,11,17 135:3 136:1,
12,19 137:4 139:10 143:12
144:6 147:5 148:22,25 149:17
151:2,3 152:1,5,7,10,11 153:5,
18 154:15,18,19 155:14
156:14 157:3,9,19,24 158:18,
19,21 159:2,23 161:9,16 163:8
167:7 168:6,14 169:3 173:9
175:2,19,23,24 178:6,17,18,25
179:8,18,24 180:20 186:6,7
189:5,7,19 192:12 193:23
194:19 196:7,10 198:7 200:6,
10,14,23 201:3,12 204:18
209:24 210:4,10 211:3 212:15

213:25 214:19 215:1 218:17
219:2 220:10 226:16,19,20
228:23,24 229:17 233:12
234:21,22 235:6,7,11 236:10
238:6,25

correctly 103:6 178:23

cost 15:18

could 4:17 5:10 18:4 28:16
31:11 59:5 69:21,22 116:23
117:10,23 118:5,8 119:1
120:4,23 135:1 136:14 160:22
166:4,5 184:14,17 191:3
196:13 197:17 206:6 212:23
213:2 217:3,20 221:1 224:20

couldn't 27:10 63:3,4

counsel 24:25 25:2 31:9
230:6

country 15:1

couple 6:8 64:1 66:11 108:19
172:13 173:7 220:20 224:15
229:15 233:3

coupled 90:18

course 100:13 120:21 225:16

court 4:5 5:6,19 76:2 175:22
189:5

cover 42:23 43:21 132:24
138:4 190:20

covered 71:11,12

covers 197:5

crafted 78:21

create 149:11 197:18

creating 102:13

crosscheck 218:23

crossing 82:3 139:22 162:16

crowded 215:6,14 217:9,17
218:6 220:5,9

CTO 14:24 15:4

current 60:8

currently 16:22

customer 216:20

customers 16:10

CV 23:8

cycle 124:8 167:25 171:18
225:7,15,17

cyclic 225:13

cylindrical 137:18

D

dash 101:23

date 27:17 95:15 96:13 98:18
99:13 215:13

dating 98:3

David 4:16

deal 10:19 24:7 32:2 53:4

dealing 60:18

Deane 3:6,12 4:4,7,14,19
18:25 68:16 122:14

Deane's 3:13,15,17,19,22,24

debating 180:15

deciding 70:6

declaration 3:12,13,15,17,19,
22,24 7:21 8:1,11,13,14,17 9:1
18:25 19:5,13,25 20:4,6 26:23
28:13 31:17 40:11,23 42:4
43:8 45:12,14 47:7,11,22 48:8,
16 50:19 59:25 66:13 68:3,4,6,
21 75:1,4,19 81:6 82:3,5,15
84:25 85:7 110:17 111:14,20
122:15 125:5,17 127:10
128:21 131:1 132:19 133:9,16,
21 138:2,11,14 139:2 150:2
152:17 153:7 169:12,25
170:19 171:11,13 173:24
174:5,20 179:13 189:2 190:16
191:20,24 193:16 195:9,22,25
197:24 202:7,22 203:9,15
208:22 209:23 212:14 213:12
214:6 217:18 221:6,22,23
226:9 228:7 229:14 230:6
232:20 233:4 242:14

declares 197:12

Deconstructing 162:20

dedicated 111:5

default 219:12,16

defense 24:19

defensible 25:2

defer 69:24

define 33:8 53:16 58:14
70:14,16 78:20 92:21 93:24
136:16 139:24 142:5 148:23
177:2 179:1 188:2 189:21,23
191:21 194:3 218:5 219:23
232:5,7 236:3 241:12,13

defined 83:19 130:14 146:10
162:12 176:5 179:2 181:19
182:9,11 183:13 184:11
186:20 188:5 190:12 192:13
205:13 237:5 240:6,21,23
242:1

defines 36:23,24 48:12 58:17
83:19 88:2 92:9 137:21 143:8
154:3,4 182:1 186:24 187:18
190:6,9,12 192:13 202:4 239:2
241:25

defining 47:5 48:14 58:7
92:14 96:20,22 107:24 139:23
142:4 152:6 180:6,10,20,22
182:24 183:5 184:2,11,22
185:1,8,11,20,22 188:13 192:7
193:10 204:5 205:7,12 239:6

definite 34:18 150:16

definition 40:17 46:20,21,25
47:16,21 48:5,9,18,22 63:5
64:18 70:4 106:14,18 108:25
112:24 113:13 114:22 128:14,
15,16 133:13,17 134:2,9,18
136:10,11,19 138:11,20 139:2,
12,17 141:4 169:23 182:7
188:20 189:24 191:13 192:20,
24 194:21,24 195:11 234:5
240:11 241:1,4 242:5

definitions 49:2 65:2 132:10
135:13 192:25

definitive 180:14

degree 55:11 131:11,21

departing 54:22 58:10,13

dependent 238:14

depending 171:25 172:22
186:3

depends 53:4 58:14 72:13
77:15 100:22 199:21

depicting 153:1

deposition 4:3,20 6:14 7:8,12
8:2,8,20,21 9:3 19:15 42:4

depressurized 171:18

depth 177:9

describe 10:15 32:23,24 36:1
45:11,13 51:14,17 52:9 53:5,7
54:1 62:15 63:1 71:10,14
89:13,15 100:12 104:5 109:5,
22 119:24 121:12 126:22
130:17 193:21 194:18 208:2
217:17 229:15,19

described 16:2 35:24 36:9
38:10 47:1 51:9 52:18 53:21
54:18,19 55:19,20 57:23
58:12,23,25 59:7 61:12 64:19
66:1 71:16 90:25 95:7 105:20
106:19 108:18 109:19 111:12
113:5 123:13 124:15,17 125:8
131:19 146:15 149:20 152:13,
21 160:6,17 174:11 188:3,22
190:2 195:3,23 207:18 224:8,
13,16 232:13 234:2 239:23
241:16

describes 39:16 53:2,10,20
56:7 59:16 73:25 83:23 86:10
88:7 89:20 91:11 93:6 110:6
114:13,16 115:3 121:13
122:23 124:12,14 151:20
188:17

describing 8:1 20:23 26:25
37:15 51:3 52:7 53:24 54:3
59:21 62:18,19 63:19 67:3,5
70:7 129:22 131:5 153:4,8,17

description 3:11 23:10 24:23
29:23 45:15 46:4 47:2 61:2
63:11,13 78:21 88:14 142:6
161:18

descriptions 65:12

deserves 241:14

design 15:14 22:3 31:1 57:16,
18,20 58:2 63:9,10 91:9
116:18 117:23 131:14,25
148:17 150:9,12 165:7 166:5,
7,14 217:13 224:25 229:25

designed 13:12,13 45:17 46:5
109:15 169:5 176:11,14,22,23
187:19

designing 91:7 218:7

designs 219:1

desire 64:13 65:22

desired 54:25

despite 58:20

detail 46:9 54:21 56:24 58:10
113:2 167:18 168:5,7,8 202:18

detailed 7:14 45:21 61:1

details 25:23 26:11 45:25

determination 200:13

determine 29:7 34:23 40:14
73:14

determining 48:3

develop 14:22 15:1 203:18

developed 25:1 41:7 238:1

developing 13:14 15:14

development 9:19 13:9 15:8,
12 22:2 131:14

developments 10:19

deviating 58:19

device 13:13 47:3,4 51:10
79:4 117:7 119:4 158:1
215:12,20 216:24 218:7
225:15,18,20

devices 10:18,23 11:24

dictionaries 41:13

dictionary 3:18,20,22 132:9
133:8,12 136:10 139:1 191:21

did 7:7,12,25 8:7,10 9:24
10:15 11:12,19 12:4,13 13:2
17:1 18:10 19:24 21:11,20
24:7,12,21,22 27:6 31:16 39:6
40:24 42:1 44:9 48:25 53:5
56:4 76:17,18 77:9 82:8,9,11
104:23 106:9 108:6,7 172:6
186:25 187:2 202:12 206:18
209:5 211:25 214:10 216:3,22,
25 218:10 222:6 223:19,20
228:20,25

didn't 11:22 13:4 14:7 17:19
20:16 41:24 77:11 93:18
108:17,18 117:18 135:19
211:19 234:19

differ 123:12 125:7

difference 175:5 198:9,16,22
199:19 200:4 201:4,6,25 202:2
204:14

differences 28:25 173:21,22
174:1 200:24 222:2,8

different 10:4,5 36:24 38:19
45:4 46:6 65:3,4 101:5 103:21,
22 106:6 109:12 116:16 118:2,
3 124:7 129:13 144:10 167:21
173:23 174:2 181:17 182:4
189:7 193:1 194:7 195:14,20,
21 198:7,24 205:8 217:15
224:4,15 229:15,16 232:13
233:7 234:3

differentiated 199:24

differentiation 203:1

differently 38:17 120:11

difficult 100:4 120:8 121:8
215:21 221:17 222:12 225:19

digest 177:14

direct 85:24 86:16,20

directed 24:18 111:8

directing 213:14

direction 85:21 87:5 108:1,2
143:6,7,20,23,24,25 144:14
167:13,14,19,22,24 168:2,3
169:21 170:4,5,6,9,10,11,25
171:2,3,4,5

directions 55:9,10 143:11
144:3,7,11,15 151:21,25
167:21 169:23

directly 17:17 163:18

directors 15:18 25:4

dis 50:19

disagree 66:14 130:20 162:19
172:17 173:15 174:8 226:15
227:4

disagreement 37:10

disavow 50:22,23,24 51:13
62:23 63:1

disavowal 60:1,3,4,16 61:2
62:12 63:20 64:23 65:3 66:11,
18,23 67:3,9

disavowed 40:18 50:20

disavowing 51:15 62:25

disavows 66:4

discern 229:6

disclaimed 40:18 49:13,16

disclaiming 50:1

disclose 94:16 97:18

disclosed 39:12 54:25 60:10
76:12

discloses 89:17 92:6 94:17
193:22

disclosure 7:14,16 29:10
52:8 54:2 57:11 58:1,15 67:21
68:2,3 79:4 89:3 91:22,25
110:17 120:1

discordant 222:20

discrete 101:9,10,12 102:2,5
144:20

discuss 7:17 60:5 193:18
225:23

discussed 28:11 44:14 45:1
57:9 83:11 130:11 221:6
227:23 228:7

discussing 57:10 149:21
158:16 227:9

discussion 17:4 49:18,20

disparate 234:25

disposed 88:24 141:21
142:21,22,25 143:1 144:2
145:2,16

disputed 175:23 221:9

distance 135:25

distances 136:8

distant 143:3

division 11:15 12:17,18

document 18:24 42:9 43:1,9,
19 47:3 57:1,5 58:15 60:21
64:16 68:2,3 80:18 97:25
110:17 132:21 138:8 165:16
190:25

documents 7:14 8:22 19:24
20:2,3,5,7,11,13,14,16 27:14

does 5:12 9:9 19:5,7 21:6,8
32:2,4 36:8 41:4 64:17 66:21,
22 69:18,20 71:13 78:15 79:7
80:2,5 81:21 87:12 89:14 90:5,
6,11 91:5,6 93:7 94:15 100:13
102:21,23 103:13 104:12
105:3 106:22 108:11 110:10

112:8 114:8 119:24 121:17,23,
24 129:22 131:17 140:16
146:22 148:10 149:9 150:12
154:11 155:5 156:16 157:6,13
158:17 159:1,14 160:11 161:1,
3 162:12,24 163:14 164:6,12
166:15 168:5 169:5,17 170:20
171:1 176:25 177:3 182:12
183:14 187:11,22 188:7
189:24 200:16 205:24 211:11
217:16 224:5 227:15 228:10,
12,14 229:23,24 230:11
231:12 232:18,22,23 233:11
234:14 235:5,9,19,21,22
236:21 237:2,3,10 238:24
239:13

doesn't 32:6 56:18,20 74:10,
18 78:14 87:1 88:17 91:1 95:3
101:3 103:18 105:7,9,12 106:2
109:22 115:7,11 116:2,13
119:9,11,12,15,18,20,24
120:22 121:14,15,24 122:1,2
127:21 129:8 130:17 146:11
149:2 157:4,18,20 159:1
160:12 166:8 185:7 188:4
189:21 197:13 200:18 219:25
220:4,7 230:15 236:14,16,17
239:13

doing 10:21 15:10 50:3 51:3
58:24 82:22 92:18 182:25
215:23 218:2 226:1

dominated 216:15

don't 7:22 17:10 23:20 25:13,
20,22 26:8,11 27:7,14 30:13,
23 31:2,8,12 35:8,23 38:12,14
39:1 41:10,20,22,23 43:14
44:24 46:12 49:1 53:15 57:9
63:20 65:24 66:14 69:23 70:12
71:3,10,25 74:4 77:12 79:10
81:3,23 83:9,22 84:15 91:4,18
92:23 94:3 101:16 108:22
113:1,16,24 114:4,14 119:13,
14 120:4 121:20 128:13
139:14 146:4,16 147:12,14
148:7,15 149:4,6,12,15 150:13
152:19 156:15 160:5 164:12
166:8 169:10 171:12 172:18
174:10 180:17 182:8 183:17
184:14 190:4,5 195:11 196:12
200:17 201:4 205:15,17
206:25 207:18 208:14,15
209:15,18 213:4 215:2 216:7
219:5 223:20 225:13 233:22
238:23 240:22 241:15,18

242:20
done 21:23 41:10 51:19 58:5
117:10 214:4 226:4
dot 134:3
dots 134:2
double-checking 133:20
down 5:6,19 37:3 50:24 56:2
64:1 69:13,14 76:1 110:13
123:2 127:7 130:7 132:12
143:25 150:19,20 160:18
178:19 187:16 191:17
downstream 87:7,23,24
171:4,7
draft 60:19
drafted 60:19
drafter 38:19 39:6,25 40:1
drafting 33:7 36:4 148:13
dramatically 214:23 215:11
draw 144:18
drawing 65:21 163:16 203:1
drawings 44:18 45:1 61:12
63:13 65:13 119:14 159:19
161:3 163:4 165:15 167:1,2
drawn 60:12
duly 4:7
durable 216:16
during 225:16

E

e.g. 170:21 192:8
each 5:11 15:19 75:25 81:12
82:24 89:22 111:3,5 115:7,21
116:3 119:12 121:3 122:21
135:17 140:7 142:7,10 144:8,
25 145:10,15 146:6 147:5,16
148:3 149:5 181:11 188:18
195:15
earlier 17:2,8 73:13,21 75:9
83:11 95:15 126:8 208:17
221:20 223:3 224:10 230:5
233:18 234:19 241:15
earliest 96:13 98:18

early 15:15 27:10 151:21
214:5
easier 117:6 178:2
easiest 95:24
easily 147:24 217:19
east 22:21
Easy 68:24
Ecellix 9:7,8,9
echoes 122:18
edges 229:11
education 131:7
effect 16:23 39:17
efficiencies 55:1
efficient 61:24
eight 11:11
either 41:8 44:9 56:20 73:8
95:21 119:25 171:17,21
175:21 176:21 177:10 181:22
186:2,3 189:12,15 196:5,10,11
197:5 200:14,24 201:6
either/or 200:12
electrical 176:13
electrically 90:18
element 88:14,15 90:10,17
106:14 115:2,4 225:13 230:1,2
241:16
elements 36:13 55:18 58:1,2
66:6,7 70:12,13 74:2,11 78:21
82:25 88:13 89:1,2 92:8,24
93:6 95:1 104:5 112:1 113:12
130:21,22,24 163:20,23 165:8,
20 223:9,10 227:21 230:25
241:13 242:12,16
else 8:8,11 17:13 29:19 41:24
50:6 52:1 56:20 64:22 68:7
96:4 176:4,12 182:22 183:11
188:9 199:4 200:3
else's 220:11
embodiment 34:4,5,6 39:20
53:2,3,6,10,12 54:4,7 58:22
60:20 61:13 63:1 65:15 71:11
94:16,18 95:9 111:3 122:22
124:13

embodiments 35:5 36:24
51:15,16,17 54:20 56:23 57:1,
23 58:9 65:17 112:9 123:12
employed 11:3,4 26:3
employee 15:21
employment 9:6 12:23 21:22
25:24
empty 233:25 234:1
enclosed 23:14
encompass 195:12 212:24
end 11:10 24:19 52:1 98:5
132:12 137:14 141:22 171:16,
17,21 206:3 222:1 236:13
239:1
ended 21:22
ends 160:14 212:20 213:17
236:12
energy 61:23 225:6
engagement 221:2,4
engagements 12:24
engineer 62:14 92:3
engineering 14:24 15:5,6
63:3 131:12
enough 35:6 39:2 63:1 73:6
83:14 105:18 113:1 130:17,21
135:15 169:11 180:14 207:18
219:4
entire 12:9 63:13 79:3 166:21
194:15 206:8 223:2
entirely 159:10 192:18
entirety 30:16,17 64:15 66:3
113:3
entities 195:20
entitled 42:13
entity 36:25
envision 34:4,5,6
envisioned 98:7
equipment 3:2 19:1 216:15,
16 238:12,16 240:5
equipped 193:5
equivalent 131:11,16 197:12,
13 238:17

Eric 212:11
especially 134:15,25 136:23
essence 52:14
essentially 23:7 66:4
establish 24:18
established 172:7 214:21
etymology 204:13
evaluate 79:11 168:8 184:16
evaluating 38:9
even 17:25 35:4 38:6 58:8
73:17 95:7 108:18 112:3,5
130:20 187:7 207:5 209:13
211:12,19 212:4
eventually 158:24 234:20
235:9 237:10
ever 6:22 7:1 13:2 25:17 54:15
119:13
every 35:24 36:9 54:10,11,15
71:17 99:8 100:7,8 111:3
114:4 115:2 122:21 156:13,17
241:16
everyone 68:10
everything 5:7 27:8 29:19
47:5 109:16 131:19 240:12
241:10
everywhere 51:24 52:1
evidence 21:3 22:25
exactly 88:11 113:24 192:11
EXAMINATION 4:12 221:18
233:1
examiner 206:22 208:23
209:5,13 210:18 211:11
examiner's 211:19
example 21:3 28:19 29:14
33:16 54:23 55:18 56:16 57:24
59:3 61:22 75:12 85:12 93:25
107:13,16 112:2 114:15
119:19 121:20,23 122:21
123:2,17 130:5 137:12 139:7
150:25 151:4,12,20 155:19
156:12 168:16 179:11 188:8
204:8 219:25 238:8
examples 11:23 65:18 116:24

exceed 239:7
exceeds 239:4,11
Except 162:11 169:4 207:16
239:1
exception 219:19
exchanged 177:5
exchanges 102:22,23
exclude 119:12 120:4,22
121:15,17
excluded 121:22
exclusion 121:20
exclusively 127:20
Excuse 162:14 163:17 227:2
executive 12:9 15:5,6 25:4
executives 21:17
exemplary 110:22,24 145:11
exhibit 3:13,15,17,19,22,24
18:21,23,24 19:14,18 21:2,7
42:3,4,6,23 43:5,7,8,21 44:4,7
46:13 49:8 68:17 74:23 75:1
77:13 81:6 95:18,19,20,25
113:17 123:16 132:13,16,18,
19,24 134:9 135:5 137:23
138:1,2,4,12 174:20 190:15,
17,20 192:5 209:22 212:13,14,
16,21 214:25
exhibits 8:14,18 19:11,14
43:24 212:12
exist 33:14 178:11,12
existed 98:21
existing 38:7 217:23
exists 48:11 90:10 145:12
171:16 233:25
exit 168:24
exiting 168:20
exits 168:13,19 169:2 230:17,
19,21
expect 55:4 242:5
expel 87:6,14
expelling 87:18
experience 21:10,11 31:3
55:21 56:2,3 60:18 91:18

94:23 95:13 131:13,16 164:21
experimented 98:8
expert 6:22,23 7:2,4 20:20,21
30:25 33:8 39:11 44:12 63:3,8
91:21 109:8 148:12 189:17
expertise 14:21
experts 98:2
explain 90:22 100:2,6 105:10
108:15
explained 60:12,22 241:24
explaining 90:23
explanation 152:21 178:20
explicit 60:3,4,16 61:2 64:23
66:18
explicitly 37:7 62:24 64:10
73:2 144:14 207:7,14 208:7
expressing 237:1
extend 129:7
extending 151:24 152:3
extension 51:18
extensive 132:1
extent 30:2 36:16 54:8
extremely 225:19
extrinsic 21:3
eye 15:9

F

face 13:15 74:15 95:16 96:12
98:18 215:13 218:15,21
fact 58:4 62:25 65:12 74:7,9,
15 83:18 95:2 109:13 145:12
146:23 195:25 235:22
failing 215:22,23
Fails 218:25
fair 6:1,5,24 14:8 18:7 33:24
34:25 44:1,2 95:4 100:17
135:15 197:7 210:6 214:12
219:4,23 239:10
fairly 146:17
falling 163:25

falls 229:11	filing 25:7 51:1 63:16 215:17	169:5 170:11 171:9 225:2
familiar 17:16 18:10,11 20:8, 10 35:15,18 43:1,19 96:10 103:23 132:7 138:7 208:19 213:1	filings 27:10,11,13	230:15 231:22 233:10 235:1 237:3 238:17,20
familiarity 18:17	final 211:13	flowing 87:7,23 91:1 154:9, 11,15 155:21 156:3,7,18,19,21 157:1,6,15,16,21,23 158:1,2,3, 7,16,24 160:11,20 161:11 162:4,22,23,25 163:15 164:4, 6,9 165:1,13,21 166:1,18 167:18,22,23 168:1,2 169:3,21 170:25 171:3,5,24,25 172:21 173:14 228:3,15,16,21 229:22 230:3 234:2,3,4,23,24 235:5, 10,16,19,20 236:1,8,9,17,19, 20 237:1
family 208:9	finding 172:22 206:22	flows 88:9 154:8 159:12,14, 16,25 160:1 164:3 167:11,12, 13,21 170:8,10 172:22 173:15, 18 230:18,20,24 234:20
far 67:18	fine 43:15 49:21,22 68:5 77:19 95:20 102:18 172:19 175:21 179:23 203:16 205:3 220:13	fluid 154:8,9,10,15 155:21 156:3,6,18,19,21 157:1,6,15, 20,23 158:1,6,16,24 159:12,13 160:11,13,20 161:11 162:3,8, 10,12,22,23,25 164:2,3,6,9,15 165:1,2,3,25 166:18 167:11, 12,18 168:1,2,13 169:2,5,21 170:8,9,25 172:21 173:14,18 228:3,15,21 229:22,24 230:2, 18,20,24 235:5 236:19,20
fashion 21:21	finish 5:8 6:8	fly 120:11,12
favorable 26:13 190:11	firmware 131:15	focus 13:17 131:2 172:11 213:8
FDA 16:3	first 4:7 15:2 17:1 18:3 28:11 34:13 41:4 44:9 61:1 64:5 69:5 70:18 71:7 72:3,21 73:1,18 74:16,20 76:25 83:12 85:12, 14,21,23,24 86:1,2,4,11,15,16, 19 87:1,5,6,7,11,23,24 88:3 89:18,21 90:7 103:10 108:1 134:12 137:15 143:6,20 144:3, 7 151:8,20,23,24 152:3 154:9 155:4,13,18,21,22 156:19 159:1,13 160:8 162:4,8,12,22 163:1 164:4,6,24 166:17,18 167:12,13 168:10,18 169:15 170:6,9,10,15 175:13,14 177:18 186:16 189:9,25 191:16 199:3 201:1,8 216:23 222:7 223:9 228:10,16 235:17 236:15,19 237:5,13	focused 24:25 163:7 180:5
FDA-REGULATED 15:13	first/third 155:3,17	follow 26:7
feature 35:24 36:9 114:5	fit 222:11	following 4:5 47:13 61:12 86:8 90:23 227:21
features 35:20 92:6 104:25 105:3 130:5,9,12 177:2 188:2	fitting 193:4	follows 4:10 57:8
February 17:9 96:13 97:15 98:19 99:25 102:7	five 13:24 15:25 16:5 22:5,14, 15,16,17 203:4,17 215:13 217:8 223:9	food 12:1
feel 31:25 79:10 84:16 135:13 149:10,22 185:14 203:13	fixed 139:5,17	Forgive 80:18 96:4 129:15
feels 166:6 185:25	flexibility 57:10	form 54:5,21 55:19,20,22 56:24 58:10
feet 19:12	flexible 55:9,10,12	forming 28:7 68:20 229:1
felt 17:4 26:12 38:1,2 46:6 200:19	flies 176:12	forth 7:16 54:5 168:3 169:7 174:7 205:11 221:22
fence 33:3,18,22 39:20,21 93:24 94:2	flip 23:3 27:23 223:6	forward 5:4 49:18 98:12 110:4 189:5 219:22
few 17:2 25:12 55:15 67:25	floating 90:10	found 76:9 122:17 217:9
field 39:16 97:23 131:12 215:6,14,20 217:4,17 220:5,9	flow 54:23,25 55:12,24 56:15 57:24 61:18 85:24 86:16 88:19 92:9 124:9 142:16 152:21 153:4,17,19 158:25 161:22 163:20 164:9 165:3 168:6,18	
Fifth 61:24,25 118:9 225:3,9 238:3		
FIG 124:6		
FIGS 60:15		
figure 27:17 86:8 91:22 158:11 192:21		
figures 60:12,20,22 151:1,13 211:13		
file 50:11 67:19,23 68:6 206:14,17,19,20,23 207:3,6,13 208:4,8,19,21 209:10,23 210:1,8 212:24		
filed 217:25		
files 27:19		

237:19

Foundation 12:6 13:15

four 115:8 116:3,13 134:2
238:21

fourth 151:10

frame 22:12 219:8,9,14

Frank 4:19

free 31:25 84:16

friend 12:25

friends 16:19

from 3:17,20,22,24 5:14 11:24
12:22 21:1,11 27:6,7 31:13
35:20 42:24 46:6 48:6,8 54:22
58:10,13,19 72:13 77:15 87:14
88:16 89:8 90:11,16 92:12
107:20 109:2 110:11 111:13
117:20 118:16 122:11 123:12
125:7 135:24 136:8,10 138:11
143:2,3 151:1 152:2 160:25
161:3 168:22 181:11 184:20
187:13 194:12 198:1,19,21
199:9,10,12,24 201:6,8 202:19
203:9 205:1,2,7 210:12 211:8
212:18 218:12 219:13 220:1,8
224:14 229:16 231:22 236:15
238:24

front 20:9 65:13 90:1 93:15
133:6 137:13 209:15 212:20
230:10

frowned 205:9

full 4:18

full-time 14:14,16 15:3

function 10:1 54:5 89:3
116:17 117:23 118:6 119:1
187:21 188:1 216:25 231:9,20

functionality 123:5

functionally 175:7

functions 11:18 16:6

fundamental 115:4

funding 15:2

further 39:3 60:12 61:12
69:12 73:18 83:19 93:24 96:1
147:4 233:1 234:6 242:20,22

G

garbage 181:8,9

gas 3:2 19:1 59:16 81:11 87:6,
18,19,21 88:9 90:11,12 91:1
103:3 115:20 124:2 126:16,17
128:17,22 129:15,20 160:2
164:16 165:7 166:3,12,15
167:20 168:22 169:1,7 171:9,
24 172:1,2 177:5 230:17
231:10,22 233:25 234:2,3
235:18 236:11,12 237:1,4

gases 60:9

Gates 12:5 13:15 16:12

gave 39:5 40:17 43:14 46:19,
25 47:16 48:5 66:10

GCE 3:2 18:25 145:22 149:16
175:1 182:3,13,18 184:7 186:7
187:5 188:8 189:6,15,18
194:22 196:5 198:6 200:7,9,
12,23 205:23 221:3,4

GCE's 81:7 113:5 115:17
118:6,13 119:2 141:13,24
144:23 145:8 146:1 147:3,18
148:21 178:25 181:13,22
183:18 186:2 187:8 196:5
198:10,16 202:12 205:19
226:11,20

GCE0002569 3:16 43:22

GCE0004074 3:14 42:24

GCE0004110 210:12

GCE0004359 3:24

GCE0005220 210:13

GCE0005901 3:18 132:25

GCE0005913 3:21 138:5

GCE0005918 3:23 190:21

GCE4359 212:19

general 5:3 18:17 31:10 35:3
46:7 48:7,21 63:21 124:1

generality 53:13

generalization 219:18

generalized 27:2 46:4 88:25
197:22 217:21

generally 9:16 10:6 26:25
35:20 44:1 45:5 84:22 97:22
100:21 102:20 110:21,24
121:11 153:4,17 205:9 211:13
228:4

Geoffrey 3:6,12 4:4,7,19
18:25

geometric 134:15 136:22
137:3,9,16,20

geometry 134:24 136:16,25
137:5,22 140:15,17,20 142:8
176:19

gets 76:4 172:5 184:20

getting 7:10,24 20:25 79:6
95:12 97:12 100:16 103:19
121:11 126:3,24 127:5 144:20
173:3 220:23

Gill 3:7 5:14 7:22 30:2,9,22
32:20 36:16 37:6,8 38:25 40:4
47:23 54:8 61:4 64:25 68:11
101:22 106:5 112:22 115:10
122:6 124:18 162:18 165:5
221:19 228:19 229:13 232:24
233:13 242:22

give 11:23 22:8 41:2,19 55:5,9
57:9 109:21 110:12 114:2,15
140:11 152:25 215:3 216:9,10
219:6 221:11

given 48:22 55:16 57:16,19
107:9 109:11 147:10 171:18
219:13 240:11

giving 7:16 48:17 55:14 66:25
74:1 128:4 175:25 178:20
225:14 239:9

go 5:2 13:8 18:12 26:22 36:18
37:24 41:6 45:14,24 47:12
49:10 50:18 54:1 59:23 61:16
63:9,10 64:9,18 65:20 66:1
67:11 68:25 70:10 73:9 78:18,
22 82:1,12,13,14 83:16 87:4
89:4,10 90:12 91:21 92:19,20
94:24 95:11 96:1 102:19
106:16 108:24,25 109:2 113:3,
20,24 116:23 122:7,10,14,25
123:10,22 128:1 130:18
133:13 135:4 140:22 141:4,16
143:16 144:22 150:20 151:18
155:7 160:9 162:17,25 163:24
165:15 166:25 176:6 179:10
180:16 187:22 188:22 191:11

192:21 193:7 195:4 197:9
202:20,21 203:20 205:11
209:4,19 214:5,23 215:2
217:22 218:23 220:16 222:21
228:17 229:8 237:14 239:18
241:2

goal 112:19

goes 28:25 42:23 85:20 89:9
131:24 134:2 138:24 141:21
147:20 168:22 171:2 176:10
177:11 188:12 189:16 206:2
225:18 236:15 238:4

going 5:2,3,6 6:4 7:15 14:6
16:2,8 18:23 29:21 38:23 40:2,
3 41:11 42:8,15 43:7,25 48:15
55:7 61:25 65:3,4 66:6 68:16
75:3,24 77:12 80:17 86:3 95:8
107:18 122:3,14 131:2 132:18
140:23 142:17 150:19 159:16,
18,25 160:16 161:14,22
163:16,17 165:17 166:7,9
168:3,18 172:3 174:19 185:15
187:16,17 190:14 197:10,20
199:4,5 201:1 210:11,13 211:8
212:8,11,13,18,21 213:16,25
216:5 219:16,22 225:4,15
233:4 242:5

Goleta 14:23

good 4:14,15 5:12,17 11:6
63:15 68:9,11 94:22 95:3
102:1 126:2 164:1 189:3
200:15

got 4:17 15:2 25:4 34:21 71:17
74:8,9 75:20 77:3 83:18 96:5
103:15 170:16 174:14 188:25
191:18,19 216:24 221:16
233:3 235:18 240:2

grab 199:5

granting 24:5

great 6:10 46:15,17 53:4
132:20 133:8 135:22 190:18

green 158:11,14 159:14
161:9,12

ground 5:3

guess 12:24 14:10 27:25
76:25 92:5 126:24 128:24
139:7 175:25 185:13 192:16

guidance 7:16

guide 29:1 222:3,22

guys 122:5 182:6 205:10

H

had 4:20 6:14 7:15,18,20 8:2,5
12:18,20 14:20 15:11,15,18
16:12,16 17:3,12 18:3,4,16,17
23:23 25:24 26:1,6,7,14 27:19
46:7 63:25 68:14 88:20 89:12
96:25 98:7,24 99:8,11 101:2,9
103:20 110:13 122:11 123:11
125:22 135:8 172:12 174:17
189:9 209:5,20 215:20,21,24
216:24 217:6,14 218:7,8,9
219:7 220:18 221:4 227:23
233:18

hadn't 95:2

half 10:11,25 19:12 22:6 28:17
87:3 112:14 235:23

half-line 134:14 136:21

hand 42:8 212:22

handle 216:22

handled 199:25

happened 11:18

happening 15:9 37:14 160:5

happens 51:1 157:11 225:17

happy 20:9

hard 33:1 35:1 51:7 58:5 70:6
91:8 92:18 101:14 120:12
129:4,8 229:10

hardware 131:15

has 22:25 40:14 41:7 43:21
45:15,20 46:5 48:4,22 50:19
54:17,19 56:22 57:9 59:3
61:10 69:12 73:24 80:7 81:2
82:25 86:19 87:2,13,18,21
88:15 89:17 90:25 98:13 100:9
114:21 116:3 128:20 132:1,24
137:8 138:5 143:15 144:12
145:22 149:23 154:21 157:13
164:7 166:12 171:17 175:22
176:9 178:15,23 180:1 183:19,
20 186:23 189:15 195:14
200:12 208:7 209:13 225:12
231:20 235:1,16 238:1

hate 140:22 141:16 209:18

have 4:20,22 6:22 7:1,4 11:22
16:16,22 17:12 18:6 19:13
20:14 21:4,23 22:1,13,22,24
23:2,6,10 24:12 25:16,19 26:9,
18 27:15 29:18 30:15,23 31:2,
8,9 36:6,25 37:15,19,21 38:14
41:5,8 42:10 43:8,10 44:17,20,
24 45:12,24 46:2,13 47:2
49:13 50:2,5 51:6,9 52:9,12
55:16 56:5 57:8 58:5 59:6
61:15,17,18 62:24 63:15,19,22
64:15,17,18 68:16 69:23,25
70:1,6,14,15 71:7 72:25 73:9
74:10 79:17,21 81:3 83:19,21,
24 86:13 91:8 92:18 94:12
95:13 96:18,25 97:12 98:13,19
100:21,25 101:4 102:5,11
103:13,18 104:8 106:16
108:15 114:4 119:18 120:18,
20,25 121:12,20,24 123:3,4,
14,19 124:5 125:23 127:21
128:4 129:4,8 131:8 132:21,22
133:6,21 134:1,6 136:16
137:13 139:22 140:6,9,11
141:10 144:9 145:11,18 146:8
147:4,10,11,12,14 149:6
154:23 160:12 164:20 167:9
169:10 172:4,18 173:12,24
174:10,21 177:25 178:24
179:6,15 180:17 189:24 190:4
192:21 200:16 201:18 203:3
205:15 207:8,15,16,17 208:8,
21 209:15,22 210:3 212:8
213:5,20 218:23 219:8,13,21,
23 221:7,10,14 222:8,16
224:20 225:10,14,25 230:10
232:24 235:19 236:25 237:19
239:19 240:10 241:16 242:20

haven't 57:19 142:11

having 23:21 44:17 51:7,25
57:23 59:17 61:20 72:13 78:17
79:4 83:14 89:20 91:19 99:23
101:14 109:12 111:5 121:21
142:7,8 148:3 177:7 193:25
223:22,25 225:12 226:25

head 5:20 14:24 169:18,22
170:22 171:1,10,14,15,16,21,
25 172:4

heading 228:22

hear 160:10

heard 18:16 103:15,18 140:5
142:11 187:5 233:4,19

heavily 15:12
heavy 131:21
held 15:4,7 45:20 96:19
188:20
help 14:21 41:13 96:20 100:2
102:17 115:24 176:3
helpful 168:8
helping 118:20
here 4:16,17 8:13 16:25 19:14
20:19,23 21:1 27:24 29:5
41:16 42:16 43:3,17,25 46:15
48:10,25 50:15 57:7 64:8 65:6
70:4 71:23 74:1,8,19,25 75:20
76:21 78:20 81:4 82:8,17,22
84:16 86:3 89:24 90:25 93:14,
22 95:4 96:13 105:12 106:21
107:7 108:8 110:17,18 111:3,
18 112:23 113:24 115:1
120:15 121:19 122:4,9,18
124:17 127:1,22 140:23
141:17 144:21 147:12 148:19
149:16 150:22 151:5 154:23
158:21 161:22 171:14 173:24
174:22,25 180:5 186:8,25
189:2 193:18 198:6 199:17
200:21 202:19 203:1,4,9,14
207:10 210:13 211:4 212:7
213:12 218:11,12 226:18
229:17 230:12 236:12,13
238:11 239:1
Heritage 3:17 132:14
hey 51:19 55:3 57:6,15
high 225:7
highlighted 179:15
highlights 76:22
highly 45:17
hired 17:6
histories 68:6 206:15,17,19
207:3,6,13 208:4 209:23 212:6
history 39:14 40:16 50:11
67:19,23 68:1 206:20,23
208:8,20,21 209:10 210:2,9
212:24
hit 171:1
hold 169:13 187:20 227:1,2,3
holding 109:7 122:23 195:1

227:1
holds 81:10 115:20 181:6
193:5
home 216:15
honest 116:7
honestly 221:10
hope 52:9
hopefully 202:23
hoping 55:23 202:18
hour 122:4
hours 238:21
housing 59:17 81:10 99:7,20,
23 101:2,3 118:23 179:24,25
180:1,2,4,6,10,19,21,22,24
181:19 182:1,2,22,24 183:5,
11,12,13,19,22,25 184:9,10,
11,18 185:7,11,19,22 190:13
232:2
housing/container 115:19
housings 101:10
how 4:23 7:17 11:9 18:9
22:11,13,25 25:1 26:9,25
28:21 29:12 32:22 33:11 34:16
37:11 38:15,18,22 39:19,23
41:6 45:8,13 49:9 52:9,10 53:4
58:14 60:18,19 62:13 63:5,18,
24 64:19 65:16,24 66:1,8 70:4,
10,11,16,25 71:5,14,15 72:6
73:9,25 78:18,20 83:7 88:7,21,
22,23 89:2,9 90:6,12,14,19,20,
23 91:2,10,11 92:13 93:11
94:20 99:1 105:20 108:12,15,
20 109:15 110:10 111:11
112:8 116:8 118:19 146:14
148:6,10,20,24 149:3 153:6
161:5 164:12 165:16 167:24
173:25 177:3 184:6,8,23
186:21 188:17,21,22 189:21
190:10 192:21,22 193:3,21
194:10,22 199:10 201:14
203:12 207:12,22 208:1,2
212:10 214:1 216:22 217:23
218:1,3 222:6,11,21 225:4,5
227:20 228:10,12 239:19
however 52:25
huge 201:4,6
hundreds 8:22

I
I'D 11:11 31:9 35:2 173:24
212:8
I'LL 5:8,9,23,25 6:2 19:8 20:9
31:24 42:2 67:11 69:14 76:1
108:15 114:15 175:25 203:21
204:22 211:1,3 215:3 216:10
230:10
I'M 4:16 5:2,10 6:4 7:24 9:18
12:11 14:6 16:2 18:3,23 20:8,
10,19 22:3 24:19 25:13 26:5
27:16 28:17 29:19 30:10,18,24
31:25 32:4,8,22 33:6,7 34:6,20
37:18,23 38:9,19 39:8,23 40:1,
6,7 42:8,15 43:7,25 44:4 46:3,
23 47:13,19,24 48:8,15,19,24
49:16 50:6,13 51:7 54:3 56:25
57:2,4,7,15 58:13 61:25 62:15
65:3 66:7,25 67:22 68:4,16
69:10 70:2 71:1,22,25 75:19,
24 76:4,23 79:10 80:2,18 83:7
86:2,3,7,8 89:14 90:19,20,22
91:21,25 92:3,5,6,13 93:20,23,
25 94:6 95:8 96:2 97:12,16,18,
19,22 98:5,9,10,11,17,24
99:14,17 100:1,6,9,14,16,20,
23 101:4,8,14 102:17 103:23
107:11,18,20 108:12 110:5,12,
14 111:9,24 112:4 113:9,18,
19,22 116:21 117:4,19 118:16,
19,24 120:2,6,7,8,17 121:7,8,
9,11,19 122:14 125:24 126:1,
3,24 127:4,5,20 128:13 129:4,
14 131:2 132:18 135:17
136:17 140:23 141:9 145:10,
11,12 146:9 147:9 148:3,5,6,8,
12 150:3,9 152:25 153:7,9,10
154:4,24 157:11 159:10
162:14,16 163:18 164:20
165:6,10 166:4,11 167:20
169:24 173:20 175:9 177:22
178:22 179:22 180:5 181:10,
20,21 183:1,3,9 184:5,7
185:15 187:16,17 190:7,11,14
191:4,7,10 195:2,17 197:10,
17,20,21 199:4,5,21 200:3,13,
21 201:1 203:1,8,22 205:12
206:5,25 210:11,13 211:8
212:11,12,13,21 213:25 214:1,
4 217:20 218:5,13,20 219:16
220:3,13,14 222:7 224:1 225:4
229:21 232:6 235:3 236:24

237:1 238:8 239:22 241:1,22
242:15,17,18
I'VE 7:15 16:18 20:6 21:13,16
22:5 34:21 41:10 43:25 51:19
54:15 57:15 74:8,9 90:25 98:1
109:10 125:15 126:17 147:9
153:14 185:14 188:25 197:14
198:11 201:3 207:9 213:15,19
215:4 221:4 235:18 240:2

idea 65:8

ideas 217:12

identification 18:21 42:6
43:5 132:16,23 137:23 190:17
212:16

identified 209:6,13 214:2
230:12

identify 41:13 48:9 50:15
81:24 83:3,4 84:4,6 206:14
207:5 211:12,19

identifying 212:5

ignore 57:13 201:8

ignoring 98:9,21,22 99:2

illustrated 124:6

IM 16:3

image 27:3,6

images 76:13,15,21

implicitly 86:13 225:12

import 220:1 223:19

important 33:7,10 40:16
150:16

importing 223:15

imports 225:4

impossible 56:3

improper 37:4 220:10

improvement 15:18

improvements 111:7

inaccurate 128:12 129:3,18
154:24

INC 3:2

Inc.'s 19:1

include 35:20 36:9 52:24
114:14 115:1 131:21

includes 59:17 72:17 104:13
106:24 112:3

including 73:7 153:16

inclusion 78:19

incoming 24:2,4,6,7,9

incomplete 130:16

incomprehensible 185:17

inconsistency 148:17

inconsistent 63:14 236:25

incorporate 239:20

incorporates 201:21

incorrect 29:17 115:9 118:7,
12,13 119:2 183:1 192:24
202:15 203:11,23 221:9

Indeed 215:5

indefinite 32:10 34:8,23 35:7
84:1,18 107:8 141:2 150:8,14
162:18 173:9,17 206:24
228:23 229:20 238:25

indefinitely 33:12

indefiniteness 32:3 84:2

independent 78:5 170:4,5
177:18 238:11,13

individually 198:20 199:20

industrial 126:17

industry 15:10 103:2 214:21
216:3,14,20 238:1

inefficiencies 225:4

inform 28:22 78:18 242:11

information 20:23 36:20
216:11

informative 79:13 83:20

initial 103:12

ink 23:6

inlet 59:17 81:12 85:21,23
86:1,5,11,14,16,19 87:2 88:3,
5,15,16,19 89:8,21 90:7 91:20
93:10 105:1 107:25 108:9
110:7 111:6 112:3 115:6,21
116:4 142:21,25 143:1,22
144:25 146:13 152:4,8,10,14
160:14,20 164:15 177:20
178:6,16 186:17 187:1 227:9

inlet/outlet 178:15

inlet/outlets 106:25

inlets 85:8 105:23 108:13
115:1 142:9 146:14,20 175:10
177:4 178:10,11 190:3 224:6

inlets/outlets 104:14

innovation 10:17

Inogen 13:22,23 14:9,20
15:20 16:11,17,18,23 21:16
22:21 23:11,18 25:24 26:12,18
27:13 97:17 214:24 217:2,13
218:13,14

inputs 222:23

Inseparable 199:20

inserting 239:21

inside 39:13,20 48:20 50:7
68:1 79:2 106:19 162:10
163:13 165:15 181:8 224:9
233:25

insofar 36:22 188:17

instance 52:16 71:17

instances 22:5,15 26:4 55:15
215:22

instead 93:10 129:22 211:13

instructs 5:15

insufficient 38:2

intellectual 9:19 11:6,12,15,
17,20,22 12:12,23 13:2,21
15:10 16:13 21:19,25 24:11
216:7 218:6

intend 55:3

intended 168:23 205:20

intent 52:4 187:23

intentional 49:25

intentionally 40:18 49:12,16,
25

interact 88:7 188:21

interaction 176:5 178:10

interactions 16:17

interchangeable 200:11

interchanges 212:7

interested 20:8

interesting 33:10 142:3
204:12

interface 176:14 177:4,6,20
186:23 188:18,21 195:20
231:10,23

interfaces 91:2 177:3,4
178:12 180:3 186:5 189:21
190:3,10 231:21

interfacing 175:10 178:6,16
186:17 187:1 199:10

interim 14:24

internal 97:17

international 13:19

interpret 29:18 34:1,3 39:9,
14,19 40:3 50:3 52:10 55:4
57:6 59:5,6 61:6 62:13 63:23
65:23,24,25 66:8 73:7 74:4
78:18 89:9 94:5 108:20
118:19,21 120:11 129:16
142:7 147:25 184:8 240:11
242:9

interpretation 31:2 33:13
38:9 41:5 53:14 63:6 66:5 72:6
83:7 91:14 93:3,14 184:1
186:19 229:12 235:12,14

interpretations 219:13

interpreted 37:12 38:16,23
54:12 63:17 75:13 116:9

interpreting 37:23 38:6 51:7
73:22 79:18 94:6,7 129:4

interrupt 5:9

intrinsic 50:4 223:2

intro 75:19

introduced 43:25 78:8 86:5
137:15 146:24

introduces 85:14 194:25

invented 65:22 214:24

inventing 64:4

invention 29:23 36:23,25
47:4 51:9 53:5,8,24 54:1,6,17,
19,23 55:19,23,24 56:6,10,22
57:18 58:11,14,15,18,19 59:2,
13,15,21 60:8,11,21,22 61:8,
11,13,14 62:15 63:12 65:8,21

79:4,14 83:21,23 89:5,6,15
91:11 111:2,10,11 112:19
118:8 121:2 176:23 207:17
225:24,25 226:24 237:23
239:2,3,8,10 240:6 241:8,12,
14 242:4,6,8

inventions 217:12

inventor 25:10 32:23 35:10
40:17 47:16 48:5,17 50:19
53:2,9 54:11

inventors 26:2 46:19,25
49:10,12,25 50:5 54:1 61:7
64:9 65:16,17 123:11 207:16

inverse 207:12

involve 25:7

involved 17:5 21:13 25:23
103:15,19 131:22

involvement 14:8 18:13
26:15

ion 9:10

IP 16:3 24:19 25:1

isn't 33:4 62:20 64:14 88:12
93:1,8,14 95:5 145:25 160:5
166:13 181:4 184:1 185:10
199:8 205:4

issue 172:23 205:15

issues 22:2 30:25

it's 11:15 15:12 19:17 21:2
23:5 27:14 28:1 30:19 31:21
33:1,2,6 36:13 37:4,14 38:19
41:5 42:12,21 43:3,12,14 46:5
48:20 50:5,6,13 51:25 52:4
53:14,20,22 55:14 58:8,11
59:3 60:19,23 61:9,13 62:6
63:5,12 64:19 65:13,14,15
66:1 71:20,21 73:8 74:8 78:4
83:9,20 84:1 86:15 87:1,18
88:19,21,22 89:8 90:17,18,19,
23 91:2,3 92:4 93:1,12 95:3,23
96:1,3 105:2,20,23 106:13,15
110:4,19,20 111:22 112:11,16,
18 113:1 115:4 116:20 120:10,
12 125:2 127:2 129:18,20
130:3,16,17 132:13 133:4
134:18 136:16,19 137:6,17
138:14 140:16 142:4,8,14
143:2,20,23 145:4,22 146:12,
14 149:18,22 151:10 152:12
153:24 156:7,15,25 157:23

159:1,17 160:3 161:14,20,22
162:18 163:4,5,13,15,16
164:8,12,25 165:2,11,21,22,
23,25 166:4 168:3,13,18,20
169:2,18,22 171:1,5,18 172:1,
19,21 173:19 175:17 176:8,11,
13,14,21,23 179:12 180:14
181:5 182:8 186:14,25 187:19
188:15,22 190:21 191:16
193:3 199:3,7,10 200:19
202:6,25 203:17,18,19 204:9
205:3 206:3 209:23 210:5,12
212:19,20 213:1 217:19 220:5,
13 222:12,22 223:9 226:1
228:15,20 229:10,22 230:1,2
231:17,24 233:19,21 234:1,3,
8,24 235:10,14,15,16,19
236:1,5,7,11,17,25 237:4,6,8,
10 238:19 240:15,23 241:5,6

item 47:1 58:18 199:7

items 52:24 193:6

itself 39:13 50:8 56:7 83:8
88:2,20 97:3 99:4 121:17
183:11 204:18

J

job 14:18 15:3,4 25:5

jump 134:5 141:17

jumped 80:20 135:11

jumping 27:24

jumps 133:5

June 3:3 4:2

just 4:18 5:2 7:22,25 8:5,15
9:5 12:11 16:2 18:24 20:12
21:2,6 23:5,22 26:17 27:25
29:14 33:16 34:9,12,20 36:6,
14 37:4,23,24 38:7,12,23 39:6
40:3 41:17 43:25 44:4 45:11,
12 46:12,23 47:13,19 48:15,20
49:11,23 50:12 53:10 56:11
57:2,11,13 58:25 62:8 64:1,21
65:12 66:10,25 67:22 69:10
70:17 71:1,25 75:9,19,25
80:18,23 81:3,15 82:12,14,16
84:3,14 85:11 86:4,7 87:1
89:14 91:3 93:22,25 94:22
95:6,16 96:1 97:11 98:11,17,
22 99:1,4,11 100:6,20,22
101:16 102:20 103:10,18

104:17 107:11,13,18 109:18
110:8,12 111:13,25 112:9,11
114:25 116:22 117:13 118:24
120:2,8,14 123:17 125:21
126:14 127:18,23 128:24
129:8 132:23 133:20 135:7
137:12 140:8 145:1 146:12
149:19,21 153:7,10,24 154:21
155:25 157:20,24 160:2
162:11 164:2,10 165:10,20
166:4,5 172:11,12 173:2,11,
13,20 175:4,11 176:4 177:12,
23 178:20 179:11,13 180:25
182:1,4,13 183:10 184:5
188:18,25 190:1 195:24 197:4,
11,17,21 199:9 200:4,19,21
201:9 202:1 203:8,21,22
205:19 207:23 209:24 212:3,
11,12,20 214:2,6 215:3 216:10
217:2 218:4 219:11 220:4,16,
20 221:1 225:20 228:6 230:15
231:15 233:5,13,19,20 234:12
235:22 236:16 238:8,23
239:22 241:18

K

keep 62:1 176:12 213:16
keeping 15:9 36:12 164:2
kept 16:18
kind 6:17 7:4 9:5 51:14 83:3
85:4 97:7,11 107:18 121:20
122:18 131:24 145:25 150:19
177:20 178:5,20 211:4 214:9
219:18
knew 98:6,7
know 5:25 6:7 11:21 13:4
17:11,18,19,21 21:1 25:13,23
26:8,11,12 27:8,14,17 30:13
31:8,12 33:1,8,11,18,21 39:15
41:4,10,20,21,22 42:16 43:14
45:11 49:23 50:21 54:3,4,5
57:17 63:20,24 65:13,16,22,24
67:17 71:10,15 74:4 78:20
81:23 83:13,20 86:19 91:4
92:14 97:19,21,23 100:23
101:16 108:22 109:10,11,14
110:3,19 111:20 113:24
116:21 118:1 119:13 120:10
122:20,24 126:25 134:13
140:3 149:13,15 154:3 156:15
164:12 169:10 171:12 176:22

177:12 180:13,14 182:9,23
189:1,17 191:19 195:13
196:13 197:17 198:14 200:18,
22 202:18 203:22 205:6,10
216:22 219:5,8 220:12,23
222:13,21 229:10 232:6

knowing 20:8 150:15 226:3,4

knowledge 13:10 17:23 18:7,
14 25:16 26:9

known 96:18,22 97:9,12,24
98:20,23 99:24 102:5

L

L'OREAL 10:12,14,16,22 11:2

labeled 23:5 132:13

Laboratory 11:15,17

lack 37:13 71:23 84:25

language 37:5,24 59:25 65:7
90:1,2,6 93:22 104:11 105:8
106:3 112:8,16 117:14 119:8,
17 120:15 121:12 122:25
129:7 130:15 145:14 147:16
148:11,13,14,20 149:5 150:11,
13,14 151:7 154:21 156:12
157:16 160:10 161:24 162:1,
20 166:24 167:9 173:23 175:9
187:15 224:2 229:16 242:17

large 12:3 148:16 215:23

large-scale 11:25

larger 54:23 173:8,9,17

largest 23:23

lasers 12:1

last 22:5,19 34:15 105:11
106:12 110:1 125:7 126:5
154:4 215:5 220:20

later 12:23 31:6 49:20 83:18
184:21 235:23 237:6

latter 28:17 185:25

Launchpoint 14:23

law 6:18

lawsuit 17:1 26:10

lawyer 17:13

lawyers 7:11 8:7,10 17:12

lay 114:8

laying 101:10

lays 114:11

leads 225:6

learn 17:1 44:9 118:17

least 32:5 74:14 88:7 95:4
96:12 107:24 114:9 152:19
153:19 158:3 165:13 166:23
178:14 182:17 183:6 184:12,
19 185:23 190:10 205:10
242:13

leave 16:11

leaving 136:24

led 12:22 16:11

left 11:10 13:4,7,9 14:5 21:15
25:24 26:1 135:12 201:4

left-hand 189:13

legal 28:3,6,14 30:3,22 31:16
32:3,20 36:17 37:8 40:10,22
48:2 54:9 63:4 221:21 229:8

legality 63:21

less 147:18 177:8 190:11
225:1 238:12 240:5,13,19,23
241:21

let 5:8,9,14,25 6:7 7:1 19:23
20:12 35:14 36:6 37:3 60:6
62:11 63:25 72:5 73:11 83:9
88:12 94:9 100:1,17 101:8
102:19 109:24 115:13 118:2,3
121:6 124:20 127:7 128:24
129:8 133:3 135:7 137:25
138:1 140:1 142:23 148:5
158:8 160:9 161:2 162:16
168:11 170:1 174:2 175:4
177:14 180:5 200:7 203:25
204:1,10 211:2 213:5 219:7
235:24

let's 18:12 26:21,22 27:23
31:19 46:12,13 53:10 60:4
68:25 72:12 74:22 75:18
77:13,14 80:23 81:3,15 84:10
85:6,11 87:4 95:11,16 97:8
99:20 101:1 102:19 103:7,8
104:2 107:12,15 123:16,22
130:4,25 132:4 135:4,20
137:11 140:22 141:14,16,17
143:16 144:22 150:1,19
151:17,18 154:25 155:11,18

158:5,10 160:18 161:5,6 162:4
163:24 167:3 169:23 172:8
174:15,19,21 179:10 182:13
185:6 186:1,16 193:15 196:18
197:9 201:7 203:21 208:11
209:18 215:2 220:4,15 239:25

letter 135:8,23

level 44:19 131:7 222:7

liberty 22:4,8

license 23:24 24:2,5,13 55:5

licenses 24:8,9,10

licensing 23:14,17,24 24:1,4

lie 150:16

Lifestyle 101:21,24 217:1

light 29:19 36:12 45:19 57:8
118:16

lightweight 61:19,23

like 7:20 10:9 11:7,21 19:21
20:15 27:8 29:25 32:24 49:23
54:16 60:13 66:19,25 76:17,20
79:10 89:12 93:21 96:12 97:22
101:6,19 107:11 117:19
120:10 122:25 126:17 157:24
168:16,17 176:13 184:4
189:17 192:17 200:19 202:21,
22 203:4,8,12,13,18 207:2
208:15,16 210:14 211:16
213:8 220:15 237:9

likely 145:25

likewise 131:24 132:1

limit 54:7 58:21,23 80:3 92:17

limitation 73:20 78:7 79:9
114:21 160:15

limitations 38:5 93:9 105:16
110:11 112:12,14 220:1

limited 52:12 53:3,12 63:18,
22 110:21,24

limiting 56:18 58:25

line 15:16 16:4 33:2,5 56:13
60:5 117:20 123:23,25 134:14,
15,19,23,25 135:2,24 136:7,8,
14,15,17,19,21,23,25 137:5,7
139:6,10,16,18,22,25 140:13,
15,16,19 143:13,15,21,23,25
144:13,18,19 151:24 152:2,3
154:9,11 155:4,19,21,22

156:14,17,19,20,22 157:3,6,
15,16,21 158:3,4,6,10,11,15,
17,25 159:1,13,14 160:3,7,8,
11 161:8,9,12,21 162:5,8,12,
14,15,22,24 163:1,5,15,18,19
164:4,6,24 165:4,10,14 166:4,
17,18 167:12,13 168:18 170:9,
10,12,15 191:17 205:3 213:22
228:3,16 229:23 230:3 233:10,
16 234:2,3,10,14,20,23 235:1,
5,11,15,16,17 236:1,6,7,8,10,
15,17,19,21 237:2,4,6,7,11,13

linear 144:12

lines 92:17 98:2 142:17,19
143:4,8,12 144:5,10,11 151:5,
8,10,14 152:7,9,13 153:1,19
154:4 155:4,14,17 158:14
160:16 168:4 228:11,12
234:25 235:1

linked 37:17 48:19

links 113:20

list 7:14 19:18 21:2,7 77:9,11
82:5,8 218:19 229:14

listed 8:14 40:25 56:16 70:3
77:4 218:16,21 228:22

listen 118:17

lists 70:24 92:8,10

liters 238:17

lithium 9:10

litigated 25:17,19,21

litigation 7:5

little 9:5 11:21 18:15 27:24
84:11 94:12 101:18 104:21
127:7 134:13 135:23 136:18
140:23 146:2 177:14 185:7
186:9 191:24 192:2 193:10
194:10 201:17,21 216:25
222:20 226:7 231:4

LLC 3:2

located 144:9

location 157:19

long 7:13 11:9 63:25 115:6
116:3 228:10,12

longer 164:8 169:2 195:13

look 26:21 28:16 29:6,9,10,11
31:9,19 33:8 34:3 37:15,21

39:11,12,14,23 40:9 41:11
45:25 49:22 51:22 52:17
53:15,17 57:25 59:8 62:1,5
64:18 65:12 66:1 68:17 69:1
70:6,9,11,18 71:13,14,19
72:12 73:22 74:6,22,25 75:3,
18 77:13,14 78:19 79:11,14,
17,21,23 80:23 82:4 83:8 85:6
91:4 92:15,16,20 93:11 94:2,3,
23,25 95:11,16,22,24 103:8
104:2 107:12,15 108:24
109:17,18 111:10 113:15,22,
25 115:15 117:2 119:8,16
120:25 123:16 125:6 131:2
132:4 135:20 137:10,11
138:10,17 141:17 142:6
147:24 149:25 150:17,25
151:12,16,17,19 152:16
153:25 158:5,10 161:5,6,24
162:25 163:16 164:23 167:3
168:16 172:8,18 174:21 177:1,
16 179:10,11 180:16 181:21
182:7 187:22,23 188:22
189:22 192:21 193:2,15 196:9,
18 201:3,5,7,9 202:1 204:1
205:11,18 208:11 212:23
213:13,14 217:23,25 218:2,3
221:23 222:9 230:10 231:15
234:7 236:23 237:22 239:18,
25

looked 21:4 50:5 101:19
104:20 108:16 189:11 193:25
195:24 207:2 222:24,25

looking 14:21 28:17 34:22
39:17 41:3 47:8 48:13 62:8
73:14,23 76:23 77:8 80:9,13,
24 82:17 83:4 92:13 95:15
96:4,5 105:19 106:18 109:1,20
120:14 154:5 156:11 159:19
163:18 173:11 177:22 179:1,
18 181:10 182:6 186:4 188:20
191:4,10,11 194:24 200:3
203:22 210:5,23 212:6 219:3
227:18,19 229:4,5 236:24
238:8 240:1 241:1

looks 10:9 11:7 19:21 27:8
76:17,20 96:12 168:17 193:3
207:2 210:14

loop 26:17

loosely 177:12

lot 16:9 95:13 159:15 179:4

lunch 122:7,9,11

M		
made 29:16,24 30:7 31:6 52:11 54:21 56:24 58:10 186:8 203:14 208:14,15 211:5	material 53:22 59:18 69:6,13 77:22,23 78:8,9,16 85:9,14,18 96:19 97:1,2,5,13 99:24 102:6 108:3,5,10 137:18 141:21 142:20,24 144:2 145:2,7,16 146:10 149:23 154:10 155:23 156:20,23 157:2,14,17,21 158:4,17 159:2,9,13,15 160:12,21,22 162:23,24 163:12,13,22 164:5,7,25 165:4 166:19 168:19 171:19 233:11 234:21 235:6,22 236:2,5,20,22 237:9,12	meanings 172:13 173:7,13 195:15
maintain 124:8	materials 8:18 9:10	means 5:25 15:8 32:18 33:12 35:7,8 38:10 52:21 67:3 72:14 74:4 79:11 83:17 95:1 96:21 125:13,18 126:13 149:10 156:19 160:13,15 190:6 196:16 199:3,16 200:19 219:12 222:15 225:25
maintained 225:5 238:20	mathematics 131:22 132:2 133:23 134:1 139:5 144:21	meant 39:8 42:20 108:19
maintenance 117:6	matter 103:12 115:7,11 116:2, 13	measured 135:25 136:9
make 9:10 34:9,12,21 41:7 45:19 46:8 47:13 57:16 63:10, 11,17 66:21 75:9 76:4 86:7 115:18 117:6 121:23 147:6 148:14 150:13 155:5 158:23 170:19 185:7 187:21 188:25 196:6 197:20 205:10 226:1 233:5 234:12 238:25	matters 172:18 186:22	measurement 139:6,21
makes 8:7 20:20,21 30:20 110:9 141:1 147:18 148:25 151:8 177:1 187:19 188:13 189:22 213:9 225:20 234:5	may 17:11 18:6 20:14 21:1,4 38:21 40:16 46:2 47:15 48:4 49:17 50:2 54:21,23 56:23 57:24 65:3 115:13 147:6 163:18 213:20	mechanical 131:11
making 99:9 150:16 176:2	maybe 20:12 27:9 37:18 62:11 85:6 98:10 101:12 102:1 106:10 107:12 115:24 118:2 125:24 131:2 161:2 162:16 173:22 174:4 185:6 191:8,15 194:8 196:17 203:25 204:10 206:11 212:12 224:1 233:20 234:19	medical 3:2 10:23 11:24 13:13 18:9,10,14 100:8,9 126:19,22 216:15,16
managed 11:16	mean 6:23 22:16 24:22 39:6 41:14 48:15 49:21 51:14 68:3 79:22 80:5 84:15 90:22 91:22 93:5,8 102:23 106:9 109:3 112:10 120:17 127:13 135:19 140:3 149:9 193:1 195:7 197:13 199:2 200:18 203:3,20 205:25 208:15 217:17 219:25 220:4,7	Medicare 216:22
management 25:4	meaning 28:22 29:2 40:14 41:2,3,19 44:23 48:4,16 64:16 73:4 74:10 103:13 108:14 109:21 115:11 119:18 127:2,4 140:2,8,12,14 143:15 160:2 162:14 163:11 174:9 175:23 176:16,18,19 188:11 193:2 196:22 222:3,18 225:13 226:16 242:18	meet 116:25 118:9 239:7,10, 12 242:4
manifold 169:6		meeting 7:19 8:2 120:23
manner 193:6		meetings 7:15,18 8:5
manufacturing 3:2 15:15,16, 17 16:4 22:3 131:25		meets 61:24 150:13 226:23 239:4,11,24
many 4:23 20:7,11 21:16 22:11,13 50:21 55:18 70:2 91:7 95:13 100:21 111:18 154:21 169:4 192:20 217:12, 23 218:1,3 222:22		Melinda 12:5 13:15
March 17:9		mention 24:18 170:20 186:8 218:25
mark 18:23 42:2 43:7 132:18 137:25 138:1 190:14,15 212:11,13,14,21		mentioned 6:14 8:15 12:12 35:10 36:15 44:3 52:2 67:18 89:11 123:14 125:23 186:12 218:11 220:23
marked 18:21,24 42:6 43:5 68:17 132:16 137:23 190:17 212:16,18		mere 110:21,24
market 92:16 214:23 216:4 217:8,9		met 4:17 8:5 224:20
marking 42:3		metes 223:18 229:6
matches 109:14		metrics 56:1
mate 181:5		middle 32:25 107:19
		might 5:14 9:7 27:1,15 38:22 44:24 45:12 67:18,23 89:1 95:23 100:21 146:3 192:2 233:6
		mind 36:12 66:3 120:6 153:5 183:15 218:5
		minds 39:23
		minimally 86:19 88:1

minute 8:13 66:15 67:1 84:15
220:15 238:17

Mischaracterizes 40:4

misparaphrase 81:4

missed 76:25 98:5

missing 230:1

Misstates 47:23 61:4 64:25

misstating 62:2

mistaken 218:20

misused 196:17

model 216:20

modification 73:9 92:22

modify 127:19 232:8

modifying 242:15,17

module 119:23 179:25 180:1,
21 183:4,12 184:10,17 185:19,
21

molecules 237:5

moment 66:7 67:10 83:9
94:14 110:12 145:19 152:25
155:7 197:21 229:21

money 16:8

month 17:8

months 7:13 11:1,2 17:2
215:13

more 15:21 18:11 26:6 33:10
45:10,15 46:22 57:6 78:24
82:2 84:11 87:2 94:12 97:22
99:20 105:10 107:5 109:21
111:2 113:5 121:6 129:5
139:23,24 142:23 145:18,25
147:11,22 148:11 149:11
160:4 161:23 167:17 168:5,7,
15 173:11,25 175:16,17 177:8
184:16 185:7,14,25 187:18
189:24 193:2 196:16 201:21
207:8 212:9 213:9 217:5
238:21

morning 4:14,15 8:5

most 87:22 216:12,13,16,17

mounted 71:4

mouth 41:24 152:20 166:9

move 13:1 49:18 73:4 169:7

186:1 197:22 237:3

movement 143:19

moving 163:5

Mr 3:7,8,13,15,17,19,22,24
4:13,14 5:14 7:22,23 18:22
30:2,5,9,12,22 31:4 32:20
33:15 34:9,19 36:16,18 37:2,6,
8 38:25 39:4 40:4,8 42:7 43:6
47:23 48:1 54:8 61:4 62:7
64:25 68:9,11,13,15,16 75:24
76:3 101:22,25 106:5,8,11,20
109:24 110:2 112:22 113:8
115:10,12 117:9,13,16,18,21
122:3,6,8,13,14 124:18,19
132:17 137:24 159:7,21
162:18,19 163:2 165:5,12
174:14,18 190:19 209:17,21
212:10,17 213:2,7,10,16,20
220:15,19 221:14,19 228:17,
19 229:8,13 232:24 233:2,13
242:20,22

much 185:25

muddled 127:5

multi 125:8

multi-bed 123:12 125:14,19
126:7,10,14,25 127:3,11,22

multiple 29:20 51:17 53:6
58:5 62:5 71:18 78:15,17 79:8,
15,24 80:7 81:11 83:21 97:14
98:3,13 99:9 100:9 101:3
105:23,24 108:13 110:9 111:5,
22 114:25 115:1,20 116:1
118:22 119:25 122:23 124:6,
21 127:13,21,23 129:16 142:1,
15,17,19 143:4 144:5,24
145:3,9 146:18,20,23 147:5,6,
16 148:6 149:4,5 169:6 223:22
227:2,3,13

multiple-column 224:11

must 53:11 79:24 142:15
145:15 146:7,17 156:16
166:16 182:3 207:8 227:1,3
231:22 238:20 240:4 241:11

my 4:16 5:8,16,24 6:3,4 7:14,
16 14:21 15:9 16:3 17:14
20:16 21:18 24:24 25:5 31:9
34:11,13 35:7 43:14 54:6,10
55:21 56:2 59:1 60:18 63:6
66:21 67:20 69:24 70:1 72:1,6
79:6 83:7 84:3 94:22 97:11

100:2 105:18 106:1,13 107:4
109:8,14,17,25 110:13,14,16,
17,20,23 113:20 115:24 120:6,
10,12 128:24 130:16 142:16
144:21 145:11 163:25 164:2,5
172:11 173:8,11,24 176:2
178:4 186:19 187:3,17 189:8
190:13 191:9,11 195:25
196:12 198:12,13,15 200:11
213:2,11 218:5 220:16 225:5
234:5 235:4 236:23 240:9
241:24

N

name 4:16,18 17:22 18:2,3,6
22:8 46:2 62:1 101:24

names 22:4 220:24

narrow 219:13

narrower 175:14

nature 40:7 52:11 216:19

near 33:2 132:12 137:14
138:21 141:22 144:1 221:23

necessarily 200:18 205:4
209:3

necessary 188:15

necessitates 200:13

need 5:7 6:7 14:7 31:20 33:18,
21 34:8 35:23 36:9 49:22
52:21 55:9,10 69:18 70:22
80:16 92:19 94:10 112:12,14
113:12 139:22,23 168:15
169:24 187:11 195:11 203:15,
20 213:17 223:19

needed 112:5

needs 63:9 73:9,20 83:21,24
112:21 118:9 148:8 194:14
226:23 234:6

negative 139:23 177:7

negotiate 23:14

negotiations 23:17 24:1

neither 119:24 175:20

never 13:12 24:13 39:17 52:2
64:13 103:15,18 126:18 216:1

new 3:20 40:2 52:24 53:22
138:15

next 19:18 72:10 87:4 132:25
178:1 192:4 201:20 202:17
210:21

nitrogen 69:7,14 85:15 87:21,
22 102:22 108:4

no 3:3,6,11 6:21,23 7:3,6 8:9,
12,25 9:2,4 14:8 16:21,24
17:17,23,24 18:7 20:16 26:14,
16 27:20 30:18 33:2 42:21
44:23 48:24 50:10 56:20 57:15
59:4 67:13,14 68:8 80:17,19,
21 81:25 84:9,17 85:7 88:14,
18 89:14 92:2 94:14 99:12
100:5,15 107:7 114:24 116:24
120:14 121:8 125:24,25
143:11,14,15 144:5,13 145:24
147:13,14 150:15 156:12
157:8,11 160:25 164:1,8
168:11 169:2,13 170:13 173:2,
4 179:23 181:4 184:5 195:2,8
199:3 206:25 207:10 219:15,
16 220:12 221:4,10,12 224:22
228:13,18 230:13 234:5 235:2
237:2,12 238:15 239:11,22
240:18 241:15

nods 5:19

noise 225:18,19

non-multi-bed 125:20 127:16

nonacceptable 225:20

none 6:13 88:25 89:2 96:20
119:18

nonfunctional 225:20

nonstarter 226:5

normally 28:20 123:13 125:9,
12,17,19,22 126:4,11,20
127:1,11,15

note 19:8

notes 220:16

nothing 4:9 8:24 16:20 74:19
81:24 112:10,13 119:17
165:19 177:16,19,21 178:4,9,
15 240:18 242:22

notice 135:4,5 202:7

noticed 77:8

noting 211:11

novel 9:10 121:2

nowhere 146:22

nuances 173:3

number 8:14 19:11 25:14,20
35:11 42:21 45:20 51:8 65:9
70:1,3 76:13 109:9 120:18
133:13 134:5 135:5,8,23 138:5
139:2 155:1 159:3,4 188:1
190:21 191:5 217:15 219:10,
12 223:8 224:24 229:19
233:23,24

numbered 210:12

numbers 29:2 42:16,17,18
43:22 109:12 132:24 133:4
135:6

numerals 60:13 90:2

numerous 98:1 224:18

O

object 5:14 39:20 134:15,16,
20,24 135:1,2 136:20,22,23
137:3,7,9,16,17,20,21 181:5
187:24 201:18

objection 5:15 7:22 30:2,9,22
32:20 36:16 37:6 38:25 40:4
47:23 54:8 61:4 64:25 106:5
112:22 115:10 124:18 165:5
187:5 228:17 229:8

objects 144:9

observation 48:21

observe 165:16

obtain 124:17

obvious 41:5 62:6

obviously 20:25 219:8,19,21

occupied 171:19

occur 166:8

occurred 49:15 200:21

occurs 156:4

October 215:12

off 14:6 41:4 48:15 68:13
92:15 122:10 209:19 216:5
217:22

offer 38:22 81:6

offered 15:3 59:4 80:9 221:11

offering 175:9

offhand 208:15

officer 9:15,17,25 15:4 16:7

officially 16:20

offsetting 225:14

often 28:21

Oh 42:20 80:16 117:15 129:13
132:6 162:15 191:7 215:25

okay 4:20,25 5:2,23 6:6,9,11,
14,19,22,25 7:4,7,10 8:17,24
9:12,21 10:24 11:5,12 12:7,11,
22 13:6,10,17,21 14:4,8,11,18
15:20 16:1,15,22 17:7,10,16
18:6,9,19,23 19:15,16,21 20:2,
18 22:7,11,15,25 23:13 24:1,7,
12,17 25:7,10,16 26:14,21
27:23 28:6,13,16 29:22 31:7,
11,13,15,19,21 32:1,6,9,17
34:10 35:4,10,19,23 36:12
38:4,12,21 39:19 40:9,13 42:2,
5,11,15,21,22 43:11,13,15,24
44:9,15 45:2,7 46:9,12,14,18
47:11,14,19 49:7,9 50:5,9
53:1,9,25 59:16,23 60:25 62:8,
21 63:25 64:3 66:3 67:6,17
68:5,24,25 69:5,12,21 70:17,
21 71:6 72:12,20 73:11,17
74:13,22,24 75:5,16 76:2,7
77:2,8,10,13 78:1 79:6 80:1,22
81:15,17,24 82:1,12,17,21
83:11,13 84:2,10,14,24 85:12,
13,17 86:10,15,22,23 87:4,15,
23 88:1,11 89:16,24 90:5
91:17 92:4 93:4,8 94:19 95:4,
11 96:4,5,6 97:11 98:9,17
99:1,10,16 100:17,19 101:12,
14 102:1,9,16,19 103:2,5,7,17
104:2,11,17,20 105:6 106:1,21
107:2,6,11,18,23 111:16
114:1,8,12,20 115:5,25
116:11,15,19 117:22 118:15,
24 119:8,22,23 120:16,22
121:5,7,10,19 122:3,18
123:10,15,16,20,22 125:5,12
126:10,20,24 127:9,22 128:1,
2,11 129:6,21 130:3,14,20,25
131:4,10,24 132:6,18,23
133:12 134:8,12,25 135:4,10
136:18 137:10,14,25 138:3,10,
14,17 139:1 140:8,18,22

141:4,7,13,15,24 142:13
144:20 145:25 147:15 149:3,8,
25 150:1,7,18,21 151:16
152:6,12,16,18 153:14,21,25
154:2,17,20,25 155:2,12,15,
16,18,20,25 156:6,11 157:13
158:5,12,15,23 159:22,25
160:19 161:7,11,20,24 163:7,
21 164:19 165:18 166:23
167:3,4,17 168:5,10 169:1,9,
12,21 170:5,8,25 171:20,23
172:2,8,20 173:11 174:3,10,
12,15,25 175:4,18 178:2,7,14,
19 179:4,10,21,23 180:4,9,11,
19,22,23 182:15 183:15,18
184:24 186:1,8,11,15 187:16
188:8,14,23 189:23 190:9,14
191:2,6,13,23 192:7,11,15
193:7,8,17,25 194:17 195:6,8
196:4,9,20 197:6,8,9,16,23,25
198:9,11 199:11,18 200:2,5,
19,25 201:11,12,14,19 202:12
204:4,7,10,17,22 205:15,18
206:4,10,13,22 207:1,12
208:6,11,22 209:4,22 210:5,8,
17,20,23 211:14,22,25 212:13
213:13,19,20 214:4,5,17
215:4,5 216:8 217:16 218:10,
15,19,25 219:4,17,21 220:7,17
221:5,14,25 223:3,21 224:10,
19 226:1,7,10,21 227:6,17
228:2,8 229:3,14 230:11,14
231:4,6,25 232:24 233:8
234:7,17,23 235:8 237:14
238:5,8,11,14 240:18 242:7

omitted 121:18 135:21

once 4:24 6:15 109:2 166:20
217:4 234:23 237:8

one 5:7 7:18 8:2 12:3 15:7
17:3 23:13 26:4,5 27:9,11,13
28:21 29:11 37:17 43:3,13,16
48:2,4 49:17 50:23 51:5 52:9
53:6,20 54:7 60:20,23 62:15
65:7,8,21 70:2 73:13,21 75:24
77:22 78:9,24 82:2 88:9 89:6
93:19 94:5 95:16,17,21,25
96:24 98:11 99:11,15 103:18,
21,22 116:15,18 117:18,23
118:1,6 119:3,4,21 121:2,6
132:12 133:23 139:24 140:11
142:25 143:5 144:5 145:21
147:5,7,21,22 149:14 151:17
155:5,7 167:22,23 168:1
175:7,8,9,11,13,14,24 177:12

182:14 184:4,16 185:13,14
186:3 187:18 188:18 189:4
190:8,11 192:8,14,16,20 193:2
194:1 196:10 197:5 198:7,18,
20,23 199:2,3,7 200:6,9,10,16,
17,24 201:1,2,3,8,16,23 202:1,
4,5,23 203:2,18 206:8,19
207:2,8,15 208:8 209:19,23
212:7 214:4,24 217:2,19
218:6,20 219:6 221:2 222:22
225:8,22 229:23 231:22
232:14 237:20,25

ones 163:18 218:19 219:10
233:3

ongoing 12:20

only 24:25 33:7 35:20 38:1
50:21 51:5 52:7,9 53:2,3,9,16,
19,20 56:19 62:18,25 63:7
65:25 94:17 116:15 118:1
119:3,21 143:5 156:6 188:17
197:10 205:6 207:15 208:8
224:8 232:11

Opening 19:1

operate 117:18

operated 103:4 167:25

operating 103:5 167:20

operation 12:10 123:6,12
125:8 126:25 127:22

operations 11:16 125:19,20,
21 126:7,10,13 127:11,17

opining 91:12,14

opinion 31:7 32:17 33:17
38:4,22 52:16,20 53:1 57:13
58:20,24 59:1 60:25 62:21,22
69:24 71:1,6 72:2 79:23 80:10
94:19 95:8 96:18 99:16 100:24
107:2,4,9 109:8 111:22 116:21
128:4 130:16 131:6 140:1
142:14,16 173:8 175:18,24
187:17 189:17 190:13 200:9,
11 203:23 205:5 209:2 217:16
219:11 221:11 226:19 228:20
229:1,3 236:25 240:13

opinions 28:7,13 68:20
221:12

opportunities 55:16

opposed 20:14 67:4 97:14
101:2 112:9 189:19 200:24

opposite 101:10 108:1 167:23
170:6

optics 12:1

option 24:14

options 109:11

order 29:7 83:15,25 124:8
139:24 234:25

ordinarily 140:9

ordinary 32:14 41:14 96:24
131:21 140:2,12,14 164:14
172:13 173:7,13 174:9 176:16,
18,19 194:1 196:22 229:4

organized 164:2

orient 134:15 136:20,22

oriented 85:21 87:5 88:23
107:25 108:2 143:22,24

orients 87:24 134:19

originally 144:22

other 5:11 8:4,7,10,17,18
12:15,18 16:6,15,16 17:23
18:12 19:23 20:2,3,13,16 21:3,
14,24 26:2,4 28:22 29:6,9,12
40:25 41:1,18,20,22 42:23
43:21 46:7 51:2,16 52:3 53:6
55:14 58:1,2 63:23 64:21
73:14,22 74:11 75:25 80:17
88:10 90:13 91:20 95:25 96:5
104:13 106:24 110:10 114:12
116:19,22 121:4 122:24
126:16 127:3,4 135:17 140:7
142:22 143:1 144:8 147:8,13
149:14 155:5 159:16,25 160:1
162:14 163:20 165:8,20 168:2
169:17 175:11 177:12 179:7
186:1 188:10,18,19 192:25
195:17 198:19 200:1,16 202:5
216:10 219:10 221:5,7,12
227:20 228:11 230:25 231:22
235:1,15 236:7

others 15:10 99:4

otherwise 83:25 104:12
105:12 106:22 174:8

ourselves 217:9

outcome 56:9

outer 107:24

outgoing 24:2,4,8,10

outlet 59:18 81:12 87:5,6,11,
13 88:3,5,15,16 89:9,21 90:8
91:20 93:11 105:1 108:2,9
110:7 111:6 112:3 115:7,21
116:4 142:21,25 143:2,24
144:25 146:13 151:25 152:8,
10,14 164:16 176:13 177:20
178:6,16 186:17,22 187:1
227:9

outlets 85:8 105:24 108:14
115:1 142:9 146:14,20 175:10
177:5 178:10,11 190:3 224:6

outside 33:18 39:21 93:16
173:16 215:24

outweighs 74:7,9

over 5:2,11 8:22 19:23 37:11
75:25 135:5,8,17 140:7 189:25

overall 222:10

oversaw 12:10

overseeing 10:18

Overview 60:14

own 16:3 25:1 61:10 73:8
90:10 97:17 146:8

owner 89:12 207:14 208:7

Oxford 3:20 138:15

oxygen 6:19 8:23 12:4,13
13:3 15:1 21:13,14 22:1 25:21
26:25 30:25 39:15 42:13
45:16,23 46:1,8 55:24 60:10,
11,14 65:14,15 72:20 77:20
80:6 89:17,20 90:17 91:19
92:8,11 95:14 97:1 98:22
126:18,23 127:13 131:14,25
156:8 167:20 169:4 187:21
214:15,18 215:18 216:1,4,13,
14,18,21,23 217:10 223:25
224:12 225:1,2,3,21 226:3,5
238:3 240:7,8,17,21 241:2,5,
25 242:1,3

P

P-O-C 215:6

P-O-C-S 123:7 214:18

P-O-S-I-T-A 123:3

p.m. 122:12 242:23

pack 90:16,19 193:23 194:5,
18,23 195:5,20 196:7,11
197:2,4 232:14,19,22,23

page 3:6,11 5:3 19:17,18 23:6
26:22 28:1 42:23 43:21 49:11
75:10 76:25 81:5 82:13 95:23
117:20 128:20 132:24,25
133:17 136:5 138:4 141:8,9
150:3,5,25 151:12 161:6 162:3
174:15,21 179:12 190:20
191:7 192:4 197:9,23 205:19
206:1 211:3 212:7 213:15,22
226:8,11 228:7 231:17 233:4
234:8,11

pages 3:17,20,22,24 42:19
164:2 178:1 202:17 203:4,17
210:14,21 212:18,25 218:4

papers 21:17 64:11

paragraph 20:22 21:5,6,9
26:22,24 27:3,25 28:17,18
31:14,20 32:2 40:9,10 41:18
47:8 49:11 55:5,11 56:11,21
57:3,14,20,22 58:8,20 59:25
61:1,6 62:9 64:21 66:12 75:3,
18 76:7 81:5 82:4,14 85:2 86:6
103:8 104:2 106:21 107:1
110:16 111:14 112:7 123:10,
24 124:12,21 125:6 128:1,3,11
129:21 131:1,10 132:4,5,9,13
133:19 138:10 148:1 150:1,3,
17 153:11,21 155:10 169:13,
15 170:21 172:8 179:18
191:20 193:16,17 195:23
202:8 204:1 206:2,3,11
208:11,12 210:1,8,14 212:25
214:6,14 215:2,4 218:11,20
221:24 222:1 237:15,22 238:9
239:2 241:7

paragraphs 26:24 122:15,25
131:5 152:17 153:3,16

parallel 143:7,13,15 144:4,8,
10,15,18,19 151:24 152:3

parameters 239:10

paraphrase 84:15

Pardon 115:9 155:7

part 12:15 15:13,14 20:12,19,
21 23:17 32:5,6 45:21 46:5
50:3 51:22 57:18 83:22 88:8
90:12,14 91:2 92:8 106:17,18
117:7 120:6 122:14,15 134:12,

18 135:21 146:7 161:18,20
178:22 180:2,5 186:1 214:5
223:11 224:7 233:18,21

part-by-part 205:24

partially 107:24 108:4 153:19
182:17 183:6 184:12,19
185:23

participate 26:2

particular 26:11 29:2 35:25
37:23 40:17 46:20,21,25
47:16,21 48:5,9,17 55:11 63:1
65:24 157:18 213:6 221:24
222:3,15

particularly 40:16 64:16

parties 226:15

partnership 23:14

parts 37:3 91:10 113:23 179:7
193:7

party's 202:8 226:18

pass 163:17 164:15 165:20
168:23

passed 164:8 231:11

passes 151:25 152:3

passing 169:18 170:22 171:1

passive 63:20

past 20:7,11,15 21:1 95:14
121:3

patent 3:13,15 7:2 25:21 26:2,
18,19 28:21 29:7,10,20,23
30:16 35:15 36:5,6,8 39:8,9,24
40:15 42:12,13,14 43:12 44:4,
5,7,18 46:16,19,24 47:20
48:10,12,20 49:3,4,5,14 50:7
51:1,4,25 54:11,14 55:15
56:12 57:14 58:21 59:1,10
60:2 61:10 63:7,10 65:7,10
68:18,25 71:16,20 74:22
76:10,18,20 77:14 82:1,10,18
83:4,13 84:5 89:4,12 95:22
98:15,19 104:3,9 105:21
107:16 110:20,23 111:8 112:2
113:18 123:18 130:4 137:11
141:18 142:18 151:18 154:1
180:17 194:15 196:1 197:11,
18,19 206:20 207:7,14 208:6,8
210:2 215:14 217:7 218:21
222:10 223:4,7 224:14,16

225:23 228:9 230:7 240:1

patents 21:17 25:8,11,17,19
35:11 43:3,16 44:1,10,13 45:1,
3,8 46:7,9 49:6 54:13,14 57:5
60:18 68:1,22 72:14 95:16
97:24 102:10,14,20 111:3,4
120:18,20 122:20,22 123:6,13
125:8 151:1 193:13 217:23,25
218:1,2,3,12,15,16 219:1,7,8,
9,13,21,22 224:19 225:22
229:1 230:22 237:20

path 163:20

paths 152:21 153:4,17

patient 60:10 127:14

patients 238:3

pattern 53:24

pause 75:24

pausing 40:7 97:16

paying 80:20

PDF 191:3 210:24

peek 103:7

pending 167:5

Pennsylvania 23:25

people 26:12 50:4 51:1
215:17,22,24 217:3,5,10

per 74:19 112:18 116:17
128:14 163:3 238:17

perform 55:25 112:18

performance 225:16

perhaps 93:11 208:17

period 11:6 14:6 16:16

permutation 60:23

permutations 36:24

perpendicular 234:24

person 32:14 51:21 52:17
55:21 61:15 100:24 131:6
164:14 215:25 229:4

personal 217:22

perspective 21:18

pertain 31:1

Ph.d. 3:12 18:25

phase 124:7

phases 124:3,8,14

phrase 86:1,4,10 87:5 126:4
140:5 154:25 199:12 201:8

physical 181:19

physics 116:23

pick 92:15 95:17 199:8 202:6
237:20

picked 199:8

picking 114:25 135:13

pictures 75:20

piece 206:7,9 213:11

pieces 73:9 178:21 201:13
212:24 217:15 218:1 220:8,11

place 4:5 18:4 27:10 29:11
56:5 61:21 79:10 95:24 147:9
182:20 184:15 206:11 225:6,
11

placed 45:18 74:1 188:19

placement 152:13

places 51:8 65:6,9 67:25
197:13,14

placing 152:9

plain 41:5,13 140:2,12,14
165:9 172:12 173:6,12 174:9
176:16,18,19 196:21

plan 24:25

plastic 176:7

play 25:6

please 5:5 57:16 60:7 64:2
71:24 73:12 84:17 117:12
118:4 170:2 174:3 177:15
213:6 220:22 234:9

plug 176:14 186:22,23,24
187:20 193:5

plural 119:14

plurality 77:22 78:9 124:4,5

plus 122:4

POC 215:6 224:20

POCS 123:6 214:17

point 15:22 24:17 25:25 31:22
46:13,18,24 47:20 49:14,17,19

50:7 60:2 66:19 67:7,11 97:9,
20,25 98:4 108:21 109:2
127:12 143:3 153:9 157:2,4,12
167:23,24 172:6 207:13 208:6
211:20 216:12 229:24 230:3
234:2 235:4 236:9 237:2,6

pointed 64:21 133:21 212:4

pointing 31:25 49:24

pointless 231:24

points 23:13 167:21

poor 37:18

port 59:18 116:4

portable 45:16,17,22 55:24
72:20 77:20 80:6 90:16 100:8
131:14,25 214:18 215:18
216:1,4,12,18,21,23 217:10
223:25 224:25 225:21 226:5,
23 238:2 240:7,8,17,21 241:1,
5 242:1,3

portion 125:10 134:8 213:7,8

ports 81:12 115:21

POSITA 32:10,14 123:3 128:4
227:18,22

position 23:21 30:10 70:21
110:3 154:20 156:13,17
205:19 235:15 237:8

positions 133:10 152:7

positive 139:23 177:7

possible 65:23

possibly 54:12

potentially 195:4

pounds 225:1 238:12 240:5,
13,19,23 241:21

power 90:16,19 193:4,23
194:5,18,23 195:5 196:7,11
197:2,4 232:14,19,22,23

preclude 146:11

predictably 56:7

predicted 121:1

prefer 189:25

preferable 124:5 184:25
189:13

preferentially 69:6,14 85:15

108:3	proceed 5:16	provided 27:21 28:9,12 47:22 49:2 55:17 221:21 242:19
preferred 51:15 54:3,20 56:23,25 58:9,21 95:8 109:13 191:3 200:19	proceedings 4:5 242:23	providers 216:15,16
prefix 42:21	process 41:16 175:22	provides 81:12 111:7 115:21 167:17 168:7
prepare 7:7,12 8:2 20:3,6	processor 38:14	providing 216:18 238:5
prepared 8:19 19:6 216:21	produce 55:22 56:9	public 225:11
preparing 7:18,21 8:1,11,19 19:24	produced 24:13	pull 206:7
presence 137:9	producing 225:1	pump 90:18
present 22:18 54:19 56:22 60:11 239:3,8 241:8	product 13:3 14:22 15:12,18 16:10 21:21 87:6,18,19 92:15 98:24 101:16,24 124:8 164:16 214:24 216:17,24	purple 155:17 159:12 161:21 163:19
presently 9:6 38:7	products 10:21 11:19 23:24 214:21	purported 111:2,10
president 11:14 15:5,6	project 12:10	purpose 52:4
pressure 103:1 169:7 225:5, 16,17	projects 12:20	purposely 52:7
pressures 225:15	pronounce 9:7	purposes 132:23
pressurized 171:18	proper 36:13 93:2	pursue 13:4
presumably 199:6,9	properly 33:4 35:9 103:4	put 20:9 23:20 25:5 41:23 54:13 55:2,8 56:5 64:13 71:15, 23 73:20 90:17 93:15,16,18 94:24 98:12 110:13 114:5 117:6 136:13,14 152:20 165:9 166:9 176:4 182:20 183:10 187:25 195:9 217:4 220:8 221:11 222:13 241:6
pretty 11:20 63:15 103:23 115:4 116:20	property 9:19 15:10 24:11 32:24 33:2,5 216:7 218:6	puts 54:16 87:10
prevalent 125:21 126:14 127:18	proposal 95:5 187:6,8	putting 36:5 110:4 131:18 157:10 174:7 183:23 189:5 190:7 192:16 215:20
previous 17:23 118:25 221:4	proposed 31:5 82:19 89:24 95:5 105:15 107:3,4 108:12 110:8 113:6 119:2 128:6,10 129:7,12 139:9,13,20 141:5, 10,13,24 144:24 145:22 146:1 147:3,18 148:9 172:12,21 173:5,6,23 175:1,8 178:25 181:2,22 182:18 183:18 184:7 186:2 189:10 192:18 194:22 196:9,18 200:12,17 201:2 202:8,12,14,15 203:23 205:20 221:8 226:11,12	Q
principle 36:20 40:22 48:7	proposes 198:6,7	qualification 156:1
principles 28:7,14 31:16,17 32:3 40:10 41:18,20,23 48:2 124:2 221:21	proposing 94:10,14 149:16, 18 182:3 192:12	qualifications 45:22
printed 212:20	prosecuted 63:6	qualified 154:14 165:25
prior 9:21 11:5 13:21 17:25 18:12 44:15,20 98:17,18 99:13,24 102:7 214:17 215:6 217:6,15 218:1 219:22 220:9, 12 221:2	prosecution 39:14 40:15 50:3 68:1	quality 15:17
priority 96:7,10 98:18 215:13	protecting 24:11	quantify 217:21
probably 19:12 22:5 30:1 45:15 51:21	proven 215:21	question 5:8,11,16 6:1,4 20:12 30:4 34:11,13,15,17 36:7 37:18,22 39:2 40:7 41:21 47:25 59:23 66:21 68:24 72:1, 5 79:6 82:2 84:3 93:1,2 94:12, 22 95:3 97:12,19 98:10 100:1, 14,18 101:15 106:1,9,12 109:25 110:1 112:23 115:24
problem 23:21 38:13 80:19, 21 147:22,23 149:14 174:10 180:17 183:17 230:16	provide 123:5 168:5 175:22 238:2,16	
problems 13:14		
procedure 200:20		

118:1 121:9 124:20 125:15
128:9,24 142:3 143:17 144:21,
22 147:10 149:14 153:15
159:6,11 168:9 172:11,20
173:4,11 178:3,4 180:13 183:3
189:16 198:12,15 203:12,21
204:12 213:2,21,22 215:3
219:15 220:3 224:2 232:7
240:9

questioning 77:18

questions 5:21,23,24 6:8
66:11 118:20 154:22 220:20
223:14 224:11 227:7,12 228:2
232:10

quick 20:22 23:3 42:8 47:12
68:9 109:25 131:3 172:9
174:16 195:13 196:12 233:3

quiet 61:19,23 225:10

quite 46:2 110:15 210:5
219:20

quote 133:22 135:20 211:8

quoted 178:11,12 191:25
192:7

R

R&d 11:14,18 97:17

raising 16:8

ran 10:17 15:17

rarely 50:25

rate 55:12 238:20

rates 54:23,25 56:15 57:24

rather 196:12 202:17

re-ask 203:21

react 216:3

read 7:13 30:15,16 31:13,22,
25 33:9,11 34:6,11,15 36:22,
25 37:17 38:18 41:9,17 51:5
52:14,15,21,25 55:5,21 57:4,5,
8,11,20 60:6 61:5,6,16 63:7,15
64:3,12,15,17 70:9 71:20
73:24 74:10 78:11 79:12,14
81:3 83:11,13,14 86:4 89:3
91:9 94:2,7 95:6 103:20
104:17 106:12,15 108:6 109:4,
8 110:1 111:11,21 112:25
113:1,4,12,19,21 114:5,22

115:19 116:6,7 117:20 125:15
128:7 131:3 134:21 142:3,4,6,
23 148:15 152:25 153:10,14,
24 159:9 160:9,25 166:12,20,
21 167:1 168:4 176:21 179:7
182:25 183:10 188:10 189:20
192:22 198:12 202:17,19,21
203:13,15,20 207:9 211:2,8
212:8 213:10,15,19,20,23
215:3,4 222:10,16 223:23,24
225:25 241:24,25 242:2,12

reader 55:3

reading 29:19 32:4 58:6 69:9
83:8 86:2 102:10 106:17
107:20 110:11 111:13 112:9
116:9 117:4 127:19 146:5,9
159:19 175:9 179:22 214:1
222:18,19,22 229:21 239:15,
17,21 240:24

reads 34:7 87:17 134:8 136:2
147:2 159:17 198:18

real 18:7 20:22 23:3 42:8
47:12 109:25 172:8

realized 179:22

really 33:6 102:17 110:19
120:7 126:1 147:19 149:20
161:20 212:20 220:14 225:19

realm 59:5

reason 6:11 22:7 56:6 77:11
97:16 116:19,20,22 147:13
188:14 205:6 221:7,12

reasonable 14:10 32:12,19
33:25 229:6

reasons 77:12 109:12 216:6
224:24

recall 4:24 25:20 27:7 45:24
77:12 206:25 207:11,18,19
208:14 223:12,13,16,17
224:17,18 227:10,14,16 228:3
230:7 232:3,16

receive 39:8 175:12 176:17,
22,24 182:16,25 183:6 184:12,
18 185:8,18,20,23 186:5
188:9,11,14 193:5 194:18
196:23 197:3 203:12

received 187:10

receives 179:3 184:23 185:2
186:4,21 192:8,14

receiving 186:9,14,25 187:4
193:22 194:5

receptacle 143:19 174:22
176:3,7,9,11,13,25 177:2,6,11,
17 178:5,11,23 179:2 180:3,6,
10,15,20,22,24 181:1,7,9,24
182:1,3,8,21 183:13,20,23
184:21,22 185:10 186:9,13,20,
22,24 187:2,13,19,23,24
188:6,13 189:12,20,23 190:6
191:14,21 192:7 193:22 194:3,
4,12,14,17,21 195:2,3,11,14,
18,19,23 196:6,16,19 197:21
198:19,21 199:11,12,24 201:9
205:1,2 231:5,8,10,13,20
232:2,11,13,18,20

receptacle] 198:2

receptacles 193:19 196:1

recess 68:14 122:11 174:17
209:20 220:18

recital 96:7

recite 44:25 82:6 104:21,25
105:3 146:22 238:24

recited 70:19 72:21 77:21
78:2,5 104:15 112:1 177:17
178:5

recites 91:19 108:8 170:3

recognize 45:1 54:21 108:17

recollect 97:17

recollection 17:14 44:17

recommendations 238:2

reconstruct 113:20

record 4:18 50:4 68:13 76:5
122:10 209:19 223:2

recorder 101:19

recrafting 184:15

red 51:25 52:1,3,4,7

reduction 15:18 211:19

redundant 29:16,25 30:8 31:6
73:25

refer 42:15 43:25 64:20 84:20
128:18 133:17 146:3 151:6
199:22 231:14

reference 42:18 47:3 54:19
60:12 123:21 135:24 136:7,8,

15,17 137:7,19 139:6,9,15,18
140:13,15,19 151:8 194:4
208:16 231:13

referenced 67:20 218:2
219:10

references 146:25 218:11
219:12

referencing 67:21 142:8
145:4,10 177:22 208:18 218:4

referred 42:12 56:22 60:13
67:22 101:16 103:3,22 126:8
138:14 146:7 182:21 194:5
195:18,19 208:3

referring 26:18 27:12 46:3
49:5 56:11,15 58:9 67:24,25
68:7 78:4 84:22 85:4 104:3
107:22 112:6 113:18 125:2
126:7,21 127:1,23 130:1 149:7
153:18 155:3 159:3 160:1,7
161:8 162:15 163:22 196:19
206:5 207:23 210:9 211:9
213:12 237:15,24

refers 143:5 146:23 175:10
195:22,25 196:1 211:13

reflected 207:4

regard 24:13 37:16 115:3
137:3 150:23 207:24

regarding 80:10 215:18

regards 56:23 85:8 148:24
149:20 152:14 172:20 184:8
194:23 196:6

rejected 175:8 189:9 200:17

relate 227:15 232:19,22,23

related 91:20 131:12,15

relates 60:8 228:9

relation 137:16 176:9 188:6

relationship 70:5 86:11,23
87:10,13 89:13 92:9 137:17
146:25 177:10 178:15 231:7

relationships 84:21 88:2

relative 126:18 134:24 136:25
140:15 142:9 143:19 146:10,
14 148:1 152:8,9 179:2,7
182:10 183:23 184:23 186:13,
20 190:6 201:5 228:11 231:21

releasably 182:16,25 183:6
184:12,18 185:23 186:4,5,17
187:1,10 188:9,11,14

release 13:2,14 175:12

released 214:25 215:12 217:2

releases 102:25

relevant 65:17 135:14 137:5
215:19

reliability 22:3

relied 21:6,10 191:21 242:8,10

rely 21:12

relying 21:4 136:11

remainder 105:21 180:16
227:8

remaining 90:20,21 165:10

remains 144:21

remember 44:24 47:7 50:13
77:12 110:15 209:9

REMEMBERED 4:1

removability 98:22

removable 42:13 59:16 89:7
90:16 92:24 97:6,9 98:3,8,24
105:2 117:5 187:13 188:5,11,
16 194:12 198:1 201:12 202:5
204:5,17,24,25 205:13

removal 117:8 205:24

remove 199:5 202:6 206:7

removed 87:21 199:9 202:13
204:4,6 205:1,13,16 206:6

removes 102:24

removing 201:18 204:11
205:5

render 228:23

renders 227:8 229:19

repeat 30:4 106:10,11 117:10
125:15 128:24 153:14 159:5,7
198:12

repeatable 53:24

repeated 52:9 60:24

repeatedly 58:17

Repeating 34:16

repetitive 74:6

repetitively 56:6 207:17,21

rephrase 135:7 200:8

replaced 199:25

replacement 199:6

reporter 4:5 5:6,19 76:2

represent 153:1 154:24
210:23

represented 161:23

represents 27:8

requested 159:9

require 72:25 73:3,4 74:18
78:15 79:8 90:13 146:5 157:18
181:24 186:16 238:11 239:15
241:21

required 51:13 55:22 56:9
118:22 123:5 217:1 226:1
237:6 241:11

requirement 52:15 74:16
117:1 156:13 225:3 240:24

requirements 45:20 46:1
61:24 73:5 224:13,15,18,20
225:9 239:3,24 242:4

requires 60:11 66:18 69:5
72:3,7 144:24 160:10 175:16
177:19 178:5 240:12,19

requiring 74:20 149:5

reread 109:25 183:4 213:3,5

resaying 62:1

research 9:19 10:19 11:23
131:13

reserved 242:24

resolution 195:17

resolve 174:6 230:11

resolved 26:10

responsibilities 10:3 12:16
14:18 15:7

responsibility 15:11,15
24:24

responsible 12:21 15:16

rest 34:14 35:2,21 57:1 78:20
90:24 112:9 130:15 145:1

148:10,24 192:18 213:17

restate 106:6

restricts 71:4

resulting 229:16

retain 176:11,24 185:18

retained 18:1

return 234:1

reveal 7:22 220:24

reverses 230:15

Reversing 170:11

review 19:24 20:16 44:13
213:4,17 228:20,25

reviewed 8:19,22 20:3,5,7,14
22:22 46:9 68:22 206:17
208:21

reviewing 21:14 49:6 108:16
110:12 154:23 199:21

rewrite 184:3

right 8:15 9:21 10:13 16:1,25
17:20 18:12 24:17 26:21 27:23
29:17 33:19,22 34:21 35:13
36:10,15 37:21,25 38:24 41:25
42:2 45:23 46:15 48:24 49:17
50:16 55:13 56:18,24 58:16
64:5,12 68:16 69:3,7 75:2,23
76:18,21 77:4 78:2,14 79:18,
22 80:13,24 81:5,6,24 82:14,
22,24 83:1 84:10,19 85:11,20,
21,24 86:17,21 87:16 91:15
95:22 100:12 102:19 103:7,25
104:6,21 105:1,4,13,17,24
106:23,25 108:6,10 114:18,23
115:3,17,19 116:14 117:13
118:14,25 119:2,10,17 120:24
121:3,13,16 123:14 125:3,14,
18 126:11 127:15,24 128:17
129:23 130:15,25 131:16,22
134:16,20 135:2,11,20 136:4
137:20,21,25 138:12,17,20,21,
22,24 139:13,20 140:9,22,24
141:2,11 142:15 143:5,16,21
144:14 145:23 146:20 147:1,
13 149:20 151:5,14,21,23,25
152:9,24 154:12,14 155:16,23
156:4 157:1 161:12,15 163:24
164:17 165:20 166:24 167:10,
19 168:17 169:25 170:4,17
173:6 174:14,19 175:13

177:20 178:8 181:12,14,24
183:21 187:4,10 189:14 191:4,
10,13,15,16,19,21 192:3,4
193:13 194:6,12,15 195:5,24
196:25 197:4,9 199:15 201:5,7
202:13 204:2 206:20 207:19
208:24 209:12,14,17 210:18,
21 211:4,21,23 212:10 213:12
214:14,21,25 218:22 220:2,5
233:16 236:1,18 237:23
238:23 240:3,15,20 242:13,14

Riverside 4:2

role 9:14 15:7 20:13,17 24:15
31:5

roles 16:1

Roman 90:2

row 54:18

rows 42:18

rude 71:23

rules 5:3

run 122:9

running 15:19 225:5

S

S-E-P 101:23

said 26:14 30:17 33:17 35:23
38:8 39:6 47:10,15 48:2,16
50:5 56:13 57:24 73:21,23
93:6 109:10,13 111:24 122:19
129:14 143:4 159:25 172:12
173:12 189:15 190:8 197:14
202:21 203:18 207:14,17
208:7 233:7,18 235:17 241:15,
18 242:13

sales 16:9

same 5:3,10 6:3 10:1 13:20
28:22 30:9 45:5 49:11 50:18,
20 66:11 69:19 70:22 71:8
72:4 75:9,13 78:4 82:25 83:3
102:4 151:20 156:1 167:22
172:20 173:14 174:15 177:5
179:19 185:6 197:12 198:24
205:8 234:13

Santa 6:18

satellite 11:25

saw 18:2

say 5:7 11:11 14:6,8 17:20
18:2 20:11 21:4,6,9 22:10,15
23:19 24:2 27:11,25 28:25
29:18 30:14,24 33:24 34:4,7
35:2 39:18,19 40:13 44:4,23
47:5 51:22,24 52:2 53:10 54:2,
15 56:18,20 58:1 60:20 61:9,
11 62:24 64:13,15 65:17 66:17
68:21 69:18,20 70:1,10 71:13,
19 74:6 78:23 79:1,11 84:25
87:1 89:4 90:23 91:5 93:10
95:4 102:23 103:12 104:5,11
105:11 117:18 119:9,11,13,18,
19 121:24 122:1,2 123:11
125:6,7,12,17 126:20 127:15,
20,22 129:21 131:10,17 140:2
145:15 146:16 148:2,12
149:25 153:9 156:16 157:4,13,
20 160:7,10 166:7,9,15
169:10,16 170:8,19 173:22
174:6 175:14,25 176:13 177:1
179:11 182:7 183:4 184:14,17
185:15 186:3 188:4 189:23
195:18 196:13 199:1 202:7
205:12,20 208:16 209:4
214:17,23 215:5,24 218:12,25
219:5,6,16 220:5 236:4,14
237:9,10 239:13 241:7 242:3

saying 21:2 35:2,4 37:21
41:16 48:20 50:24 51:8 53:16
57:4,7,15 58:11,13 63:23 64:3,
5,7 66:18 67:1 69:10 73:17
86:15 89:12,14 91:17,21 93:23
98:10 103:17,25 106:22
108:22 110:19 111:17 112:20
121:8 123:3 126:10,25 127:2,
10 128:3,11,13 129:2,4,18
134:19 140:12 142:1,14
145:11,14 146:9,12 149:8
154:24 158:24 165:7,10 166:4
169:25 170:12 171:12,13
178:22 184:1 192:23 195:7
197:17,21 198:24 204:3
205:12,23 210:18 211:18
212:2,4 214:2 217:20 222:7,9
223:1 225:25 234:18,19
239:22 240:7 241:20

says 28:19 36:20 39:9 48:22
54:17 55:8,11 56:21,25 57:3,5
58:8 59:1,12,14 60:21 65:13
66:23 69:12 72:20 73:2,18
74:15 76:8 77:20 78:11 79:4,
12 81:10,14 85:7,20,23 91:3

103:12 107:1,23 111:22,25
115:23 116:8 119:17 121:14
124:1,21,24 134:13,23,25
135:24 136:7,8 137:2,3 139:5
143:18 144:1,3,7 145:1,6
149:24 151:23 154:7 155:23,
24 156:18,25 157:4,20 158:6
162:3,11 163:21 164:25
165:19,20 180:6,19 181:13,25
185:12 186:7 187:10,12 188:5
190:9 196:21 198:18,20 199:4
201:20,23 202:1,5 204:17,23
219:15 222:1 223:10 229:22
234:16 235:5,21 236:16 239:1,
2,11,13 240:17 241:4,6 242:7

scaling 54:24 57:25

scanned 198:11

science 12:1

scope 29:8 32:11,18 33:25
38:6 40:19 49:13,16 50:1,20,
22,23,25 51:13,15,23 52:13
54:6,22 58:11,14,19 60:3,4,17
61:3 62:12,24 63:2 64:23
66:12 73:14 110:20,23

screwdriver 176:8

search 217:19

second 15:11 32:9 43:13
44:13 50:11 62:11 69:13 70:18
71:7 72:3,22 73:1,11,18 74:16,
20 75:25 80:16 81:16 86:3
89:18,21 107:19 108:1,2
112:14 119:18 125:6 126:4
141:14 143:6,22,24 144:3,7
151:8,20,24 152:2 154:11
158:5,10,17,25 160:8,11
161:8,20 162:15,24 167:12,13
169:21 170:3,4,5,9,10,12,25
171:3,4,5 175:8,9,14 179:12
182:13,18 185:2 187:8 189:9,
25 190:8 192:4 199:7 201:23
202:1 209:19 214:6 219:6
228:10 233:15 234:10,14,20,
23 235:5,10,17,23 236:10,15,
17,21 237:2,10

section 28:3 150:4 198:1
213:17 228:22,23 231:14

see 19:3,19 23:6,15 24:20 27:4
28:4,19,23,24 29:3,4,12 31:9
32:9,13 33:9 38:12 40:20 41:6
42:19,24 47:15,17,18 49:19
51:18 59:12,14,19 62:5 67:11

72:23,24 75:22 76:8 77:24
85:2 86:2,5,6 87:8 94:3,5 96:8
100:17 104:16,19 107:20,22
113:23 123:8,23,25 124:10
125:10 127:7 132:14 133:1,14,
22,24 134:4 135:16 136:5
138:21 139:3,7,8,19 141:20,22
148:15 150:4 154:5,13 158:13,
14 162:18 165:17 167:1,8,15
169:19 170:23 172:14 174:23
175:3 178:24 179:16,17 180:7,
8 183:17 187:22,24 188:22
190:5,23,24 191:14,19,23,24
192:2,5,9 193:19 198:4,8
201:4,5 202:10 204:1 206:15
208:12 209:7 210:15 211:4,6,
7,13,25 214:25 215:8 217:23
221:1 222:8 226:12 238:9
239:18

seeing 209:9,10

seeking 242:18

seem 202:25

seems 93:21 184:25

seen 18:3,4,6 20:15 21:16
42:9 43:8 44:17 46:7 69:3
125:22 126:18 132:21 169:11
190:25 217:24

SEEVA 9:22,24 10:9 11:2

segment 134:14,19 136:22

selected 201:18

selectively 187:12 188:4,11,
15 194:12 198:1 201:14,16,22
204:25 205:12

send 88:19 211:20

sense 8:7 41:8 66:21 121:23
148:25 152:12 155:6 185:7
196:6

sent 44:13

sentence 32:9 48:13 50:24
103:10 104:8 105:11 125:7,18
126:5,8 210:21 215:5 222:5

sentences 31:13

separable 198:19 201:10
202:3 205:2

separate 81:12 92:12 115:21
116:3 128:22 129:15 199:5,10

separated 108:23

separates 102:24 108:24
128:17 129:20

separating 103:3

separation 59:17 60:8 66:9
70:15,22 71:18 72:4,22 73:1,
19 74:17,21 76:9 77:23 78:2,4,
16,19,24 79:1,5,8 80:7,10
81:1,2,7,11 82:6,23,25 89:25
93:20 95:6 98:12 102:21
103:13 104:13,21 105:4,17,19
107:7,19,23,25 108:17 109:3
110:7 111:4 112:1,24,25
113:14,23 114:9,13,16,18,22
115:3,18,20 117:5,8 119:5,21,
23,25 120:5 121:21,24 122:23
124:3 126:17 128:5,14 129:11,
19 130:6,12 141:5,25 144:23
146:1,7 148:9,17,21 149:16
154:7,9 156:2,4,7 157:24
158:2,7,8 164:3,10 165:2
166:1 167:9,11 168:20,23,24,
25 169:2,3 175:12 176:24
182:17 183:7 184:13,19
185:24 187:12,20,25 188:1,5
190:2,4 194:4,6,11 195:4,18
196:11,24 199:23 206:6 207:7,
14 208:7,23 209:6,13 211:12,
20 212:3,5 214:3 223:11,15,25
224:7 226:8,16 227:6,21
228:15 230:20,21 231:1,8,9,
13,24 232:2,15,19,21

sequenced 124:7

series 15:2 202:20

served 7:2,4

service 199:6,9 216:17,18

serviced 199:25

serving 134:14 136:19,22

set 51:10 88:22 221:22 238:1

settled 26:12

several 7:13,15 14:6 60:14
150:9 215:21 216:6

severe 149:11

shaped 181:5

share 169:6

she 76:4

short 37:23 176:2

shorthand 44:3

should 21:4 27:25 36:1,2
37:11 38:16,18 53:11 71:14
72:7 75:13 83:19 100:7 105:7
106:3 110:21,24 111:1 140:25
141:1 148:5 195:3 196:21
210:24 212:24 233:15

shouldn't 52:24

show 40:16 47:15 48:4 76:12
95:3 119:14,15 142:18 211:3
217:3 226:11

showed 217:2

showing 90:19,20

shown 48:17 60:20,21,23
61:11 64:11 153:1

shows 49:15 160:24

side 90:13 117:25 181:11
185:15 200:22

sides 101:10

sieve 208:24 209:1 211:21
212:4 214:2

signature 242:24

significance 136:25 137:8

similar 10:2 18:19 45:6 51:20
54:16 66:19 173:4 202:9
203:1,6

simple 162:21

simplified 27:15

simplify 174:4

simply 110:11

since 7:15 14:4,9 16:17 21:15,
23 22:1,18,20

single 36:9 47:4 48:13 53:2,10
62:4 71:18 78:25 79:1 96:19,
25 97:2,4,6,13 98:2,21 99:1,4,
6,8,23 100:13 101:2,7 102:6
116:25 118:10 119:1 122:23
124:4,12,15,16,24 139:16
146:23 148:1 207:6 212:2
224:20 225:4 226:4,24 227:1,3

single-bed 123:4 125:20
225:12

single-column 224:11

singular 36:25 47:2 51:9,10
55:19,20,22 58:18 59:3

Sir 59:8 123:16 209:22

sit 147:12 148:19

sits 32:25 33:1 189:22

sitting 50:15 169:22 207:10

situation 53:14

six 22:5,14,15,16,17 117:4
207:3 223:10

skill 32:14 96:24 98:20 100:24
131:6,21 164:14 194:1 229:4

skilled 51:18,21 52:17 54:20
55:21 61:15 226:2

skin 10:18,23

skipped 135:5,8

skipping 24:19

skips 138:6 190:22

slightly 65:4

slow 56:2 69:14 76:1

slowly 142:23

small 55:24 173:12,21

so 5:3,7,8,11,20,23 7:1,20 8:6
9:6 10:1,18 11:11,16,23 12:2,
10,11 13:6,10,17 14:8,11 15:4
16:7,9,25 18:6,19,23 19:12,17
20:20 21:6,19 22:15 23:5,6,21
24:22 26:3,21,24 27:23 28:3,6,
16 29:5,14 30:13 31:5,11 32:2,
17 33:4,6,11,16,21,24 34:11,
20,22 35:4 36:6 37:3,16 38:4,
12,21 39:22 40:2 41:15,20
42:19,23 43:24 44:15 45:7
46:4,12 47:7,12,15,19 48:2,8,
16 49:9,11 50:9,15 51:4,5,12
52:6,7,10,14 53:9,21 54:5
55:2,7 57:13,25 58:8,20 59:23
60:6,16,25 61:22 62:5,8,11,17
63:15,16,19,25 64:3 65:3 66:3,
25 67:18 68:5,25 69:5,25 70:9,
17 71:3,6,12,19,22 72:5,8,12,
20,25 73:8,11 75:18 76:7 77:3,
13,15 78:1,14 79:6,20,22 80:9
81:3,15 82:2,12 83:3,15 84:2,
10,16 85:6,7 86:1,10,19,23
87:10,23 88:1,11,12 89:9,11,
16 90:5 91:17 92:5,6 93:5,8,20
94:5,9,20 95:4 96:7,16 97:6,

22,25 98:11 99:10,16 100:2,7,
17 101:12,20 102:1,5,9,19,23
103:7,12,17,25 104:2 105:22
106:1 107:6,11,23 108:8,12
109:10,16,20,24 111:9,10
112:4,20 113:3,9,24 114:25
115:13,24 116:9,15 117:2,9
119:16,22 120:13,22 121:4,11,
14,19 123:7 124:12,16 125:12,
17 126:3 127:10 128:24 129:6
130:14,20,25 131:5,18 132:4
133:4,6,8,21 134:18 135:1,20
136:10,18,24 137:19 138:17
139:12,14,21,23 140:18,25
141:13,24 142:5,8,11 143:2,4,
18 144:5 145:10,14 146:4
147:3,12 149:3,12,19 150:4,
17,20,25 151:4,12,18,19
152:6,12,25 153:16,25 154:3,
7,14 155:13 157:1,15,18
158:20 159:5,17,22,24 160:18
161:5,11,17,20 162:25 163:7,
19,21,22,24 164:9,19 165:2,10
166:2,3,7 167:17,22 168:1,16,
24 169:1,10,15 170:1,12,19
171:9,21,24 172:2 174:19
175:4,13,23 176:7,10,16,21
177:5,8,14,16,23 178:4,14
179:10,18,23 180:5,9 181:16,
21 182:3,13,25 183:12,15,18,
25 184:22 185:1 186:21,22,25
188:8,20 189:20,25 191:4
192:16 193:5,15,25 194:21,24
195:11,15 196:12,17,24 198:9
199:18 200:22 201:6,7,9,14,25
202:15 203:18 204:10,14
205:19 206:10,19,25 207:20
208:6,19 209:12,17 210:13,17,
25 211:2,18,24,25 212:6,21
213:2,14,20 214:5,14 215:5,
10,16 216:3,18,20 217:12,16,
19 218:5,25 220:7 221:11
222:24 223:2 224:1,5,25
225:24 226:25 227:4,12,17
229:3 230:1,24 232:9,18
233:9,15,20 234:7 235:18,24
236:8,9,11 237:20 238:5,23
239:6,14,25 240:3,10,12,15,24
241:15,22 242:2,7

software 131:15

solve 145:21 230:15

some 5:2,23 11:23 21:21
25:11 35:20 39:20 40:10
42:15,16 44:3,18,20 45:12

46:5 50:2 56:5,7 57:23 59:25
70:13 72:7 84:20 86:23 89:11
90:2 91:10,20 93:22 99:1,6
104:5,6 113:23 114:11 122:19
130:11 132:9,24 144:20
146:25 150:22 151:1,4,10,13
152:22 157:2,4,12 158:3
159:16,17 168:5,17 169:16
172:6 173:6,23 176:9,14
181:19 186:8 200:1 206:14
208:15 214:9,15 216:25
218:11 220:24 221:20,21
223:14 224:10,12,14 227:7,12
228:2 229:24 230:3,25 232:10
234:2 237:2,6 238:5,14,24
239:9

someone 17:13 48:22 51:18
98:20 131:20 220:11 226:2

something 17:5 27:9,19,21
30:14 31:23 33:9 41:9 48:13
49:19 50:6,14 51:21 53:20
54:16 55:8,16,17 58:5 61:9
63:17 64:14 67:4,19,21,23
72:16 83:19 97:20,21 101:6
102:9,10 105:7,9 106:3,17
117:16,19 120:22,23 121:18,
21 125:22 129:22 142:11
150:12 176:4,9,17 178:12
182:22 183:11,19 185:9,21
188:9 190:9,10 192:8,14 193:6
194:18 195:3 196:16,23 197:4,
5 199:4 204:11 205:12,13
208:16 210:18 217:4,24 233:5
234:6 239:21,22 241:21 242:8

sometime 215:12

sometimes 164:5 171:24
174:15 222:12

somewhat 202:9 203:6

somewhere 18:7 96:4 127:24

sorry 7:24 8:4,19 13:8 14:16
17:19 22:21 43:14 44:4 49:4
58:16 68:4 69:2,15 77:17
80:15 86:3,7 92:3 96:2,3 98:5
102:17 117:15,19 119:10
125:24 126:1 127:4 129:14
135:17,23 140:7 142:23 155:9
160:8 162:16 163:25 169:24
173:1,20 186:4 191:7 198:14
202:12 204:21 220:14 221:16
224:4 227:16 230:9,18

sort 99:2,7 127:5 204:6

Sorting 207:9

sound 5:12

sounds 7:20 11:21

source 60:11 193:2

Southeast 13:16

space 13:3 98:23 134:15
136:22 137:6 139:24 169:18,
22 170:22 171:1,10,14,15,16,
21,25 172:4 176:17 180:25
181:2,4,5,6,8 182:9 185:8,10,
11,18,20 190:12 192:13,17
196:22 197:3 218:6 230:19,25
234:1

spaced 143:2,10 152:2

spaces 25:14

spatial 160:14

speak 5:7 8:8,10

speaking 177:12

spec 96:13 110:11 195:5

special 40:14 41:2,19 48:4,16,
22 49:1 241:14

specific 18:18 45:10 46:6
48:9 52:4 61:7 65:21 66:6,7,8
73:6 103:13 120:9 136:25
137:5 140:15,17 168:15
175:17 176:19 178:9 193:6

specifically 7:18 8:21,24 20:6
32:10 51:4 56:21 60:9 67:4,21
108:21 111:21 209:10

specification 35:21,24 36:2,
10,15,22,23 37:13,15,22 38:11
39:12 40:15 41:6,7,11 45:3
50:7,9,12 52:12,18,22 53:17,
19 54:2 58:16,17 60:19 61:10
64:4,11,19 66:2,4,20 67:8
70:11 71:13 73:24 74:3,7
78:22 79:21,24 83:16 89:17
91:25 92:6,20,21,25 93:6 94:3,
4,8,15,17,25 95:9 102:14
106:16,19 109:1,5,6,16,20,22
110:5,22,25 111:21 112:10,17
113:4,5,25 114:5,13,15,16
115:2 119:15 120:1,25 123:17
130:19 151:1 159:19,22
160:24,25 163:3 167:1 187:24
188:3 193:18,21 194:1,19
207:20,24 220:1,8,11 222:18,
25 224:9 227:20,25 229:5

232:12,14 237:18 239:17

241:3,4,11,17 242:2

specifications 45:4 56:4
224:13 228:25 239:20

specificity 83:24

specifics 44:24 95:13 207:18

specified 37:1 225:2

specifies 65:7

specify 224:6 228:10,12,14

speed 159:5 203:25

spell 101:17,22

spend 94:12

spent 16:9

spirit 54:22

Spokane 4:3

spoke 215:24

spoken 98:1

spot 207:6

spring 114:16

squint 191:19

stake 221:10

stand 61:10 189:8

standard 225:24

standards 28:3 238:24 239:4,
7

standing 15:16 97:2 99:3

start 19:23 41:4 75:8 97:8
107:18 155:11 175:4 186:16
206:12

started 4:17 9:12 11:10 14:11,
20 15:20 217:3,5,7

starting 14:1 56:13 107:21
123:23 132:25 133:23 153:11

starts 69:11 213:12 228:7
236:12

startup 12:25 15:21

state 4:18 5:15 32:10 171:25

stated 221:6

statement 66:18 213:25

States 13:13 43:12 216:14

steal 43:13

step 194:8

stepped 109:9,11

still 13:7,9 26:3 47:24 54:6
58:21 101:8 111:16,24 113:9
121:22 146:4,19 159:10 163:5
165:10 168:4 179:22 187:10
197:2 220:9 230:19 235:16
236:6,16 237:7,10

stop 12:13 129:8 164:10

stopped 22:20

straightforward 148:7

strategies 24:19

strategy 9:20 25:2,3

strike 158:9 220:12

strong 185:15

strongly 109:13 216:3

structural 84:20 104:25 105:3
130:5,9,12,21,22,24

structurally 152:6

structure 72:8 83:14 85:1,8
88:13 90:5,7 104:12 105:12
106:23 130:1 175:11 176:22,
23 178:24 180:10,24 181:1,14,
16,17,18,25 182:2,4,9,16,21,
24 183:5,9,21,22,25 184:2,7,9,
11 185:22 192:17 202:4 232:2,
3,5,7,8,9

structured 37:12

structures 60:13

struggling 165:6

stuff 12:13

sub-letter 134:13

sub-piece 212:14

sub-terms 174:9

subcomponent 101:1

subcomponents 45:18

submitted 7:21

substantial 198:23 199:1

substantially 143:7

substantive 78:23

subtle 199:3,18 200:24 201:6
202:25 203:18 204:9

success 26:6

successful 63:10,11

such 38:1 54:14 99:10 154:8
156:3 167:10

sufficiently 70:14

suggest 29:16 38:1 74:17
78:14 79:7 80:2 82:24 92:21
177:9 180:23 187:17 208:22

suggested 185:16

suggesting 39:24 62:15
66:23 111:9 114:21 150:7,9
233:24

suggestion 105:18

suggests 80:6 127:16

suit 43:3,16 44:1 45:8 68:22
102:14,20 151:2 218:3,16
219:2,9

Suite 4:3

summarize 16:2

summary 21:1 45:22 59:12,
14 237:23

superfluous 30:21 182:4
222:20

supply 193:4

support 18:25 41:13 44:12
133:9

supported 36:2 92:25 93:2
112:16 205:24

supportive 85:1,7

suppose 184:14 204:13

supposed 112:18 164:10
165:7

sure 4:19 5:25 16:20 18:4
20:22 23:4 26:8 27:16 29:11
30:6,18 32:8 34:7,9,12,21
35:22 36:3 37:18 40:6 41:15
45:14 47:7,9,13 48:2 49:17
50:6 56:25 57:4,16 59:9,11
62:10 66:7,16 67:16,23 68:12
69:9 70:2 72:15 75:7,9,21 76:4
79:19 80:16 83:10 84:13 86:7

88:9 90:4 95:19 100:3 102:3
103:11 104:4,17 105:11,22
107:14 111:19 113:9 115:19
120:2,19 121:7 122:17 124:20
125:16 128:7,8 129:1,20
131:4,23 144:12,17 145:20
147:19 150:24 152:25 153:3,
13 158:23 159:10,17 163:2,9
164:20,22 168:12,16 169:14
172:10 174:24 175:15 177:23
183:2 185:3,5 188:7,25 194:2
195:13,17 197:8,15 198:3
200:3,13 204:16 213:10
214:11 216:10 220:3,4 221:16
232:6 233:6 234:12 239:5

surrender 66:12

surrendered 40:18

surround 32:3

surrounding 108:4 112:4

surrounds 108:9

suspect 26:6

swath 12:2

swing 60:9 124:2 225:17

sworn 4:7

symmetric 134:16 135:1,2
136:23

synonymous 188:10,15

system 27:2 45:16,17,18 46:8
90:12,20,21,24 91:7 135:25
136:9,13,14,15 139:16 225:6
226:6

systems 10:7 15:17 21:14,15,
16 238:2

T

table 174:25 207:10

take 5:19 6:9 26:21 28:16
31:19 40:9 49:22 68:17 69:1
72:12 74:22 75:18 77:13,14
80:23 83:9 85:6 103:7,8 104:2
107:12,15 117:25 122:4,6
123:16 125:5 131:3 132:4
137:11 138:17 150:17 151:16,
19 152:16 158:5,10 161:2
167:3 168:16 172:8 174:15
181:21,22 182:13 185:4,15
188:12 189:15 193:15 194:8

199:4 201:7 206:6 208:11
212:23 213:4 216:5 220:7,15
237:22
taken 4:4,20 6:15 90:18
134:24 140:16 199:8
takes 203:17
taking 5:6 199:22,25
talk 51:25 58:3 60:20 63:4
65:16 66:8 67:25 84:11 90:11
91:2 110:15 142:17 162:4
169:15 176:10,12 187:2 214:9
226:7 231:4
talked 21:17,19 65:10 67:18
68:5 73:13 75:8 91:23 114:3
156:2 157:24 173:13 179:4
182:1 192:17 193:10 194:8,10
196:25 210:20 214:14 221:20
223:3 233:18 241:9
talking 5:11 7:16 34:21 48:19
58:1,4 59:24 70:25 75:12,25
76:8 84:10,14 91:10 97:14
99:3 101:4 119:22 121:3
122:20 132:5 135:17 139:14,
16 140:7 144:1 151:4,7 155:13
165:1 168:6 169:16 171:14,15
173:6 186:9 187:7 204:20,23
206:1 207:20 208:4 209:24
233:9 234:10,12
talks 87:3 88:25 175:11
177:10,12 193:19 194:11
tall 19:12
tape 101:19
targeted 238:2
team 25:4
technical 9:18 11:18 14:21
16:9 30:25 216:6
technically 12:21 214:20
technologies 9:22 10:2 12:3
14:23
technology 9:15,16,25 10:4,5
11:19 12:2,19 13:20 15:4,8
16:7 22:2 45:8
tell 4:7 7:11 20:9 22:4 23:22
31:3 32:17,25 33:5,6,12 34:24
55:3 63:4 64:14 66:17 75:25
81:15 88:17,20,21 92:16 98:1
105:18 148:20 161:3 175:4

183:1 198:9,16 213:14
telling 113:10 118:19
tells 56:2,3 89:2 202:23
temporal 160:13 172:1
230:16
Ten 5:1
tends 26:7
term 28:21,22 29:15,16,25
30:7,20 34:23,25 37:19 38:7
40:14,17 41:2,19 46:19,21
47:1,16 48:4,5,14,17 58:16
66:8,20 75:12 76:9 78:1 80:10
84:18,19 92:1 103:15 108:16,
17 112:25 113:14 132:5,7
133:14 140:8 150:4 173:5
174:22 182:4 196:19 198:4
201:16 204:5,18,20,23 205:7
226:8 227:7 228:11,21 231:5
232:11 241:25
terminal 177:7
terms 7:17 28:20 29:1,8,12
37:1 38:18 52:10 53:13 54:3
59:7 63:22 74:1 75:11 103:23
131:20 149:21 150:7,23
157:23 172:13 173:7,8,9,12,
17,19 175:23 179:7 189:4
190:1 193:11,19 194:25
197:20 205:24 206:23 207:20
208:1 218:4 221:9 222:2,4
228:21
testified 4:10 95:12 224:12
testify 6:11 30:25
testifying 230:5
testimony 40:5 47:23 61:4
65:1
textbook 27:16
than 8:4,7,10,17 16:15 17:23
20:2 21:24 26:4 40:25 42:23
43:21 52:3 57:7 63:23 64:12,
21 78:24 96:5 101:5 110:10
111:2 113:6 139:24 147:22
149:11,14 161:23 175:14
189:19 193:2 195:17 196:12
200:16 202:17,24 207:8 221:5
225:1 233:7 238:12 240:5,13,
19,23 241:21
thank 46:15 153:12 159:5
171:8 174:10,13 192:1 206:4

221:14 226:7 231:18 237:21
242:21
thanks 116:9 159:8 213:18
232:24
that 4:1,24 5:7,12 6:2,17 7:21
8:14,15 9:21 10:6,12,13,24
11:5,18 12:4,7,10,14,15,18
13:5,14,24 14:7 15:8,11,21
16:4,13,15,23,25 17:7,20,23
18:2,5,7 19:3,5,11 20:3,14,15,
20,25 21:3,22 22:11,25 23:13,
15 24:3,13,14,17,18,20,22,25
25:1,3,7,21,24 26:4,5,6,7,9,12,
15,17 27:4,6,8,9,17,19,21
28:4,7,9,18,23,24 29:3,4,5,16,
17,18,19,20,24,25 30:6,8,11,
14,20,24 31:2,3,5,6,7 32:5,13
33:5,9,11,13,17,22,24 34:3,17,
25 35:5,6,8,14,19 36:8,12,13,
14,19,20,21 37:3,4,10,12,16,
21,22 38:2,5,14,15,16,17 39:7,
8,9,13,17 40:11,13,16,20,22
41:1,10,15,18,21,24 42:8,9,24
43:8,13,24 44:1,16,20 45:2,15,
18,20 46:2,6,12 47:3,5,12,17,
18,20 48:3,4,10,21,23,24 49:6,
15,17,24 50:3,6,13,14,18,25
51:1,4,5,6,20,21,24 52:2,10,
11,14,15,18,21,23 53:1,3,10,
12,16,19,21,25 54:5,7,10,13,
14,16,17,21 55:3,5,8,10,22,23,
25 56:3,6,21 57:2,5,8,17,20,
21,23 58:4,12,20,24 59:5,19
60:6,16,25 61:1,2,5,6,17,20,
21,24 62:4,8,13,18,19,20,21,
23,25 63:5,9,10,11,12,14,17,
24 64:6,7,12,17,21 65:4,7,8,
10,17 66:10,14,17,20,23,24
67:1,7,8,15,18,20 68:1,7
69:18,20,24 70:3,12,13,14,20,
21 71:7,9 72:2,6,9,10,14,16,
17,23,24 73:2,6,7,13,17,18,19,
20,21,23 74:3,7,8,9,12,14,15,
17,18,19 75:11,22 76:12,21
77:1,4,24 78:7,10,12,14,23,24,
25 79:7,9,11,13,15,23,25 80:3,
5,6 81:2,10,14,16 82:5,19,24
83:1,2,5,8,13,14,16,17,18,19,
20,21,22,23,24 84:7,22,25
85:2,4 86:1,4,5,10,15,16,19,21
87:8,13,14,16,21 88:2,5,12,17
89:1,10,12,14,16,17 90:2,3,6,
17,25 91:4,5,7,11,18 92:5,8,
11,14,17,22,23,24 93:14,19
94:1,4,9,10,14,17 95:2,5,22

96:8,12,16,19,20,25 97:9,14,
21,25 98:1,3,6,7,12,20,23,24
99:11,17 100:13,21,25 101:3,
6,19,22 102:23 103:1,2,15,17,
18,25 104:15,16,17,19,21,24
105:1,6,8,10,18 106:2,3,13,16
107:1,2,3,4,7,20 108:6,8,14,
19,20,22,23,24,25 109:2,5,6,9,
11,18,21 110:4,6,10,19,20,23
111:1,6,9,20,24,25 112:5,6,8,
10,11,13,15,17,20 113:2,4,11,
16,20,24 114:4,5,10,14,21
115:2,6,18,19,23,24 116:1,6,
10,16,25 117:5,7,9,19,22,23,
24 118:1,5,6,10,11,16,21
119:6,12,17 120:4,23 121:12,
13,16,20,23 122:19,25 123:4,
8,10,12,23 124:7,10,14,16
125:6,7,10,13,18,19,22 126:4,
8,13,14,22,25 127:4,16,17,21,
24 128:4,7,11,13,16,18 129:2,
4,16,20 130:3,5,8,9,11,12,16,
17,20,22 131:17,19,24 132:1,
7,14,21 133:1,3,9,14,22,24
134:4,6,8,18,19,22,23 135:8,
13,20,21 136:10 137:8,10,15,
17,21 138:21 139:3,7,8,15,19,
20 140:5,12,18,25 141:1,8,14,
22 142:5,14,15,16 143:4,18
144:2,3,4,7,9,10,15 145:12,13,
14,17,21,25 146:6,11,12,17,24
147:1,7,14,15,21 148:1,2,9,12,
13,14,21 149:1,6,9,10,11,13,
16,19,24 150:5,7,9,10,12,13
152:12,21,24 153:1,3,4,6,10,
17,19,21,22 154:4,5,8,13,20
155:5,16,24,25 156:2,3,6,13,
16,19,20,22 157:3,6,16,22
158:3,4,9,13,15,24 159:12,14,
16 160:2,3,5,7,13,15,16,18,23,
24 161:1,3,6,12,17,18 162:1,
11,12,16 163:5,10,20,23
164:6,15,19,24 165:1,2,3,4,7,
9,10,13,14,18,19,20,23 166:1,
2,3,4,8,15,20,21,24 167:10,15,
22 168:3,4,6,17,18,19,20
169:1,4,6,11,15,19 170:9,17,
18,23 171:2,12,16,17 172:4,5,
7,14,17,23,24 173:5,9,12,15,
16 174:5,6,7,8,21,23 175:23
176:3,6,9,10,25 177:2,9,11,14
178:2,8,12,15,20,23,24 179:2,
6,13,16,17 180:7,8,9,12,23,24
181:5,6,16,17,25 182:3,20
183:8,9,11,17,21,23 184:5,8,
20,25 185:11,12 186:10,18,23

187:5,11,14,17,24 188:9,11,
18,19 189:8,12,15 190:3,5,6,8,
9,11,23 191:14 192:5,8,9,11,
14,18,23,25 193:3,5,7,19,22
194:7,18,22,23,25 195:4,12,
23,25 196:4,21,25 197:2,7,10,
11,13,17,18,19,20 198:4,8
199:1,2,7,15,22 200:8,12,13,
18,20,22 201:1,2,5,6,9,15,16
202:1,4,6,8,10,18,20,22 203:1,
2,3,10,12,13,17,21 204:19
205:11,15,25 206:2,5 207:7,
11,14,16,17,19 208:19,21,22
209:7,9,10,16 210:1,6,8,15,20,
23 211:1,3,6,7,9,11,18,23
212:1,2,18,22,23 213:4,11,15,
16,19,25 214:4,12 215:3,8,11,
14,23 216:1,4,6,7,8,12,17,24,
25 217:1,2,3,6,19,20,24,25
218:11,13,22 219:6,7,11,12,
14,15,18,19,22,25 220:2,3,7
221:1,8,21,22 222:1,5,7,8,10,
19,25 223:6,12,13,16,17,23
224:2,4,6,13,15,17,24 225:8,9,
10,13,14,17,22,23,24,25
226:1,13,15,21,22,25 227:10,
14,16 228:3,21 229:1,3,22,24,
25 230:2,3,7,16,20 231:2,5,19
232:3,6,16,18 233:5,10,13,15,
18,21,22,24,25 234:1,2,5,6,14,
18,19,20,24 235:5,15,16,19,
20,22 236:1,6,8,9,11,12,14,15,
24,25 237:1,4,7,8,15,24 238:9,
12,16,18,21 239:1,6,10,14,15,
22 240:4,5,6,10,11,12,15,19,
24 241:7,10,15,17,20 242:5,7,
8

that's 6:24 11:8 13:25 14:10,
17 22:18 26:5 33:20 34:7
35:24 36:11,21 40:7 41:16
42:20 43:16 45:16,23 46:4,14
48:6,7,19,20,23 49:21,22 51:7,
20 53:22 56:13,15 57:2 58:6
59:21 61:23 64:5,19 68:5
69:10,11 71:1 74:23 77:19
85:16 87:17 88:14 90:13 92:21
94:12,13,19,22 99:20 100:16,
17 101:12 102:1,9,10 105:5
106:17,18,19 107:8,9 109:19
111:11,15 112:20 114:2
115:23 116:8,21 118:10
121:18 123:17 128:10 131:9,
18 133:2,6,16,17 134:11
135:23 136:2,3 137:2 139:22
140:8 142:11 143:20 147:1,2,

17 152:6 153:7 154:19,23
155:23 156:1,24 157:11
158:19 162:4 163:7 165:17
167:24 171:11 173:23 176:8,
18,22,25 177:8 179:23 180:17
182:18 183:15 185:16 186:23
190:1,5,12,13 193:6 195:7
197:3 199:16 201:12 202:14,
18 203:13,16,24 204:4,7,22
205:10 207:4 208:18 209:16
210:17 211:4 213:24 215:25
218:24 220:9 221:14 224:8
227:23,24,25 228:6 232:24
234:16 235:12,13 239:7
241:10,21 242:5,13

their 10:17 11:17 14:22,24
17:22 18:2,6 21:17 22:10 25:5
32:24 51:9 53:5,12 54:1,11
61:7 63:22 70:5 146:8 216:16,
17

them 12:21,24 14:2,4,5,21
16:2 17:25 18:7,16 20:8,9
44:1,14,15 54:16 70:2,3,5,14,
16,25 71:15 73:3 92:10 99:9
121:2 126:18 127:5 141:1
142:7 147:6 151:2 169:7,8
175:5,10 177:25 181:24
192:21,22 195:22 199:19
201:3 202:22 206:2 215:19,20,
22 217:12 218:4,21 222:9
238:25 239:11

themselves 222:24

then 5:16 7:1,15 8:1 10:12
12:18 13:21 14:4,7,14,16
15:17 17:5 24:17 25:3,5 28:11
34:13 41:23 44:13 54:2,7
58:12,19 69:12 72:10 75:19
77:3 81:21 85:20 87:4 88:11
94:9 104:8,11 118:10 119:1,4
120:11,23 122:7,9 133:5
134:1,2,5,25 135:4 136:13,16
137:21 138:5,6,24 141:16
143:17,22,23,25 145:1 146:24
149:3,6 151:23 152:2 158:25
159:20 165:8 172:3 174:2
178:2 183:20,22,25 189:16,22
190:21 196:13 201:8 203:21
205:18 210:20 213:5,21
218:19 220:20 227:4,13 231:1
236:4,8 238:4 239:7

theory 63:5

therapy 216:14

there 8:18 9:12,14 11:3,18
12:4 13:11 14:19 15:23,25
16:5,19 19:10,11,18 20:2,5,13
21:3,21 22:11 23:11 24:8
25:20 26:22 32:6 36:19,21
37:10,13 38:6,12 40:3,25
41:12,17,18 49:1,14 50:2,21
52:3 53:11 54:4,13,14 55:8,15,
16 57:11 59:4 61:21 63:25
64:22 65:6,7,8,9,19 67:18
70:3,12 77:11 78:15,23,24,25
79:1,24 82:2 84:3,5,7,25 86:1,
23 91:3,7 94:4,13,24 95:5
96:13 98:6,21 103:10 107:21
108:19 109:9,11 112:16 113:2,
15 114:12 115:7 116:2,24
117:3,6 118:21 119:3,9,11
120:4 121:15 125:13,20 126:4,
13 127:2,16 129:8,16 130:11,
15,21,22,24 131:20 134:12,19
137:15 139:2 141:10 142:14
143:4,9,11,22 144:15 146:17
147:6 148:3,5 149:3 151:13
153:11,22 155:7,11 156:12,21
158:1 160:15 163:19 164:6
165:8 166:10 170:15,20
172:11,16 174:25 175:1,25
176:10 177:19 178:9 179:12,
24 181:18 182:22 183:10
187:8 188:14 191:11,13
192:23 193:22 197:4 198:22
204:14 205:21 206:5 210:3
211:18 213:6 215:16,21 216:5
217:6,13 218:8 219:11,20
221:7 223:23 224:15,18
227:12,13 228:22 230:19
231:20 232:12 233:25 234:4,
10 236:12 237:2,3 240:13
241:7

there's 19:8,18 27:3 29:20
31:22 33:2 42:21 45:25 46:23
50:14 51:4,8 53:6 55:17 60:3
64:22 65:18,21,22 74:19 75:19
86:15 88:5 93:10 96:7 107:6,7
115:6 116:15,22 118:1 119:4,
17 122:24 130:21 133:13
142:19 143:11,19,24 144:5,13,
14 145:3,8,13 146:9,10,13
147:13 148:14 151:23 159:15
160:4 163:4 165:18 170:13
171:21 173:23 174:22 178:15
181:18 199:18 202:19 219:15
224:24 233:10 240:18

these 19:24 20:2 28:14 31:13
42:19 43:24 44:10,13 45:3,8

46:9 55:4,8 56:4 61:16 70:11
89:7,10 91:13 92:6,8,24 93:6
102:10 104:20,24 109:10,15
111:3 122:25 131:5 150:7,23
152:22 172:12,13 173:9,12
175:25 176:21 177:4,10 186:2
188:2,21 189:4 199:13 200:6,
9,14,23 207:19 218:2,15,19
219:1,8 223:9 224:19 228:23
229:4 239:3,4,12,14 241:20
242:4

they 10:23 14:7 15:21 31:1
45:13 47:2,3,5 50:14 51:6,9
53:2,4,5,7 54:12 55:20 61:17,
18,19 63:16,22,24 65:20
69:18,21,22,23,25 70:4 88:7
91:11 92:10 101:9 116:25
123:14 125:22,23 131:7
149:18 152:15 188:19,21
189:6,15 192:21 195:20 196:5,
13 198:24 199:22 201:2
202:25 207:22 208:1,2 215:10,
18,19 216:17 218:18 219:1
222:11 224:14 237:7 240:7,10
241:6,7 242:3

they're 7:14 29:12 36:15
45:21 46:7 47:4 54:15 55:23
63:8,19,23 64:4 65:20 70:4,16
71:4,5 116:3 125:21 126:14,16
127:17 144:8 152:13 173:25
188:18 193:6 195:1 199:13
200:11 214:1 218:3 222:9

they've 26:6,7 240:6,10

thing 15:11 38:2 48:4 53:16
62:15,16,18,20 65:25 83:3
89:7 102:4 120:12 163:25
173:14 179:19 181:4 182:10
183:23 185:6 186:21 190:7
197:10 222:16,17 224:8
234:13

things 7:25 20:15,25 21:2,11,
18 24:15 29:20 39:23 40:2
50:2 51:2 52:22,24 55:2,14
56:5,9 59:5 61:21 64:1 70:1
74:25 89:8,10,11 103:21,22
109:6,9,15 121:15 122:19
159:5 160:16 176:5,21 188:21
189:13 195:21 198:24 207:9
217:1 225:14,22 226:1 236:24
239:15 241:18

think 8:15 19:18 21:20 22:13
23:5,19 29:20 30:10,15,19
31:2 33:17 34:20 35:10 37:12,

16 39:1 41:3,12 44:3 45:12,23
46:2 50:2 51:6,8,17,20 52:10
53:4,14 55:2 61:5 62:2 63:18
67:17,20 68:17 69:25 70:12,13
71:3,19 74:6 75:8 78:17,19
79:13 83:9,22,23,25 84:19,24
90:2 91:23 92:23 93:5 94:13,
22 95:15 102:1 109:19,21
110:6,14,16 111:18 112:11,20,
23 113:19,21 114:3 115:4
117:2 121:3,9 122:18 128:20
129:16,17,21 130:1,11 133:3
136:24 139:14 142:11 145:18
146:4 147:8,10,13,21,24 148:7
149:1,22 150:13 155:4 159:15,
18,24 161:18,22 165:15
166:25 171:11 172:7,18,19
173:21 175:21 176:18 177:9,
11,25 178:19,22,24 179:1,6
180:3 182:6,8 183:1,15 185:15
186:13,19 187:18 188:2
189:10,12,16 190:5,15 191:10
195:7 196:24 198:13,15
199:22 200:12,14 201:16,17
202:19,22,25 204:3,12 205:18,
20 206:5 208:14 211:3,9,24
213:11,24 214:1,10 217:3
218:20,23 219:5,19 222:15
223:9,20,22,23 224:15 230:8
236:24 237:12,15,22 241:12,
18 242:10

thinking 32:22 98:2 113:20
122:6 216:4

thinks 200:23

third 15:14 94:11,21 95:6
151:10 155:4,14 191:16
223:15,19

this 8:5 9:7 17:1,4,8,22 18:1,
13 19:5,14 20:13,17,19 21:1,6,
24 22:23 23:1,7 26:24 27:3,15
28:3,6,13 31:17 32:4,23 34:4,8
39:16 40:9,11,23 41:1 42:3,23
43:1,19,21 44:12,18 45:16,19,
21 46:16,19 49:2 50:5,6,24
51:1,22 53:5,6,7 54:3,5,18
55:3,4,10,18,21 56:18 57:4,5,
6,14 58:8,21 59:5 60:21 61:6,
11,13 62:5 63:6,7,15,23 64:3
65:4,20,22,24 66:19,24 67:10,
11 69:5 70:2,6,8,9,10,13 71:9,
11,13,14,20,23 74:4,6 75:8
76:7,18 78:18,21 82:5,18
83:12 88:20,23,25 89:14 90:1,
12,14 91:5,6,8,9,15,23 92:14,

16,17 93:9,12,16,19 94:1,2,5,
10,21,24 95:2 97:23 98:15,19
99:13 102:20 103:16,19 104:3
107:1 108:16 109:8 110:15
111:9,11 113:19,21,22 114:3,8
115:14 116:6,7 117:2,4,6
118:8,19,23 120:11 122:18
124:1,12,21 125:15 127:10,12,
19 128:3 132:9,12 133:8,12
136:8 138:4,7,11 139:1,12,17
142:4,6,7,18 144:6,13 145:10,
14 146:13,22,24 147:2,9,24
148:8,16 149:25 151:5 154:14
155:3 156:4 157:16 159:17
160:6 161:6 163:8,20 164:23
166:12 167:17 168:11 173:5
174:4 175:22 176:23 179:13,
23 182:7,25 183:4,19 184:1,3,
15 185:13 187:19 189:23
190:7,10,15,20,24,25 191:20
199:6 200:14 202:20 203:13,
25 204:10 208:8,16,22 209:4
210:11 211:8 212:7,10,12,21
213:15 214:1,9 215:14 216:10
217:1,6,21 218:10 219:7
221:2,9,11 222:15 223:23
225:23 226:24 228:9 230:5
231:25 234:14,19 235:4,20,24
236:14 238:5,24 239:8,9,10
241:8,9 242:4

those 8:17 15:19 16:1,5 19:19
21:18 22:4,8 24:1,15 31:16
35:17 41:8 56:8 66:7 70:22
76:15 77:3 82:24 88:13 89:2
90:20 91:10 92:12 94:25 98:2
100:12 110:9 112:1,11,14
113:11 120:20 132:12 146:13
151:14,20 152:7,9 153:3,16
160:16 163:18 168:4 174:9,11
175:19 177:21 178:4 188:2
189:16,18 195:12,15 205:13
206:15,17,19 207:6,13 212:1
217:12 221:2,12,22 222:22
223:10 224:20 237:5 238:9
239:7,15,24

though 18:3 24:14 27:10
39:23 58:8 67:10 73:17 95:7
145:23 207:23,25

thought 72:10,11 80:4,17
95:2 108:15 129:14 184:16
189:11 191:8 197:11 202:23
215:19 233:6,19 234:18
241:24

thoughts 110:13

three 12:23 15:7,19 16:1,5
22:6 77:3 79:5 94:16,18 95:3
109:7,13 110:5 111:22 115:8
116:3,13 117:3 124:6 131:13
142:7 175:25 181:13 202:17
207:2 218:4 224:1 239:15

three-dimensional 137:6,7

three-year 16:15

threw 84:18

through 9:6 16:4 19:21 32:22
43:22 45:7 49:22 51:2,24 54:1
89:4 91:1 108:15 109:4 116:23
122:25 132:25 133:4,5 135:6
138:5,6 143:16 144:18 150:22
151:25 152:4,19,20 154:8
156:3,7 157:23 158:2,7 160:20
161:22 163:17 164:3,9,16
165:1,3,20 167:11 168:23
169:3,5,18 170:22 171:1 172:3
189:11 190:21,22 198:11
206:14 210:24 212:8,19
220:16 225:15 230:18,21,24,
25 231:10 234:4 235:19

throughout 28:20 47:3 52:8
55:15 60:14 62:6 63:12 65:10
79:3 94:4

thrown 84:19

time 5:8,14 6:3,7 11:6 13:1
16:9 18:3 22:12 44:18 49:22
51:7 58:5 68:9 70:6 91:8 92:18
94:13 96:16 97:10 98:4 100:25
101:14 121:6 127:12 129:4,9
147:10,11 157:12 158:3 163:4,
5 166:21 167:21,23,24 172:6
209:5 216:8,12 219:8,9,14
221:15 224:19 229:24 230:1,4
234:3,5 236:3 237:3,6

timeline 217:9

times 4:23 16:6 41:12 42:16
111:18 156:21 159:16,17
169:17 170:20

tissue 70:8 74:2

titled 18:24 28:3

today 5:24 6:12 7:8,18 8:2,8,
20,21 16:23 17:1 18:11 95:12
122:20 146:17 147:12 179:4
221:7,17,20 223:3 224:10

together 36:5 61:17 71:15
73:10 176:6 192:22 193:7
215:20 221:12 222:16,21

told 185:14 240:7

ton 55:14

took 4:5 151:1,13

top 23:5 91:1 149:10 191:13,
15,16 192:5

total 39:19

Totally 122:8

transportable 45:19

trash 176:10,11

tried 226:2

true 102:8 105:5 159:17
209:16 218:24 227:24 241:17

trumps 222:14

truth 4:8,9

truthfully 6:11

try 5:7,8,9,25 30:15 39:14 41:9
55:8 61:16 63:17 69:14 72:6
76:1 101:8 105:7 106:3 109:2
121:6 159:11 188:20 193:3
212:13 217:7 222:9,11 241:3

trying 30:18 34:21,23 39:18
41:17 46:8 47:19 63:8 71:22,
25 76:4 86:7,8 92:6,13 93:21,
25 97:16,19 98:9,11,17 100:4,
6,20,23 101:5 102:17 106:14
107:11 108:12 110:5,14
111:24 112:4 113:19,22
118:16 120:6,8,17 121:7 127:5
135:18 148:8 153:10 166:11
173:20 181:21 183:3,9 184:6,7
193:1 200:21 203:8,9 213:13
215:22,25 217:10 218:5
220:13,14 241:22

tube 99:2 234:1 235:19

turn 19:17 20:22 130:25 150:1
154:25 158:25 174:19 197:23
228:6 234:20 235:1

turned 234:24 235:16

turning 206:10

two 8:5 14:6 17:3 22:6 31:13
37:3,17 45:3 74:8,9,25 86:24
101:9 103:21,22 115:8 116:3,

13 117:3,10 119:9,11 120:5
121:21,24 128:20 131:13
143:8 144:9,15 149:19 154:17
175:1,3,19 176:5,21 177:17
178:1 181:11 188:17,21 189:4,
6,13,18 193:7 194:25 195:15
197:12,13 198:6,10,16 200:6,9
201:4 204:14 207:2 218:4
220:15 225:14 231:23 232:12
237:25 241:18

two- 16:15

type 10:21 21:9

types 11:19 21:10 232:13

U

U.S. 3:13,15 13:17 44:4

uh-huh 5:20 14:13 28:2 37:20
39:10 69:4 80:12 81:20 96:17
99:19 100:11 104:18 105:14
117:17 129:24 140:10 151:22
162:6 179:5 193:12 201:24
205:22 211:10,17 214:8
220:25 241:9

unable 229:5

unanswered 154:21

unaware 127:20

unclear 5:24 47:24 73:8
111:16,25 141:2 146:2 159:1
161:25 163:10 166:6 189:21
201:17 227:10

uncomprehensible 185:16

under 15:14 61:1 150:4
183:18 218:3 229:11

understand 17:22 20:19
24:2,3 30:15,16,18 32:11,18
34:10,12,16,18 35:5,8 36:19,
21 37:16,19 39:1 40:6,13 41:3,
15,17 46:3 47:19 48:21 52:19
53:15,18,21 57:17 61:16,17
63:8,9,11 64:4,16 70:10,11
71:20 72:1,14,19 79:22,25
83:15,16,17 85:17 87:19
91:16,18 92:2,7,13 93:10,12,
21,25 94:1,19,20,24 95:1
98:11,17 100:20 106:9,14,16
107:12 108:12,18 109:3 110:3,
6,22 111:1,13,17,24 112:4,5
113:2,16,22 116:21 117:5

118:20 120:7,8 121:1 128:9,13
130:18,19 145:8 148:2 149:8,
12,24 158:23 159:11,12,20,23
161:19 162:2 164:15,24
165:13 166:11,23 167:2 168:3
173:24,25 175:7 183:3,9
184:6,8 189:1 193:1 195:16
197:14 199:14,16 200:4,20
202:19 203:9 205:9,19 220:3
222:9,11,12 223:18 226:15
227:20,22 233:6,21 235:2,4
236:14 241:3,22 242:18

understanding 12:12 28:9
29:1,5 30:6 33:24,25 35:7 45:7
51:12 52:20,21 53:23 62:23
63:6,16 64:8,24 67:7,15 72:18
78:12 84:20 91:8 93:9 99:17
101:14 102:13 105:6,16 106:2,
13 109:14,17 110:20,23
121:16 129:5,9 134:22 145:17
153:22 158:20 164:19 168:21
173:8 175:6 178:23 183:21
187:3 189:1,8 190:1 200:22
213:11 222:3,5,21 224:2 231:2
232:8 234:6

understood 5:18,22 6:4
60:19 123:4 128:5 233:19

unique 91:10,13 189:22

United 13:13 43:12 216:14

universally 109:6

unless 5:15 93:19 121:14
186:23 218:20 239:23

unlimited 134:14 136:21

unstapled 155:8

until 140:16 213:16

unwaveringly 51:4

up 6:8 15:16 24:25 35:14 36:6
49:18,20 62:11 73:11 86:3
88:12 109:25 115:13 122:8
140:2 155:25 158:8 159:5
170:1 203:25 217:2 220:21
225:18 236:12,13

upon 21:10 34:5,6 53:4
156:21 162:4 205:9

upstream 171:4

us 15:25 178:20

usability 111:7

use 46:12,13 52:18 58:16
85:11 92:20 93:24 99:24 101:5
124:21,24 126:3,19 127:14
130:4 136:15 155:18 176:20
179:13 182:13 184:7,21 204:7
205:7 225:19 232:11

used 28:20,21 29:12 41:16
103:24 123:13 124:5 125:9,12,
18,19,23 126:4,11,16,18,20
127:1,2,11,15,17,20 130:4
137:7 147:25 193:3 194:17

useful 29:1 222:3

uses 125:13 127:3,4 188:8
197:12 204:3

using 33:16 34:20 41:12 56:4
60:9 68:4 92:1 99:17 124:16
197:19 224:3 226:24 242:19

utilizes 111:4

V

V-B-O-X 17:19

vacuum 37:17 52:25 60:9
94:6 106:15 124:2

vague 38:25 44:17 106:5
112:22 115:10 124:18 165:5
228:17

Vaguely 227:11

valves 88:22 89:11,13

variability 57:16,17,19,21
59:4

variety 35:5

various 29:8 42:16

vary 55:16

varying 58:2,3

VBOX 17:16,18,21 18:19

vector 144:12,19

vehicles 10:8

Ventures 11:6,13,15,17,20,22
12:12,23 13:2,21 16:13 21:19,
25

verb 165:24

verbal 5:20

version 27:15 179:15

versus 119:23 128:23 185:21
199:20 206:8 224:11

very 12:3 15:12 18:15 27:14
45:6 46:5 61:7 65:20 70:6 91:8
93:12 109:13 120:12 142:3
148:7 166:6 172:1 202:25
203:18 205:3 215:21 216:19
217:9 229:10 241:5

viable 214:20 215:10

vice 11:14 15:5,6

view 37:22 54:10 65:14 219:22

viewing 194:15

views 60:14

vision 10:7

volume 107:25 171:16 233:25
235:18

voluminous 210:6

vs 3:2

VSA 124:2

W

wager 50:25

walk 9:5 45:7 152:19,20

walking 150:22

want 9:5 12:11 17:10,11 23:20
31:22 34:9,12,13 41:23 45:11
47:13 49:10,21 55:6,9,11 57:6
59:23 61:18,19 65:23 70:17,18
71:14,15 72:5 75:9 97:23
111:20 117:13 122:4,5,10
141:4 146:16 148:2 152:20
158:23 166:8 177:1 179:12
184:14,21 185:1 188:25
189:24 191:23 193:15 203:22
205:19 208:16 212:12 213:10,
15 214:5 216:7,9 218:10
220:16 226:7 228:6 231:4,15
233:5,20 234:12 237:14
239:13

wanted 17:5 44:11 82:2
198:11 221:1,23

wants 32:23 54:11 239:10,12

Warren 208:24 209:6 211:5,

12

was 4:4 6:17 9:25 10:6,7,18,24
11:1,4,14,23 12:4,7,9,17,21,25
13:1,7,9,12,13,17,19,20,23,24
14:22 15:3,7,9,12,15,16 16:4,
6,7,8 17:2,4,5,12,14 18:13
21:25 23:24 24:14,15,24 25:5,
20,21,23 26:1,10,11,13 27:9,
21 28:9,11 31:10 38:2,8 41:17
44:11,13 45:1 47:22 48:10
52:3 59:24 67:25 68:14 73:21,
22 76:17 77:18 78:24,25 79:1
82:19 83:12 94:14 96:5,18
97:12 98:21,23 99:24 101:4,
18,24 102:17 103:21,22
108:16,19 109:16,23 113:10
116:9 119:3 121:1 122:11
132:18 138:1 148:3 149:19
174:17 175:7,8 178:3 184:15,
16 188:13 189:8,10,12 190:15
191:20 197:19 198:12,15
200:14,17,18 202:18,23
205:20 207:24 208:18 209:12,
20 211:18,20 212:1,2,3 214:25
215:6,10,12,14,16,19 216:5,
15,18,19,20 217:1,2,22 218:6,
8 219:20 220:9,18 221:2,3,10
233:13,23,24 237:4 240:8
241:17 242:19

Washington 4:3

wasn't 18:3 67:23 113:10
125:22 217:21

waste 216:7

way 30:20 35:23 41:1 45:19
50:23 51:1,3,5 53:20 55:4
61:17 63:23 64:8 65:5 71:23
73:22,23 80:3 83:14 86:2
91:10 94:5 101:12 102:2 106:7
108:14 109:23 112:18 115:13
118:2,3,20 123:2 138:7 141:1
145:21 147:7,22 148:14
150:19,20 154:24 159:16
160:6 166:12 174:2,11,14
176:15 177:5 180:17 185:16
186:23 194:7 198:18 200:1
204:11 210:12 217:7 224:4
235:17

ways 41:1 50:21 58:5 73:13
91:7 129:16 147:6,8

we'll 6:8 8:13 12:24 44:4 50:11
67:11 70:2 74:25 122:6 143:17
184:5

we're 5:3,11 6:8 16:25 39:22
41:12 42:3 49:6,11 50:15 57:7
66:6 75:3,9,12,25 80:13,24
82:17 109:20 114:25 120:14
121:3 135:13,17 140:7 151:4,7
161:8 163:7,22 168:6 170:12
173:5 174:19 179:1,18 186:3
191:9,10 204:20,23 210:5
234:10,12

we've 71:17 93:5 97:14 122:3
158:16 182:1 192:17 210:20
221:6 241:9

Webster's 3:22

Wednesday 4:1

weigh 238:12 240:5

weight 222:13

well 5:21 11:17 12:10 29:3
33:17 39:5 41:22 48:15 49:20
57:2 75:4 76:6,18 79:17 88:12,
17 90:3 91:12 93:1 97:8
105:11 126:20 128:16 129:8
135:7,12 137:1 138:12 142:17
146:16 151:19 156:16,24
158:21 163:14 164:14 165:24,
25 166:11 171:12 175:7,22
176:1 177:3 181:10 187:7
191:4 192:25 196:15,18
200:20 202:17 206:17 210:17
218:12 223:16 235:14 236:14
237:8 241:20

well-defined 83:25

went 14:14,16 189:11 217:13

were 7:25 8:1 10:9,12,21,23
11:2,3,5 12:13,14,15 13:10,22
14:18 15:10,21,23,25 17:7,25
19:11 20:2,13 21:20 23:17
24:1,9,10 25:10 26:3 34:20
41:18 44:15 46:6 47:7 59:24
64:5 66:17 67:24 68:1 80:17
81:16 83:6 84:5,10,14 93:22
95:15 97:9 98:2 101:9 111:13
114:4 126:21 144:1,18 149:21
155:10,13 160:1 166:7,9 174:1
182:20 207:23 209:24 214:20
215:10 216:5,6,17 217:1,13,23
218:7 219:1,11 221:21 223:14,
15,23 224:10,15 227:7,12,17,
18 228:2 230:5 231:25 232:10,
12 233:9 237:5,15

weren't 109:11

what 5:25 6:17 7:11 9:9,16,24
10:6,15,21 11:12,19 12:22
14:18 15:9,10 16:11 17:18,21
18:13 19:12 20:20,21 21:9,10
22:7 23:17 24:22 26:9,11
27:11,17 30:18 31:10 32:17
34:20 35:2,7,17 37:11,14 38:8,
9 39:5,6,8,9,15,16,19 40:25
41:13,17 42:4,11,17,20 43:7,
11 44:25 46:3,5,6 47:6,14,21
48:8,19,24 49:9,12,21 51:8,12,
13 53:15,23 56:10,13 57:2,4,7,
8,10,17 58:1,2,6,13,23,24 61:7
62:2,12,24 63:8,9,16,18,23
64:4,5,9,10,19 65:22 66:25
67:4,5,24 69:8 70:4,5,7 71:11,
12,13 72:1,14 73:21 74:4
76:17 78:11 79:11,12 80:2,5
81:14,21 82:22 83:17 84:22
85:4,17 87:17,19 88:11,14
89:4,8,9 90:5,13,22,25 91:11,
14,21,22 92:10,14,19 93:2,20
94:7 95:1,8 96:10,20 97:7
100:23 101:16 102:21 105:19,
20 107:1 108:19,25 109:3
110:4,5,12,16,19 111:6,9,16,
21,25 112:5,19,20 113:2,4,9,
10,20,22,24 115:11,23 116:8
117:2,4 118:16 121:13 122:4
123:21 124:17 126:21 129:22,
23,25 130:14 131:6,7,20
132:18,19 133:6 134:9,23
136:2 137:2 138:1 140:3 142:4
147:2,8 149:8,9,21 151:6
153:8 154:4,23,24,25 155:23,
24 156:4,25 157:11 160:1,15,
24 161:17,25 162:1,3 163:7,10
164:12 165:6 166:9 167:18
169:24 171:11,12,14 173:18,
25 175:5,7 176:25 177:1,2,9
178:22 180:14,15 181:10
182:11,25 183:14 184:23
185:1,12 186:9,14,15,24
187:2,14,18,22,23 188:13
189:1,12,22,24 190:6 192:11,
23 193:3,18 194:25 195:7,17
198:11,12,16 199:2,16 200:3,4
201:25 202:2,14,15,18,23
203:9,22,23 205:7,23,24 206:5
207:23 208:18 209:4,12
210:17 211:18 213:11,13,15
215:18,19 217:16,19 218:8
220:12 221:5,6 222:5,7,9,14,
15,17,25 223:24 226:4,16,24
227:23 229:11 233:7,19,23
234:16 237:1,24 238:16,20

239:1,18,20,25 240:8 241:3,4,
5,22 242:13,18,19

what's 9:14 21:7 30:16 32:24
33:10 37:1,14 38:10 39:11
40:3 52:18,19 53:21 57:8
58:25 59:7 61:12 63:7 74:1
94:24 109:19,22 111:11
112:23 113:15 121:12,15
153:1 165:16,17 183:8 186:18
189:14 190:1 201:5 204:19
207:4 208:3 221:5 226:3 231:7

whatever 6:8 97:24 99:22
122:5,10 176:12 213:10 216:9

when 5:10 6:5 13:7,9 14:20
15:2,20 17:1 18:2,9 20:11 21:9
22:15,20 24:2 27:11 32:25
33:2,4,7,11 34:18,22 36:3,4
37:13 44:9,11,23 48:22 50:4
51:17 55:21 57:15,19 58:15,16
59:1 61:6,9,11 62:5,14 63:21
65:20,24 70:9 71:12,19 72:10
73:24 74:10 78:18 79:14,18
83:11,13 89:3 90:10,23 93:11
94:5,25 102:23 103:4,5,20
106:2 108:16,25 109:4,8,17
111:10 112:25 113:19,21
114:5 116:6,9 117:2,4 119:8
125:12,17 126:3,20 127:15,22
140:1,2 142:3,6,21 145:3
148:15 154:8,14 155:21 156:1,
3,7,21 157:1,23 158:1,6 160:3,
7,20 161:11 162:10,25 163:4,
5,10,11,13,14 164:2,9,24
165:1,21,25 166:3,25 167:11,
20 168:1,2,13,18,19,22 169:1,
17,22 170:20,21 171:1,2,5
173:22 176:10,12,21 183:10
187:11,22 188:8 199:1 201:17
210:17 214:24 215:23 218:5,
12,25 221:16 222:7 223:23
225:17 228:15 230:2,5,17,18
233:18 234:7 235:10,15 236:1,
3,5,9,15,16 239:18 241:12,15
242:2

where 11:23 15:13,15 17:3
18:4 23:21 27:6,7 28:19 32:9
33:5,13,22 34:2,24 35:8 41:12
45:25 46:18,24 47:15 49:10,
12,25 50:14,19 51:9 53:15
55:15 56:25 57:21 59:12,14
60:3 64:17,22 65:6,10,13
67:25 68:5 69:11 70:5,7 71:4,
10,20 74:4 76:8,12 79:10 82:5
86:2,4 87:21 88:16 90:11

92:16 94:2 96:5 97:25 100:16
101:1 107:20,22 112:2 119:13
128:18 137:14 141:20 142:18,
20,24 144:1 145:2 147:9
150:15 152:12 153:9 156:22
157:13,20 158:6,15 162:8
166:5,8,11 167:18 168:18
169:5 170:13,15 172:22
177:16 178:5 185:13 189:8
191:3 206:2 207:6,14 208:6
211:25 212:1 213:14 218:6
222:13,14 225:6 228:6,14
231:14 235:13 237:2,3 240:15

wherein 72:21 77:21 87:5
141:20 143:6 145:6,15 154:7

wherever 242:7

whether 17:4 20:8,10 33:1,6,
9,18 34:17,22,23 39:20 40:14
44:11 48:3 63:19 91:8,13,16
93:1 94:13 97:23 103:21
104:13 106:23 108:22 116:2
121:1 131:18 137:6 159:1
168:7 180:13 192:16 223:14
227:7 232:1

which 12:20 19:17 22:6 25:19
34:5,6 50:2 56:9 60:13 72:1
81:6 83:12 89:7 100:9 111:7
114:19 115:17 134:16 135:1,2,
24 136:8,17,23 141:25 143:7
144:23 145:5 146:2 147:19,20
149:6,24 155:4 156:2,19
158:6,10 164:20 165:22 172:1
174:20 175:18,24 176:4,16
177:11,17 179:3 182:10 184:4,
9,16,21 185:14 186:3 187:18,
25 188:16 189:4,10,18 196:22
199:21 200:6,9,22 201:21
204:25 211:20 214:18 215:10,
23 217:22 226:18,23 227:13
231:10 233:10,25 240:1 242:1

while 13:10 21:25 110:20,23
160:13 207:10

who 16:19 17:13 60:10 98:2

who's 226:2

whole 4:8 29:10 101:4 173:6
198:19 199:20 201:10 205:1,2
222:16,17

why 40:7 51:7 61:16 62:6
92:7,21 93:25 97:16 103:25
109:24 116:15,23 181:6
184:16 187:11 189:11 213:4

215:2,23 221:13 223:21 224:5,
23 226:21 229:19 230:14
231:12

withdraw 204:11

withdrawable 198:18 201:10
202:3 204:18,24

withdrawal 205:1

withdrawing 201:18 205:4
206:8

withdrawn 198:20 202:2,3
204:8

within 29:6 35:5 38:6 54:6
72:22 73:19 74:17 75:11 77:23
78:9,16 79:8 82:25 99:6 101:1
102:6 114:16,18,19 127:23
160:13 173:7 217:8 228:14
230:20,25

without 7:10,24 36:22 38:2
54:22 58:10,13 70:4,25 73:7
74:3,10 79:15 80:20 83:22
89:10 91:9 92:24 94:1,21
95:12 105:19 112:15 129:5
143:15 144:20 148:11,19
188:1 204:11 220:23 231:9,22,
23

witness 6:23 30:4,10,23 32:22
34:16 36:19 39:1 40:6 47:24
54:10 61:5 65:2 68:12 101:23
106:6,13 112:23 115:11
117:12,15,17 159:8,10 162:20
163:3 165:6 190:18 212:15
213:6,8,13,18,24 220:17
221:16 228:18 229:10

won't 33:11 112:17 130:7
161:14 231:9

wondering 46:23

word 35:1 38:14 39:18 41:4,12
57:21 62:2,13 65:25 99:2
101:5 112:24 135:14 147:25
179:1 184:20,22 189:20
191:16 193:2 195:14 196:16,
17 197:12,13 201:14,21 204:8
205:7,8,9,16

words 16:3 31:1 38:7,13,15,
20,22,23 39:12,22,24 41:23
74:19 82:23 127:5 146:6
152:20 165:9 166:9 198:25
201:9 205:14 235:12

work 7:20 12:4 16:12,19 20:15
21:1,23 23:10 24:8,24 27:1
44:21 45:9,13 147:3,6 148:11
159:18 194:23 196:10,25
216:2 217:14 218:9

workable 44:19,23

worked 11:24,25 12:8 14:25
22:13 25:2 54:16

workers 54:20

working 12:5 21:21

works 148:21,23

world 13:14 217:7,11

worn 55:25

worse 147:22 149:14

worth 211:11

would 13:4 15:24 16:13,23
17:7 18:2 19:12 25:7 26:5,18
29:5,6,9,11,16,18,22,24 30:14
31:7,8 32:11,23 34:1,3,7 35:1,
5,14,19 36:13 37:4,10 38:1,15,
21 41:14 44:20 45:2,24 49:23
50:3,23,25 51:22,24 53:25
54:6,10 56:3 62:13,14 64:14
67:8 69:24 73:3,4,19 74:14,17
75:11 78:1,23,25 79:7 83:5
86:13 88:1,22 89:16 91:8,9
92:7 93:25 94:15 96:24 98:19
100:24,25 102:5,11 104:24
107:6,11 108:21 114:19 115:5
116:1,11 117:9,22,24 118:5,6,
11,13 119:2,9,13 120:25
121:2,21,22 123:3,4,14 124:16
125:23 126:22 127:17,19
128:4,9,18 129:25 130:3,9,21
131:7,19,21 136:11 137:10,15
139:12 140:8,18,25 144:4,19
145:18,21 147:4,7,10,15
148:2,12 149:1,2,11 156:6,11
157:22 158:15 160:25 164:14
165:18 168:7 169:1,10 171:7
172:4,24 175:13,21 177:6,9
180:9,12,19 181:6 182:21,22
183:4 188:15 189:15,17,22,24,
25 192:16 194:5,18,22 195:4,
12,13,14 196:4,6,10,13,25
197:2 199:7 202:19 205:6
215:19 216:25 219:21,23
220:1 227:18,21 229:5 236:4,8
242:7

wouldn't 37:24 44:25 72:25
80:3 164:23 180:23 185:11
194:3 242:12

wrap 220:21

write 36:4 50:24

writing 52:11

written 33:12 36:14 38:6
52:19,23 63:7 64:10 69:20
71:4,9,21 72:7 83:15 90:9
109:23 113:1,16 129:9,10
148:7 150:11 154:21 164:13
165:16 180:18 197:18,19
209:12

wrong 9:7 92:1 98:10 135:8
183:8 190:5 191:7 197:19
214:1

Y

yeah 6:24 7:24 39:1 40:6
46:23 47:12 68:11 84:17 86:9
95:19 99:22 113:19 117:25
118:18 120:3,19 122:6 125:16,
24 128:20 133:24,25 146:19
150:4 153:11 155:11 172:25
180:12 181:12 187:9 188:24
193:9,14 194:8 195:8 198:13
199:11 200:5 206:3 214:11
231:19 234:12 235:3,25
237:20

year 10:10,11,24 17:3,8

years 5:1 8:22 11:11 13:24
14:6 16:5 21:16 22:6,19
131:13 217:8

Yep 196:2,3

yes 4:22 6:16 7:9 8:16 14:15
16:6,14 18:8,20 20:1 21:8
22:24 23:16 24:16 25:9,18
26:20 27:22 28:8,12,15 31:18
33:23 34:3 35:3,12,16 42:10
43:4,10,20 44:5,6,22 45:6
46:11 48:7 51:22 64:6 67:2
68:19,23 69:4,11 72:9,11
75:15,17 76:14,24 77:5,16
78:3,6,13 80:4,12 81:18 82:7,
16 83:2 84:23 85:19,22 86:14
87:3,22,25 88:6 89:19,23 90:4
94:18 96:9,11,23 97:9 98:14,
16 103:4,6 104:1,23 107:22
114:11,20 115:16,23 116:12

119:6,7 121:18 123:1,25
124:15,23 125:1,11 126:6
127:25 129:20,24 130:2 132:3,
6,8,11 133:7,20 134:23 135:6,
16 136:2,6 138:9,13,16,19,25
139:4,11 140:21 141:19,23
146:21 147:2 151:9,11,15,22
152:23 153:20 154:6,16
155:17 156:5,10 157:12
161:10,13 163:19 164:18
165:7 167:6,16 168:22 170:7,
14,24 173:10 174:24 175:3,17
179:9,14,20 181:15,23 182:19
191:1,12,22 192:1,6 193:20,24
194:13,16 195:10 197:1,8
198:8 199:17 201:13 202:14
203:7 204:13,16,25 207:4
208:5,13,18,25 209:25 210:7,
19,22 211:15 213:1 214:22
215:9 219:3,24 220:6 223:2,5
224:5 227:14,16,23 228:1
229:2,22 230:23 231:3 232:9
233:14,17 234:16,17 237:17,
21 238:7 240:10,14

you'd 203:12 211:16 213:8

you're 5:24 6:5 9:6 15:13
20:7,23 22:8 23:21 25:10
26:18 33:18 34:12,17,22,23
35:2,4,10,14 36:3,4 38:23
39:6,17,18,24,25 40:2,3 41:15
43:1 47:14,20 48:13 51:8
53:13 55:7 56:11,15 57:10,15
58:4,6,7,11,24,25 62:24 63:21
64:3,7,8,22 67:3 68:6 69:8
73:17 76:8 80:14 82:22 84:22
85:4 91:12,14 93:18 94:9
96:10 102:10,18 103:25
106:21 107:22 110:4,8 111:17
112:20 113:21 114:21 117:25
119:22 121:8 122:20 126:2,7,
10,24,25 127:1,23 128:3,9,11
129:2,13,18 130:1 131:5
132:5,7 135:11 136:10,24
138:7 139:14,16 142:14 146:5
147:19,21 149:8 150:7,22
151:6,13 152:9 153:4,8,16
157:10 158:24 159:22 162:15
164:1 166:23 169:16,24,25
171:14 172:1,22 174:7 177:22,
23 178:14,20,22 183:23
185:13 187:7 194:24 195:7
200:3 204:3 206:1 207:1,20
208:19 211:9 212:4 213:11,14,
25 220:5 222:18,19,25 224:2
231:14 232:20 234:18,19

236:23 237:13,24 241:20
242:16

you've 8:18,19 41:1 42:8 46:9
69:3 75:20 80:9 83:18 84:18
93:5 95:12 107:9 122:19 140:5
146:16 154:17 183:1 186:12
190:25 207:2 212:4 219:7,10
228:22 230:12

your 4:18,20 5:9 6:14 7:11 8:1,
4,7,8,10,11,13,14,17 9:1,6,14
12:16,23 13:10 14:18 16:4
17:12 18:13 19:13,25 20:13
21:10,11 23:7,10 24:8,15
25:16,19,24 26:22 27:19 28:7,
13 29:5 30:6 31:7 32:17 33:16,
17,24 34:14 36:5 38:4 40:10
41:23 42:4 43:8 44:20 45:7,12
47:7,22 48:6,8,16 50:9,19
51:3,12,25 52:2,12,16,20 53:1
57:10,13 58:20,24 59:25 60:25
62:21,23 64:8,23 66:3,10,12
67:17 68:3,20,21 70:21 71:1,6
72:1,2,5,18 75:1,3,18 78:12
79:23 80:9 81:1,5 82:3,4,15
83:6 84:4,24 85:7 89:24 91:18
93:24 94:19 95:7 96:18 98:5
99:16 100:14,24 102:13
103:17 105:6,11,15,22 106:1,
21 107:2,9 108:18 110:3
111:14,22 113:10 115:15
116:4,21 118:19,24 121:16
122:15 125:5,17 127:10
128:21 131:1,5 132:19 133:9,
16,21 134:22 138:2,10,14
140:1,11 141:4 142:14 144:18
145:17 148:2,9 149:12,24
150:1 151:19 152:17,20 153:5,
7,22 154:20 158:11,20 159:6
161:5 164:20 166:9 168:17,20
169:12,25 170:19 171:6,11,12
173:7,8,16,19 174:5,20,25
175:5,18,24 178:2 179:13
183:15,21 185:16 187:5,25
189:1,17 190:15 191:20,24
193:16 195:9,22 197:14,23
200:9 202:7 203:9,15,23 205:5
207:24 209:1,22 212:14
213:12 214:6 215:12 217:16,
18 218:16 219:11 221:6,15,22,
23 222:5 223:3,8,10 224:5
225:15 226:8,18 227:7,17,19
228:7,20 229:3,14 230:6
231:2,12,14 232:20 233:4,5
235:14 237:8 239:14 240:4,13
241:10,22 242:6,8,13

Z

zeolite 55:17 65:18 86:13
234:4,15 235:20 237:2,3

zoom 191:3