

EXHIBIT

Blasters-1023

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

CASE: IPR2018-00504

PATENT 7,255,116

BLASTERS, INC.,
Petitioner

vs.

WATERBLASTING, LLC,
Patent Owner.

INTER PARTES REVIEW OF SCOTT F. BOOS

TAKEN BY: Attorney for Patent Owner

DATE: Thursday, October 11, 2018

TIME: Commencing at 10:00 a.m.,
To 6:38 p.m.

PLACE: Veritext Legal Solutions
Tampa City Center
201 North Franklin Street
Suite 1950
Tampa, Florida 33602

REPORTED BY: Dawn Neukomm, RPR
Registered Professional Reporter
State of Florida at Large

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1 THEREUPON,

2 SCOTT F. BOOS,
3 was adduced as the deponent herein, and upon first
4 being duly sworn upon oath, was questioned and
5 testified as follows:

6 CROSS-EXAMINATION

7 BY MR. COHEN:

8 Q Good morning.

9 A Good morning.

10 Q We're here in the matter of Blasters, Inc.,
11 versus Waterblasting d/b/a Waterblasting Technologies
12 in an Inter Partes Review. You gave a depo recently in
13 that case, sir?

14 A I did.

15 Q And your name for the record?

16 A Scott Boos.

17 Q And in reading that in the caption here,
18 Blasters, Inc., that's your company?

19 A Yes.

20 Q You're the president of that company?

21 A I am.

22 Q You're the CEO?

23 A President and CEO.

24 Q And you make the principle decisions for your
25 company?

1 A I have a vice president and other people that
2 are involved in the decisions.

3 Q Did you make the decision to institute this
4 IPR?

5 A Yes, I did, but as I said, there were other
6 people that were involved in that, but yes.

7 MR. COHEN: I'm going to mark what's
8 previously been marked as Blasters 1009 as an exhibit.
9 And I guess I'll mark that as Patent Owner's 1, so we
10 can go PO-1, if that's okay.

11 MR. LYTVYN: Maybe we want to stick with the
12 exhibit numbers we already have, and this way it's
13 easier.

14 MR. COHEN: Is that easier? I'm just saying
15 because of the record --

16 MR. LYTVYN: That's really the easiest way,
17 so this way we don't have to try to come up with
18 different numbers with each other.

19 MR. COHEN: Okay. So let's mark this for
20 your purposes and just for record-keeping in this
21 deposition what's previously been marked as Blasters
22 1009.

23 COURT REPORTER: 1009? Exhibit Number 1009?

24 MR. COHEN: Yes. Exhibit 1009, and it's
25 Blasters Exhibit 1009.

1 COURT REPORTER: Yes. Thank you.

2 MR. COHEN: I'm sorry, but I just want the
3 record to be clear.

4 COURT REPORTER: That's fine.

5 (Blasters Exhibit No. 1009 was marked for
6 identification.)

7 BY MR. COHEN:

8 Q Okay. I'm going to show you what's been
9 marked as Blasters Exhibit 1009. Do you recognize this
10 exhibit?

11 A I do.

12 Q If we flip to the second to the last page,
13 which is Page 114, the last heading, I believe it's an
14 X, Roman Numeral 10, conclusion. Paragraph 203 states
15 that you understand that you're subject to
16 cross-examination, if required. That's why we're here
17 today.

18 A Yes.

19 Q Is that still your understanding?

20 A Yes.

21 Q And in paragraph 204, it says I hereby
22 declare that all statements made in this declaration
23 are of my own knowledge and are true, and that all
24 statements made on information and belief are believed
25 to be true; that these statements were made with the

1 knowledge that willfully false statements and the like
2 so made are punishable by fine or imprisonment or both
3 under Section 1001 of Title 18 of the U.S. Code. And
4 then on the last page, Page 115, it's respectfully
5 submitted, Scott F. Boos. Is that your signature?

6 A Yes.

7 Q And it's still your position today that
8 paragraph 204 remains true?

9 A Yes.

10 Q So on Page 4 of your declaration, paragraph
11 2, it states that you understand that you're providing
12 my opinion on behalf of the Blasters, Inc., as a
13 technical expert for the above-captioned Inter Partes
14 Review.

15 A Correct.

16 Q Is it fair to say that you are an independent
17 technical expert?

18 A I took the biasness out and just looked as a
19 person of the skills in the art, and I, you know, just
20 was open-minded and unbiased as the expert witness
21 today.

22 Q So you removed the bias?

23 A I did.

24 Q Yet you have a financial interest in the
25 outcome of this case?

1 A I don't think I do, no.

2 Q Isn't it correct that there's a litigation
3 pending in the Southern District -- excuse me -- the
4 Middle District of Florida --

5 A There is.

6 Q -- in which you're the defendant?

7 A Yes.

8 Q And in the course of that pending litigation,
9 this Inter Partes Review of the patent that's been
10 asserted against you was instituted; correct?

11 A Correct. I guess it is.

12 Q And you're the president and CEO of the party
13 that has instituted this Inter Partes Review; correct?

14 A Correct. I'm the president of Blasters.

15 Q Okay. And so then you're not an independent
16 technical expert?

17 MR. LYTVYN: Object to the form.

18 THE WITNESS: I'm a person of ordinary skill
19 in the art. I have, you know, years of experience,
20 and, you know, again I come unbiased.

21 BY MR. COHEN:

22 Q You would agree that if you hired an
23 independent expert, that they would truly be
24 independent?

25 MR. PFEIFER: Objection to form.

1 THE WITNESS: No, I wouldn't agree.

2 BY MR. COHEN:

3 Q You wouldn't agree that an expert in this
4 field hired just for their time would be an independent
5 technical expert?

6 MR. PFEIFER: Objection; asked and answered.

7 THE WITNESS: I don't think they would be
8 anymore independent than I am.

9 BY MR. COHEN:

10 Q As president of the company that is
11 instituting this Inter Partes Review, you're
12 maintaining that you just removed the bias?

13 MR. PFEIFER: Objection, testimonial.

14 THE WITNESS: Yes.

15 BY MR. COHEN:

16 Q So you consider yourself a person of ordinary
17 skill in the art --

18 A I do.

19 Q -- based on your experience in the
20 waterblasting industry?

21 A Correct, in the field, yes.

22 Q And that began in the mid '80s, I believe,
23 1986; correct?

24 A No, '82.

25 Q '82. Okay. Did you write this document?

1 A I didn't physically write it, type it.

2 Q Did you type this document?

3 A I didn't physically type it.

4 Q So how did you prepare this document?

5 A It was a collaborative effort between myself
6 and our attorneys. We worked together with the prior
7 art and wrote the document.

8 Q So the technical information in this
9 document, was that entirely contributed by you or
10 someone else?

11 A It was both. It was a collaborative effort.
12 I came up with some of the prior art, and my attorneys
13 came up with some of the prior art.

14 Q So you're not the only technical expert that
15 contributed to your declarations; is that your
16 testimony?

17 MR. PFEIFER: Objection; form.

18 THE WITNESS: I signed that, but that's my
19 declaration.

20 BY MR. COHEN:

21 Q So every paragraph in here is material,
22 technical information, contributed by yourself?

23 A Again, it was a collaborative effort between
24 myself and our attorneys.

25 Q This is your expert declaration. If you had

1 collaboration on it, why are you the only signatory on
2 your declaration?

3 MR. PFEIFER: Objection; testimonial.

4 THE WITNESS: I believe that's the way it
5 works. I'm not an attorney, but to the best of my
6 knowledge, that's the way it works.

7 BY MR. COHEN:

8 Q Well, what's your experience in compiling
9 technical papers to form an opinion?

10 A I'm very experienced in different trade
11 groups. I've been involved in, you know, different
12 situations providing data, and I just am an expert in
13 the field.

14 Q Is this the first expert declaration you've
15 ever composed?

16 A I've never been involved in an IPR.

17 Q That wasn't my question. Is this the first
18 report you've ever generated as a technical expert?

19 A In a lawsuit?

20 Q It doesn't have to be a lawsuit.

21 A No. I have provided other technical
22 documentation.

23 Q I'm sorry. You said no?

24 A I said yes, I have provided other technical
25 information.

1 Q And did you prepare a report?

2 A I have. And again it was a collaboration in
3 different situations, a collaboration of efforts.

4 Q In the past, has everyone who has
5 collaborated been reflected and given credit on the
6 document?

7 A I was the only one that signed it.

8 Q And why is that?

9 A Because somebody had to step forward and
10 assert the document.

11 Q Are you familiar with --

12 A I mean if you're referring to a patent, I
13 mean people that were involved in patents would be, you
14 know -- you know, would be part of some -- you know,
15 part of a patent submittal. If they were part of it,
16 they were on the team of the people that signed it as
17 being part of the patent. But if you're referring to a
18 technical submittal, I would have signed it myself
19 solely.

20 Q Even when you have collaborative engineers
21 and other experts?

22 A I mean it would depend on the situation.

23 Q Okay. So I guess I'll ask you as we go along
24 which portions of the technical data in your
25 declaration were not submitted by you just to be clear

1 on the record here.

2 MR. PFEIFER: Objection; testimonial.

3 BY MR. COHEN:

4 Q So it's correct to say that you're an expert
5 in the field of waterblasting?

6 A Yes.

7 Q And how would you categorize waterblasting?

8 MR. PFEIFER: Objection; form.

9 THE WITNESS: Restate the question. How
10 would I categorize waterblasting? What do you mean by
11 that?

12 BY MR. COHEN:

13 Q You're an expert. You're an expert in the
14 machinery that you build and sell for waterblasting --

15 MR. PFEIFER: Objection; form.

16 BY MR. COHEN:

17 Q -- applications?

18 A I'm an expert in the waterblasting field.

19 Q And is Waterblasting Technologies a
20 competitor?

21 A Yes.

22 Q A direct competitor?

23 A Yes.

24 Q And they're selling equipment in the
25 waterblasting field?

1 A In certain waterblasting fields. It's very
2 broad, and in one small part of the field, they sell
3 equipment.

4 Q So are you an expert in the field of
5 waterblasting, if they sell equipment?

6 A Yes.

7 Q And in your declaration, we'll get here to
8 Page 7, you list a number of patents.

9 A Yes.

10 Q And one of them, for example, labeled letter
11 F is U.S. Patent No. 8,510,905 --

12 A Yes.

13 Q -- entitled vacuum debris collection box
14 having sloped debris chute. So that's one of your
15 patents?

16 A Correct.

17 Q And that's in what you would consider the
18 waterblasting field?

19 A No. It can be used for all types of
20 different applications, one of which -- it's not
21 limited to just waterblasting. It could be used in
22 other areas as well, in other applications.

23 Q But it is an application -- one of the
24 disclosures in that is an example of why you would be
25 an expert in waterblasting technology?

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: I don't understand. Restate
3 the question in a different way, please.

4 BY MR. COHEN:

5 Q On Page 7 of your declaration, you list A
6 through F, patents that you're an inventor on?

7 A Correct.

8 Q That established your background as an expert
9 in waterblasting technologies?

10 A That's not the only thing that establishes
11 it, but it is just one of the things, yes.

12 Q But those patents are one of the examples,
13 and then some of your other examples are just your
14 experience in the field?

15 MR. PFEIFER: Objection; form.

16 THE WITNESS: That's a pretty broad-based
17 question that you're asking me. I mean I have provided
18 the documentation of why I'm an expert in the field and
19 a person of ordinary skill, and that's it.

20 BY MR. COHEN:

21 Q Okay. Well, I'm trying to understand. You
22 know, I'm asking about your qualifications as a
23 technical expert. You dispute that you're an
24 independent technical expert. You've testified already
25 that you're not the only person who contributed to your

1 expert declaration here. And I'm trying to understand,
2 well, which portions of your declaration directly
3 establishes your qualifications, and which portions of
4 your declaration are deficient in the fact that you
5 needed help to complete your declaration.

6 MR. PFEIFER: Objection. Is there a
7 question?

8 MR. COHEN: Yes.

9 BY MR. COHEN:

10 Q Which technical aspects of your declaration
11 were contributed by someone and not you?

12 A It's a collaborative effort. I mean I put
13 the document together. I collaborated with our
14 attorneys, the two which are present, and we presented
15 the declaration which I signed.

16 Q So I'm not asking did your attorneys edit
17 this document. I'm asking what technical information
18 was contributed by someone other than yourself?

19 MR. PFEIFER: Object; form.

20 THE WITNESS: The only people that were
21 involved in that other than myself are the two
22 attorneys that are present.

23 BY MR. COHEN:

24 Q So it's a correct statement that you did not
25 contribute every bit of technical opinion in this

1 declaration?

2 A It was a collaborative effort. You know,
3 they contributed, and I contributed.

4 MR. COHEN: What was my last question?

5 (Previous question read back by court reporter.)

6 MR. COHEN: I'll re-ask the question.

7 BY MR. COHEN:

8 Q So I'm just establishing a yes or no. Did
9 you contribute every bit of technical information in
10 your declaration?

11 MR. PFEIFER: Objection; form.

12 THE WITNESS: It was a collaborative effort.
13 It was a joint effort between myself and our
14 attorneys.

15 BY MR. COHEN:

16 Q So that's a yes?

17 MR. PFEIFER: Objection.

18 THE WITNESS: It's a collaborative effort.

19 BY MR. COHEN:

20 Q I understood your testimony that it's a
21 collaborative effort. So just so the record is clear,
22 what you're saying is, it's correct that you did not
23 contribute every single technical aspect that's in your
24 expert declaration?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: I'll answer the question again,
2 and I'm going to keep answering it the same way. It
3 was a collaborative effort.

4 BY MR. COHEN:

5 Q So then the answer is yes, it would be a fair
6 answer to that question?

7 MR. PFEIFER: Objection; form.

8 THE WITNESS: The answer is it's a
9 collaborative effort.

10 BY MR. COHEN:

11 Q So on Page 9, paragraph 5, relevant legal
12 standards?

13 A Yes.

14 Q I'm not asking you to reveal any privileged
15 conversations with your attorneys. My question is what
16 is your understanding of the legal standards applicable
17 in generating this expert report?

18 A Well, I'll start by saying I'm not an
19 attorney, so that's why I hired these guys to, you
20 know, represent me. But basically all I did was look
21 at the claims in the patent, compare the claims to
22 prior art, you know, and then it was at that point, you
23 know, it was about obviousness. You know, I just
24 looked at comparing those prior art versus the claims
25 and, you know, the obviousness of what makes sense.

1 And it was an arrangement of different components,
2 common components, commonly-known components to yield
3 part of the declaration.

4 Q And you put forward a number of claim terms
5 that required construction in your opinion?

6 A Yes.

7 Q And on Page 10, for example, Number 15, hard
8 surface --

9 A Yes.

10 Q -- did you make the determination to construe
11 that claim?

12 A Did I make the determination? I mean I would
13 define a hard surface as basically any surface capable
14 of supporting a vehicle or a tractor with a head for
15 this purpose. There's a lot of hard surfaces.

16 Q So as a technical expert in the field of
17 waterblasting, what specifically would you categorize
18 your expertise as?

19 MR. PFEIFER: Objection.

20 THE WITNESS: Would you restate the
21 question?

22 BY MR. COHEN:

23 Q You reviewed Patent Number 7255116, the
24 patent that's in issue in this Inter Partes Review; is
25 that correct?

1 A I did.

2 Q And you determined that that's a vehicle
3 that's for operation in the waterblasting industry?

4 A I reviewed it as a machine for cleaning. A
5 cleaning machine is the way I reviewed it. I reviewed
6 Claims 1 through 6 and 10 specifically.

7 Q Okay. And in the waterblasting industry,
8 what is a hard surface?

9 A A hard surface by my definition is basically
10 any surface that would support, you know, a truck, a
11 support truck or a utility vehicle like a tractor with
12 a head on it would be the way I would describe or
13 define a hard surface. There's lots of hard surfaces.

14 MR. COHEN: Why don't you mark this one as
15 Waterblasting 2001.

16 (Waterblasting Exhibit No. 2001 was so marked
17 for identification.)

18 BY MR. COHEN:

19 Q I'm going to show you what has been marked as
20 Waterblasting 2001.

21 MR. PFEIFER: We'd like to make an objection
22 that this piece of evidence has not previously been
23 considered in this analysis.

24 MR. COHEN: Excuse me?

25 MR. PFEIFER: We would like to make an

1 objection that this patent was not previously analyzed
2 when he made this opinion.

3 MR. COHEN: This is his patent.

4 MR. PFEIFER: Correct, but it was not
5 considered during the opinion. We're just objecting
6 for the record. It's outside of the scope of the
7 opinion that was rendered in this declaration.

8 BY MR. COHEN:

9 Q All right. And just for the record, on Page
10 7, and I believe I read it into the record earlier, one
11 of your list of qualifications that you submitted makes
12 you an expert in this field is Patent Number 8510905;
13 is that correct?

14 A That's what it says on Page 7.

15 Q Is that incorrect?

16 A It's correct that that's our patent, and it's
17 correct that it's letter F on Page 7, correct.

18 Q Okay. So looking at the first page, the
19 named inventor is Scott F. Boos. That's you; correct?

20 A Correct.

21 Q And then there's Ian Ellman Brown, a
22 co-inventor?

23 A Correct.

24 Q If you could turn to the Page F of your
25 drawings, and it's labeled column 1.

1 A This page?

2 Q Yes.

3 A Okay.

4 Q So in column 1 coming down at line 35 on the
5 left, it says summary in the invention.

6 A Where is that, line 35?

7 Q Right. It's where it says summary of the
8 invention in the left column.

9 A Yeah. Okay. I see it. Yeah. Okay.

10 Q And in coming down, so it would be -- there's
11 a sentence, the longstanding, but heretofore
12 unfulfilled need for an improved vacuum box is now met
13 by a new, useful, and non-obvious invention.

14 MR. PFEIFER: Objection; form.

15 THE WITNESS: Show me where you are, please
16 again.

17 BY MR. COHEN:

18 Q I'm right here.

19 A Okay. On the top, just at the very top.

20 Q And the next paragraph says the inventive
21 structure is used with a tractor of the type used to
22 remove pavement markings or coatings from asphalt or
23 concrete roads, parking lots and the like by blasting
24 the asphalt or concrete with water under high pressure.
25 The technology is also used in removing pavement

1 markings or coatings and built up runway rubber from
2 airport runways and taxiways as indicated at airport
3 technology dot com.

4 So is it fair to say that that's
5 representative of the waterblasting applications for
6 this invention?

7 MR. PFEIFER: Objection; scope; objection to
8 form as well.

9 THE WITNESS: State the question again,
10 please?

11 BY MR. COHEN:

12 Q Sure. I'm going to ask the question
13 differently.

14 MR. COHEN: But I want to note for the record
15 that this is a cross-examination. Mr. Boos has
16 established himself as an expert in his technical
17 field, and I'm attempting to impeach him on it. These
18 are improper objections in the scope of what the line
19 of questioning I'm in?

20 MR. PFEIFER: We're going to respectfully
21 disagree.

22 BY MR. COHEN:

23 Q That paragraph, Mr. Boos, is that the
24 applications, exemplary of the applications in the
25 waterblasting industry?

1 MR. PFEIFER: Objection to form; objection to
2 scope.

3 THE WITNESS: No, it's not. The invention
4 structure is usually the tractor of the type used to
5 remove pavement markings or coatings. So when you look
6 at that, basically it's not limited to just pavement
7 markings. It's limited to coatings as well, which is,
8 you know, any substance or foreign debris spread over a
9 surface. So it can be all types of different coatings
10 to be removed. So it's not just for waterblasting. It
11 could be used for cleaning. It could be used for all
12 types of surfaces, again, you know, surfaces or layers
13 over a surface.

14 BY MR. COHEN:

15 Q So what you're referring to in your pavement
16 markings or coatings from asphalt or concrete, what
17 kind of pressures do you need to remove those coatings

18 MR. PFEIFER objection; scope.

19 THE WITNESS: It depends on the application.
20 There's different pressures for different
21 applications. And you simply can throttle the engine
22 up or throttle the engine down on the waterblaster to
23 determine that pressure.

24 BY MR. COHEN:

25 Q So specifically what's an example of a

1 pressure you would need to employ to remove pavement
2 markings?

3 A There's lots of different types of pavement
4 markings and all types of different composites that
5 would be, you know, highway or airport stripes. There
6 are all types of different ones that are out there. So
7 it takes different pressures to remove different types
8 of pavement markings.

9 Q So, for example, are you familiar with what a
10 pavement marking would be on like the street in front
11 of this building?

12 A Yes, and again there's all -- there's, you
13 know, various different types of coatings that are
14 on -- even in downtown Tampa, there's various different
15 types of pavement marking compositions and coatings
16 that are put down right here in this downtown area.

17 Q So you're an expert in constructing a vehicle
18 that would be capable of removing one of these coatings
19 that you referred to? Yes?

20 A Yes.

21 Q And if the City of Tampa was going to
22 contract with you to build some trucks to remove
23 pavement markings or coatings from the street, what
24 pressure ranges would you give as an example would be
25 the range that you would need to remove those sort of

1 markings?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: I mean typical -- well, for
 4 coating removal, it can be -- so, you know, if I was
 5 building a machine, a coating removal machine like this
 6 machine, you know, it'd be run anywhere from high
 7 pressure of, you know, a couple hundred psi to ultra
 8 high pressure at 40,000 psi. So I would build a
 9 machine that you can throttle up or throttle down to
 10 do -- as a cleaning machine to remove coatings, I would
 11 have to have a machine that could do all the
 12 applications.

13 BY MR. COHEN:

14 Q So you're saying you would build a machine
 15 that could throttle from 200 pounds per square inch all
 16 the way up to 40,000 pounds per square inch?

17 A Potentially, yes.

18 Q Have you ever built that machine?

19 A Yes.

20 Q You have?

21 A Yes. It could run an 200 psi or it could be
 22 run at 40,000 psi just by throttling up and throttling
 23 down, correct.

24 Q So in your field, what would one of ordinary
 25 skill in the art refer to a pavement marking as?

1 A What they refer to as a pavement marking is
2 basically a stripe on the road that keeps the traffic,
3 you know, in line, so they don't hit each other.

4 Q I realize these lines can be comprised of
5 anything from simple paint to complex polymers that
6 adhere to the asphalt; is that correct?

7 A Yes.

8 Q So if you're talking about a polymer that
9 adheres to the asphalt, what sort of pressures are we
10 talking about to remove that?

11 MR. PFEIFER: Objection; form.

12 THE WITNESS: I don't know. I mean polymer
13 is a broad term. I mean I'm not trying to be
14 difficult, but I don't know what you mean by that.
15 There is no polymer that's a stripe.

16 BY MR. COHEN:

17 Q You've submitted a declaration under oath to
18 the patent that you're a technical expert in this field
19 of technology?

20 A Yes.

21 Q I'm asking you technical questions. You're
22 the one being difficult with all due respect.

23 MR. PFEIFER: Objection; testimonial.

24 BY MR. COHEN:

25 Q As a technical expert, what would you expect

1 the average -- and strike average. What do you
2 encounter that are road markings that require removal?

3 MR. PFEIFER: Objection; form.

4 BY MR. COHEN:

5 Q What are they composed of?

6 A What are the different types of stripes that
7 are out there, the pavement markings that are out
8 there?

9 Q Yes.

10 A Anything from, you know, a very non-robust
11 coating as a temporary paint that's on a highway. It
12 could be as hard as a thermal plastic or an epoxy or a
13 methacolade, a very hard coating. So there's various
14 different markings that are out there.

15 Q It's true to say that you understand that you
16 applied the broadest reasonable interpretation is how
17 you analyzed the patent?

18 A That's correct.

19 Q Okay. In this field that you're a technical
20 expert, when someone refers to a hard surface, what are
21 they referring to?

22 A They're referring to a surface that will
23 support any vehicle, a truck or a tractor, you know,
24 with a head on it. If you're talking about this field,
25 that's what a hard surface is.

1 Q So your testimony is that when you're talking
2 to another individual in this field, the hard surfaces
3 you're talking about are roads, highways, parking
4 garages, runways; is that correct?

5 MR. PFEIFER: Objection; asked and answered.

6 THE WITNESS: Potentially, yeah.

7 BY MR. COHEN:

8 Q So in your field when you talk about coatings
9 on a hard surface, what would somebody in the
10 waterblasting field consider that to be?

11 A You know, I mean in our field, I mean there's
12 all types of cleaning. I mean people are out on
13 runways cleaning mildew and dirt and grime and oils off
14 of runways, so that's cleaning. Yes, that's cleaning a
15 coating off of a hard surface. And again it could be
16 all the way up to the hardness of a coating of epoxy
17 that's on a highway. So it's a big cross-reference or
18 a cross-section, I should say, of different coatings on
19 a surface.

20 Q In your declaration, you've elected to group
21 these terms separately and not in the context which
22 they appear in the claims, the coatings upon a hard
23 surface.

24 MR. PFEIFER: Objection; testimonial.

25 THE WITNESS: What page are you on?

1 BY MR. COHEN:

2 Q Well, your proposed definitions start on Page
3 10. So it's true that you split these apart, and you
4 did not consider them in the context that they appear
5 but as individual terms?

6 MR. PFEIFER: Objection.

7 THE WITNESS: There wasn't any strategy in
8 that. It was my opinion and my definition on each one
9 of the -- each one of the items.

10 BY MR. COHEN:

11 Q Okay. So paragraph 15 where we're talking
12 about hard surface, it's your opinion that a person of
13 ordinary skill in the art would have understood the
14 term hard surface to mean any surface having rigidity
15 sufficient to support the weight of a vehicle carry the
16 blast head?

17 MR. PFEIFER: Objection; form.

18 THE WITNESS: Absolutely, yes.

19 BY MR. COHEN:

20 Q And paragraph 16, did you contribute all of
21 the technical aspects of that paragraph yourself, or is
22 there any aspects of that that are not contributed by
23 you exclusively?

24 A It was a collaborative effort with our
25 attorneys.

1 Q So you did not contribute the subject matter
2 in its entirety yourself?

3 MR. PFEIFER: Objection; form.

4 THE WITNESS: I repeat. It was a
5 collaborative effort with our attorneys.

6 BY MR. COHEN:

7 Q And I'll repeat. I'm asking you yes or no
8 questions. Paragraph 16, yes or no, did you contribute
9 the entirety of the technical information yourself?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: I didn't write -- I didn't
12 write the document completely myself. I didn't type it
13 myself, if that's what you're asking?

14 BY MR. COHEN:

15 Q That's not what I'm asking. I'm asking is
16 the entirety of paragraph 16, the technical
17 information, was all of it contributed by yourself
18 exclusively, or did somebody else contribute to the
19 technical information in paragraph 16? And it's a yes
20 or no question.

21 MR. PFEIFER: Objection; form.

22 THE WITNESS: My attorneys contributed, so
23 yes, my attorneys contributed.

24 BY MR. COHEN:

25 Q To technical aspects of that declaration?

1 MR. PFEIFER: Objection.

2 THE WITNESS: No, that was my -- I'm the
3 technical person.

4 BY MR. COHEN:

5 Q So what technical aspects of paragraph 16
6 were not contributed by yourself?

7 MR. PFEIFER: Objection, form.

8 THE WITNESS: They weren't. They were mine.

9 BY MR. COHEN:

10 Q So in column 1, the paragraph, the inventive
11 structure that we've talked about previously --

12 MR. MCHALE: What exhibit?

13 MR. COHEN: This is Waterblasting 2001.

14 BY MR. COHEN:

15 Q -- is your patent. You're one of the
16 co-inventors. And I'm in column 1.

17 A Okay.

18 Q And again that paragraph, if one of ordinary
19 skill in the art was reading this paragraph, is it fair
20 to say that concrete roads, parking lots and the like
21 are hard surfaces?

22 MR. PFEIFER: Objection; form; objection;
23 scope.

24 THE WITNESS: Yeah, they could be considered
25 hard surfaces, yes. There's lots of hard surfaces,

1 but, yes, they could be considered hard surfaces.

2 BY MR. COHEN:

3 Q And we're talking about here in this
4 descriptive of this area of technology, you're talking
5 blasting asphalt or concrete with water under high
6 pressure?

7 MR. PFEIFER: Objection; form.

8 THE WITNESS: Well, again we're talking about
9 -- we're talking about cleaning, and we're talking
10 about coatings. So it's not just limited to what's
11 written here. It wasn't the intent.

12 BY MR. COHEN:

13 Q I'm not asking you about the scope of your
14 patent. I'm just asking you about one of ordinary
15 skill in the art in this art area, you've submitted
16 that you're a technical expert in this area. So would
17 somebody of ordinary skill in the art consider asphalt
18 and concrete that these pavement markings or coatings
19 are on to be hard surfaces?

20 MR. PFEIFER: Objection; form.

21 THE WITNESS: It wouldn't be limited to
22 those, but I think somebody could say, yes, those are
23 hard surfaces, but it wouldn't be limited to that.

24 BY MR. COHEN:

25 Q I didn't ask about limitations of it, but is

1 that what somebody ordinarily would talk about in this
2 field --

3 MR. PFEIFER: Objection.

4 BY MR. COHEN:

5 Q -- when they say the hard surfaces you're
6 talking about are roads and airport runways --

7 MR. PFEIFER: Objection; form.

8 BY MR. COHEN:

9 Q -- create asphalt structures; is that
10 correct?

11 A It could be some of the surfaces they talk
12 about, yes.

13 Q Well, I'm asking you as a technical expert.
14 I mean technically speaking, is that the way people of
15 skill in the art in this industry refer to the surfaces
16 that need to be cleaned?

17 MR. PFEIFER: Objection; form; objection;
18 asked and answered.

19 THE WITNESS: And I answer it as it's some of
20 the surfaces that could be used, yes.

21 BY MR. COHEN:

22 Q What kind of pressures would you need to
23 remove, for example, runways rubber?

24 A Well, there's all different thicknesses of
25 runway rubber. You know, it's a very -- it's a very

1 soft rubber. And I guess I'd have to look at the
2 specific application. You know, it's just various
3 pressures for different applications. For rubber, it
4 depends on how thick it is.

5 Q Well, I mean can you give me some examples?

6 MR. PFEIFER: Objection; form.

7 (Phone interruption in conference room.)

8 THE WITNESS: I mean it's part of the prior
9 art that I analyzed. You know, NLB uses up to 40,000
10 psi, but it's a range. It can be throttled down or
11 throttled up, but the maximum would be up to 40,000
12 psi.

13 BY MR. COHEN:

14 Q Well, let's talk about throttling up and down
15 of the pumps. What are you referring to?

16 MR. PFEIFER: Objection; form.

17 THE WITNESS: I'm just referring to, you
18 know, the higher the engine goes, the more pressure you
19 create. The lower the engine goes, the less pressure
20 you create.

21 BY MR. COHEN:

22 Q Okay.

23 A So to remove various coatings that are out
24 there, different coatings take different pressures to
25 remove the coatings. So you wouldn't want to run too

1 high of a pressure for a certain application.

2 Q So a pump that pumps at 40,000 psi, what are
3 the characteristics of that sort of pump to achieve
4 that --

5 MR. PFEIFER: Objection; form.

6 BY MR. COHEN:

7 Q -- pressure?

8 A I mean it's a plunger pump. I'm not sure --
9 I mean typically the main characteristic is it's a
10 positive displacement reciprocating plunger pump. But
11 other high pressure pumps that may be lower in pressure
12 but still high pressure are the same, are positive
13 displacement reciprocating plunger pumps as well.

14 Q So pumps capable of pumping in excess of
15 40,000 psi, you're saying have the same characteristics
16 as pumps that pump at lower pressures?

17 MR. PFEIFER: Objection; form.

18 THE WITNESS: Well, if we're talking about
19 pumps in excess of 40,000 psi or at 40,000 psi?

20 BY MR. COHEN:

21 Q Let's say at 40,000 psi.

22 A Yeah, the characteristics are the same.

23 Q Okay.

24 A They're positive displacement pumps. They
25 reciprocate which means they move back and forth, and

1 they're plungers. They're plunger driven. All of them
2 have a plunger that pushes the water to create the
3 pressure as they reciprocate back and forth.

4 Q And you're saying that you are familiar with
5 operating pumps at 40,000 psi?

6 A Yes.

7 Q And you've throttled them down to what
8 pressures?

9 A Well, you know, virtually down to zero. I
10 mean it can go -- you can throttle them up or throttle
11 them down depending on the application.

12 Q So a pump that pumps 40,000 psi, what do you
13 mean by throttling it down?

14 A Just basically use the engine control box and
15 lower the rpm of the engine which in turn will drop
16 your pressure.

17 Q And does the flow out your nozzles remain the
18 same?

19 MR. PFEIFER: Objection; form.

20 THE WITNESS: You could use to run a -- to
21 keep the flow or gallons per minute the same, then you
22 could also use larger nozzles or more nozzles depending
23 on how you do it to basically drop your pressure as
24 well. So I mean technically you can throttle the
25 engine higher or lower to create your pressure. You

1 can use different jets, bigger jets or more jets. You
2 can also use what's called a flow control bypass valve
3 to dump water, gallons per minute, as you flow as
4 you're referring to. So there's a multitude of
5 different ways to do it, but you'd want to use
6 different pressures for different applications.

7 BY MR. COHEN:

8 Q Okay. Can you give an example of a specific
9 coating that you would need 40,000 psi to remove?

10 A Most of the time 40,000 psi isn't run. I
11 mean that would be an absolute extreme situation.
12 Typically, you know, it's done at a lesser pressure.
13 But if you were to run 40,000 psi, maybe you're taking
14 off an epoxy or a thermal plastic stripe on a highway.
15 That specific stripe would require 40,000 -- not
16 necessarily up that high, but it could require 40,000
17 psi. And I think that's what -- you know, again back
18 to the prior art, you know, that's what NLB also says
19 that is required, and they said 40,000 -- up to 40,000
20 psi. All pumps are up to a maximum pressure.

21 Q For removing pavement markings from parking
22 lots and the like and/or runway rubber from airports,
23 typically what size pumps do you build at your company?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: State the question again, if

1 you would, please?

2 BY MR. COHEN:

3 Q I'm referring to you using your patent as an
4 example of one application of removing pavement
5 markings or coatings of runway rubber from airports,
6 and we're talking about applications with asphalt or
7 concrete. At your company that you're the president,
8 the machines that you build to perform these functions,
9 typically what pressures do they operate under?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: Well, first of all again, it's
12 not just limited to these coatings that are here. I
13 mean there's lots of different coatings that are on
14 surfaces, but if you're referring -- let me see that.
15 If you're saying if I was to remove paint, rubber,
16 thermal plastic tape and curing compounds and other
17 debris, so if I look at debris, debris can be, you
18 know, a big application as dirt and grime and oil, you
19 know, very low pressure, less than 1,000 psi and
20 potentially up as high as 40,000 psi. So again
21 cross-section of pressures for various applications.

22 BY MR. COHEN:

23 Q So typically what would you or a competitor
24 for removing runway rubber, what would the
25 specification of a pump to remove runway rubber from

1 the airport runways be?

2 MR. PFEIFER: Objection; form.

3 BY MR. COHEN:

4 Q Be it you or someone else with ordinary skill
5 in this art area, what typically would the pump
6 specifications be?

7 A For removing rubber?

8 Q Yes.

9 A The specs that I have seen to the best of my
10 recollection are based on how many square feet an hour
11 you're supposed to remove. You know, there's a minimum
12 out there on the runway.

13 Q Okay.

14 A I mean I think, you know, as we would or
15 maybe as NLB would, you know, it could be -- it could
16 be 20,000 psi --

17 Q Well, I mean --

18 A -- or it could be higher. It could be less.
19 It could be more.

20 Q Well, I mean you're the technical expert in
21 this field; correct?

22 A Yes.

23 Q Are you still maintaining that?

24 A Yes.

25 Q So I'm asking you a technical question.

1 We're reading your patent. Give me an example of
2 machines that you've built and what the specifications
3 are for being able to take runway rubber off of airport
4 runways.

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: This patent, you know, 905, is
7 not only limited to just say rubber removal. You know,
8 it does a lot of different things. We have people
9 doing all different types of cleanings at different
10 pressures. I'm not sure how to answer it anymore.
11 This particular patent that you're referring to here,
12 the 905 patent, that slope for debris collection box is
13 used for various types of applications, but not limited
14 to these and including many others that are out there,
15 many other coatings that are spread over a surface.

16 MR. PFEIFER: We've been going for about an
17 hour. Can we take a break when you get to your next
18 stopping point?

19 MR. COHEN: We can take a break here, if you
20 want.

21 MR. PFEIFER: Okay.

22 (Brief recess was taken at 11:00 a.m., to
23 return at 11:15 a.m.)

24 BY MR. COHEN:

25 Q Referring back to Exhibit Waterblasting 2001,

1 which is your patent, in the description in column 1,
2 if you would go to the top of column 1, numbered
3 paragraph 2, the description of the prior art.

4 A Yes, I see it.

5 Q And would it be fair to say that in a patent,
6 the description of prior art is used to describe what
7 exists in the field of technology, and that your patent
8 is an improvement in that field?

9 MR. PFEIFER: Objection; form.

10 THE WITNESS: This particular patent was all
11 about the floor being sloped and letting whatever
12 solids or whatever coatings we're removing drop out of
13 suspension because they're all heavier than water
14 specific gravity-wise. So it was better for any
15 application, any type of cleaning application.

16 BY MR. COHEN:

17 Q So this is an improvement patent of what's
18 out there for vacuum debris collection boxes?

19 A We think so.

20 Q And under that number 2 description of prior
21 art, it says vacuum boxes are used to collect water,
22 pulverized asphalt, paint, rubber, thermal plastic tape
23 and curing compounds and other debris created when high
24 pressure water is discharged by a nozzle bar mounted on
25 the tractor to remove pavement markings or coatings

1 from roads, airport runways, taxis, parking lots and
2 the like. What are the coatings referred to there?

3 MR. PFEIFER: Objection; form.

4 THE WITNESS: I mean just as it says. It
5 just says, you know, pulverized asphalt, paint, rubber,
6 thermal plastic tape and curing compounds.

7 BY MR. COHEN:

8 Q The 116 patent discloses a cleaning system
9 for removing coatings from a hard surface by high
10 pressure liquid. Do you agree with that? I'll refer
11 you to your declaration on Page 15 --

12 A Page 15. Okay.

13 Q -- where you state that.

14 A Just reading from the top here?

15 Q Yeah.

16 A The 116 patent discloses a cleaning for
17 removing coatings from a hard surface by high pressure
18 liquid. Okay. I've read it, and what's the question?

19 Q Well, I didn't ask you a question yet. Is
20 that still correct, that that's your understanding of
21 the patent claimed here?

22 A That's what it says, yes.

23 Q And did you write this portion of your
24 declaration?

25 A Yes.

1 Q The description of the prior art in your
2 patent, is that referring to the same area of
3 technology that the 116 patent is concerned with?

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: It's one of the many
6 applications. It's not limited to that, but it could
7 be used for that.

8 BY MR. COHEN:

9 Q So if one of ordinary skill in the art
10 according to your opinion is reading the description of
11 the prior art in your patent, what would they consider
12 roads, airport runways, taxis, parking lots and the
13 like? Would those be considered hard surfaces to
14 somebody of ordinary skill in the art?

15 MR. PFEIFER: Objection; form.

16 THE WITNESS: It's one of many hard
17 surfaces. Yes, it could be considered a hard surface.

18 BY MR. COHEN:

19 Q Now does one of ordinary skill in the art in
20 your field usually refer to coatings, markings, airport
21 rubber in conjunction with the surfaces that those
22 coatings are applied?

23 MR. PFEIFER: Objection; form.

24 THE WITNESS: Restate the question, if you
25 would, please.

1 BY MR. COHEN:

2 Q One of the claim terms you opined on is hard
3 surface. I'm asking you when one of ordinary skill in
4 the art in the field that you're a technical expert
5 reads this paragraph, would they consider roads,
6 airport runways, taxis, parking lots and the like hard
7 surfaces?

8 MR. PFEIFER: Objection; form.

9 BY MR. COHEN:

10 Q Yes or no?

11 A Those would be considered hard surfaces, but
12 again there's other hard surfaces beyond those. It's
13 not limited to just those, but, yes, those could be
14 considered hard surfaces.

15 Q And does a person of ordinary skill in the
16 art in this area ordinarily associate when discussing
17 the coatings that need to be removed, are they
18 referring to these sort of roads, airport runways and
19 those hard surfaces when they discuss where coatings or
20 airport rubber removal applications occur?

21 MR. PFEIFER: Objection; form.

22 THE WITNESS: Not limited to those, but, yes,
23 those could be some of the coatings that could be used
24 on hard surfaces. Those could be some of the hard
25 surfaces. That could be some of them, but not limited

1 to those, but it could be construed as coatings and
2 hard surfaces.

3 BY MR. COHEN:

4 Q So when you're collecting pulverized asphalt,
5 how would you pulverize the asphalt? When does that
6 occur in operation?

7 MR. PFEIFER: Objection, form.

8 THE WITNESS: When do you pulverize it?

9 BY MR. COHEN:

10 Q Well, let me ask it this way. So the vacuum
11 tank disclosed in your patent application --

12 A Yes.

13 Q -- works in conjunction with other systems;
14 correct, or it's part of a complete system?

15 A Correct.

16 Q So if you're vacuuming up pulverized asphalt,
17 what pump pressure are pulverizing asphalt?

18 A I mean, this could be used for
19 waterblasting. You know, this could also be -- this
20 system could also be used for dry, so you could use
21 grinding and milling to also pulverize asphalt. I
22 think this is referring to pulverized asphalt is when
23 you're doing stripe removal specifically. The asphalt
24 actually could come apart and basically be vacuumed up
25 into the vacuum debris box. So I think it's referring

1 to -- you know, you wouldn't have a project that you
2 would go out and pulverize asphalt. It's just part of
3 specifically just the stripe removal. So you would
4 just be doing stripe removal only. You wouldn't use
5 high pressure water to pulverize asphalt. If like
6 you'd see pulverized asphalt, that would be a big
7 milling operation on a highway. They would use
8 conventional, traditional milling and grinding
9 techniques to pulverize asphalt. The intent of that
10 was basically that when you're removing stripes, that
11 the asphalt could come loose and would be vacuumed up.

12 Q So asphalt can come loose when high pressure
13 water is applied?

14 A It could, yes.

15 Q And how does that happen?

16 A You use high pressure water.

17 Q Well, what pressures? What pressures are
18 going to remove coatings and pulverize the asphalt that
19 the coating is stuck to?

20 A Well, coatings again can be an array of
21 different surfaces. So if you were using -- you know,
22 removing coatings, it could be extremely low pressure,
23 you know, a couple hundred psi if you're talking about
24 a thermal plastic or an epoxy stripe. You know, when
25 you reference the prior art again of NLB, you know, it

1 could be used up to 40,000 psi.

2 Q So in this sentence here, I'm asking you as a
3 technical expert.

4 A Which sentence, the vacuum box?

5 Q The vacuum box is one long sentence.

6 A Okay.

7 Q It's talking about other debris created when
8 high pressure water is discharged.

9 A So you're asking about that whole paragraph
10 now?

11 Q What sort of surface are we talking about
12 where -- or the surface we're talking about here is
13 pulverized asphalt with a coating on it. What sort
14 of --

15 A Not pulverized asphalt, just asphalt with a
16 surface with a coating on it. It's just a sound
17 substrate which is the asphalt with the stripe on the
18 top of it.

19 Q Okay. With a stripe adhered to the asphalt.
20 This substrate you're talking, does that over time with
21 heat and pressures become chemically bonded to the
22 asphalt does that occur?

23 A The asphalt typically stays intact, you know,
24 so you're not -- again, the intent of this is the
25 asphalt that's referred to here that's pulverized is

1 from the stripe removal application. So that's why
2 it's pulverized, and then it's being vacuumed up.

3 Q So what is an example of a pressure range
4 that you're going to remove a substrate that is bonded
5 to the asphalt that's going to result in pulverized
6 asphalt needing to be vacuumed up?

7 A Yeah. You're never removing the asphalt.
8 That's not the intent. The intent is to take the
9 stripe off the asphalt without damaging the asphalt.
10 So it's the opposite. It's taking the stripe off the
11 asphalt underneath it. So you never would use -- it's
12 the opposite of what you said.

13 Q So in stripe removal from roads, the concrete
14 or asphalt never gets removed in the process even at a
15 minuscule layer or level?

16 A Yeah. Step one is to remove the stripe. If
17 any of the -- I mean concrete typically stays intact.
18 That's why it doesn't say pulverized concrete. At
19 times if asphalt is haggard and worn out, you know,
20 over time, potentially it could pulverize the surface
21 underneath where the stripe is when the removal process
22 goes over it.

23 Q And would you agree that one type of road
24 striping would be some sort of composite substrate
25 polymer?

1 A The substrate is, you know, the surface that
2 the stripe is applied to.

3 Q Okay. And in this paragraph, in your
4 technical opinion, what pressures would it be operating
5 at that are capable of removing pavement coatings or
6 markings from the road, airport runways, taxiways,
7 parking lots and the like that may pulverize asphalt in
8 the process?

9 MR. PFEIFER: Objection; form.

10 THE WITNESS: So as I read that, you know,
11 collects water, pulverize asphalt, paint, rubber,
12 thermal plastic tape, curing compounds and other
13 debris. I mean if you're doing a very hard type of
14 coating, which could be a stripe, you could use up to
15 40,000 psi. You know, softer, you know, all the way
16 down to dirt and grime would be a much lower pressure.
17 So it's up to 40,000 psi, and it's down extremely low.
18 BY MR. COHEN:

19 Q What's the minimum pressure that you could
20 pulverize asphalt with?

21 A Pulverized asphalt is not an application that
22 anyone would do in high pressure water. That would all
23 be done with convention, mechanical grinding and
24 milling equipment.

25 Q Is it sometimes necessary to remove a layer

1 of asphalt or concrete to get whatever is stuck to it
2 off in a cleaning application?

3 A Within high pressure water, you're not
4 supposed to do that. You're supposed to stop. If
5 you're eating into the substrate, the application is
6 supposed to stop. The operation is supposed to stop.

7 Q But at what pressure would you eat into the
8 asphalt or concrete?

9 A It depends on how bad it is.

10 Q Well, I mean I'm asking you for some
11 technical examples.

12 A If you're out removing a stripe on epoxy or a
13 thermal plastic, a very hard stripe, you know, you're
14 going to have higher pressures. Higher pressures for
15 harder types of coatings. So it could be as high as
16 40,000 psi and lower.

17 Q So if you're removing an epoxy coating from
18 asphalt or concrete, what would one of ordinary skill
19 in the art expect a pump to discharge, in what ranges?

20 A You would probably -- you know, you'd
21 probably use higher pressures which probably would be,
22 you know, 30 to 40,000 psi.

23 Q So it would be 30 to 40,000 psi?

24 A Yes. If you're doing a hard coating like
25 you're talking about, yes, that's where it would be

1 in. And, you know, that's what the industry would use
2 for that particular application. But if you're talking
3 about a cleaning machine that does lots of different
4 things, you would throttle the engine up or throttle
5 the engine down to whatever pressure you would want or
6 need for the application.

7 Q So when you're talking about removing stripes
8 be it epoxy or other applications like airport rubber,
9 and we're talking about pump ranges in 25, 000 to
10 40,000 psi, for example, so as to not destroy the
11 concrete and pavement, isn't it true that different
12 nozzle configurations and pump discharges in relation
13 to nozzle sizes is what's employed?

14 MR. PFEIFER: Objection; form.

15 BY MR. COHEN:

16 Q Is that correct?

17 A Potentially, yeah. I mean, you would want to
18 pay attention to your jets and your pressures, yes.

19 Q So what would you take into consideration to
20 remove an epoxy, for example, that is adhered to the
21 asphalt, so that you remove the epoxy, but not dig into
22 the asphalt?

23 A What would I --

24 Q How is that accomplished?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: It's accomplished with, you
2 know, multiple jets and a head and a shroud.

3 BY MR. COHEN:

4 Q And is there a rate that surface area needs
5 to be? What would the technical term be --

6 MR. PFEIFER: Objection; form.

7 BY MR. COHEN:

8 Q -- pressure sprayed? Is there an optimum
9 range to pressure spray an individual surface area?

10 A They don't usually spec a pressure. They
11 typically spec, you know, high pressure. You don't
12 spec a specific pressure typically.

13 Q Well, I mean what's the range of the pump?

14 A Which pump?

15 Q Well, I mean you've put forward that you're a
16 technical expert in this area.

17 A I am.

18 Q And I'm asking you technical questions. So I
19 believe the pending question we're in the area of, so
20 for pulverizing asphalt, taking an epoxy, you might
21 spec a pump in the range of 25,000 to 40,000 psi. So
22 now I'm asking as an expert, well, how do you remove
23 that coating without damaging the asphalt or concrete?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: If you're removing, you know, a

1 thermal plastic stripe, you're going to want to look at
2 what pressure you're going to run, your nozzle size,
3 your rotational speed, how many jets you use. I mean
4 there's different things that should be taken into
5 consideration before you start.

6 BY MR. COHEN:

7 Q So is coatings a term of art in this industry
8 area of waterblasting?

9 A A term of art? I mean people -- coatings is,
10 you know, again a substance or a layer over a surface
11 is how I would define a coating. So when you say
12 coating, I mean it's just so -- it's not misleading,
13 but it's a big cross-section of different compositions
14 of the material used to create the coating. Some are
15 harder. Some are softer.

16 Q So in this industry art area of removing
17 stripes on airport runways employing high pressure
18 pumps, ultra high pressure pumps, what are markings or
19 coatings referred to when people in the industry
20 discuss those terms?

21 A The different, you know, markings would be,
22 you know, the thermal plastic, epoxy, temporary paints,
23 methacolades. I'm trying to think of what other. A
24 marking could be a temporary tape. Tape is used as a
25 stripe. It would be considered a marking. I mean

1 there's coatings of glass beads with reflectivity for
2 reflectivity properties. So there's a lot of
3 different -- it's a big cross-section if you refer to
4 markings of what it is.

5 Q And what kind of surfaces would you apply the
6 markings you were just talking about to?

7 A I'm not a coatings application. We only do
8 the removal. I don't sell equipment that basically
9 does the application of the stripes.

10 Q So you're not an expert on coatings?

11 MR. PFEIFER: Objection; form.

12 THE WITNESS: I'm not an expert on coatings
13 application, applying the stripe to the surface. I'm
14 not a striper or a painting contractor. I'm
15 waterblasting.

16 BY MR. COHEN:

17 Q But you're an expert in removing of coatings?

18 A Correct.

19 Q So I'm asking you as an expert, what are
20 coatings referred to in this area of art?

21 A I mean if you're specifically talking about
22 markings, you know, you're talking about some of them
23 that are mentioned here. I said a few questions ago I
24 gave an example of maybe eight different types of
25 markings, not coatings, but markings, you know, that

1 are out there.

2 Q So if someone asks you in your technical
3 expertise do you have a machine that can remove
4 markings or coatings from roads, airport runways,
5 parking lots and the like, what coatings are they
6 talking about or markings?

7 MR. PFEIFER: Objection; form
8 BY MR. COHEN:

9 Q Are they the same ones that you just listed
10 in your previous testimony?

11 A If you're only talking about markings and
12 you're not talking about coatings, then I would answer
13 the question yes.

14 Q Okay.

15 A Because coatings is very broad. So cleaning
16 -- a cleaning machine and coatings are very broad on
17 what you're cleaning. If you're just talking about,
18 you know, paint stripe removal or markings removal,
19 there's some differences there.

20 Q So in your patent when you get down to the
21 part where it says to remove pavement markings or
22 coatings from roads, markings and coatings aren't used
23 interchangeably in this industry?

24 A Where are you again?

25 Q I'm at the second half of that first sentence

1 where it says -- do you see where it says -- so it's
2 one, two, three, four lines into that line, and we'll
3 start by a nozzle mounted on a tractor to remove
4 pavement markings or coatings from roads. So the
5 markings that you're referring to and coatings aren't
6 used interchangeably in this field of invention?

7 A It could be. Yeah, it could be.

8 Q So if you had a machine that was capable of
9 removing coatings from a hard surface with high
10 pressure liquid, in this field of invention, would it
11 be safe to say that you would anticipate a pump as one
12 of the components of the system would pump somewhere in
13 excess of 25,000 psi?

14 A To specifically remove markings from roads,
15 airports, taxiway, parking lots and the like?

16 Q Yes.

17 A Yeah. If you're just specifically saying
18 pavement markings from airport runways, taxiways,
19 parking lots and roads, then that could be a pressure
20 that you use, yes.

21 Q Okay. And if you were to say in this field
22 of invention, if you're removing coatings from a hard
23 surface, that the hard surfaces are more than likely
24 asphalt or concrete in these applications?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: If you're just talking about
2 runways and highways -- if you're just talking about
3 runways and highways, then -- state the question one
4 more time.

5 BY MR. COHEN:

6 Q When a person of ordinary skill in the art,
7 which you're a technical expert --

8 A I am.

9 Q -- consider for these applications like an
10 example of what's in your patent, that when referring
11 to the hard surfaces that you would remove one of those
12 coatings, that that would be limited to the things like
13 roads, airport runways, taxiways and parking lots that
14 are constructed of such as asphalt or concrete?

15 MR. PFEIFER: Objection; form.

16 THE WITNESS: Yeah, I wouldn't limit it to
17 that, no. But that could be some of the surfaces that
18 coatings -- sorry -- or markings, stripe coatings,
19 markings could be removed. So that could be a surface
20 that these markings are on, yes.

21 BY MR. COHEN:

22 Q I mean you're familiar with the removal of
23 airport runway rubber?

24 A Yes.

25 Q What surfaces other than asphalt and concrete

1 would a plane that's going to leave, is a skid mark the
2 technical term --

3 MR. PFEIFER: Objection; scope.

4 BY MR. COHEN:

5 Q -- or leaving rubber debris upon the runway?
6 What surfaces other than asphalt and concrete are you
7 familiar with that need rubber removal in this field of
8 invention?

9 A On aircraft carriers, there's steel decks
10 that require rubber removal as well. It's called
11 vulcanizing of the rubber is what it is. It vulcanizes
12 the rubber onto the surface, a substrate. So different
13 substrates.

14 Q Are there any other surfaces you're aware of
15 where you can vulcanize the rubber?

16 A I mean if you're asking me are there other
17 surfaces that runways are made of other than asphalt
18 and concrete, I mean if you're just specifically
19 talking about rubber removal, no.

20 Q So then a person of ordinary skill in the art
21 where when they're talking about one of the markings,
22 coatings or vulcanized as you just testified to, a hard
23 surface to that person of skill would be asphalt,
24 concrete. It could be steel like on an aircraft
25 carrier deck. But that would be the area of hard

1 surfaces that they would be limited, to those sort of
2 groups of materials?

3 MR. PFEIFER: Objection; form.

4 THE WITNESS: If you're just talking about
5 runway and rubber removal, that would typically --
6 those three surfaces that you just spoke of would be
7 typical, yes. And so a person of skill in the art
8 would look at those surfaces, yes.

9 BY MR. COHEN:

10 Q So you've reviewed the 7255116 patent;
11 correct?

12 A Which one is that now?

13 Q That's the patent that you offered your
14 opinion in, in this Inter Partes Review.

15 A I'm familiar with everything in my
16 declaration, in my petition, but which one are you
17 referring to?

18 Q I mean the patent at issue that you --

19 A Oh, 116?

20 Q Yes.

21 A Of course. Absolutely.

22 Q So would you agree -- is it fair to say that
23 that is the same field of invention as your 905 patent?

24 A The 116 patent only is a cleaning machine.
25 And, you know, our box does different things. It has

1 other applications, but one of which is the 905 patent,
2 the debris box, the sloped forward debris box could do
3 vacuuming of stripes. That's one of the things it
4 could do, but that's a cleaning machine in 116. So
5 both do various different applications I guess to be
6 even more specific. 116 has a broad base of
7 applications or could and has a cleaning machine and so
8 does, you know, our box. Our box could debris a
9 cross-section of different coatings.

10 Q So in the summary of your invention in the
11 905 patent, which is Exhibit 201 (sic), Waterblasting
12 201 (sic) --

13 A Okay.

14 Q -- this inventive structure is used with a
15 tractor of the type used to remove pavement markings or
16 coatings from asphalt or concrete roads. So there's an
17 application, and then it goes on to say parking lots
18 and the like by blasting the asphalt or concrete with
19 water under pressure. And just to be complete, it goes
20 on that the technology is also used in removing
21 pavement markings or coatings and built-up runway
22 rubber from airport runways and taxiways as indicated
23 at airport technology dot com. So in that application
24 I just read, it's fair to say that the disclosed
25 invention in the 116 patent and the disclosed

1 embodiment or one of them in your 905 patent are of the
2 same field of invention?

3 MR. PFEIFER: Objection; form.

4 THE WITNESS: They have some similarities, a
5 slight overlap.

6 (Blasters Exhibit No. 1001 was so marked for
7 identification.)

8 BY MR. COHEN:

9 Q So in this field of invention that's
10 disclosed in your 905 patent, what would somebody
11 consider high pressure?

12 MR. PFEIFER: Objection; form.

13 THE WITNESS: State the question again,
14 please.

15 BY MR. COHEN:

16 Q In the field of invention, for example, that
17 your patent, the 905 patent, is directed to for
18 removing markings and coatings from roads, for airport
19 runways, taxiways, you know, we discussed -- you
20 testified earlier about epoxies that need to be
21 removed. I think the term of art is vulcanized rubber
22 for the rubber that is attached to the concrete or
23 asphalt. What would somebody of ordinary skill in the
24 art in this area consider high pressure?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: If you're taking pavement
2 markings off of runways or highways, you know, typical
3 pressure could be, you know, 25,000 psi to 40,000 psi.

4 BY MR. COHEN:

5 Q Would you expect to be able to remove
6 vulcanized rubber from an airport runway using
7 400 psi?

8 A Would you expect to be able to do that?

9 Q Could you?

10 A No. If you're just talking about rubber
11 removal, I mean typical pressures are, you know -- no,
12 you wouldn't typically do that with -- what did you
13 say, 400 psi?

14 Q For example. So then if one of ordinary
15 skill in the art, for example, is going to remove an
16 epoxy stripe from a roadway, what's the minimum pumping
17 pressure they would expect to be able to remove that
18 stripe or coating?

19 A If you're just talking about coating removal
20 and not cleaning, if you're talking about the removal
21 down to the substrate, then you would probably use
22 25,000 to 40,000 psi.

23 Q Okay. So in stripe removal, it would be
24 inaccurate to say removing the stripe from the street
25 is cleaning the stripe off the street?

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: I'm not sure what the question
3 was. It sounded like a statement, and I didn't --

4 BY MR. COHEN:

5 Q These are different cleaning applications.
6 So is it technically incorrect to say removing
7 vulcanized rubber from an airport runway is not
8 cleaning the runway?

9 MR. PFEIFER: Objection; form.

10 THE WITNESS: I mean I would guess I would --
11 you know, I would answer that cleaning is very
12 subjective. Cleaning a surface to one person is
13 different than to another person, you know, because
14 there's a whole different level of cleanliness. You
15 know, so maybe I'm not understanding your question.

16 BY MR. COHEN:

17 Q Okay. Let me ask it this way. You're a
18 technical expert in this field?

19 A Yes.

20 Q And I'll ask you the question. You're asked
21 to clean vulcanized rubber off of a runway.

22 A Okay.

23 Q What sort of surface, for example, would you
24 expect that rubber to be on?

25 A As we talked earlier, I mean typical runways

1 are either asphalt, concrete or steel on an aircraft
2 carrier. That's typical.

3 Q And what sort of pressure would you need to
4 use to remove that vulcanized rubber?

5 MR. PFEIFER: Objection; asked and answered.

6 THE WITNESS: If you're trying to remove it
7 all the way down to the -- what pressure would you
8 use? Anywhere from 15,000 to 30,00, 35,000 psi.

9 BY MR. COHEN:

10 Q So in your declaration if you look on Page
11 10 -- Blasters 1009 is the exhibit.

12 A Okay. Yeah.

13 Q Paragraph 18, which is under the heading of
14 high pressure which is numbered 17 above that, you're
15 saying under the broadest reasonable interpretation --
16 do you agree that's what BRI stands for?

17 A Yes.

18 Q A POSA, a person of ordinary skill in the
19 art, would have understood the term high pressure to
20 mean of or relating to pressures higher than normal
21 especially higher than atmospheric pressure?

22 A Right.

23 Q What's atmospheric pressure?

24 A Atmospheric pressure is the pressure that we
25 live in. It's 14.7. So we're saying anything that's

1 higher than that is high pressure. Anything lower than
2 atmospheric pressure is low pressure.

3 Q Anything lower than atmospheric pressure is
4 low pressure?

5 A It's low pressure.

6 Q So then the water coming out of a shower head
7 is high pressure in your opinion?

8 A Yes.

9 Q And in the field that the 116 patent is
10 concerned with, a person of ordinary skill in the art
11 would understand the term high pressure to mean
12 anything above atmospheric pressure?

13 A They could, yes.

14 Q So what typically comes out of a garden hose
15 pressure? Are you familiar?

16 A City pressure is typically 50 psi.

17 Q And would one of skill in the art be able to
18 expect to be able to remove a marking or a coating or
19 airport vulcanized rubber from these surfaces using a
20 water hose at city pressure of 50 psi?

21 A They use different pressures for different
22 applications. So I mean, you know, NLB is prior art
23 that's there for this specific application of taking a
24 stripe off with pressures up to 40,000 psi.

25 Q But that wasn't my question. I started my

1 question with --

2 A You can't take a robust stripe off a roadway
3 with a garden hose.

4 Q So then in this industry area, one of
5 ordinary skill in the art would understand the term
6 high pressure to start at what range?

7 A I don't know who the individual is.

8 Q Well, you're the expert here today. At what
9 range would --

10 A Are you talking about stripe removal, or are
11 you talking about cleaning?

12 Q I'm talking about being able to remove
13 coatings with coatings being defined as vulcanized
14 rubber on airport runways, epoxy coatings, line
15 stripes, things that are found on roadways.

16 A So the 116 patent is a cleaning machine. So
17 I wouldn't say a coating is a vulcanized rubber. It
18 could be, but that's not limited to that. It could be
19 dirt and grime, you know, and any substance that's
20 spread over a surfaces is how I would describe a
21 coating. So if it's a softer coating, you'd use a
22 lower pressure. If it's a harder coating, you'd use a
23 higher pressure.

24 Q Okay.

25 A But you're specifically talking about stripe

1 removal only. And if you're only talking about stripe
2 removal, then you're going to need to use in that case
3 higher pressure.

4 Q When you read the 116 patent, do you recall
5 that patent discloses that the ranges of high pressure
6 they're talking about is 25,000 to 40,000 psi?

7 A I saw that, yes. I read that.

8 Q Would that disclosed range be consistent with
9 what a person of ordinary skill in the art would
10 consider high pressure to be in this area of
11 technology?

12 A No.

13 Q So you're a person of ordinary skill in the
14 art in waterblasting?

15 A Correct.

16 Q And in waterblasting, what range would you
17 define high pressure for being able to accomplish like,
18 for example, in your 905 patent being able to remove
19 all the disclosed coatings, pavement and runway rubber?

20 MR. PFEIFER: Objection; asked and answered.

21 THE WITNESS: I'm not including pulverized
22 asphalt for removal because that's not the intent.
23 Paint removal, rubber removal, thermal plastic tape and
24 curing compound, if you're just talking about those
25 five, those five specific applications, but it's not

1 limited to that. It's much broader than that. Then,
2 again, the pressures could be 15,000 psi to 40,000 psi.
3 But if you go on to read, it talks -- but this patent
4 is broader based. So if you go on to read, you know,
5 debris, there's other items that are listed here that
6 are being cleaned, and, again, you would use a low
7 pressure. So if you're cleaning grease or grime off a
8 runway, you're going to run very low pressures, still
9 high pressure, but lower pressures.

10 BY MR. COHEN:

11 Q Well, so in your declaration here, from the
12 end of Page 10 and then the top of Page 11, the 116
13 patent while titled stripe removal system doesn't claim
14 a system designed specifically for the removal of paint
15 stripes. And then you go on to say rather the claimed
16 system is simply a cleaning system. Without providing
17 any quantitative limits or ranges on the qualitative
18 high, a POSA would understand that the claimed system
19 is any cleaning system employing a pressure higher than
20 atmospheric pressure.

21 You testified earlier that you are familiar
22 with the range disclosed in the 116 patent of 25,000 to
23 40,000 psi. Why did you not account for that in your
24 opinion? You claim in your opinion that the 116 patent
25 doesn't claim a system design specifically for the

1 removal of paint stripes. If a machine was built based
2 on the 116 patent disclosure, would a pump that
3 operated in a range of upwards of 25,000 to 40,000 psi,
4 would that be sufficient to remove paint stripes?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: No. You can remove stripes at
7 lower pressures than that as well.

8 BY MR. COHEN:

9 Q In that disclosed range, would you be able to
10 remove the epoxy coatings we were talking about?

11 A Yes.

12 Q And the vulcanized runway rubber?

13 A Yes. But again it's a cleaning system, so
14 there's other applications other than just rubber and
15 paint. It's a cleaning machine. So it's taking all
16 different types of different coatings off.

17 Q So if a machine is built based on what's
18 disclosed in the 116 patent, that, for example, has a
19 pump that discharges somewhere in the range of 25,000
20 to 40,000 psi, what applications other than removing
21 coatings that we've been talking about all morning from
22 roadways and vulcanized rubber on airport runways would
23 that be employed to clean?

24 A I mentioned also that, you know, you're
25 cleaning dirt and grime off roads. You're preparing

1 stripes for restriping application which would all be
2 at lower pressures. You're cleaning asphalt to create
3 more friction on a road. You know, there's a whole
4 multitude. And that's the interesting thing with high
5 pressure water as a cleaning system is people use these
6 machines for lots of applications throughout the
7 world. And so the applications are very broad.

8 Q So would it be fair to say that a person of
9 ordinary skill in the art, if they were given the task
10 of cleaning dirt off of the road would not employ a
11 system disclosed in the 116 patent pumping at 40,000
12 psi?

13 A They would not.

14 Q So how do you justify your opinion here
15 rather the claimed system is simply a cleaning system
16 when you're referring to the 116 patent?

17 A I didn't make that determination. That's
18 what it says in 116, that it's a cleaning system.

19 Q That cleans and, for example -- I mean is it
20 correct to say that removing the airport rubber is not
21 cleaning off the airport? I mean would a person of
22 ordinary skill in the art dispute that
23 characterization?

24 A Can I see the 116 patent?

25 MR. PFEIFER: You haven't been provided with

1 that.

2 THE WITNESS: What's that?

3 MR. PFEIFER: You were never provided a copy
4 of that.

5 THE WITNESS: Can I see the 116 patent.

6 MR. COHEN: Do you have a copy of it?

7 BY MR. COHEN:

8 Q I mean I'm asking you what's in your
9 declaration.

10 A I'm saying that, you know, my recollection is
11 it is a cleaning system. That's the way it's defined,
12 you know, from the claims that I reviewed, which was 1
13 through 6 and 10. It's a cleaning system.

14 MR. MCHALE: Here's the patent. Here's a
15 clean copy. Well, actually this is not.

16 MR. COHEN: I don't have a clean copy here.
17 I'm not intending to make this an exhibit.

18 MR. LYTVYN: I could probably provide you
19 with a clean copy. I think I have an extra one here.

20 MR. COHEN: Okay.

21 MR. LYTVYN: So this is exhibit --

22 MR. PFEIFER: Do you want to take a look at
23 it?

24 MR. LYTVYN: Yeah. And we would like to
25 break for lunch, if that's fine.

1 MR. PFEIFER: Do we have a question pending?

2 MR. COHEN: He wanted to review the 116
3 patent, but, yes.

4 THE WITNESS: This talks about the field of
5 the invention, and the invention relates to the field
6 of high pressure cleaning devices for highways,
7 runways, parking decks and other hard surfaces. So
8 it's a cleaning device.

9 BY MR. COHEN:

10 Q Okay. And if you're one of ordinary skill in
11 the art in this field, you're saying other hard
12 surfaces refers to anything under the sun? Is that
13 your testimony?

14 A I'm saying if it can support the vehicle and
15 a tractor, then it's considered a hard surface.

16 Q Okay.

17 A We're not broad reaching here. I mean we're
18 trying to -- we are broad reaching, but it's a cleaning
19 device. One of the things that it does is it cleans
20 stripes --

21 Q Right.

22 A -- or removes stripes or cleans stripes.

23 Q So here's my next question. We're talking in
24 the field of invention which you just read. We're
25 talking about cleaning highways, runways and parking

1 decks. And then the summary of the present invention
2 in column 2 says briefly discloses a cleaning system
3 for removing coatings from a hard surface by a high
4 pressure liquid. Do you see that? So isn't it true
5 that someone of ordinary skill in the art in this
6 field --

7 A Where are you now?

8 Q I'm in the summary of the invention, column
9 2.

10 A Okay.

11 Q -- where further going on --

12 A I mean some of the prior art that I reviewed
13 was the NLB system which does the same thing. So
14 there's prior art out there that we looked at and I
15 looked at that does the same thing.

16 Q So going from what you read the field of the
17 invention to the summary of the present invention,
18 would you agree that we're talking about removing the
19 coatings that are being removed are in this field that
20 you're an expert in, that your patent as well discloses
21 coating removals?

22 MR. PFEIFER: Objection; form.

23 THE WITNESS: No.

24 BY MR. COHEN:

25 Q So one of ordinary skill in the art in your

1 industry wouldn't understand that this is -- that this
2 patent is for removing vulcanized rubber and coatings
3 that are on runways?

4 A I think it does that, but it does other
5 things as well. There's other applications for that
6 machine.

7 Q And then let me --

8 A It says briefly disclose the cleaning system
9 for removing coatings from a hard surface by high
10 pressure liquid. So it's broad based. It's removing a
11 coating, you know, any substance or foreign matter over
12 a surface, you know, with a pressure liquid. So it's
13 more broad. It's much broader than just stripe
14 removal.

15 Q Okay.

16 A It can do more than just stripe removal.
17 It's a cleaning system as is some of the other prior
18 art that's out there. Those are cleaning systems. You
19 know, Jones has a cleaning system. Clemons has a
20 cleaning system. There's a lot of cleaning systems out
21 there that are commonly known.

22 Q But we're talking about the 116 patent right
23 now. And we're talking about your opinion on how one
24 of ordinary skill in the art would determine highway
25 pressure is anything above atmospheric. And further in

1 your declaration, we're back to talking about -- you
2 said the 116 patent while titled stripe removal system
3 doesn't claim a system designed specifically for the
4 removal of paint stripes. Rather the claimed system is
5 simply a cleaning system. So in the 116 patent, I want
6 to direct you to column 3.

7 A Okay.

8 Q And at line 57 in column 1.

9 A Yeah, I am.

10 Q Do you see it says the trailer of 17?

11 A Column 56, you said?

12 Q I'm in the detailed description of the --

13 A Okay. Over here. All right. What number?

14 Q Line 56 or 57 is the paragraph.

15 A Okay. I see it.

16 Q It starts out trailer of 17.

17 A Yes, I see it.

18 Q The trailer 17 is removably attached to the
19 prime mover through a conventional trailer hitch.

20 Mounted on the bed 22 of the trailer is a high pressure
21 fluid pump greater than 25 to 40,000 psi and from 2 to
22 15 gallons per minute.

23 A Okay.

24 Q That's not in your definition of high
25 pressure.

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: Sure, it is. It's above
3 atmospheric pressure.

4 BY MR. COHEN:

5 Q Okay. So if one of ordinary skill in the art
6 was asked to remove vulcanized rubber from an airport
7 runway, could they accomplish that with the disclosures
8 in the 116 patent?

9 A State the question again, please.

10 Q If a person of ordinary skill in the art was
11 tasked to accomplish one of the objectives disclosed in
12 this stripe removal system --

13 A Which of --

14 Q -- which is the 116 patent --

15 A Right. Which objective? Which objective
16 specifically.

17 Q Well, if, for example, we're talking about
18 removing coatings -- or strike that question. Let me
19 ask you this way. If one of ordinary skill in the art
20 were to read the 116 patent, and in column 3, line 57,
21 it says, Oh, the high pressure fluid pump is in a range
22 of 25 to 40,000 psi and pumps at 2 to 15 gallons per
23 minute. What applications other than removing the
24 coatings and airport vulcanized rubber applications
25 would that person of ordinary skill in the art use this

1 sort of machine for?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: For cleaning, cleaning stripes,
4 for roughening of -- the cleaning of grease and grime
5 off runways or highways. You know, there's a whole
6 multitude of applications beyond the limited
7 applications that you're speaking of. Those are very
8 limited, very concise.

9 BY MR. COHEN:

10 Q So --

11 A But it's much broader based because it's a
12 cleaning system. It can do a lot of different things,
13 which is good. That's the way they intended it to be,
14 so they could use it for a multitude of applications,
15 which is the way the system sold.

16 Q So as a technical expert, what would you use
17 to clean with a pump discharging at 2 to 15 gallons per
18 a minute at 40,000 psi?

19 A You asked me that question earlier, and I
20 said thermal plastic or epoxy stripes.

21 Q Are you familiar with what sort of nozzles
22 you would need to pump that pressure at that volume?

23 MR. PFEIFER: Objection; form.

24 THE WITNESS: What type of nozzles?

25 BY MR. COHEN:

1 Q Yes.

2 A Specifically what do you mean by what type of
3 nozzles?

4 Q I mean how would a nozzles have to be specked
5 to handle 40,000 psi at let's say 3 gallons per minute
6 discharge? What would the characteristics of it have
7 to be?

8 MR. PFEIFER: Objection; form.

9 THE WITNESS: At 40,000 psi?

10 BY MR. COHEN:

11 Q Yeah.

12 A They're made of stainless steel.

13 Q Okay. Do you know what diameter the nozzles
14 would be?

15 A There's all different sizes. There are all
16 different sizes. There's a whole multitude of
17 different sizes.

18 Q Well, I mean if you were going to build a
19 cleaning system that included the vacuum tank that's
20 disclosed in your 905 patent to vacuum up the different
21 debris including pulverized asphalt, and you had a pump
22 on there that pumped at 40,000 psi at 3 gallons per
23 minute, what size nozzle would you put --

24 MR. PFEIFER: Objection --

25 BY MR. COHEN:

1 Q -- would you connect to the discharge of that
2 pump?

3 THE WITNESS: It depends on how -- what's
4 that now?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: It depends on how many jets. I
7 mean there could be a whole multitude of how many jets
8 do you want over how wide of a nozzle bar, and there's
9 a lot of different -- that's a very broad question.
10 You know, it depends on how wide your bar is and how
11 many jets you want.

12 BY MR. COHEN:

13 Q Let's just say one jet just to keep it
14 simple. So you're going to put one jet on the
15 discharge of a 40,000 psi pump pumping at 3 gallons a
16 minute, what diameter nozzle would you put on that
17 discharge?

18 A I don't know. I don't know what the size of
19 it is.

20 Q Do you know what exit velocity out of that
21 nozzle it would be?

22 MR. PFEIFER: Objection; form.

23 BY MR. COHEN; .

24 Q Isn't it true that you would have to size
25 that nozzle based on exit velocities?

1 A You would have to size the nozzle to meet the
2 objective of what you're trying to do. So you would
3 size the orifice to the specific application that you
4 want.

5 Q So have you ever built a truck that has a
6 pump on it that discharges at 40,000 psi?

7 A Yes.

8 MR. PFEIFER: Objection.

9 BY MR. COHEN:

10 Q And at what gallons per minute does it
11 discharge?

12 A At various different flow rates.

13 Q Just give me an example of one. Is it in the
14 range of 2 to 15 gallons?

15 A State the question one more time.

16 Q Have you ever built a machine at your company
17 Blasters, Inc., in your capacity as the president --

18 A Uh-huh.

19 Q -- you've also stated in your declaration
20 that you're a technical expert. So have you ever built
21 a machine that has a pump on it that pumps at 40,000
22 psi in the range of 2 to 15 gallons per minute?

23 MR. PFEIFER: Objection; relevance.

24 THE WITNESS: Have I ever built a machine
25 like that, sure.

1 BY MR. COHEN:

2 Q And was that machine used to remove coatings
3 in runway vulcanized rubber?

4 A That's one of the applications it could have
5 been used for.

6 Q And in this machine in your mind that I'm
7 asking you about, how many nozzles does it have?

8 MR. PFEIFER: Objection; relevance.

9 THE WITNESS: It's a polarity of nozzles. I
10 mean there's no answer. There's no specific answer to
11 that. It depends on, you know, what you're trying to
12 do and how many jets there's going to be.

13 BY MR. COHEN:

14 Q So when you build this machine, how do you
15 decide how many nozzles will be on it?

16 A You look at the application. You decide how
17 wide you want it to be, you know, what the objective
18 is, what you're trying to accomplish.

19 Q So give me a specific example of a machine
20 that you've built that has 40,000 psi on it that pumps
21 in a range of 2 to 15 gallons per minute. How many
22 nozzles are on that?

23 MR. PFEIFER: Objection; form; objection;
24 relevance.

25 THE WITNESS: I mean anywhere from, you know,

1 a single jet to, you know, 24 jets, you know, somewhere
2 in that range, you know, or more.

3 BY MR. COHEN:

4 Q Okay. So let's say a single jet system. Are
5 you aware of what the diameter of that nozzle orifice
6 would be?

7 A No.

8 Q How about the 24 system?

9 A It depends on how many gallons. You gave me
10 a broad scope of how many gallons a minute, and again
11 how many gallons a minute, how wide the bar is, how
12 many jets, all that determine the nozzle size.

13 Q Okay.

14 A There's nozzle charts. I mean it's pretty
15 in-depth what you're asking me. So there's nozzle
16 charts that people, you know, people of skill, you
17 know, of ordinary skill in the art would have to use.
18 They'd have to use a chart because it's very technical.

19 Q So just generally, are we talking that
20 nozzles in this application of gallons per minute rate
21 of 2 to 15 gallons would be below an inch? Is it fair
22 that some of these nozzles could be --

23 A Below an inch in diameter?

24 Q Yes.

25 A Yes.

1 Q So it's well below. If we're talking
2 thousandth of an inch for this sort of application, is
3 that how somebody with ordinary skill in the art would
4 size an orifice for one of these nozzles?

5 A Depending on what pressure and flow they're
6 using, it could be a thousandth of an inch, yes, within
7 a thousandth of an inch.

8 Q And are you aware of what the exit velocities
9 are at these high pressures of 40,000 at, you know,
10 3 or 4 gallons per minute, or I should say just the
11 range of 2 to 15 gallons per minute with, you know, an
12 orifice that's in the thousandth range?

13 A No, I don't know the exact number. I mean I
14 could get back to you on that, you know, that speed,
15 that mock rating of what it is when it exits.

16 Q And would you agree that that would be vastly
17 different than a simple cleaning system like a power
18 washer or a street sweeper?

19 A Would what be different, the jet be
20 different?

21 Q Would the requirements? I mean with a
22 cleaning pump that has a 40,000 psi pump on it that's
23 pumping at let's say 5 gallons per minute going to a
24 nozzle --

25 A All right.

1 Q -- let's just say one nozzles at 3 thousandth
2 of an inch?

3 A It would be a simple exchange. I mean it
4 would be a simple exchange of hoses and jets. The
5 higher pressure you run --

6 Q That's not what I'm asking you. I'm asking
7 you would one of ordinary skill in the art take that
8 machine and clean like a football field, for example,
9 turf?

10 A They would throttle the machine down and
11 clean it at a lower pressure. Yeah, the jet could be
12 used.

13 Q So an expert in this field of art, if they
14 wanted to -- if they were tasked with buying a machine
15 for cleaning AstroTurf at a sporting complex would
16 scope out a pump at 40,000 psi and just throttle it
17 down, that's your expert opinion?

18 A It could be used for that application. It
19 could be used for that application by throttling it
20 down. But, you know, if you want to go up in pressure,
21 you need to, you know, handle the hoses and, you know,
22 the whole system -- not the whole system. But you
23 would simply change the hoses and potentially the head
24 to do a different pressure. It would be an exchange of
25 commonly known parts and components that are out there

1 in kind of a rearrangement of how to do it to
2 accomplish the objective.

3 Q Your expert declaration on Page 1 goes on to
4 say -- I'm still within paragraph 18 -- you opine
5 without providing any quantitative limits or ranges on
6 the qualitative term high, a POSA would understand the
7 claimed system is any cleaning system employing a
8 pressure higher than atmospheric.

9 Isn't it true when we went over here in
10 column 3 of the 116 patent, that there are qualitative
11 limits and ranges on how the disclosed machine in the
12 116 patent operates?

13 MR. PFEIFER: Objection; form.

14 BY MR. COHEN:

15 Q So isn't that line in your declaration
16 incorrect?

17 MR. PFEIFER: Objection; form.

18 THE WITNESS: No. It's correct. It's
19 accurate.

20 BY MR. COHEN:

21 Q A person of ordinary skill in the art
22 wouldn't understand that the removal of coatings in
23 conjunction with -- if you go higher in column 3 to
24 line 45, it says the sump 14 is connected to the vacuum
25 pump by hose 16. The intake of a high power vacuum

1 pump capable of approximately 1100 cubic feet per
2 minute is connected to the vacuum tank. Is that
3 drawing a lot of vacuum in your technical expertise?

4 A No. It's a high power vacuum.

5 Q So we're talking about a high power vacuum,
6 and we're talking about a high pressure --

7 A Tell me where you are, please.

8 Q I'm in column 3 right here. And I'm looking
9 at where 45 is and going down.

10 A Okay. I've got it.

11 Q Another component of this is we're talking
12 about a vacuum system that's pulling a vacuum at 1100
13 cubic feet per minute?

14 A Yeah. It's a high power vacuum, correct.

15 Q So one of ordinary --

16 A But it's just an example though. It's not a,
17 you know, qualifying definition. I mean it's not a
18 limiting definition. You know, it's an example of what
19 could be used. And high power is just anything above,
20 you know, normal strength or capacity. That's the way
21 I understand high power to be.

22 Q So you're disputing that this is qualitative
23 limit arranged disclosed in the patent?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: I'm saying it's an example of

1 what could be used.

2 BY MR. COHEN:

3 Q Okay. So it's a range --

4 A It says approximately.

5 Q It's a range --

6 A It says approximately.

7 Q -- of what can be used?

8 A It says approximately.

9 Q Right. So you're talking approximately
10 1100 cubic feet per minute. Would somebody of ordinary
11 skill in the art think the range of there goes all the
12 way down to a household Dust Buster? Isn't it true
13 that there are disclosures of quantitative ranges all
14 throughout this patent?

15 A NLB uses a vacuum that 1,000. So I would say
16 1,000 CFM is approximately the same, you know, range,
17 if you will, qualitative to 1100 CFM. So NLB, which is
18 prior art, referenced them. My statement basically is
19 within range of 1100. NLB uses a vacuum that's 1,000.

20 Q And they use a pump that's 40,000 psi;
21 correct?

22 A Up to 40,000 psi.

23 Q And you're representing that NLB is another
24 competitor in the market in the field of the invention
25 that we're talking about?

1 MR. PFEIFER: Objection; scope; objection;
2 relevance.

3 THE WITNESS: Are they another competitor?

4 BY MR. COHEN:

5 Q Are they a competitor of yours?

6 A Competitor of whose?

7 Q Of yours?

8 A Yes.

9 Q Okay. And are they --

10 A They're a competitor of Waterblasting
11 Technologies as well.

12 Q And the machines that they build, the pumps
13 are in this same field of art that you're an expert in?

14 A They are also cleaning machines, but one of
15 the things they do is stripe removal.

16 Q Okay. So that wasn't exactly my question.
17 But, you know, we're talking about 1100 cubic feet per
18 minute.

19 A Right.

20 Q And you say, well, NLB discloses that, that
21 somebody in this industry who is a competitor who I
22 assume they have people of ordinary skill in the art
23 that work for them designing?

24 A I would assume so.

25 Q And, you know, we talked about a range of

1 25 to 40,000 psi, and you say, well, NLB has a pump
2 like that that's out there.

3 MR. PFEIFER: Objection; testifying.

4 BY MR. COHEN:

5 Q Not my question. My question is those are
6 quantitative limits. When I mentioned quantitative
7 limits, you give me an example. I'm saying isn't it
8 true that those limits are disclosed in the 116 patent?

9 A They are disclosed as an example. The
10 pressure are an example. It's not a limiting
11 definition. It's an example.

12 Q In your expert opinion here, it says that
13 without providing any quantitative limits or ranges, a
14 POSA wouldn't understand reading the 116 patent in its
15 entirety. There are disclosed limits. That statement
16 is incorrect; right?

17 A No.

18 Q So did you consider the disclosures that we
19 previously discussed here in column 3 in --

20 A It's an example.

21 Q -- deriving your opinion?

22 A It's an example. It's not a limiting
23 definition. It's an example. And there is prior art
24 out there that is run at that pressure of -- well, in
25 this case, the high power of the vacuum.

1 Q In terms of high pressure, why would a person
2 of skill in the art, in the technology area that the
3 116 patent is directed to, believe that high pressure
4 could be any limit or any range over atmospheric?

5 A Why would they?

6 Q Yes. Like you're a technical expert. Why
7 did you not note the disclosed ranges in the 116
8 patent?

9 A Because it's a cleaning machine and lower
10 pressures -- much lower pressures can be used.

11 Q Did you write paragraph 18 of your
12 declaration?

13 A It's was a collaborative effort. I was
14 involved in it, yes.

15 Q All the technical contributions or omissions
16 in this case were contributed by you solely?

17 A No. It was a collaborative effort with
18 myself and our attorneys.

19 Q So as a technical expert, you would not
20 understand that the disclosed operating pressures of
21 the device disclosed in the 116 patent are in the range
22 of 25 to 40,000 psi?

23 A No, because it's a cleaning machine. So lots
24 of cleaning is done at a lesser pressure than 25,000.

25 Q Are you familiar with the term file history?

1 A File history?

2 Q Yeah, when a patent is prosecuted --

3 A Is there other language for that?

4 Q I mean that's the term of art. So any office
5 actions, responses by the patent owner would all go in
6 a file, and that is the file history. Are you familiar
7 with that?

8 A I've heard the term. I didn't review it
9 before we sat down today.

10 Q Did you review it before you authored your
11 expert declaration?

12 A I reviewed it, but I didn't -- I don't think
13 I went into -- I didn't deem it as relevant. It didn't
14 seem relevant.

15 Q Did you review the file history for any
16 admissions or disclosures of limits or ranges or
17 discussions of the operation of the disclosed claims in
18 the 116 patent?

19 A No.

20 Q If there was disclosures in the file history,
21 would you agree that reviewing those would be important
22 in deriving an opinion?

23 A No, I wouldn't.

24 Q Why not?

25 A I just didn't -- it didn't seem relevant, and

1 so it wouldn't have changed my position in the
2 declaration.

3 Q Are you aware that any admissions or
4 disclosures in a file history are relevant?

5 A I guess it's a case by case.

6 Q Well, I mean I'm asking what's your
7 understanding of that?

8 A I guess they could be relevant.

9 Q Oh, is it your understanding that they are?

10 A They could be.

11 Q Well, if they could be, then why did you not
12 review the file history in it's entirety for these sort
13 of details?

14 A I mean I wrote as the, you know -- we wrote
15 the declaration. I wrote the declaration. We
16 presented it, and, you know, the petition, and
17 basically we moved forward. I looked at a few, you
18 know, of these. I looked at the declaration, reviewed
19 it a few times and came in today. I wrote it, so I was
20 familiar with it, so I didn't have to prepare much.

21 Q We talked about at the beginning of this
22 cross-examination, in your declaration, you're holding
23 yourself out as a technical expert, and I said aren't
24 you an interested technical expert, and you said no. I
25 removed the bias from this in my evaluation. Now, here

1 we're talking about the file history, and we're talking
2 about quantitative limits that are included both in the
3 patent and in the file history, and you didn't review
4 the file history.

5 MR. PFEIFER: Objection; testimony.

6 THE WITNESS: I reviewed the patent, the 116
7 patent. And I reviewed, you know, this patent, the 116
8 patent and basically claims 1 through -- and that's how
9 I prepared myself, 1 through 6 and claim 10.

10 BY MR. COHEN:

11 Q So then your declaration here about not
12 providing any quantitative limits has flaws to it since
13 you did not consider everything that relates to the
14 those quantitative limits or ranges?

15 MR. PFEIFER: Objection; testimony.

16 THE WITNESS: My declaration was my
17 declaration.

18 BY MR. COHEN:

19 Q I mean you're an interested witness?

20 A Yes.

21 Q You're an interested technical expert?

22 A Yes.

23 Q And I'm asking you, did you review materials
24 that are relevant to your opinion?

25 A Yes.

1 Q And so you reviewed the file history of the
2 116 patent in its entirety?

3 A I said I looked at it. I said I reviewed it,
4 and that was it. And I said it didn't seem relevant to
5 my statement in the declaration.

6 Q So did you read anything in the file history
7 about quantitative limits on pump pressure, for
8 example?

9 A In the patent, it talked about -- I think it
10 talked about 25,000 to 40,000 psi. I wasn't trying --
11 we weren't trying to beat the patent, or, you know,
12 that wasn't the goal was to beat the patent of
13 Waterblasting Technologies. The goal was to build the
14 best system available. So we looked at the prior art,
15 and we looked at, you know, commonly known components
16 that are on the market and rearrangement, and we built
17 what we perceived to be the best system.

18 Q You're not answering my question. I'm asking
19 you, you're building an expert opinion here. I'm
20 saying -- and you testified that maybe some of the file
21 history was irrelevant. And I'm asking you, did you
22 read anything in the file history related to
23 quantitative limits or ranges because your expert
24 opinion here is that the 116 patent and the related
25 disclosures do not provide any quantitative limits or

1 ranges. So if that file history disclosed quantitative
2 limits or ranges, isn't it possible that this whole
3 opinion here is incorrect or incomplete?

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: We saw it as an example and not
6 a limiting definition is the way we saw it.

7 BY MR. COHEN:

8 Q So you keep saying we, and I'm asking you a
9 specific question about your expert declaration. So in
10 terms of how you evaluated quantitative limits or
11 ranges, did you evaluate any quantitative limits or
12 ranges related to the 116 patent outside of the
13 physical patent itself?

14 A I reviewed it but didn't see it -- I didn't
15 deem it as relevant.

16 Q So the answer is yes, that did you notice in
17 office action, for example, that the patent owner's
18 representative talked about qualitative limits or
19 ranges?

20 A I don't recall that, no.

21 Q You don't recall? You don't recall if you
22 read it, or you don't recall if you made the decision
23 to include it in your opinion?

24 A I don't recall -- I don't recall what the
25 qualitative limits were.

1 Q Would you agree that for a technical expert's
2 opinion to be objective, all the facts and
3 circumstances should be included in an opinion?

4 A It was a broad-based approach. I mean I
5 looked at a lot of technical information, so yes.

6 Q So as a technical expert, do you often review
7 documents for accuracy by skimming over them?

8 A I'm a detailed person.

9 Q So if you're a detailed person and your
10 opinion says that the 116 patent doesn't provide any
11 qualitative limits or ranges, wouldn't, for example,
12 disclosing high pressures as 25,000 to 40,000 be a
13 quantitative limit or range?

14 A I read it as an example, not a limiting
15 definition is the way I understood it. Maybe I
16 misunderstood it. You know, maybe I misunderstood what
17 it said.

18 Q So then if you misunderstood it, that is a
19 quantitative limit or range?

20 A I think it was a -- I read it as, you know,
21 an example, not a limiting definition, as an example of
22 what the pressure that could be used. This is a
23 cleaning system. It can be run at much lesser
24 pressures than 25,000 psi.

25 Q That's not my question. I'm asking you what

1 method did you derive this opinion? You're saying
2 that --

3 A As a person of the ordinary skill in the art,
4 that's how I derived that opinion.

5 Q Would you say a person of ordinary skill in
6 the art would read the 116 patent and the corresponding
7 file history and say there's no quantitative limits or
8 ranges related to the term high?

9 A I would say that it was used as an example.
10 And, you know, if you're a person of ordinary skill in
11 the art, you would know that it can be used -- that
12 that machine can be run at much lower pressures for
13 other cleaning because it's a cleaning machine for
14 other applications.

15 Q Okay. But you chose to pull the term high
16 pressure out and discuss it in a paragraph by itself.
17 So high pressure you say is anything above atmospheric
18 because there's no provided quantitative limits. Isn't
19 that incorrect? There are quantitative limits?

20 A It shows it as an example. It states an
21 example in the 116 patent of 25,000 to 40,000 psi, but
22 that was an example of where it could be run.

23 Q And it's also true that those quantitative
24 limits are not discussed by you at all in your opinion?

25 A Not in my declaration.

1 MR. PFEIFER: I guess we can break for
2 lunch. How long do you want?

3 MR. LYTVYN: How much longer do you guys
4 anticipate going?

5 MR. COHEN: I don't know. It depends.

6 MR. LYTVYN: Well, then I guess let's take a
7 lunch where we can actually get some food. So maybe an
8 hour?

9 MR. COHEN: That's fine.

10 (Lunch recess was taken at 12:40 p.m. and
11 returning at 1:35 p.m.)

12 CROSS-EXAMINATION (Continued)

13 BY MR. COHEN:

14 Q We're back on the record. Just a question I
15 might have forgotten to ask earlier. What's your
16 financial interest in Blasters, Inc.?

17 A I'm a partner in the business.

18 Q And what does that entitle?

19 A It entitles ownership.

20 Q What percent ownership do you have?

21 A My dad just passed away here recently, and
22 we're reworking that.

23 Q Sorry to hear about the passing of your
24 father. Prior to his passing, what was your percentage
25 of ownership?

1 A It was 44 1/2 percent.

2 Q And do you know what your anticipated
3 ownership might be, I'm assuming subsequent to the
4 handling of your father's estate?

5 A It's to be determined. Either a 50/50 or a
6 minority ownership.

7 Q But you anticipate the 44 1/2 half to
8 increase?

9 A Potentially, yeah. Yeah. Most likely, yes.

10 Q Okay. I'd like to direct your attention to
11 Page 126 of your declaration in Exhibit Blasters 1009.

12 A Okay.

13 Q Paragraph 23 is talking about the term
14 connected to?

15 A Yes.

16 Q And then you give an opinion of what the term
17 connected to means; correct?

18 A Correct.

19 Q And that's based on a case, and the case in
20 your declaration is Pacific Surf Designs, Inc., versus
21 SurfWaves, Limited and the citation for that is
22 2017 WL 506465, and it's the Patent Trial and Appeal
23 Board, 2017, (citations and quotations omitted). So
24 you reviewed that case?

25 A Yes.

1 Q And what is that case about?

2 A I don't recall right at this point.

3 Q Do you recall the case being a patent case?

4 A I have reviewed a lot of different things. I
5 don't recall that one. I mean I understand connected
6 to, you know, directly or indirectly in length, but I
7 don't recall the specifics of that case.

8 Q You don't recall the specifics because you
9 didn't read the case, because you forgot what the case
10 said? You don't recall because this is not something
11 you contributed to your expert declaration? I mean
12 what is the root of your confusion?

13 A I just don't recall it. I reviewed it, but I
14 don't recall the basis of that. I reviewed a lot of
15 different information.

16 Q Do you recall -- assuming this is a patent
17 case, do you have any reason to dispute that this
18 wasn't involving a patent?

19 A No.

20 Q Do you recall if the patent at issue in this
21 case had anything to do or was related to the field of
22 invention that the 116 patent was directed to?

23 A I think it had some relevance. That's why I
24 referenced it.

25 Q So what's your basis for coming up with this

1 opinion?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: I mean, you know, connected to,
4 you know, is an articulated link. I mean different
5 terms have some similarity like that. I don't recall
6 that case specifically. So I can't respond. I don't
7 remember.

8 BY MR. COHEN:

9 Q So as you testify here today, you don't
10 remember the basis for your opinion of the term
11 connected to?

12 A Can you reference that case for me? Can you
13 show that to me? Do you have it?

14 Q I don't have it handy. I'm asking you if you
15 read it. It's your opinion.

16 A I read it, but I don't have it. I don't
17 recall what it said.

18 Q Was this related to cleaning apparatuses that
19 had high pressure pumps on them, high vacuum pressures,
20 or is it some other patent-related case -- unrelated
21 case?

22 A I think it was unrelated. I think it had
23 relevance to this application or, you know, I wouldn't
24 have referenced it.

25 Q Relevance based on what?

1 A It had some commonality.

2 Q And what is that commonality?

3 A I don't recall. I don't recall that specific
4 case.

5 Q Okay. And you don't recall any facts and
6 circumstances of that case?

7 A I don't. For some reason, I'm having a blank
8 on that case.

9 Q Do you recall why there's no description in
10 your opinion on what this term means related to that
11 case?

12 A I don't recall, no.

13 Q Do you recall making a determination of what
14 formed this part of your opinion?

15 A I just don't recall that specific case, so
16 no, I don't have a response for you.

17 Q So that's a case you cited. So aside from
18 the case cited, which you don't seem to recall, what's
19 the basis for your opinion as it is articulated here
20 today?

21 A I just don't recall the case. I mean I just
22 don't recall that case. I mean this was done -- this
23 declaration was done a long time ago. A lot has
24 happened since then. I don't recall that particular
25 case. I can't respond. I don't want to tell you

1 something that's incorrect.

2 Q Well, I'd like you to tell me something that
3 is correct, and I'm asking you what's the basis for
4 this opinion. So let me ask you this way. When you're
5 saying connected to in this art area --

6 A Connect to is, you know, an articulating
7 link. It could be a pin. Basically it's different.
8 It's different connection points where you join two
9 components which allows movement. So there's a pin.
10 There's horizontal movement. There's vertical
11 movement. There's pins that allow as the connection
12 points and links, and it allows articulation of the
13 head.

14 Q And that's another term that you propose for
15 construction, which I believe is consistent with what
16 you just testified to, which is in that paragraph. And
17 I don't take issue with that at this point. My
18 specific question I'm asking you is you have a
19 definition here talking about directly or indirectly
20 joined. So how would components in the field of high
21 pressure water cleaning devices be indirectly joined?

22 MR. PFEIFER: Objection; form.

23 THE WITNESS: How they're indirectly
24 connected is basically from a -- you have like a
25 vacuum. You have a vacuum power unit that connects to

1 the vacuum debris box indirectly. The hose goes from
2 the top all the way out to the head of the utility
3 tractor. So it's indirectly connected. So it goes
4 from the vacuum power unit indirectly to the vacuum
5 debris box. From the vacuum debris box, the hose goes
6 out and goes to the head of that of the tractor. So
7 it's an indirect connection. So a direct connection
8 would be like the high pressure hose. It goes from the
9 pump directly to the head of the tractor. So that's
10 the difference between indirectly connected and
11 directly connected.

12 BY MR. COHEN:

13 Q But you would agree that your example of a
14 pumping system, the entire system is connected from the
15 pump to the discharge nozzle --

16 MR. PFEIFER: Objection; form.

17 BY MR. COHEN:

18 Q -- or the vacuum pump is connected from the
19 suction head all the way through to the vacuum tank?

20 A You said through the system. Okay. So one
21 question at a time. So the high pressure pump. From
22 the high pressure pump, the hose travels to the head of
23 the tractor. So from the truck side, the high pressure
24 pump has a hose. The hose goes to the head of the
25 tractor. On the vacuum power unit, the vacuum hose

1 goes to the tank, and from the vacuum tank is an
2 additional hose that goes down to that of the tractor.

3 Q Okay.

4 A And so that's the difference between
5 indirectly and directly connected. So it's two
6 components being connected.

7 Q And you agree that that is not articulated in
8 your opinion, the explanation, the explanation you just
9 testified to?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: It just states connected, an
12 indirect connection or a direct connection. That's
13 what I submitted.

14 BY MR. COHEN:

15 Q Right. And you just testified to a more
16 detailed explanation of what indirect is. And I asked
17 you yes or no, is it correct that that explanation did
18 not make it into your declaration of what you testified
19 to.

20 A What I just said? What I just said --

21 Q Yeah.

22 A -- about the vacuum --

23 Q Yes.

24 A -- and the high pressure?

25 Q Yes.

1 A No, it was not.

2 Q Okay.

3 A It wasn't there, no.

4 Q And you cite to an indirect connection
5 definition from a case that you don't recall the
6 details of?

7 A Correct, I don't recall the details of that
8 case.

9 Q So did you review your declaration prior to
10 today?

11 A I did.

12 Q And you did not review any of the cites here
13 such as this case of Pacific Surf Designs?

14 A I reviewed the declaration a few times to
15 prepare myself for today. I wrote it, and I just don't
16 recall what Surf Designs versus SurfWaves, what that
17 case is about.

18 Q So in preparation for being asked a question
19 about indirect connections, is it fair to say that you
20 didn't prepare to answer that question today?

21 MR. PFEIFER: Objection; form.

22 THE WITNESS: I wouldn't say I didn't
23 prepare. I did prepare, and I just can't respond to
24 that case.

25 BY MR. COHEN:

1 Q All right. Moving along to your declaration
2 here, on Page 13, numbered paragraph 27 is in quotes,
3 high power vacuum pump, and underneath that, number 28
4 numbered paragraph, which goes onto Page 14, the second
5 to the last sentence on Page 14 of paragraph 28, and we
6 started -- you alluded to this before the lunchtime
7 break when we were talking about the 116 patent. In
8 your opinion here, you said the claims of the 116
9 patent do not impose any numerical ranges or other
10 quantitative limitations on the qualitative term high
11 power. Thus the term high power vacuum pump should be
12 construed as a vacuum pump capable of removing liquid
13 and substances from a surface and conveying them to the
14 vacuum tank. Now, we established earlier, correct, on
15 the record that you did not review the file history of
16 the 116 patent; correct?

17 MR. PFEIFER: Objection; form.

18 THE WITNESS: State the question again.

19 BY MR. COHEN:

20 Q The question is you testified earlier that
21 you did not review the file history of the 116
22 patent --

23 MR. PFEIFER: Objection; form.

24 BY MR. COHEN:

25 Q -- in preparing your declaration?

1 A I said I reviewed it. I reviewed it, and
2 basically it didn't seem relevant to this, to what
3 we're talking about today.

4 Q Right. And then earlier you had mentioned
5 NLB for disclosures of a high pressure pump as well as
6 a high power vacuum pump. And again I'm going to
7 direct your attention to the 116 patent, column 3,
8 starting at line 45 in column 1 -- excuse me -- column
9 3, where it says the sump is connected to the vacuum
10 pump by hose 16. The intake of a high power vacuum
11 pump capable of approximately 1100 CFM, cubic feet per
12 minute, is connected to the vacuum tank.

13 You wrote in your declaration that the 116
14 patent doesn't impose any other numerical ranges or
15 other qualitative limitations -- excuse me --
16 quantitative limitations for a person of ordinary skill
17 in the art to consider. Isn't that a quantitative
18 limitation?

19 MR. PFEIFER: Objection; form.

20 THE WITNESS: It's an example. It's not
21 defining in my opinion. It's an example of what could
22 be used. And, yes, the NLB patent -- excuse me -- the
23 NLB prior art used 1,000 psi. So it's an example.
24 It's not a defining -- I said it earlier value. It's
25 not a defining value.

1 BY MR. COHEN.

2 Q So is this part of your declaration
3 inaccurate as well, that the 116 patent does not impose
4 any numerical ranges?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: I see it as an example, just
7 merely an example.

8 BY MR. COHEN:

9 Q So there's no discussion in your proposed
10 definition of a high power vacuum pump about the
11 quantitative limitations that are disclosed in the
12 detailed description of the invention in the 116
13 patent?

14 MR. PFEIFER: Objection; form.

15 THE WITNESS: You mean the quantitative
16 values of 1100 CFM?

17 BY MR. COHEN:

18 Q Yes.

19 A No, it doesn't state that.

20 Q So you don't consider that -- so one of
21 ordinary skill in the art wouldn't consider a high
22 power vacuum pump disclosed approximately 1100 cubic
23 feet per minute as a range of high pressure pumps?

24 MR. PFEIFER: Objection, form.

25 THE WITNESS: I mean high power, it's -- you

1 know, anything above high power is anything above
2 normal capacity and normal strength is the way that I
3 interpreted that's, and that's the opinion that I
4 gave.

5 BY MR. COHEN:

6 Q So what's normal strength?

7 A I mean, you know, there's lots of different
8 vacuums with lots of different capability. So, you
9 know, 1100 CFM is an example of what -- it's limiting.
10 You know, it's an example of what -- it's not a
11 defining limitation. And basically, you know, if 1,000
12 CFM was used in the prior art by NLB, that's what they
13 used for stripe removal. This is a cleaning system in
14 claims 1 through 6 and claim 10, the ones we're talking
15 about here. All 7 of those claims, 1 through 6 and 10
16 all start with a cleaning system.

17 And my interpretation and opinion in my
18 declaration was stated that -- yeah, it says 1100 CFM,
19 but as a cleaning system, high power is anything above
20 normal strength and capacity. And I didn't interpret
21 it, and my opinion was stated so that I didn't see it
22 important to get into the specifics. And if you want
23 to get into the specifics, NLB does specifically state
24 in their prior art, that 1,000 CFM was used.

25 Q And again that's not my question. You are

1 testifying to your opinion on obviousness ahead of my
2 questions, and it's not my question. You testified at
3 the very beginning of this cross-examination, that you
4 removed the bias, so you could be a technical expert?

5 A Yes.

6 Q I'm asking you technical questions. You
7 submitted that you as a technical expert in this field
8 would understand what a person of ordinary skill in the
9 art would understand. I'm asking you that now. High
10 pressure, if someone of ordinary skill in the art is
11 reading the 116 patent where it's talking about high
12 power vacuum pumps capable of approximately 1100 cubic
13 feet per minute, is that something a person of ordinary
14 skill in the art would consider high pressure or high
15 power?

16 A Not necessarily.

17 Q So what would one of ordinary skill in the
18 art consider high power?

19 A Any vacuum that has capability of negative
20 pressure to lift water and whatever type of debris
21 they're trying to lift. That would be high power.

22 Q So a person of ordinary skill in the art is
23 reading the 116 patent --

24 A But you're trying to read it that it's just
25 stripe removal. This is a cleaning system. So when

1 you clean different surfaces and cleaning different
2 materials, it takes less to lift it. So at 1100 CFM
3 for a stripe removal machine may be needed, but to lift
4 something that's lesser in required capability, you
5 wouldn't use a vacuum so high.

6 Q Okay. So in the 116 patent -- and I'm going
7 to read from different portions here, and then I'll ask
8 a question.

9 A Tell me where you are.

10 Q We started earlier on column 1, in the field
11 of the invention. And in the field of invention, this
12 invention relates to the field high pressure water
13 cleaning devices for highways, runways, parking decks
14 and other hard surfaces. Then throughout the patent
15 and to get into the prior art, the prior art talks
16 about in column 1, starting at line 52, talking about
17 NLB markets a high pressure water jet system for
18 removing paint from pavement under the name StarJet.
19 Are you familiar with that?

20 A Yes.

21 Q And if you go into column 2, we have NLB
22 Corporation also has another system marketed under the
23 mark of StripeJet. Are you familiar with that?

24 A Yes.

25 Q That is a self-propelled tractor with a blast

1 head on the front of the tractor?

2 A Correct.

3 Q And then another stripe removal system is
4 marketed by the Blasters Corporation. Is that you at
5 the time?

6 A Yes.

7 Q And you're familiar obviously with that
8 device?

9 A Yes, I am.

10 Q So this patent is an improvement on those
11 devices that's you're familiar with?

12 MR. PFEIFER: Objection; form.

13 BY MR. COHEN:

14 Q Would you agree with that?

15 A I would not agree with it. I would say that,
16 you know, this technology of Waterblasting
17 Technologies, I would openly say that it is very
18 similar to that of the StarJet and StripeJet technology
19 with striking resemblance.

20 Q So if we're talking about a person of
21 ordinary skill in the art reading the 116 patent --

22 A Right.

23 Q -- is it fair to say that that person would
24 have a knowledge in this area of high pressure coating
25 removals?

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: Would have experience and
3 knowledge in that of the StarJet and StripeJet and the
4 Blasters machine?

5 BY MR. COHEN:

6 Q Yes.

7 A Potentially.

8 Q Or the least the technology involved in
9 constructing one of those machines?

10 A If they're in the field for four to five
11 years, they probably would be aware of it, yes.

12 Q And that's consistent with your opinion of
13 what a person of ordinary skill in the art is in your
14 declaration?

15 A Correct.

16 Q So moving along in column 2, starting at
17 line -- about line 23, summary of the present
18 invention, and it's starts briefly disclosed is a
19 cleaning system for removing coatings from a hard
20 surface by high pressure liquid. The system employes a
21 liquid reservoir connected to a high pressure pump for
22 directing ultra high pressure water through a blast
23 head mounted on a self-propelled mobile frame. Okay?
24 So we're still talking about ultra high pressure
25 throughout the application.

1 MR. PFEIFER: Object; testifying.

2 THE WITNESS: I don't believe they talked
3 about ultra high pressure all the way through the
4 system.

5 BY MR. COHEN:

6 Q Well, it's mentioning ultra high pressure,
7 and I'm just laying a foundation --

8 A You said it was mentioned all the way
9 through. It's not mentioned all the way through. It's
10 the first place I believe that it's mentioned.

11 Q All right. When we go into column 3, and
12 again we're down in column 3, line 57, the trailer 17
13 is removably attached to the prime mover through a
14 conventional trailer hitch. Mounted on the bed of the
15 trailer is a high pressure fluid pump greater than
16 25,000 to 40,000 psi and from 2 to 5 gallons per
17 minute. Would a person of ordinary skill in the art
18 consider that range ultra high pressure?

19 A Would they consider 25,000 to 40,000 ultra
20 high pressure?

21 Q Yes.

22 A No.

23 Q So what would a person of ordinary skill of
24 the art according to your declaration define ultra high
25 pressure?

1 A Ultra high pressure is 30,000 to 40,000.

2 Q Okay. So how would you quantify 25,000 psi?

3 A I would quantify it all as high pressure
4 myself, but I mean potentially in the industry, you
5 know, it would be discussed as 30,000 to 40,000.

6 Q Okay.

7 A But it's all high pressure. All of it is
8 considered high pressure water. When somebody talks
9 about, you know, this equipment, it's considered a high
10 pressure system.

11 Q So one of ordinary skill in the art wouldn't
12 consider a 1,000 psi system to be within the range
13 disclosed in this patent; is that true?

14 MR. PFEIFER: Objection; form.

15 THE WITNESS: 1,000 psi would not be
16 considered ultra high pressure as a person of ordinary
17 skill in the art.

18 BY MR. COHEN:

19 Q And the same question for vacuum. I mean
20 would somebody of ordinary skill in the art consider
21 something that's drawing 50 cubic feet per minute
22 considered high power?

23 A I would say they would, yes.

24 Q So I mean how low do you have to go when
25 talking about vacuum pumps before it's a low power

1 vacuum pump?

2 A I don't know what that limitation would be.
3 I don't know where you would start to say it's a low
4 power vacuum.

5 Q So in your declaration, you say --

6 A I think we're only talking about high power
7 vacuum, and we just said it was anything above normal
8 or normal capacity or capability is the way I
9 interpreted it, and that's the opinion I gave was a
10 high power vacuum was anything above, you know, typical
11 normal.

12 Q So what would a person of ordinary skill in
13 the art consider normal?

14 A I don't know, 50 CFM, 100 CFM.

15 Q And based on reading that patent, that's your
16 opinion, that that's what one of ordinary skill in the
17 art --

18 A Yes.

19 Q -- would consider normal?

20 A Yes.

21 Q And it's correct that you don't discuss that
22 analysis at all in your declaration in your proposed
23 claim construction for a high power vacuum pump?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: I don't get into details with

1 what's normal power or high power, into those details,
2 no. I talk about high power having a greater than
3 normal strength or capability.

4 BY MR. COHEN:

5 Q So would you agree that as a technical
6 expert, this is intended to be a technical document, a
7 technical opinion?

8 A Well, the technical opinion was based on what
9 high power was and not normal power.

10 Q Right. But you're making a lower limit of
11 high power normal strength, and now I'm asking --

12 A Only because you're asking me.

13 Q Exactly, because you put forth a declaration
14 as a technical expert. I'm asking you the technicals.
15 You're claiming that you removed the bias from your
16 opinion. And here we were, and I'm asking you, and
17 you're not answering the questions.

18 A I did answer the question.

19 Q So what would a person of ordinary skill in
20 the art consider normal in light of reading the patent?

21 MR. PFEIFER: Objection; asked and answered.

22 THE WITNESS: I already answered the
23 question.

24 BY MR. COHEN:

25 Q Why wouldn't somebody of ordinary skill in

1 the art take into account those numerical ranges and
2 quantitative limitations when doing an analysis of what
3 the claimed ranges are?

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: I didn't think it was relevant
6 or I would have stated an opinion on it.

7 BY MR. COHEN:

8 Q You didn't think it was relevant to the
9 definition you need to draw upon this prior art or --

10 A Not that I would need, but as a person of
11 ordinary skill in the art.

12 Q So you considered these technical values and
13 limitations when you were preparing this report?

14 A I read Patent 116.

15 Q And you decided not to give an analysis of
16 any of the detailed technical ranges disclosed in the
17 116 patent?

18 A I discuss it here. It says that Patent 116
19 discloses a specific embodiment of having a vacuum pump
20 with an intake capable of approximately 1100 CFM. So
21 it is mentioned.

22 Q So what is your basis for making the
23 statement that claims that the 116 patent do not impose
24 any numerical ranges or other quantitative limitations
25 on the qualitative term high power?

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: It's a cleaning machine. And
3 claims 1 through 6 and 10 all say it's a cleaning
4 machine. And, you know, it has other applications, and
5 lesser capable vacuums can be used. And so we stated
6 it. I stated it, 1100 CFM, but it wasn't a -- it was
7 an example of the CFM that was used, not a -- not if it
8 wasn't a defining limitation.

9 BY MR. COHEN:

10 Q And you don't recall reading anything in the
11 file history of the 116 patent that would address these
12 numerical ranges or quantitative limitations of these
13 claims?

14 A I reviewed the claim history, and basically
15 it's -- you know, again, I read through the 1100 CFM.
16 It was not a -- it was an example given of a CFM that
17 was used most likely for stripe removal only. And this
18 is a cleaning machine that does other things that
19 require a lesser vacuum shown by other examples of
20 prior art in my declaration.

21 Q So did you contribute all of the technical
22 aspects that made it into your opinion that forms
23 paragraph 28?

24 A It was a collaborative effort.

25 Q And just for record, who collaborated? What

1 other experts collaborated in your technical aspects of
2 your declaration?

3 A Just myself and the two attorneys, our two
4 attorneys that are present today.

5 Q All right. I'm going to show you or I'm
6 going to mark Blasters 1002. Exhibit Blasters 1002 is
7 currently in front of you. Do you recognize this?

8 A Yes, I do.

9 (Blasters Exhibit No. 1002 was so marked for
10 identification.)

11 BY MR. COHEN:

12 Q All right. And this is one of the first
13 references that you claim as prior art --

14 A Correct.

15 Q -- in your declaration?

16 A Yes.

17 Q And what is Jones?

18 A What is Jones?

19 MR. PFEIFER: Objection; form.

20 BY MR. COHEN:

21 Q So do you have any reason to dispute that
22 Jones is an artificial turf cleaner that relates to a
23 cleaning apparatus used to clean large fields having
24 artificial turf?

25 A No, I wouldn't object to that.

1 Q And I assume you've reviewed this patent
2 prior to preparing your declaration?

3 A I have.

4 Q And I'll direct your attention to column 2.
5 And just so the record is clear, Blasters 102 (sic) is
6 the United States patent to Jones, and it's Patent
7 Number 3,902,219. And column 2, line 62 -- well,
8 actually I'll just -- well, it's what would be about
9 line 57 starting with cold water is supplied to line 11
10 shown in figure 6 from any suitable source on the field
11 being cleaned and is fed through an electrically
12 operated pressure booster pump which builds the
13 pressure of the water to approximately 200 pounds per
14 square inch. Do you see that?

15 A Yes.

16 Q And then this pressurized water is fed
17 through piping to the heater where is it heated to
18 approximately 180 degrees Fahrenheit.

19 MR. PFEIFER: Objection; form.

20 BY MR. COHEN:

21 Q Do you see that?

22 A Yes.

23 Q Now in comparing to the prior art background
24 that's disclosed in the 116 patent, which we discussed
25 earlier including one of your own stripe removal

1 systems, is this analogous art to what's disclosed in
2 the 116 patent?

3 A Yes.

4 Q Why?

5 A Because it's a utility truck that has a
6 tractor. It's a straight truck with a tractor. It has
7 a blast head with an articulating link, and it's a
8 cleaning machine that has a vacuum and uses high
9 pressure water.

10 Q Okay.

11 A So it's similar prior art to the claims in
12 the 116 patent.

13 Q So a person of ordinary skill in the art in
14 the field in which you're a technical expert, they
15 would be able to remove coatings upon roadways and
16 vulcanized rubber on airport runways using the Jones
17 reference?

18 A The Jones machine is at 200 psi, so no, you
19 wouldn't. They'd have to use an exchange of the NLB
20 system with higher pressure. And so no, you'd have to
21 exchange the pump of NLB to be able to do that. But
22 again it's common components that are available on the
23 mark, and it's a rearrangement of those common
24 components.

25 Q So you're saying that the pump in the Jones

1 reference pumping at 200 pounds per square inch is
2 similar components to what is disclosed in the 116
3 patent in the range of a pump that can pump 25 to
4 40,000 psi?

5 A I'm saying it's a positive displacement
6 pump. So it's a positive displacement pump that is in
7 the 116 patent, and it's a positive displacement pump
8 in the NLB patent. And it's simply an exchange of
9 commonly known components again from the Jones machine,
10 utilize the NLB machine, and that would give you that
11 of the 116 patent.

12 Q So if a person of ordinary skill in the art
13 was trying to solve the problem of removing vulcanized
14 rubber from an airport runway, for example, they would
15 expect to be able to utilize the Jones reference in
16 combination with a 40,000 psi pump disclosed by NLB?

17 A Yes, they could do that.

18 Q How? What would their motivation to combine
19 those elements be?

20 A The motivation would be to have a better
21 machine to improve the system of that of the Jones.

22 Q Technically speaking how would you expect to
23 mount a 40,000 psi pump onto this Jones referenced
24 tractor?

25 A Well, you wouldn't mount it on the tractor.

1 You would mount it on the utility truck, the truck
2 that's with it.

3 Q So that's the same pump disclosed here that's
4 disclosed in the 116 patent?

5 A It's a positive displacement pump.

6 Q Is it the exact same pump that's disclosed?

7 A I can't -- I don't know.

8 Q Well, I mean you're --

9 A It's most likely not, no, but neither is the
10 NLB pump. But it's not the same pump, but it does
11 40,000 psi.

12 Q So do you not know?

13 A No, I know. It's probably not the same pump,
14 but they all are positive displacement pumps. So it's
15 an exchange of components from the Jones machine simply
16 rearranging it and putting the pump of that of NLB on
17 it. And the NLB pump is exactly the same pump of that
18 of the 116 patent.

19 MR. COHEN: I'd like to mark this as Blasters
20 1003.

21 (Blasters Exhibit No. 1003 was so marked for
22 identification.)

23 BY MR. COHEN:

24 Q I've handed you what's been marked as
25 Blasters 1003. It's a U.S. Patent to Breither, Patent

1 Number 3,011,206. Are you familiar with this patent?

2 A Yes, I am.

3 Q And this is a street sweeper patent?

4 A Yes, a cleaning system.

5 Q A patent to a --

6 A It's a vehicle for cleaning streets.

7 Q A vehicle for cleaning streets. Are you
8 aware of what pressures a street cleaner discharges its
9 water at?

10 A Our interest in the -- my interest in the
11 Breither system is the tanks. Simply the Jones machine
12 used the municipal water supply, so the water source at
13 the job site; whereas, Breither was a more mobile
14 portable tank. And it used two tanks of a sump and a
15 reservoir which enables you also to keep the same
16 center of gravity. So our end motivation was to use
17 these tanks on the Jones prime mover truck, the larger
18 service truck. That was our motivation. And why would
19 we do that, to make a more advantageous machine for the
20 application.

21 Q Would you agree that all the components
22 disclosed in the 116 patent, the high power vacuum
23 pump, the high pressure pump, are all mounted on the
24 same truck?

25 A No, they are not all mounted on the same

1 truck.

2 Q So the vacuum pump, the water tanks, the high
3 pressure pump, the tractor, they're not all mounted on
4 the same truck?

5 A When you look at the 116 patent, they're not
6 all mounted on the same truck. It's a trailer. The
7 waterblaster is a trailer. So they're not all mounted
8 on the truck.

9 Q Okay. So that's one embodiment. But isn't
10 it also correct that they could all be fit onto one
11 truck is what the specification of the 116 patent says?

12 A Could they all be on one truck; is that what
13 you're asking me?

14 Q Yes.

15 A Yes, they could all be on one truck.

16 Q You just testified that your reason for
17 selecting Breither as a reference was for the water
18 tanks. But my question was, the pump, are you aware of
19 what the pump pressures are and what vacuum would be
20 used in operation of the Breither disclosed machine?

21 A I'm not using the Breither machine for
22 the -- it does have a vacuum pump and a pump, but it
23 doesn't -- I'm using the NLB pump. It's a
24 combination. It's basically a rearrangement of
25 commonly-known components. So we have the Jones system

1 with the utility tractor to improve, and our motivation
2 for improvement was to use the Breither tank system.
3 So that's what we did. So the pump is the NLB pump,
4 not the Breither pump. Our motivation is to have the
5 best possible system.

6 Q So my question is, are you familiar with what
7 the pump discharge pressure, operating pressure, of the
8 Breither reference is?

9 A Yes. I read it. I did read it. But to
10 improve the system, and the motivation was to utilize a
11 higher pressure, and so we did that with -- we
12 accomplished that. I accomplished that in the
13 declaration with the NLB system. But it is a high
14 pressure pump on the system.

15 Q The Breither pump is a high pressure pump?

16 A We're not using the Breither high pressure
17 pump.

18 Q So for purposes of my question, assuming
19 because you're basing your conclusions on Breither, for
20 example, is prior art, and based on having a high
21 pressure pump based on your proposed definition of high
22 pressure --

23 A Yes.

24 Q -- in which you noted earlier that you did
25 not take any account into the quantitative limits that

1 are articulated in the 116 patent or the 116 file
2 history. So assuming that the range is 25,000 to
3 40,000 psi is what a high pressure pump is, does
4 Breither disclose that type of high pressure pump?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: Based on Breither only, if
7 you're asking me does the Breither system run 25,000 to
8 40,000 psi, the answer is no. That's why to improve
9 the system, our motivation to have the best possible
10 system, the motivation was to use the NLB pump.

11 BY MR. COHEN:

12 Q So you're saying -- so it's your opinion that
13 a person of ordinary skill in the art in the field
14 we're talking about, the 116 patent that you're a
15 technical expert in, that they would combine Jones,
16 Breither and NLB to come up with the 116 patent?

17 A Correct. Well, yeah, and there's some more.
18 I mean we have to continue on when you showed me the
19 other prior art example, and then we can talk further
20 about that. But where we are so far in the process
21 with the exhibits you've presented me, that's correct.
22 Other than you haven't shown me the NLB brochures yet.

23 Q I mean I'll show you NLB brochure.

24 MR. COHEN: This is going to be marked
25 Blasters 1006.

1 (Blasters Exhibit No. 1006 was so marked for
2 identification.)

3 BY MR. COHEN:

4 Q Okay. I've showed you what's been marked as
5 Blasters 1006.

6 A Yes.

7 Q And this is the NLB reference that you've
8 been referencing --

9 A Correct.

10 Q -- all day; correct?

11 A Correct.

12 Q All right. So I'm asking you as a technical
13 expert, specifically what would motivate you to combine
14 Jones, Breither and the NLB reference to arrive at your
15 conclusions based on that and the 116 patent?

16 MR. PFEIFER: Objection; form.

17 THE WITNESS: What motivated me, to build the
18 best system for the objective.

19 BY MR. COHEN:

20 Q So technically speaking, what would you have
21 to do to combine Jones and Breither, for example, just
22 in improving the system as you were saying?

23 A To improve the system, our motivation was to
24 utilize the -- so we didn't have to utilize the
25 municipal supply for the water. The water tanks on

1 Breither, I utilized those tanks. I utilized those
2 tanks for the system to make it mobile, in essence,
3 more mobile and self-contained compared to that of
4 Jones.

5 Q And how would you interchange the pumps, for
6 example?

7 A Well, now we're talking about the pumps.
8 We're talking about utilizing the NLB pump. Basically
9 you'd have to use a larger chassis of that of Jones.
10 You'd have to use a larger chassis to accommodate the
11 pump.

12 Q Okay.

13 A To simply lengthen the bed.

14 Q All right. So looking at the Jones
15 reference, and we're in your declaration on Page 36.
16 And in number 2, it says claim 1. And let's take this
17 part A, a cleaning system, this portion of the claim.
18 A cleaning system for removing coatings from a hard
19 surface by high pressure liquid. So assuming that
20 coatings, we're talking about coatings or markings on
21 airport runways, roads surfaces as well as, for
22 example, vulcanized rubber, and those hard surfaces are
23 asphalt or concrete, or they could be an aircraft
24 carrier deck was another example you gave this morning
25 by a high pressure liquid, and assuming a person of

1 ordinary skill reading the 116 patent is the range of
2 25,000 to 40,000 psi, how would Jones be configured to
3 accomplish that portion of the claim?

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: Well, first of all, the 116
6 patent is a cleaning machine. See, you keep going back
7 to stripe removal, yet claims 1 through 6 and 10 all
8 talk about a cleaning system. And so definitely
9 Jones is a cleaning system. To improve the cleaning
10 system to do potentially stripe removal, you use
11 commonly-known components and prior art, in this case
12 that of NLB, to up the pressure. So if you're talking
13 about pavement marking removal, then you would have --
14 if you're talking about cleaning and coatings, the
15 Jones machine does the job. If you're talking about
16 markings removal, which is not part of claim 1 through
17 6 and 10, then you would need to -- we would need to
18 basically -- it would motivate us to use the NLB pump
19 to go to higher pressures.

20 BY MR. COHEN:

21 Q So you're a technical expert in removing
22 coatings from surfaces; correct?

23 A Correct.

24 Q And I'm asking you about what a person of
25 ordinary skill in the art in the field that you're an

1 expert in. And you've put forth this claim, and you
2 decided to argue a legal position here that this just
3 means cleaning systems. I'm asking you a specific
4 technical question.

5 A It's not a legal position. It's a person of
6 ordinary skill in the art. It's not a legal position.

7 Q I asked you a technical question just now,
8 assuming coatings, hard surface and high pressure
9 liquid means all the things we've been talking about
10 all day long relating to stripe removal in the field of
11 your business and expertise.

12 A Okay.

13 Q Would the Jones reference be useful for that,
14 and you answered no.

15 A To answer -- so hold on. So you're saying
16 that -- I just want to make sure I understand the
17 question you're asking. If you're referring to
18 coatings as a pavement marking --

19 Q Yes.

20 A -- and you're asking me would the Jones
21 machine be suitable to take off pavement markings; is
22 that what you're asking me?

23 Q Yes.

24 A The answer is no, it is not. It's a turf
25 cleaning machine.

1 Q Okay. And for the Breither machine, the same
2 hypothetical. Would that be suitable for removing
3 coatings based on that definition --

4 MR. PFEIFER: Objection; form.

5 BY MR. COHEN:

6 Q -- in the art area that we've been talking
7 about here all day?

8 A As the Jones machine stands and as the
9 Breither machine stands, no, they are not pavement
10 marking stripe removal systems.

11 Q Okay. Now my technical question. I'm not
12 asking you about cleaning systems and your legal
13 opinion. I'm asking your technical opinion here. How
14 would a person of ordinary skill in the art
15 specifically modify Jones in combination with Breither
16 in combination with NLB to arrive at your conclusion
17 that one of ordinary skill in the art could recreate
18 the 116 patent by looking at these three references?

19 MR. PFEIFER: Objection; form.

20 THE WITNESS: A person in the ordinary skill
21 of the art would not want to recreate the wheel. This
22 is commonly-known components on the market. It's very
23 straightforward. There's benefits in each one of those
24 systems. And in the end, our motivation would be to
25 have a better system. So somebody that's a person of

1 the ordinary skill in the art would be smart enough not
2 to start from scratch. All these components are
3 already there. Why not utilize those components that
4 are commonly known in the industry. So it would be
5 very simple for them to do that, and it would be
6 straightforward and obvious for them to do that.

7 BY MR. COHEN:

8 Q Figure 6 in the Jones drawings.

9 A Oh, here it is.

10 Q For example, that drawing is a visual
11 representation, and you see there's pumps labeled on
12 that system?

13 A Yes.

14 Q And there's pump 23 which we talked about
15 earlier pumps at 200 psi.

16 A Uh-huh.

17 Q How big would you expect that pump to be on a
18 system like this?

19 A I don't know. I mean it's a good size pump,
20 probably about roughly the same size as a 40,000 psi
21 pump, a very similar size. It's pumping more water,
22 more volume.

23 Q And what are you basing that on?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: I don't know exactly what size

1 the pump is. I mean I don't know the size of the
2 pump. It's hard to tell from a plan view of this, and
3 I don't think it's all to scale. I don't think this is
4 all to scale. It's a plan view, so it's hard to tell
5 the exact size of the pump.

6 BY MR. COHEN:

7 Q What would you expect a turf cleaner to
8 output gallons per minute on discharge?

9 A It's got about 19 nozzles. I don't know. It
10 wasn't in the patent on how many gallons a minute each
11 nozzle does.

12 Q Well, would you be familiar with what the
13 exit velocity might be on these nozzles on this turf
14 cleaner?

15 A No, I don't. I don't know what the exit
16 velocity would be.

17 Q Are you familiar with what the exit
18 velocities would be on the discharge end of an NLB
19 pump?

20 A They're much higher than that of the Jones
21 nozzle. I don't know the -- I mean I know there is a
22 formula, and I don't have it in front of me. But, you
23 know, I'm familiar with it. It's a certain speed that
24 the jet exits.

25 Q So technically speaking if you were trying

1 to -- if a person of ordinary skill in the art was
2 trying to build a machine to remove coatings, meaning
3 the coatings we've been talking about all day in your
4 field of expertise, why would they expect to be able to
5 drop the NLB pump into this Jones reference?

6 MR. PFEIFER: Objection; form.

7 BY MR. COHEN:

8 Q I mean what kind of modifications would you
9 have to make to fit the NLB pump --

10 A You'd have to lengthen the bed of that of
11 Jones and rearrange the components. It's hard to tell
12 with a plan view like that. But you'd have to
13 rearrange the components and make it longer to
14 accommodate the pump.

15 Q How much horsepower would you need to fuel a
16 pump that pumps 200 psi?

17 A It depends on how many gallons a minute it
18 is.

19 Q Well, I mean you're a technical expert.
20 You're saying that a person of ordinary skill in the
21 art in your field that you're an expert would drop the
22 NLB pump into the Jones reference. So I'm asking you
23 the technicals. Well, how does the Jones reference
24 operate? Why would a person of ordinary skill in the
25 art expect to be able to drop the NLB pump into this

1 and gain success? Like what are the modifications to
2 complete it?

3 A It would be the complete NLB pump.

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: It would be the complete NLB
6 pump that's on there.

7 BY MR. COHEN:

8 Q How about big is this turf cleaner in your
9 estimation?

10 A It's not drawn to scale. I can't tell. Let
11 me go back to the --

12 Q Well, are you familiar with turf cleaners?

13 A Let me go back to the pressure and flow. You
14 know, I'm the expert here. So basically to get
15 horsepower requirements, it's the pressure times the
16 GPM divided by a constant, which is 17, 14, and then
17 you typically add about 10 percent above that for
18 required horsepower. So that's how you would drive
19 that. But I don't know the exact flow rate of the
20 nozzles, but we could use the complete NLB system.
21 That's our motivation is to use the complete NLB system
22 to run the jets, to power the jets.

23 Q And what exit velocity would you expect the
24 artificial turf cleaning to be discharging at?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: I don't know the answer to
2 that. I mean very few people in the industry have the
3 answer to that. It would be less than that of the NLB
4 system.

5 BY MR. COHEN:

6 Q So are you familiar with the requirements of
7 cleaning artificial turf?

8 MR. PFEIFER: Objection; form.

9 THE WITNESS: The requirements?

10 BY MR. COHEN:

11 Q Yeah.

12 A I mean I'm familiar with it through this
13 prior art reference. So I'd answer it that way.

14 Q Okay. So you combined the Breither
15 reference. And you testified earlier that you combined
16 Breither, so that you could draw on the liquid
17 reservoir connected to a high pressure pump?

18 A Correct.

19 Q And I'm going to just go to Page 40 of your
20 declaration, and in paragraph 74 -- and before I ask
21 about paragraph 74, what is the discharge pressure of
22 the pump in the Breither reference? What's your
23 technical expertise with street sweepers like the kind
24 disclosed in Breither?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: I mean my motivation was not to
2 use the Breither pump. My motivation was to use the
3 NLB pump for cleaning and for higher pressure work.

4 BY MR. COHEN:

5 Q You testified previously that you removed the
6 bias, so you could be a technical expert?

7 A I did.

8 Q And I'm asking you as a technical expert, are
9 you familiar with what type of discharge pressures the
10 pumps in the Breither system operate at?

11 MR. PFEIFER: Objection; form.

12 THE WITNESS: I don't recall the pressure of
13 the Breither system, but it didn't motivate me. So we
14 used the pressure of the NLB system to propel the
15 better system, the combined system.

16 BY MR. COHEN:

17 Q Are you familiar with street sweepers like
18 what's disclosed in Breither?

19 A Yes.

20 Q Are you familiar with what pressures they
21 discharge at?

22 A All different pressures. It depends on, you
23 know, what they're cleaning and what they're doing.
24 There's lots of different brands of street sweepers.
25 There's lots of different applications.

1 Q Would you agree that Breither is disclosing a
2 system, an improved system for cleaning dirt off of the
3 street?

4 A It's one of the things it does.

5 Q So are you familiar with what pressures a
6 street sweeper that is cleaning dirt like in the
7 Breither disclosure here operate at?

8 A A few thousand psi.

9 Q A few thousand psi? So you're saying that
10 the discharge nozzle --

11 A I don't recall the --

12 Q -- that sprays the water onto the dirt comes
13 out generally at a thousand psi?

14 A I don't recall the pressure on the Breither
15 patent because again I was motivated to use the NLB
16 patent.

17 Q I'm asking you a technical question. Are you
18 familiar with what discharge pressures come out of the
19 nozzles on street sweepers like Breither?

20 A They're high pressure. I don't know exactly
21 what the pressure is.

22 Q High pressure by your convenient definition
23 of anything over ambient or high pressure based on
24 what's disclosed in the 116 patent in this field of art
25 over 25,000 psi or --

1 MR. PFEIFER: Objection; form.

2 THE WITNESS: The Breither patent would not
3 run at 25 to 40,000 psi.

4 BY MR. COHEN:

5 Q It would not?

6 A No, it would not.

7 Q Okay. So my question is, how would one of
8 ordinary skill in the art expect to connect the NLB
9 pump to the Breither truck?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: They are loaded on the --
12 they're loaded on the Jones system. It's a combination
13 of the Jones system. We're using the water source of
14 the Breither, of the Breither machine, and the pump
15 of that of NLB. And basically the motivation was to
16 combine the prior art that's out there and
17 commonly-known components, rearrange them, and build
18 the best system.

19 BY MR. COHEN:

20 Q So how many horsepower is required to pump
21 the Jones reference?

22 A It's electric. It's an electric system.

23 Q Okay. Would you expect to be able to run an
24 NLB pump at 40,000 psi using electric?

25 A It can be done, yes.

1 Q How? I mean are we talking within the
2 confines of Jones, Breither and NLB? How could you --

3 A That's a diesel. That system, that NLB
4 system is a diesel-driven system, the NLB system I'm
5 referring to on Exhibit 106 (sic).

6 Q Why would a person of ordinary skill in the
7 art in the field that the 116 patent is directed to of
8 removing coatings, vulcanized rubber, those things off
9 of roadways and airport runways put a 40,000 psi pump
10 on an artificial turf cleaner?

11 A We're combining the technologies.

12 Q How?

13 A By lengthening the bed and rearranging the
14 components. They're all things that are over the
15 counter and common components. So they're rearranging
16 them to build what we perceive is to be the best
17 system.

18 Q So you're rearranging in hindsight looking at
19 the 116 patent, or how would you -- like why would a
20 person of ordinary skill in the art, and if we look at
21 the first drawing on Page 1 of the Jones patent, the
22 219 patent, that looks like a tractor that's trailering
23 a turf cleaning system. Would you agree with that?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: It's trailering a system with a

1 high pressure nozzle and a high pressure or high power
2 vacuum with a vacuum debris hose. That's what it looks
3 like to me.

4 BY MR. COHEN:

5 Q So with high pressure being 25,000 to 40,000
6 psi, that's what's in Jones?

7 A No. Jones is a 200 psi system.

8 Q So it's relatively low pressure?

9 A It's high pressure.

10 Q By your definition it's high pressure?

11 A By my definition, yes.

12 Q Okay. So in paragraph 74, your opinion is
13 even if the term high pressure pump is construed to
14 mean a pressure between 25 and 40,000 psi, this
15 limitation would still have been obvious in the mind of
16 a person of ordinary skill in the art. As previously
17 explained, NLB discloses a cleaning system adapted to
18 discharge fluid at 40,000 psi. There is nothing
19 uniquely difficult in achieving such a pressure.
20 Indeed it is simply achieved by substituting an
21 existing pump for a more powerful pump.

22 A Correct.

23 Q Isn't it true that there is a multitude of
24 different factors that would need to be designed in
25 order to combine Jones, Breither and NLB to arrive at

1 what's disclosed in the 116 patent?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: No, I don't see it as that
4 difficult, no, not as a person of ordinary skill in the
5 art, no.

6 BY MR. COHEN:

7 Q So what sort of horsepower would be required
8 to run the NLB pump at 40,000 psi?

9 A This system?

10 Q Yeah, for removing coatings?

11 A The system in the 1006?

12 Q Yes.

13 A If you're only asking me to remove pavement
14 markings like the brochure says, if you're only asking
15 me that, that particular machine is 175 horsepower.
16 But if you're asking me what does it take to clean like
17 the 116 patent says in claims 1 through 6 and claim 10,
18 then it could be a much lower, lower pressure and lower
19 horsepower requirement to clean it.

20 Q Well, I'm asking you -- and that's not my
21 question. And you're the technical expert, and I'm
22 asking you technical questions.

23 A Right.

24 Q And you're not answering technically.

25 A I did answer your -- yes, I did answer your

1 technical question. You asked me what horsepower does
2 it take to drive the NLB system on 1006. You asked me
3 that question, and I said 175 horsepower.

4 Q So then the Jones reference, if you're going
5 to put an NLB pump on there, why would a person of
6 ordinary skill in the art put a 40,000 psi pump on the
7 Jones reference?

8 A Because it gets the benefits of some of the
9 other components in the Jones system.

10 MR. PFEIFER: We've been going for about an
11 hour. Can we take a quick break now?

12 MR. COHEN: Sure.

13 (Recess taken from 2:55 p.m. to 3:00 p.m.)

14 BY MR. COHEN:

15 Q So back to your declaration, which is
16 Blasters Exhibit 1009.

17 A Yes.

18 Q On Page 45, paragraph 81, for example, it
19 says because the cleaning medium is at a pressure above
20 the ambient atmospheric pressure, the high pressure
21 nozzle and the high pressure liquid limitations of
22 claim 1 of the 116 patent is taught in Jones;
23 therefore, Jones teaches said blast head having at
24 least one high pressure nozzle for delivering high
25 pressure liquid onto a hard surface.

1 So you would agree that if the term high
2 pressure was construed to mean in a range of 25,000 to
3 40,000 psi, that Jones would not disclose high
4 pressure?

5 A State the question again. Yeah, go ahead and
6 state it one more time.

7 Q I mean your opinion is based on your
8 definition of high pressure being anything above
9 ambient?

10 A Correct.

11 Q So if, in fact, what high pressure -- if, in
12 fact, high pressure were to mean in the range between
13 25,000 to 40,000 psi, then Jones does not teach high
14 pressure; would that be correct?

15 A But I don't call high pressure 25 to 40,000
16 psi.

17 Q I understand that, but I'm asking you as a
18 technical expert. If that were, in fact, to be the
19 range, then Jones wouldn't disclose high pressure?

20 A If the assumption was that high pressure is
21 only 25,000 to 40,000 psi, Jones may still offer it as
22 high pressure. He could still say it's high pressure.
23 He could still state that his system is high pressure.

24 Q I'm asking you as a technical expert in this
25 area, if the definition is 25 to 40,000 psi, would you

1 consider Jones high pressure?

2 A If the definition -- you're saying the
3 definition of high pressure is 25,000 to 40,000. I'm
4 saying that's not high pressure. But with that in
5 mind, if you're saying 25,000 to 40,000 is high
6 pressure, Jones could have written his patent to say
7 high pressure because in his mind, it's still high
8 pressure. It's kind of construing it here. You're
9 construing it to your advantage here.

10 Q No. You just testified what's in Jones'
11 mind, and the question is not directed to what's in
12 Jones' mind. And I'm not sure how you would know
13 what's in Jones' mind?

14 A Right.

15 Q I'm asking you about your technical opinion
16 where as we discussed earlier --

17 A As a technical individual --

18 Q Excuse me. Let me finish the question
19 first.

20 A -- from a person with ordinary skill of the
21 arts --

22 Q Excuse me.

23 A Go ahead.

24 Q It would be a lot clear on the record if I
25 ask a question first and then you answer it.

1 A Okay.

2 Q I'm asking about your opinion.

3 A Yes.

4 Q And I'm disputing your opinion going back to
5 what we discussed in both talking about high power
6 vacuum as well as high pressure --

7 A Okay.

8 Q -- that you didn't consider the ranges in
9 your opinion in coming up with the definition.

10 A Okay.

11 Q So I'm saying hypothetically assuming that
12 your definition is inaccurate to what a person of
13 ordinary skill in the art would consider, if we're
14 talking high pressure is between the range of 25,000 to
15 40,000 psi, would that be taught by Jones as high
16 pressure? Is it fair to say that Jones is not high
17 pressure in that area?

18 MR. PFEIFER: Objection; form.

19 THE WITNESS: I don't think there's -- you
20 know, as a person of ordinary skill in the arts, I mean
21 it's -- you're saying if the statement that atmospheric
22 pressure is not considered high pressure, and you're
23 stating that 25,000 to 40,000 psi is considered high
24 pressure by definition industry-wide, you know, I still
25 can't say that Jones wouldn't -- there's no governing

1 body that determines high pressure, low pressure. You
2 know, Jones considers his machine to be high pressure,
3 so he patented that and said it was high pressure. So
4 I can't answer your question as a person of the skill
5 in the art to say that he wouldn't have taught high
6 pressure. I can't say that. He taught high pressure,
7 and that's what it is. It's on the record in the
8 patent as high pressure. So I can't comment.

9 BY MR. COHEN:

10 Q The Jones is teaching high pressure --

11 A Yes.

12 Q -- is based on your definition of that?

13 A It's a high pressure system. It's high
14 pressure liquid. It's a high pressure system by our
15 definition, by my definition.

16 Q So then did you contribute the technical
17 analysis that paragraph 81 relies on?

18 A As I said again, it was a collaborative
19 effort between myself and our two attorneys. That's
20 it.

21 Q So did you make the determination that the
22 Jones reference discloses high pressure, or is that
23 someone else?

24 A We did.

25 Q Was it you or was it someone else?

1 A It was a collaborative effort.

2 Q So there's more than one expert that
3 contributed technical data to your declaration?

4 A Correct. It was a collaborative effort.

5 Q But yet you're the only expert that signed
6 your expert declaration?

7 A Correct.

8 Q How long have the other contributing experts
9 in your declaration been working in your field?

10 A They're not in our field.

11 Q But they're experts in it?

12 A They didn't sign as the expert. I signed as
13 the expert.

14 Q Right. And my question is directed to not
15 what your lawyers' legal theories are, but this is a
16 technical declaration.

17 A Yes.

18 Q So everything in here is a technical
19 contribution by you. Do you agree with that?

20 A Yes.

21 Q So when I ask you then did you contribute all
22 the technical components to paragraph 81, for example,
23 and you say, no, it's a collaborative effort, then who
24 wrote this paragraph?

25 A I wrote it. It was a collaborative effort.

1 I wrote it, and I basically declared it as my
2 declaration. So, yes, we looked at the prior art that
3 was out there in a collaborative effort form, and
4 myself as the expert person of skill, of ordinary skill
5 in the art, I clearly qualify for that. I wrote the
6 declaration. I signed it as the expert.

7 Q So in your proposed definition, for example,
8 of high pressure, you don't mention any quantitative
9 limits. So that enables you to decide that Jones' high
10 pressure for your purposes. But in your conclusion,
11 you hedge, and you say, well, even if the term high
12 pressure does mean between 25 and 40,000 psi, it would
13 still be obvious.

14 A You said that the -- you said that the
15 pressure, the high press was 25,000 to 40,000. You
16 said that. You said if we make the assumption that it
17 is, is it accurate to say that -- if we make the
18 assumption that 25,000 to 40,000 psi is high pressure,
19 then it's high pressure, and I said yes, if we make
20 that assumption, then it is.

21 Q Right. And in posing the question
22 hypothetically in that term, I mean you do admit that
23 it takes into account that you factored out what the
24 specification of the patent says technically, and that
25 you didn't make any reference to the technical

1 specification in the file history; is that correct?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: The 25,000 to 40,000 psi is
4 declared in the declaration on Page 45.

5 BY MR. COHEN:

6 Q But it didn't make it into your definition of
7 what high pressure would be. And referring you back to
8 that definition, for example, you're saying that
9 without providing any quantitative limits or ranges on
10 the qualitative term of high, a POSA would understand
11 that the claimed system is any cleaning system
12 employing a high pressure -- a pressure higher than
13 atmospheric pressure. What I'm saying is you're
14 sparring with me over posing questions noting that you
15 did not include that in your analysis of where these
16 limits are mentioned in both the patent and the file
17 history. So assuming that those are considered and
18 that is a range, then Jones would not be high
19 pressure --

20 MR. PFEIFER: Objection; testimony.

21 BY MR. COHEN:

22 Q -- correct?

23 MR. PFEIFER: Objection; form.

24 THE WITNESS: Yeah. I maintain that this is
25 a cleaning system; that the 116 patent is a cleaning

1 system. You know, I show the 25,000 to 40,000 psi.

2 Maybe I didn't define it. What page are you on?

3 BY MR. COHEN:

4 Q 45.

5 A I mean for the definition.

6 Q Oh, the definition?

7 A Page 10?

8 Q It's 10.

9 A Yeah.

10 Q And it spills onto page 11. And without
11 providing any quantitative limits or ranges is the
12 sentence which I think is in the record numerous
13 times.

14 MR. PFEIFER: Is that a question?

15 BY MR. COHEN:

16 Q So you come up with a definition based on the
17 fact that there's no quantitative limits or ranges
18 disclosed, yet you do note them conveniently after you
19 give a broad definition of high pressure, and then
20 you're adding what is actually a high pressure pump to
21 a turf cleaner. And I'm asking you as a technical
22 expert, how would somebody in your field expect to drop
23 the NLB pump into the Jones reference and expect
24 success?

25 MR. PFEIFER: Objection; form.

1 THE WITNESS: Because it could be done. I
2 mean you can lengthen the bed of that of Jones and rely
3 on the NLB pump. It can be done.

4 BY MR. COHEN:

5 Q I mean I agree with you that it can be done.
6 It's disclosed in U.S. Patent 7,255,116. But I'm
7 asking you not going back and looking for a parts list
8 in hindsight. I'm asking you what would an expert in
9 your field's motivation be to combine Jones with NLB
10 and how would you do it?

11 MR. PFEIFER: Objection; form.

12 BY MR. COHEN:

13 Q Let's talk about some of the technicals like,
14 okay, well, you could drop a high pressure pump into
15 Jones. What specifically would you modify on Jones?

16 A Well, the technology is out there to be able
17 to do it. It's commonly-known components that are on
18 the market. Instead of starting from scratch, it was
19 obvious to combine the prior art, the prior art
20 techniques that were out there.

21 Q How would you repower Jones, for example, to
22 handle the NLB pump?

23 A We just used the complete system of that of
24 the NLB. I just used the NLB pump with the diesel
25 engine. That's how I would power it is with the same

1 diesel engine that NLB uses. And you basically just
2 have a longer chassis, and you mount it that way.

3 Q You just have a longer chassis, and you mount
4 a 40,000 psi pump in place of a 200 psi pump?

5 A Correct.

6 Q And the turf cleaner in Jones runs off of a
7 small electric generator. And what would you
8 anticipate the horsepower of the truck in the NLB
9 system would need?

10 A I answered that already. The NLB -- are you
11 talking about the waterblaster?

12 Q Yes.

13 A 175 horsepower.

14 Q Just to run the pump?

15 A Yes.

16 Q And what about the vacuum system?

17 A 30 horsepower. It's a very small vacuum.

18 Q And what about an 1100 CFM?

19 A 30 horsepower.

20 Q 30 horsepower?

21 A Yeah.

22 Q Okay. So again I don't believe you testified
23 maybe, and correct me if I'm wrong, that you knew what
24 the exit velocities of the nozzles were to clean turf?

25 A No, I don't know. I also don't know the exit

1 velocity, you know, in high pressure either, what the
2 exit velocity is. And I don't think it's something
3 that is commonly known in the industry.

4 Q So for coating removals in the area of art
5 that we're talking about being epoxies and line stripes
6 and vulcanized rubber, how would you configure the
7 nozzles on one of those systems? What type of exit
8 velocities and flows would you anticipate?

9 MR. PFEIFER: Objection; form.

10 THE WITNESS: I don't know what is the exit
11 velocity, but, you know, again we talked about it
12 earlier. It depends on, you know, what you're trying
13 to take off. Is it a coating? You know, is it
14 something that's softer that would require a wider
15 cleaning bar, a narrower cleaning bar and how many jets
16 you run. There's a lot of variations on how that is.
17 That's a very broad open question.

18 BY MR. COHEN:

19 Q Would you expect the way in Blasters 1006
20 exhibit, the NLB reference is configured?

21 A Yes.

22 Q And again you didn't seem to know what sort
23 of nozzle diameters would be employed earlier.

24 A Well, it's not that I don't know. It's an
25 open-ended question. I don't know -- I don't know

1 because I don't know how wide the bar is. I don't know
2 what the application you're trying to approach, what
3 you're trying to do. So there's a lot of different
4 variations, and that's very technical. But you have to
5 specifically say I'm trying to do this, so I would use
6 X number of jets. I would try to use -- you know, it's
7 a seven thousandth jet. It's a ten thousandth jet.
8 It's an eleven thousandth jet. I know exactly what I'm
9 talking about with that, but the question you're asking
10 me is too broad for me to give you a specific answer.

11 Q Well, I will give some leeway to answer
12 because I'm not asking a broad question. Just ballpark
13 it. What type of nozzle diameters -- and I'm not
14 pinpointing you to a specific exit velocity of the
15 nozzle. But are we talking about like a minuscule
16 opening like a thousandth or three or four thousandth
17 of an inch and some ultra high velocity?

18 A Yes. I mean the velocity -- excuse me -- the
19 orifice sizes for it. Now, let's only talk about
20 pavement marking removal. If we're talking about
21 pavement marking removal, the jet size could be seven
22 thousandth of an inch, eight thousandth of an inch.
23 The biggest jets may go up to fourteen or fifteen
24 thousandth of an inch, but only for pavement marking
25 removal. But when we go back to what the patent is on

1 116 per claims 1 through 6 and claim 10, it's a
2 cleaning machine. So you would use much larger jets
3 and much lower pressures to do cleanings like that. So
4 again it's still hard for me to say, but I gave you a
5 good range of what size.

6 Q Well, in the configuration you just talked
7 about --

8 A Yes.

9 Q -- would you anticipate that that discharge
10 could cut concrete or pit concrete, or if you kept it
11 in one spot, that it ultimately would --

12 A I mean if you kept it in one spot and you
13 kept it rotating and created, you know, maximum dwell
14 time, you could etch into the surface. But that's
15 absolutely not the requirement here. You want to not
16 do that.

17 Q But that configuration could. And isn't it
18 true that the reason that you don't cut the concrete or
19 asphalt or you keep it to a minimum is because the
20 trucks are configured to discharge and move and vacuum
21 at a certain rate, so that you just remove the coating
22 and not the underlying substrate as you called it
23 earlier; is that correct?

24 A It's a combination of all types of different
25 things. It's your head rotation speed. It's your jet

1 configuration. It's your forward movement. It's the
2 width of your bar. There's a lot of variations that
3 have to do with whether you cut into the substrate or
4 not.

5 Q But the raw equipment could cut into the
6 substrate if those parameters weren't set in place
7 correctly; is that right?

8 A They could if you just sat in one spot and
9 just kept eating it.

10 Q All right. And would you expect a pump
11 discharging at 200 psi to be able to have the same
12 cutting ability as a 40,000 psi pump?

13 A No.

14 Q So what would you expect -- the configuration
15 we were just talking about for coating removals,
16 pavement marking removals --

17 A Okay.

18 Q -- if you were to take a pass across a field
19 with artificial turf, what would that machine do to the
20 turf?

21 A The NLB system?

22 Q Yes.

23 A Well, you wouldn't run it that high. You
24 would throttle it down.

25 Q Well, why would you build an NLB machine to

1 clean turf?

2 A You wouldn't build an NLB machine to clean
3 turf.

4 Q Right.

5 A You want to use the right pressure for the
6 right application.

7 Q Right.

8 A So you want to throttle your system up or
9 throttle your system down. We're not trying to use
10 the -- I'm not trying to use the Jones system without
11 the introduction of the NLB pump to take stripes off.
12 And you wouldn't want to use the NLB system to clean
13 turf. It's basically saying they're both cleaning
14 systems. And my motivation was to basically make the
15 best system by combining the best components that are
16 commonly known on the market and integrate them
17 together to have the best system. And that's what I
18 did. So the prior art was there. It was obvious. You
19 know, I was motivated to build it that way, and we did.

20 Q So you've built a system that's similar to
21 the NLB reference that we're talking about?

22 A Yes.

23 Q And it's your testimony that you started with
24 a truck like disclosed in Jones, a system disclosed in
25 Jones for cleaning turf? That's the origin of where

1 you began experimenting to create the truck that you're
2 employing today for pavement marking removal?

3 MR. PFEIFER: Objection; form.

4 THE WITNESS: It has some similarities. I
5 didn't buy a turf cleaner and, you now, buy an NLB
6 waterblaster if that's what you're asking to do that.
7 The prior art was out there, and it helped -- you know,
8 all of them had their benefits, and that motivated me
9 to look at that and build up the best system. And
10 that's what I did.

11 BY MR. COHEN:

12 Q Okay.

13 A So I did not own a turf cleaning machine.

14 Q So as a technical expert, you're building a
15 machine for pavement marking removal, and you have
16 experience in building machines for pavement marking
17 removal; correct?

18 A Correct.

19 Q And you would consider in building a machine
20 for pavement marking removal, that some of the terms of
21 art like high pressure would be anything above
22 atmospheric?

23 MR. PFEIFER: Objection; asked and answered.

24 THE WITNESS: If I'm selling a machine to do
25 stripe removal, I wouldn't even refer to the pressure

1 as high pressure or ultra high pressure. I would
2 just -- you know, I would just basically state the
3 pressure.

4 BY MR. COHEN:

5 Q Okay. So would you agree that the 116 patent
6 embodies a machine that is marketed and sold by
7 Waterblasting Technologies; is that accurate?

8 A Just one second.

9 MR. PFEIFER: Objection; scope; relevance.

10 THE WITNESS: See, here's an example of the
11 statement that I just made. It just says 40,000 psi.
12 It doesn't say ultra high pressure. It just says
13 40,000 psi. It doesn't say high pressure, and it
14 doesn't say -- I'm noting Exhibit 1006, the NLB
15 brochure. It doesn't say ultra high pressure. It just
16 says 40,000 psi. So what was your other question?

17 BY MR. COHEN:

18 Q And my question related to that. Would
19 somebody of ordinary skill in the art consider that
20 high pressure?

21 A They could. I mean they could consider it.
22 You know, I consider that to be high pressure, yes.

23 Q So then in relation to that sort of pump of
24 40,000 psi being high pressure, then in relation to a
25 pump pumping 200 psi, relatively speaking the 200 psi

1 pump discharge is not high pressure?

2 MR. PFEIFER: Objection; testimonial.

3 THE WITNESS: Well, I'll tell you. You know,
4 here's another way to look at it. You can cut your
5 finger, cut a hole in your finger with 100 psi. So,
6 yeah, 200 psi is high pressure. It could hurt you.
7 So, yeah, I would consider 100 psi to be high pressure
8 because if I took a jet and asked you if I could take a
9 nozzle and shoot your hand with it, would you allow me
10 to do it, and you probably wouldn't want me to do that
11 because it would penetrate your skin and hurt you. So
12 I would consider 100 psi to be high pressure. But
13 again what I go back to is this machine in the 116
14 patent is a cleaning machine. It is not just a stripe
15 removal, pavement marking removal machine. It is a
16 cleaning machine. And the other machines that I
17 reference in my prior art are cleaning machines as
18 well.

19 BY MR. COHEN:

20 Q Okay.

21 A And, yes, high pressure is anything -- you
22 know, 100 psi is high pressure in my opinion, and
23 that's what I put in my declaration, yes.

24 Q Is it fair to say that the 116 patent
25 embodies a machine that is being manufactured, marketed

1 and sold by Waterblasting Technologies? Would you
2 agree with that?

3 MR. PFEIFER: Objection; scope.

4 THE WITNESS: Would I agree that the machine
5 in 116 --

6 MR. LYTVYN: Can we go off the record for a
7 second.

8 (Discussion off the record.)

9 (Back on the record.)

10 MR. COHEN: I'd rather have this argument on
11 the record.

12 MR. LYTVYN: Sure. Okay. So the question
13 before we went off the record is why are you talking
14 about an infringement claim which is what's being
15 argued in the underlying lawsuit instead of arguing
16 what the prior art and what the 116 patent teaches,
17 what's the relevance of the accused infringed device to
18 the 116 patent.

19 MR. COHEN: And the reason I'm laying this
20 foundation is this goes to bias. Like this patent
21 covers an embodiment of a machine that is the subject
22 of litigation. The technical expert here, Mr. Boos, is
23 the principle of the company that is manufacturing an
24 alleged accused product, and it's in this area of his
25 expertise. And he's testified that he is not a -- that

1 he's removed bias from his expert opinion. And he's
2 not answering any technical questions. He's dancing
3 around all the questions. Like I'm asking specific
4 technical questions, and I'm laying my objections here
5 starting with that he's a biased expert witness. He
6 has a financial outcome in this proceeding as well as
7 the litigation. He's already testified he has 44 1/2
8 percent interest in the party that (A) has instituted
9 the Inter Partes Review as well as being sued in the
10 litigation, and he's a nonbiased technical expert. So
11 I'm asking technicals. I'm asking technical questions,
12 and they're not being answered.

13 MR. PFEIFER: The question about what
14 Waterblasting is selling is not a technical question
15 related to the scope of this opinion.

16 MR. COHEN: I disagree.

17 MR. PFEIFER: Okay.

18 MR. LYTVYN: Should we call the board?

19 MR. COHEN: Sure. We can go off the record,
20 and we'll call the board.

21 (Mr. Lytvyn proceeds to call the board.)

22 (Back on the record while waiting for the
23 board to return the call.)

24 BY MR. COHEN:

25 Q So from a technical standpoint, and you

1 already said when you set out to invent, you don't want
2 to reinvent the wheel. So from a technical standpoint,
3 what technical aspects of what's disclosed in Jones and
4 Breither would motivate somebody, a person of ordinary
5 skill in the art, to add an NLB pump to those systems?

6 PFEIFER: Objection; form.

7 THE WITNESS: The motivation would be to
8 raise the pressure.

9 BY MR. COHEN:

10 Q But technically speaking, how would you
11 combine the NLB reference with Jones and Breither to
12 arrive at a system that would function to achieve the
13 utility of being able to conduct pavement marking
14 removal?

15 MR. PFEIFER: Objection; asked and answered.

16 THE WITNESS: I did answer this before, but
17 if we're going to use the NLB pump, the diesel engine
18 in the pump on the NLB system, we're going to make the
19 Jones truck system longer and integrate that with the
20 Breither tanks, utilize the utility tractor of that of
21 Jones, raise the pressure of the hoses and nozzles.

22 BY MR. COHEN:

23 Q So technically speaking, if a person of
24 ordinary skill in the art in talking about pavement
25 marking removal doesn't consider 200 psi to be high

1 pressure, then why would they be considering the Jones
2 reference?

3 A Because it has a tractor, something that's
4 more maneuverable with a better turning radius than a
5 big straight truck. The tractor creates that
6 maneuverability and improved turning radius.

7 Q So you're saying that one of ordinary skill
8 in the art, if they were trying to improve a system for
9 pavement marking removals would take a 40,000 psi pump
10 and mount it on a system, on a smaller system that only
11 has a 200 psi pump?

12 MR. PFEIFER: Objection; form.

13 BY MR. COHEN:

14 Q And that's what you're saying; correct?

15 A I'm saying that we would use the 40,000 psi
16 pump, and, yes, use that tractor. It's maneuverable.
17 It's a utility vehicle, a small tractor. So, yes,
18 that's what I'm saying.

19 Q Why would a person of ordinary skill in the
20 art think you can just drop the NLB pump onto the Jones
21 tractor and have it work?

22 A We don't put the NLB pump on the Jones
23 tractor. We put the NLB pump on the Jones truck, and
24 then you increase the pressure of the hoses and the
25 capability of the tractor to accommodate the higher

1 pressure pump of NLB.

2 Q Okay. So then why do you have in your
3 opinion that Jones discloses a high pressure pump?

4 MR. PFEIFER: Objection.

5 THE WITNESS: He does have a -- Jones does
6 have a high pressure pump.

7 BY MR. COHEN:

8 Q That pumps at the high pressure of 200 psi?

9 A That's correct.

10 Q That's your testimony that's high pressure?

11 MR. PFEIFER: Objection; asked and answered.

12 MR. COHEN: We're going to mark this Blasters
13 1004.

14 (Blasters Exhibit No. 1004 was so marked for
15 identification.)

16 BY MR. COHEN:

17 Q I've handed you what's been marked as
18 Exhibit 1004.

19 A I don't think I have it.

20 Q Oh, I didn't hand it to you?

21 A I don't have it.

22 Q Now I've handed it to you.

23 A Now I have it.

24 Q This is Blasters Exhibit 1004. It's U.S.
25 Patent Herhold, Patent Number 6,889,914?

1 A Yes.

2 Q Do you recognize this patent?

3 A Yes, I do.

4 Q Did you analyze this patent?

5 A Sure. This patent, Matthew Herhold was a
6 signee by NLB. He's using a polarity of nozzles
7 created about negative pressure. It has a shroud
8 around the outside of it. It's all under negative
9 pressure with a vacuum. This is absolutely 101 A, B,
10 Cs of the waterblast business. So this is very
11 straightforward technology that's out there.

12 Q Okay. And this A, B, C technology, this
13 shroud goes over a pump?

14 A No. The shroud goes over the cleaning
15 nozzles.

16 Q It goes over the nozzles?

17 A Correct.

18 Q And why would you install a shroud over the
19 nozzles?

20 A To create a better level of vacuuming to
21 contain the water and the debris. That's why you use
22 the shroud.

23 Q So is it correct to say then this shroud
24 covers the discharge nozzles for the waterblasting as
25 well as the suctioning intake for the vacuum?

1 A Yes, it does.

2 Q Okay. And what pressures and velocities
3 normally does a shroud of this type of disclosure
4 cover?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: Various pressures. It could be
7 any pressure. I mean a brush and shroud technique is
8 used with all different types of pressures.

9 BY MR. COHEN:

10 Q Well, you testified earlier that this patent
11 is assigned to NLB; correct?

12 A It just says it's a unique shroud assembly
13 cover of the outlet nozzle of a high pressure hand held
14 discharge device.

15 Q That's not my question. My question was,
16 just so I'm correct, you said that this patent is
17 assigned to LNG Corp.?

18 A Correct.

19 Q Who is a competitor in this industry that
20 you're a technical expert in?

21 A Correct.

22 Q And you also testified that this is the A, B,
23 Cs of how this waterblasting technology is utilized;
24 correct?

25 A How the industry captures water and debris

1 under vacuum, under negative pressure under vacuum.

2 Q Okay. So now as a technical expert, I'm
3 asking you some technical questions. So when you
4 install this shroud, what kind of pressures and exit
5 velocities of the nozzles are we talking about?

6 MR. PFEIFER: Objection; form.

7 THE WITNESS: It doesn't have anything to do
8 with it. It just creates a negative pressure. It
9 creates a seal. I mean all the shroud is -- and the
10 brush is at the bottom creates a seal.

11 BY MR. COHEN:

12 Q So in this what I'm going to call the Herhold
13 -- well, I'll just call it the Herhold patent.

14 A Okay.

15 Q In column 1, background of the invention,
16 they're talking about pressurized water exits the
17 device at pressures up to 40,000 psi. So is that
18 typical of what you would encounter in the A, B Cs of
19 waterblasting?

20 MR. PFEIFER: Objection; form.

21 THE WITNESS: I mean I think when a company
22 is trying to sell it, they're just saying it can go up
23 to 40,000 psi. That's the maximum pressure typically
24 in the industry is 40,000 psi. They're just saying if
25 you want to run it at 2,000 psi or 5,000 psi or 20,000

1 psi, you can go all the way up with this tool up to
2 40,000 psi just like it says in the first paragraph of
3 column 1 on line 16. It says up to 40,000 psi.

4 BY MR. COHEN:

5 Q Further down when you get to line 21 and 22,
6 it's talking about chaotic discharge of elements.

7 A What line is that?

8 Q It's start 21 with --

9 A I see it, yeah. Okay.

10 Q -- the sentence fluid along with lucid matter
11 and debris flow around the nozzle. This chaotic
12 discharge --

13 MR. PFEIFER: Is there a question posed?.

14 BY MR. COHEN:

15 Q Well, what are they referring to? Is this
16 just a term for the chaotic discharge?

17 A Yeah. What they're saying is, is that if
18 you --

19 MR. LYTVYN: Hold on a second. We have a
20 phone call coming from the board.

21 COURT REPORTER: Do you want to go off the
22 record?

23 MR. LYTVYN: For a second yes.

24 (Discussion off the record.)

25 MR. LYTVYN: We can go on the record now.

1 (Back on the record.)

2 THE BOARD: I'm sorry about that. Can you
3 guys hear me now?

4 MR. LYTVYN: Yes, we do.

5 THE BOARD: So we have a call here. I've got
6 Jeff Abram on the phone, Michael Wood on the phone, and
7 this is John Kenny. Who's on the line representing the
8 parties.

9 MR. LYTVYN: For Blasters, Inc., the
10 petitioner, you have Andriy Lytvyn and Nicholas
11 Pfeiffer.

12 THE BOARD: And is there a court reporter
13 there?

14 MR. COHEN: Yes.

15 THE BOARD: And is the court reporter
16 recording this?

17 COURT REPORTER: Yes.

18 THE BOARD: All right. And so representing
19 the other side?

20 MR. COHEN: Representing Waterblasting, LLC,
21 the patent owner, I'm Kenneth Cohen and sitting with me
22 is Edward McHale.

23 THE BOARD: All right. So who requested the
24 call?

25 MR. LYTVYN: Blasters, Inc., and the question

1 pertains to 37CFR42.53D52. It's the federal rule that
2 that says for cross-examination testimony, the scope of
3 the examination is limited to the scope of the direct
4 testimony. The issue we have that we would like you to
5 help us resolve are the questions pertaining to the
6 accused device that is not being used as a prior
7 reference, and is that line of questioning allowed. So
8 the accused device in the underlying infringement
9 litigation, which has not been cited in the expert
10 declaration and which is not being used as a prior art,
11 questions pertaining to the accused device, is that
12 kind of line of questioning permitted in a deposition?

13 THE BOARD: Can you be a little bit more
14 specific about what type of questions are being asked?

15 MR. LYTVYN: Court Reporter, could you say
16 the question that was asked prior to --

17 COURT REPORTER: It's going to take me a
18 little bit without my laptop.

19 MR. COHEN: This is Kenneth Cohen on behalf
20 of the patent owner. I think the issue I'm running
21 into here, and I would invite guidance on how to
22 navigate through this is, I've hit a point in this
23 cross-examination of the declaration of Mr. Scott
24 Boos. Now, he happens to be the principle in Blasters,
25 Inc. He's the president. Blasters and Waterblasting

1 also have a pending district court litigation, and he
2 has also submitted a declaration as the technical
3 expert.

4 Now, he's already testified that he has a
5 44 1/2 percent ownership interest in Blasters, and on
6 this cross-examination as a technical expert, I'm
7 getting into -- I'm trying to get into some questions
8 related to bias because I'm trying to ask technical
9 questions, and I'm being, you know, met with certain
10 difficulties. And I don't intend in any way, shape or
11 form here to complain about the difficulties of
12 litigating something, but I feel like I'm not treading
13 too far afield to establish the bias of this technical
14 expert who's subject of cross-examination is his
15 declaration as a technical expert in this matter.

16 MR. PFEIFER: This is Nick Pfeifer. I just
17 want to chime in real fast. The amount of questions
18 pertaining to bias, we're not objecting to that. We're
19 objecting to the line of questioning being that there
20 should not be -- it's improper to ask questions about
21 the accused infringing product and whether or not it is
22 similar to the claimed device. That line of
23 questioning is out of scope of the opinion that was
24 rendered here. So if he wants to, you know, discuss
25 the 44 percent interest and all of that, he has that

1 information. At this point, there's no reason to go
2 into whether or not the accused infringing device does
3 have the same components as the claimed invention.
4 That should be saved for district court litigation.

5 THE BOARD: Maybe I can ask you, Counsel.
6 Why are you asking those type of questions?

7 MR. COHEN: I mean I'm not intending to tread
8 into the district court litigation issues. I'm just
9 trying to establish what materials and technical
10 information this expert, purported expert has
11 considered. And, for example, without being specific
12 unless the board solicits it, I mean in my opinion,
13 there's been some very broad technical liberties taken
14 on what proposed claim constructions might be. And in
15 trying to drill down a technical opinion on this, it's
16 frustrating the process. So that's the context in
17 which this bias keeps raising its head.

18 THE BOARD: But why do you need to know how
19 similar the accused product in litigation is to the
20 prior art for purposes of the IPR?

21 MR. COHEN: I mean I don't need that direct
22 comparison. I guess it's just a notation for the
23 record that, you know, the patent that the principle of
24 Blasters who's also their technical expert has analyzed
25 is also the subject of the district court litigation.

1 So I mean I can agree that I don't need a direct
2 comparison between the patent and the infringed
3 product, but I mean it is the subject of his analysis,
4 this patent.

5 MR. LYTVYN: Just for the record, the accused
6 product is not the subject of the expert declaration
7 that was filed in the IPR, and it is also not being
8 used for any purpose, prior art or otherwise in this
9 IPR.

10 THE BOARD: All right. Let me just
11 understand. Now is there -- is there now an agreement
12 that nobody is going to be going into the accused
13 product?

14 MR. COHEN: I don't see the need to go into
15 the accused product. I do see value in the record
16 though to identifying that the 116 patent at issue here
17 in the IPR is also the subject of the district court
18 litigation. And I'm just trying to draw the
19 distinctions of the overlap between -- in terms of what
20 the bias is here of this technical witness who -- all
21 he testified to was he removed the bias from his
22 opinion, which I'm trying to dispute that laying a
23 record.

24 THE BOARD: Okay. I'm just trying to get at
25 the dispute at hand. As I understand it, the objection

1 was getting into the questions about the product that
2 was accused of infringement in the litigation which was
3 not discussed or mentioned in the declaration. Now, it
4 sounds like you're not planning to go into any
5 questions about the accused product or any further
6 questions about the accused product; is that correct?

7 MR. COHEN: Correct, not outside of the scope
8 of what's disclosed in the patent.

9 THE BOARD: What do you mean outside of the
10 scope of what's disclosed in the patent?

11 MR. COHEN: Well, I mean a lot of the dispute
12 here is in terms of what technical ranges are
13 disclosed, for example, like the operating pressures of
14 a pump, for example, that's part of the system. And my
15 position is, is that Mr. Boos as an expert is taking an
16 unreasonably broad interpretation of some of these
17 terms, and I'm just trying to highlight the bias by
18 laying a record of what's in the patent, and that
19 noting that there is district court litigation, and he
20 has a financial interest in the outcomes of all of
21 these. And, you know, it's impacting I believe some of
22 the questions. And I'm just trying to accurately lay a
23 foundation just for some of my technical questions
24 about what is in the declaration as well as what's been
25 conveniently left out of the declaration.

1 THE BOARD: Okay. See, I'm just trying to
2 get this point at hand. I mean you've already
3 established I think in the ownership interest;
4 correct?

5 MR. COHEN: Yes.

6 THE BOARD: And if there's no dispute that
7 the litigation is pending?

8 MR. LYTVYN: There's no dispute, Your Honor.

9 THE BOARD: So in terms of -- I mean if the
10 issue just at our hands in terms of questions about the
11 accused product, are you planning to ask any questions
12 going forward about the accused product? And I'm
13 talking about the product that is accused of
14 infringement in the litigation?

15 MR. COHEN: No, I'm not planning on that.

16 THE BOARD: Okay. So given that, maybe you
17 can ask counsel for the other side, is there a dispute
18 for us to resolve at this point given the fact that
19 he's not going to be asking anymore questions about the
20 accused product?

21 MR. LYTVYN: Yes, Your Honor.

22 THE BOARD: Sorry?

23 MR. LYTVYN: I'm sorry. Let me clarify. As
24 long as there are no further questions about the
25 accused product, the dispute is off, Your Honor.

1 THE BOARD: All right. So then as far as I
2 understand, everything is cleared up, and there's
3 nothing -- we don't need to make any rulings here. It
4 sounds like everybody has got an understanding on how
5 to go forward; is that correct?

6 MR. LYTVYN: It appears so.

7 MR. COHEN: Yes. I think we have some
8 clarity. Thank you.

9 THE BOARD: Okay. And that's true for all
10 sides? Everybody is on board, and you guys can proceed
11 at this point?

12 MR. LYTVYN: Yes.

13 MR. COHEN: Yes.

14 THE BOARD: I'll just put you on hold for one
15 second. Okay. I think that wraps it up for today.
16 And I assume that the transcript, this will just be
17 included with the deposition transcript on the record?

18 COURT REPORTER: Yes.

19 MR. PFEIFER: Yes.

20 MR. COHEN: Yes.

21 THE BOARD: Okay. All right. Well, thank
22 you very much.

23 MR. PFEIFER: All right. Well, thank you.

24 MR. LYTVYN: Thank you.

25 MR. COHEN: Thank you.

1 THE BOARD: Okay. Good-bye.

2 MR. COHEN: Do you want to take a five-minute
3 break?

4 COURT REPORTER: Sure.

5 MR. COHEN: Is that all right.

6 THE WITNESS: Do you want me to answer the
7 question about the chaotic impact, or do you want to
8 wait until we come back?

9 MR. COHEN: You know what? Let's answer that
10 pending question just so the record is clear.

11 THE WITNESS: Basically it's a chaotic
12 discharge. That shroud is there to protect the
13 operator of the machine or anybody around it that could
14 get hit with flying debris. So all the shroud does is
15 it keeps it inside that container, if you will, inside
16 that shroud, so that somebody doesn't get hurt by
17 flying debris.

18 BY MR. COHEN:

19 Q Is that the kind of problem you would
20 encounter on a street sweeper or a turf cleaner?

21 A It could. I mean it could. I mean the water
22 could hit, you know, anything on a street sweeper. It
23 could be a rock. You know, somebody could get hit with
24 a rock. The turf, I'm not sure if that's, you know --

25 Q Based on your own expertise or knowledge, do

1 you have a basis for that opinion that it could be or
2 is a problem that needs to be used on a street sweeper
3 or a turf cleaning machine?

4 MR. PFEIFER: Objection; form.

5 THE WITNESS: It definitely would have impact
6 on a street sweeping machine and, you know, potentially
7 on a turf cleaning machine.

8 BY MR. COHEN:

9 Q Are they customarily -- based on your
10 understanding, is this type of shroud used on turf
11 cleaners and street sweepers?

12 A I'd say something very similar.

13 Q Okay. And what do you base that opinion on?

14 A Based on the shroud, some type of shroud
15 that's being used on either one of them. Both of them
16 would need to have some type of shroud.

17 Q So could you give me a specific example
18 within your knowledge of where a shroud is employed in
19 either a street sweeper or a turf cleaning machine?

20 A Around the cleaning head, the cleaning head
21 area.

22 Q So they are used?

23 A They can be used, yes.

24 Q Well, I'm not asking you can they be used.
25 I'm asking you what is your specific knowledge to a

1 street sweeping system or a turf cleaning system that
2 employs a shroud like disclosed in the Herhold patent?

3 A In the Jones patent, the jet hits the
4 surface, and then there's a vacuum nozzle behind it.
5 On the Breither machine, we're not -- the shroud on the
6 Breither machine is -- I think it's a brush as well.
7 The NLB system has the exact -- not the Herhold patent,
8 but it has a shroud on it just like the 116 patent
9 has. So the prior art on the 116 patent is the same as
10 the prior art on the NLB system. The shroud is exactly
11 the same.

12 Q That's not my question. My question is, are
13 you personally aware of a street sweeper system like
14 disclosed in Breither or a turf cleaning system like
15 disclosed in Jones that employ a shroud as disclosed in
16 Herhold?

17 A It looks like it's a similar -- it's a
18 similar shroud system that's being used. The shroud is
19 exactly the same on that of the NLB system in the prior
20 art.

21 Q I didn't ask you about NLB. I asked you what
22 is your specific knowledge as to is the shroud that's
23 disclosed in Herhold, all right, do you have any
24 specific knowledge personal that could form the basis
25 that either Jones or Breither used a shroud?

1 MR. PFEIFER: Objection; form.

2 BY MR. COHEN:

3 Q That's a yes or no question.

4 A So state the question again.

5 Q The shroud disclosed in Herhold --

6 A Yes.

7 Q -- do you have any personal knowledge as to a
8 street sweeper system or a turf cleaning system that
9 employs the Herhold disclosed shroud?

10 A I don't know. I'm not sure. I don't think
11 so. I don't think it uses the shroud exactly like that
12 one, no.

13 Q So you're not personally aware of anything?

14 A I'm not positive that the Herhold shroud is
15 exactly the same to that of the turf cleaning machine
16 of Jones and the street cleaning machine of Breither.
17 But I can say that the NLB prior art is exactly the
18 same. The patent from Herhold that was used separately
19 on the NLB prior art is the same shroud that's used on
20 the 116 patent.

21 MR. COHEN: Okay. I guess we'll take that
22 break now.

23 (Brief recess was taken at 4:07 p.m., to 4:14 p.m.)

24 CROSS-EXAMINATION (continued)

25 MR. COHEN: I'm marking Blasters 1005.

1 (Blasters Exhibit No. 1005 was so marked for
2 identification.)

3 BY MR. COHEN:

4 Q I'm handing you what's been marked as
5 Blasters Exhibit 1005. The exhibit I just handed you,
6 Blasters 1005, it is a patent to Schrunk,
7 S-c-h-r-u-n-k, Patent Number 5,494,393. Do you
8 recognize this patent?

9 A Yes, I do.

10 Q Have you read it before?

11 A Yes.

12 Q And you cite this patent in your declaration?

13 A I did.

14 Q And what is this patent related to?

15 A This patent dealt around using transversely
16 loaded or provided ramps that are pivotally connected
17 to the side of the vehicle and enables the small
18 utility vehicle tractor type device to be driven up and
19 onto a truck. And it takes up less space. It's safer,
20 and it enables you to drive the tractor forward in both
21 directions, so like coming up and going down. It
22 enables you to use it either way.

23 Q So is this type of device used in the
24 pavement marking removal industry?

25 A It can be. It can be. You know, it's not --

1 it can be used, yes.

2 Q How?

3 A To load any type of tractor on a truck. You
4 load it transversely to take up less deck space.

5 Q So this could be one piece of a system?

6 A It could be, yes, but depending on what. You
7 asked about the pavement marking. So it could be a
8 striping company using it. It could be a company that
9 does the removal using it. So, yes, it could be used
10 as one -- of one component of an overall system.

11 Q So in your expert declaration, this is
12 another patent that you say would be obvious to the 116
13 patent and over the combination of Jones, Breither,
14 Herhold and now this patent, Schrunk?

15 MR. PFEIFER: Objection to form.

16 BY MR. COHEN:

17 Q So in your technical field, and we're talking
18 pavement marking removals and specifically the field
19 that you're a technical expert in based on your
20 technical expertise, technically why would you be
21 motivated to add this component --

22 MR. PFEIFER: Objection; form.

23 BY MR. COHEN:

24 Q -- to arrive at the 116 patent?

25 A It just gives you more -- it gives you more

1 deck space. It's safer to load it this way, and it
2 gives you more deck space as opposed to loading it
3 longitudinally.

4 Q Where do you fit all the other components to
5 arrive at the system disclosed in the 116 patent?

6 A You just use a larger truck.

7 Q So how large of a truck would it have to be
8 to fit all the components required to do pavement
9 marking removals with a pump that pumps at 40,000 psi
10 and a vacuum pump that vacuums at 1100 cubic feet per
11 minute?

12 A The standard straight truck. It depends
13 on -- again, there's variables, the size of the water
14 tanks you use, the size of your sump. But, you know, a
15 24 foot straight truck would be more than enough to
16 accommodate something like this.

17 Q So you're familiar with all the components in
18 the 116 patent --

19 A Yes.

20 Q -- to construct the cleaning system disclosed
21 there?

22 A Correct.

23 Q Have you ever built a truck that has all
24 those components on it?

25 MR. PFEIFER: Objection; scope; objection;

1 relevance. It's the same as we discussed earlier. I'm
2 going to advise you not to answer that. We already
3 went over this.

4 THE WITNESS: I'm advised by my counsel not
5 to answer.

6 MR. PFEIFER: We can call the board again, if
7 we need to.

8 BY MR. COHEN:

9 Q Are you aware of trucks that have all the
10 components disclosed in the 116 patent?

11 A Yes.

12 Q And how long specifically are those trucks?

13 A I don't know. I'd have to take a
14 measurement, but workable.

15 Q Have you ever built a truck yourself like
16 that?

17 MR. PFEIFER: Objection. The same
18 objection. Don't answer that.

19 MR. COHEN: It's getting into his background
20 as an expert.

21 MR. PFEIFER: You just asked him if he's
22 familiar with it. You don't have to ask him if he's
23 actually built it.

24 THE WITNESS: I'm familiar with it.

25 BY MR. COHEN:

1 Q And how long would a truck with all these
2 components need to be?

3 MR. PFEIFER: Objection; asked and answered.

4 THE WITNESS: Workable. A workable length,
5 you know, that would be workable to go out on the road
6 and do a job with everything loaded all on one truck,
7 very workable.

8 BY MR. COHEN:

9 Q When a person of ordinary skill in the art in
10 your field builds one of these trucks, do they build
11 them to workable lengths, or are there technical
12 specifications involved? And specifically I'm asking
13 you for examples of specific dimensioning. Like how
14 long is the trailer? How many axils is on it? Why
15 would somebody be motivated to put all those components
16 on a pickup truck that has a -- it looks like an ATV on
17 the side of it? And that's disclosed in the Schrunk
18 patent.

19 MR. PFEIFER: Objection; form.

20 BY MR. COHEN:

21 Q I'm asking you to technically explain that
22 with details that are more than general.

23 THE WITNESS: Should I answer?

24 MR. PFEIFER: Sure.

25 THE WITNESS: I mean you're going to have the

1 water box unit on there, the vacuum power unit on
2 there, a water reservoir, a debris sump. And you're
3 going to have the ramps transversely loaded. It's
4 common. It's common in the industry. It's can be done
5 in the industry. It's common. People are doing it.
6 Yeah, it can be done. And I don't know. I'd estimate
7 roughly 24 or 25 feet which is very workable in the
8 industry. As an expert, that's a very workable length
9 of a truck to house all of those components to do
10 that. So it's not an overly long truck that would be
11 cumbersome to work on a job site with.

12 BY MR. COHEN:

13 Q So in the industry, why would you put the
14 truck on sideways --

15 A The tractor.

16 Q -- or the tractor on sideways?

17 A Instead of loading it longitudinally, when
18 you load it transverse, it enables you to have more
19 deck space available to haul more water to create a
20 sump that's larger that holds more water, debris water.

21 Q So what problem would that solve? I mean is
22 it fair to say that that's trying to fit everything on
23 one truck?

24 A It just makes it more workable to have
25 everything on one truck.

1 Q Okay. So specifically what sort of
2 innovation would you have to develop to fit everything
3 on one truck?

4 A It wouldn't be very innovative at all. I
5 mean everything is commonly known in the industry.
6 It's a rearrangement of known components. It's not
7 novel.

8 Q So --

9 A It's all prior art stuff that's available.

10 Q So the Jones, Breither, Herhold and Schrunk,
11 are those all in the pavement marking removal
12 industry? Are they examples of machinery that are
13 employed in the pavement marking removal industry?

14 A Let me take each one of them, I guess. The
15 Jones patent is built around turf cleaning. The
16 Breither patent has some similarities around street
17 cleaning, so, yes, it has some similarities. The
18 Herhold definitely is used in the pavement marking,
19 pavement marking and removal industry. It's being
20 used, yes, and so is the Schrunk transverse loading of
21 a utility tractor on a truck. So it's being used as
22 well, so yes. Some are and some aren't.

23 Q All right. So agreed, the Herhold component
24 is used in the industry --

25 A Yes.

1 Q -- as a pavement marking removal?

2 A And so is the Schrunk.

3 Q The Schrunk discloses a ramp system for
4 loading a tractor on?

5 A Correct.

6 Q So in the pavement marking removal industry,
7 Schrunk as disclosed is used with just loading a
8 tractor on sideways?

9 A You load the tractor onto the utility truck,
10 onto the support truck, so, yes, it is being used in
11 the pavement marking removal industry.

12 Q And in its entirety? There is a vehicle in
13 the pavement removal industry, marking removal industry
14 that just has a tractor loaded sideways on the truck,
15 which is what's disclosed in Schrunk -- excuse me.

16 MR. PFEIFER: Objection; form.

17 BY MR. COHEN:

18 Q Yes, that was correct, Schrunk.

19 A It's all -- everything is loaded all on one
20 truck.

21 Q So --

22 A You know, that's not true. I'm sure that
23 people do load, you know, equipment on transversely.
24 I've seen it before in the industry. So that's one
25 opportunity. The other one is loading it on a pavement

1 marking removal system that combines everything.

2 Q So in the pavement marking removal industry,
3 and that's the industry that you're a technical expert
4 in?

5 A Yes.

6 Q Putting a tractor and all the other
7 components on one truck is well-known; is that your
8 testimony?

9 A It is done in the industry.

10 Q So where is your industry reference in your
11 opinion of this disclosure you speak of?

12 MR. PFEIFER: Objection; form.

13 THE WITNESS: I guess I didn't -- it's
14 there. I mean it's available. I mean it could be made
15 available.

16 BY MR. COHEN:

17 Q But if these combinations of Jones, Breither,
18 Herhold and Schrunck are well-known in the industry,
19 where is the disclosure --

20 A I said they were done -- they were utilized
21 in the industry. I said they were utilized in the
22 industry.

23 Q Okay. So then people with ordinary skill in
24 the art in the industry would know about them?

25 A Correct.

1 Q So where is your evidence of these
2 combinations in your industry?

3 A I just guess I didn't put it in.

4 Q Because why?

5 MR. PFEIFER: Objection; form.

6 THE WITNESS: They weren't put in, but
7 they're completed. They're utilized in the industry
8 with everything on one truck, yes.

9 BY MR. COHEN:

10 Q So you're saying that your declaration is
11 incomplete?

12 MR. PFEIFER: Objection; form.

13 BY MR. COHEN:

14 Q I mean is it inaccurate?

15 A No, it's not inaccurate.

16 Q So where is your industry examples of the
17 combination of Jones, Breither, Herhold and Schrunk?

18 A I gave independent analysis and looked at
19 each one of the claims, claims 1 through 6 and claim 10
20 and just used prior art that would motivate me to make
21 a better system, and I did that. That's the result is
22 my declaration.

23 Q And my question is, you testified --

24 A It doesn't make anything inaccurate that it
25 wasn't.

1 Q So my question is, is you're saying in the
2 pavement marking removal of airline rubber and the
3 other surfaces that, for example, are disclosed in the
4 116 patent to remove from various hard surfaces such
5 asphalt and concrete, did I understand correctly that
6 you testified that the combination of Breither, Jones
7 or Jones, Breither, Herhold and Schrunk is well-known
8 in the industry?

9 A I didn't say well-known. I said it's done in
10 the industry.

11 Q It's done in the industry?

12 A Yeah, people do that.

13 Q So would a person of ordinary skill in the
14 art know about the components that you claim Jones,
15 Breither, Herhold and Schrunk disclose?

16 A Yes, they would if they did -- it would be
17 very obvious for them and easy for them to figure that
18 out, so yes.

19 Q So that is the foundation for my specific
20 question of if there are people in the industry that
21 you're a technical expert in, where is your evidence of
22 that in your declaration? Where is your discussion of
23 what people in your industry are doing?

24 MR. PFEIFER: Objection; form.

25 THE WITNESS: As I stated earlier, you know,

1 I referenced each of the specific prior arts as
2 compared to the existing claims in the 116 patent, and
3 I identified each one of them as stated in my
4 declaration.

5 BY MR. COHEN:

6 Q So there's not a combination of Jones,
7 Breither, Herhold and Schrunk anywhere in the pavement
8 marking removal industry that you're aware of?

9 MR. PFEIFER: Objection; form.

10 THE WITNESS: I already answered that there
11 are people doing it just like that with everything
12 loaded all on one truck.

13 BY MR. COHEN:

14 Q Right. And my question is, well, you're an
15 expert in this technology area. You submitted a
16 declaration in this technology area. You say you know
17 of people that are using this technology in this area,
18 and I'm asking you, well, where's the discussion of
19 that in your declaration?

20 MR. PFEIFER: Objection; form.

21 THE WITNESS: I'm saying that we put each one
22 of the components of the prior art together, and, you
23 know, it can be provided.

24 BY MR. COHEN:

25 Q So --

1 A I wouldn't say it's inaccurate. It doesn't
2 make the declaration inaccurate though. It makes it
3 stronger.

4 Q I mean --

5 A It makes it even more comprehensive.

6 Q You agree that your opinion hinges solely on
7 being able to pull this prior art in combination based
8 on your definitions of what these terms are in the 116
9 patent? Would you agree with that?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: No, I don't think it's just my
12 opinion on what it is. I mean I think it's not just my
13 opinion. It's my opinion what I said in the
14 declaration. But I think that the assumptions that are
15 made are not just my assumptions. You know, I put
16 myself in the shoes of a person with the skill, you
17 know, a person with skill in the art, ordinary skill in
18 the art.

19 BY MR. COHEN:

20 Q So you're saying then a person of ordinary
21 skill in the art will read the disclosures in the 116
22 patent, for example, and they would just -- they would
23 read claim 1, for example. It says a cleaning system
24 for removing coatings from a hard surface by a high
25 pressure liquid. And they would look to the

1 specification and say I'm going to disregard column 3
2 starting at line 57, which we read into the record
3 numerous times, they're going to disregard that
4 disclosed limitation, qualitative limitations of 25,000
5 to 40,000 psi? And that's just an example, and then
6 this way -- well, then Jones is what people in the
7 industry are doing?

8 MR. PFEIFER: Objection; form.

9 BY MR. COHEN:

10 Q And what I'm saying is, if a person -- what
11 I'm asking you is if a person of ordinary skill in the
12 art would understand that in this field of invention,
13 for example, pavement marking removal were to look at a
14 range between 25,000 to 40,000 psi, why would they use
15 the Jones machine as a baseline of representation of
16 what people are doing in the industry?

17 A The 116 patent is a cleaning machine as
18 stated in claims 1 through 6 and 10. It's not
19 specifically just a pavement marking removal system.
20 The 25,000 to 40,000 psi was an example. You know, it
21 wasn't a defining limitation.

22 Q But to illustrate what people in your
23 industry are doing or at least some, you need to
24 combine the turf cleaning machine with the street
25 sweeper?

1 A You would combine the prior art of the Jones
2 machine, the Breither machine, the Herhold machine and
3 the Schrunk machine.

4 Q Well, when you talk about what people are
5 doing in the industry --

6 A Yes.

7 Q -- are you referring to complete systems?

8 A Yes.

9 Q So you're aware of complete systems within
10 your industry --

11 MR. PFEIFER: Objection.

12 BY MR. COHEN:

13 Q -- for pavement marking removal?

14 A What does a complete system mean?

15 Q I'm asking you as an expert, what would a
16 complete system be for pavement marking removal?

17 A I mean people are building complete -- that's
18 very broad. Complete system is an extremely broad
19 question.

20 Q So what would you consider a complete system
21 narrowly defined?

22 A I mean narrowly defined? I mean not
23 everybody wants a vacuum. It depends on where you
24 are. Not everybody wants to load the tractor on
25 sideways. Not everybody wants a tractor. So I mean

1 there's a lot of different variations of this equipment
2 on how people want it, you know. And you try to build
3 equipment around what people's needs are and have the
4 price reflect it that way. So complete is a very broad
5 term. It's hard for me to answer.

6 Q Okay. So more specifically in your
7 declaration, you have a combination of Jones, Breither,
8 Herhold and Schrunk?

9 A Right.

10 Q In that specific combination, you're aware of
11 someone in your industry who is doing that combination?

12 A Yes.

13 MR. PFEIFER: Objection; relevance.

14 BY MR. COHEN:

15 Q So you're saying that whatever this system
16 you're referring to, and part of my question is, well,
17 what are you referring to?

18 A What do you mean by that?

19 Q Are you saying that there's somebody in the
20 industry that took the Jones turf cleaner and combined
21 it with a street sweeper and put an NLB pump on it, and
22 there you are?

23 MR. PFEIFER: Objection; relevance;
24 objection, form.

25 THE WITNESS: It was an example of the

1 prior -- I've already answered this question earlier,
2 but the prior art that was out there are examples of
3 technology that's commonly known in the industry. And
4 we already went through this before, and it's --

5 BY MR. COHEN:

6 Q So Jones, for example, discloses a pump that
7 pumps at 200 psi. And you're saying that the NLB pump
8 at 40,000 psi, you're saying pumps are pumps? Is that
9 your testimony?

10 MR. PFEIFER: Objection.

11 THE WITNESS: I didn't say that at all.

12 BY MR. COHEN:

13 Q So then my question is then explain to me
14 from a technical standpoint why would a person of
15 ordinary skill in the art area we're talking about,
16 your area of technical expertise, interchange those
17 pumps?

18 A What I said was the similarity as a pump is
19 that they're both positive displacement pumps. And I
20 said that for cleaning, the Jones pump could be used
21 for cleaning. If you want to take off hard or robust
22 markings, then you may have to go up in pressure, and
23 that's why we combined the NLB pump that went up in
24 pressure.

25 Q If you had to combine the NLB pump to get

1 pressures to remove these coatings or vulcanized rubber
2 or whatever else is cleaned with machines in your
3 technical area of expertise, then if that range was
4 above 25,000 psi, for example, then these references
5 would not be used to make that sort of device. Would
6 you agree with that?

7 MR. PFEIFER: Objection; form.

8 THE WITNESS: The 116 patent is a cleaning
9 machine though. It's a cleaning machine that does more
10 than just take markings off. So it can be done with
11 lower pressures. And regardless NLB runs up to 40,000
12 psi anyways. They are prior art that I referenced.

13 BY MR. COHEN:

14 Q So you're saying a person of ordinary skill
15 in the art in the area of pavement marking removal
16 would use what's disclosed in the 116 patent to clean
17 turf?

18 A No. We talked about this question. You
19 already asked me this question, too. You use different
20 pressures for different cleaning. You use the lower
21 pressure for softer materials and higher pressure for
22 harder materials. When you're cleaning -- and like the
23 116 patent is a cleaning machine. Claims 1 through 6
24 define that. Claim 10 defines that. It's a cleaning
25 system. You use different pressures for different

1 applications.

2 Q So you still don't have a technical answer to
3 that question.

4 A That's very technical, a very technical
5 response.

6 Q I'm asking you based on what's disclosed in
7 this patent, the 116 patent, in the ranges of 25,000 to
8 40,000 psi -- and we spoke earlier on the 116 patent
9 about prior art in this area including the machine that
10 you built, Blasters Corporation, that we're talking
11 about pumps that are in the range of 25 to 40,000 psi.

12 MR. PFEIFER: Objection; form.

13 BY MR. COHEN:

14 Q Would you agree that one of ordinary skill in
15 the art would understand that that's the disclosure in
16 the 116 patent?

17 A If the 116 patent is only requiring cleaning
18 -- sorry -- removing pavement markings, then that
19 would be correct. But it's a cleaning system, so lower
20 pressures can be utilized. Again, 25,000 to 40,000 was
21 an example. It was not a defining value, if you will.
22 It was an example. It didn't say you have to run
23 25,000 psi to 40,000 psi. It doesn't say you have to
24 run that pressure. It was an example of what was
25 typically run was an example of 25,000 to 40,000. And

1 besides that, the NLB prior art, if you do want to run
2 40,000 psi, that system in the prior art would motivate
3 anybody to use it. They use a tractor. They use a
4 system, you know. I mean, you know, it's a striking
5 resemblance.

6 Q So if someone in your industry said I'm going
7 to take one of these NLB trucks with a 40,000 psi pump
8 on it, you know, a high power vacuum pump, you know,
9 something along the lines of 1000 cubic feet per
10 minute, and they're going to go and remove vulcanized
11 rubber from a runway, if they said -- and I assume
12 these jobs are bid to a specification where it would
13 say it will take us, I don't know, a day to clean all
14 the runways. Is that something that's normally
15 discussed in the industry?

16 MR. PFEIFER: Objection; relevance.

17 THE WITNESS: I mean, of course, with any
18 project, you'd have a scope of work and you'd have a
19 duration of time that you'd have to give that to your
20 customer of how long it's going to take to do the job.

21 BY MR. COHEN:

22 Q And would it be an incorrect technical term
23 once all the rubber is removed from the runway, for
24 example, that the runway is now clean of the rubber?

25 A Would that be the language that would be used

1 after the application was complete? Is that what
2 you're asking?

3 Q Would that be technically incorrect to say
4 once all the vulcanized rubber is removed from an
5 airport runway, that the runway is clean?

6 MR. PFEIFER: Objection; form.

7 THE WITNESS: Typically all the rubber is not
8 removed. It's a partial removal spec. So, you know,
9 it was removed -- I would say it would be more that the
10 rubber was removed from the runway. I wouldn't say it
11 was cleaned from the runway.

12 BY MR. COHEN:

13 Q So when you have a claim -- a cleaning system
14 for removing coatings, so the cleaning system would
15 remove the coatings. So if we're talking about
16 removing runway rubber, that system is cleaning the
17 rubber off. Is there anything technically incorrect
18 about that statement?

19 A I guess you could say it's cleaning. You
20 could say it's cleaning the runway, but, you know, the
21 next person might say it's removing the rubber.

22 Q I didn't ask you that. I asked you is there
23 anything technically incorrect about using that
24 terminology in your industry?

25 A Cleaning the runway? Cleaning the runway?

1 Q Sure.

2 A No, there's not anything technically wrong
3 with saying cleaning the runway. But the
4 specifications -- so we're on the same page, if you go
5 to an airport, it's not called cleaning. It's not
6 called cleaning the rubber. The specification is
7 rubber removal. It does not talk about cleaning the
8 runway. It's never the spec, and that's not the
9 technical or industry language. The industry language
10 is rubber removal. It's not cleaning.

11 Q So if somebody were to say to a person of
12 ordinary skill in the art in this technical area we're
13 talking about, your area of expertise, do you have a
14 machine to come out and clean my runway?

15 MR. PFEIFER: Objection; form.

16 BY MR. COHEN:

17 Q Is that person of ordinary skill in the art
18 going to come out with a Jones turf cleaning machine,
19 or are they going to come with something different?

20 A The Jones cleaning system was an example of
21 prior art that was commonly known on the market. You
22 wouldn't go to clean a runway with an artificial turf
23 machine.

24 Q So if you're talking about coatings and
25 markings in the area of airport runways and roadways

1 and other asphalt and concrete structures that would
2 have these markings like parking garages and roads, if
3 your cleaning system is removing these coatings, would
4 you agree that that's limited to a pressure range of
5 25,000 to 40,000 and up or some vacuuming at a rate to
6 keep up, a vacuum pump system capable of over 1000
7 cubic feet per minute? Would you agree that those are
8 necessary components that a person of ordinary skill in
9 the art at a minimum would have on their machine?

10 MR. PFEIFER: Objection; form.

11 THE WITNESS: Ask me one question at a time
12 if you would. That was kind of a run-on sentence.

13 BY MR. COHEN:

14 Q Okay. If somebody asked a person of ordinary
15 skill in the art to remove a rubber coating from a
16 runway --

17 A Just so we're on the page, rubber is not a
18 coating.

19 Q Fine. Vulcanized rubber that is attached to
20 the runway surface.

21 A Okay. Right.

22 Q If a person of ordinary skill in the art is
23 approached to remove that rubber, what are the minimum
24 operating components on the system to come out to blast
25 with water that vulcanized coating off and vacuum it

1 up?

2 MR. PFEIFER: Objection; form.

3 THE WITNESS: I mean we talked about this
4 earlier, too. I mean typically, you know, maybe
5 15,000 psi up to -- you know, rubber is not typically
6 cleaned at 40,000 -- not cleaned, but removed at 40,000
7 psi.

8 BY MR. COHEN:

9 Q But would the person of ordinary skill in the
10 art select a turf cleaning machine that discharges
11 water at 200 psi?

12 A You wouldn't use a turf cleaning machine to
13 do a rubber removal project, and you wouldn't -- you
14 use different pressures for different applications.
15 You have to be, you know, wise and aware of your
16 application to choose the right piece of equipment.
17 The example of the Jones machine was prior art of an
18 example of a utility tractor and a support truck. That
19 was the example, and then it built from there to create
20 the best possible machine. So the answer is you
21 wouldn't use a -- you wouldn't use the Jones machine to
22 tackle a runway project. But when you add the other
23 components of the prior art that are all commonly
24 available and commonly known on the market and
25 rearrange them in a larger truck, and you surely could

1 go out and do the work on a runway.

2 Q So have you built any trucks --

3 MR. PFEIFER: Objection.

4 BY MR. COHEN:

5 Q -- utilizing the combination of these
6 disclosed references?

7 MR. PFEIFER: Don't answer that.

8 THE WITNESS: Counsel advised me not to
9 answer.

10 BY MR. COHEN:

11 Q I mean in your technical background and
12 expertise, a lot of what you rely upon is your patents
13 and your positions at Blasters, Inc., in various
14 capacities over the years. Do any of those involve
15 building a system that's similar to what's disclosed in
16 the 116 patent?

17 MR. PFEIFER: Again, objection for the same
18 reason.

19 THE WITNESS: Don't answer?

20 MR. PFEIFER: No.

21 THE WITNESS: Counsel suggests I don't
22 answer.

23 BY MR. COHEN:

24 Q I mean --

25 MR. PFEIFER: There surely can be other ways

1 to get an answer to that question.

2 BY MR. COHEN:

3 Q So what is your experience in constructing
4 machines for applications such as removing pavement
5 markings and/or the vulcanized rubber in airport
6 runways?

7 A We starting building them in 1990, and we
8 started building systems that we sold in 1992,
9 something like that. So the early '90s.

10 Q And have they evolved through the present
11 time?

12 A Yes. Like any system, you want to improve as
13 you go.

14 Q Okay. So --

15 A And evolve.

16 Q And when you first started developing your
17 first system, did you use something similar to the
18 Jones reference?

19 MR. PFEIFER: Objection; form.

20 THE WITNESS: In the original system that we
21 built was a truck-mounted system. It didn't have a
22 tractor, so it's not relevant.

23 BY MR. COHEN:

24 Q So you didn't even start with something as
25 small as the Jones reference for the applications we're

1 talking about in the field of art that the 116 patent
2 is related to?

3 MR. PFEIFER: Objection; relevance.

4 THE WITNESS: Can I answer that?

5 MR. PFEIFER: You can.

6 THE WITNESS: The first trucks that we built
7 were truck-mounted systems where we had a head off the
8 front of the truck, and there was no utility tractor
9 utilized. So it's not relevant.

10 BY MR. COHEN:

11 Q So there came a time where you added a
12 utility tractor, you called it --

13 A Yes.

14 Q -- to the system?

15 A Yes.

16 Q And when was that?

17 A 1999, '98.

18 Q And what are the components of that system?

19 MR. PFEIFER: Objection. You're going down
20 the same line. Don't answer it.

21 THE WITNESS: Counsel has --

22 MR. PFEIFER: This is not relevant.

23 MR. COHEN: This is absolutely relevant. I'm
24 asking his background and getting into his expertise.
25 And I'm saying how would one of ordinary skill in the

1 art be motivated to combine this stuff, and he's giving
2 general answers. I mean this is a cross-examination.

3 MR. LYTVYN: Sure. And the person of
4 ordinary skill in the art is not defined as somebody
5 who actually builds these machines. I think that's the
6 definition that we have on the record that we proposed,
7 and you guys agreed to it and the board accepted, nor
8 does it say that a person of ordinary skill in the art
9 is somebody who actually builds these machines.

10 BY MR. COHEN:

11 Q Somebody of ordinary skill in the art is
12 agreed would have technical expertise in this area, and
13 that's you?

14 A Yes.

15 MR. PFEIFER: Objection; asked and answered.

16 BY MR. COHEN:

17 Q So in this area, you -- I mean you say you're
18 a technical expert, so I assume that encompasses you're
19 a person of ordinary skill in the art; correct?

20 A Correct.

21 Q So you testified earlier that a lot of these
22 components are known in the industry and are built on
23 specific machines within your industry. So I'm asking
24 you specific questions. What is your knowledge about
25 where -- like who in the industry and how is this done,

1 and, for example, have you a built machine that is a
2 combination of all these references?

3 MR. PFEIFER: Objection. Again, this is
4 going into -- don't answer. You're leading right down
5 the road of whether or not he infringed this patent.
6 It's not relevant to determine all -- who has built one
7 of these machines since the implementation of the 116
8 patent.

9 MR. COHEN: We're talking about prior art.

10 MR. PFEIFER: You're not though.

11 MR. LYTVYN: You're asking if anybody else
12 has built one of these machines.

13 MR. COHEN: But I'm making the question more
14 specific.

15 BY MR. COHEN:

16 Q The prior art -- is there prior art in your
17 industry specific to your opinion?

18 A The NLB patent.

19 Q Okay. So the NLB patent by itself or the NLB
20 disclosure -- so you're saying that Schrunk assigned
21 NLB that? Is that what you're referring to?

22 A No. The NLB prior art, I'm saying.

23 Q The reference?

24 A The reference.

25 Q The Blasters 1006 I believe is the --

1 A Yeah, this one right here, 1006.

2 Q So what other prior art in your industry are
3 you aware of because you agreed Jones is not within the
4 scope of your industry?

5 MR. PFEIFER: Objection; relevance.

6 BY MR. COHEN:

7 Q Breither is not within the scope of your --

8 A We've already gone through this question.
9 You've already asked me three -- this is probably the
10 third different way you have asked me the same
11 question. I already answered it.

12 Q You didn't answer it. So is it correct to
13 say that Jones by itself is not a machine that's
14 utilized in your industry?

15 MR. PFEIFER: Objection; form.

16 THE WITNESS: No. The Jones machine by
17 itself is not used for pavement marking removal.

18 BY MR. COHEN:

19 Q Okay. And either is Breither?

20 A Stand alone it is not.

21 Q And neither is Schrunk?

22 A Stand alone it is not.

23 Q So why would a person of ordinary skill in
24 the art in your industry combine all of these
25 references?

1 A Because it's prior art, and it's commonly
2 known. It's commonly known in the industry.

3 Q You could combine Jones, Breither, Herhold
4 and Schrunk with NLB and arrive at what's been
5 disclosed in the 116 patent?

6 MR. PFEIFER: Objection; form.

7 THE WITNESS: Yes. It's commonly known in
8 the industry. And it's a rearrangement of components,
9 and, sure, yeah, it could be done, yes.

10 BY MR. COHEN:

11 Q And I'm asking what is your personal
12 knowledge of that within your industry, and without
13 citing to these references, do you have personal
14 knowledge of where this is being employed in your
15 industry?

16 MR. PFEIFER: Objection; relevance. We're
17 not here for him to find infringes for you. Don't
18 answer the question.

19 MR. COHEN: This is inconsistent with -- it's
20 a follow-up question to his testimony of this is known
21 in the industry.

22 MR. PFEIFER: It's not because you're not
23 restricting your time frame back to the priority date.
24 You're asking if this is happening in the industry.
25 Those are two completely different questions. And the

1 fact remains that just because we don't have a 102
2 (sic) reference doesn't mean that the combination of
3 references is not obvious.

4 BY MR. COHEN:

5 Q In terms of prior art, what is going on in
6 the industry that you have personal knowledge of that
7 everyone is doing?

8 A I never said everyone. I said there are
9 people that are doing it. It's the same question,
10 isn't it?

11 MR. PFEIFER: It is.

12 THE WITNESS: Yes, it's the same question.
13 I'm not going to answer that.

14 BY MR. COHEN:

15 Q Prior to July 2nd, 2004, because we're
16 talking about prior art, do you agree that that's what
17 your opinion is based around?

18 A Yes, on claims 1 through 6 and 10, correct.

19 Q Within your industry, is there prior art that
20 you're aware of prior to July 2nd of 2004 that combines
21 these elements such as are disclosed in Jones,
22 Breither, Herhold and Schrunk?

23 A Some of them are -- some of those -- there is
24 prior art for all of them prior to 2004, yes, July 2nd,
25 2004, yes, there is.

1 Q Other than this? So people that are doing
2 pavement marking removal and removing runway vulcanized
3 rubber coatings, there is other combinations similar to
4 Jones, Breither, Herhold and Schrunk that you're aware
5 of?

6 A Be more specific with your question to make
7 sure I'm answering it correctly.

8 MR. COHEN: Would you mind reading that
9 question back.

10 (Previous question read back by court
11 reporter.)

12 THE WITNESS: Then do I answer the question?

13 MR. PFEIFER: Yes, you can answer that.

14 THE WITNESS: Yes, there are people out there
15 doing this.

16 BY MR. COHEN:

17 Q And like what specifically are you referring
18 to?

19 MR. PFEIFER: Objection; scope.

20 THE WITNESS: I guess the question is you
21 said -- you referenced the Jones, the Herhold, the
22 Breither and the Schrunk patent prior art.

23 BY MR. COHEN:

24 Q Yes.

25 A You're asking me are there people that are

1 doing each of those?

2 Q I'm asking you a follow-up question to -- and
3 correct me if I have this wrong. I'm trying to clarify
4 if you testified then that there are some people in
5 your industry who have devices, machines, to be
6 utilized in the pavement marking removal or airport
7 rubber runway removal industry that are using this
8 technology --

9 MR. PFEIFER: Don't answer that.

10 BY MR. COHEN:

11 Q -- prior to July 2nd 2004 where you're
12 saying -- what is your knowledge of these elements
13 being combined in your industry?

14 MR. PFEIFER: You can answer that one.

15 THE WITNESS: My knowledge of the --

16 MR. PFEIFER: Objection; scope also.

17 THE WITNESS: There are people in the
18 industry that are combining those combinations of
19 equipment all on one chassis, yes.

20 BY MR. COHEN:

21 Q They're doing that prior to July 2nd of 2004?

22 A I'd have to think about that one, yeah. I'm
23 not sure if it was prior to that date or not. But
24 there's people that are doing it. Surely the prior art
25 shows there's -- I'd have to think about that. I'd

1 have to think about that. I'm not prepared to -- I was
2 just saying I'm not prepared to answer the question
3 before July 2nd of 2004. I don't know.

4 Q What is your understanding of what
5 constitutes prior art?

6 A Prior art is the technology prior to the
7 filing date of the patent. The patentholder in this
8 case is the technology that was made publicly available
9 and aware prior to the filing date. It's the specific
10 technology that's mentioned in the claims.

11 Q And at the time that you prepared and
12 executed your declaration, was that your understanding
13 of what prior art was at the time?

14 A Yeah. I would say so, yes.

15 Q So the question you just said you had to
16 think about, what was the state of the prior art in
17 your industry, do you think that that would have been
18 something you would have researched at the time of
19 preparing this declaration?

20 MR. PFEIFER: Objection; form; objection;
21 scope.

22 THE WITNESS: No, I wouldn't have.

23 BY MR. COHEN:

24 Q You wouldn't have considered prior art within
25 your own field?

1 A I did. We did prior art based on each of the
2 components to try to -- again, we weren't trying to
3 beat anyone's patent. We were just trying to improve
4 the system.

5 Q What do you mean by that?

6 A Just trying to improve a system and build the
7 best possible system that's out there.

8 Q So are you saying you built the best possible
9 system out there?

10 A I don't know. One may say that.

11 Q Okay. So is that based on you reading the
12 references of Jones, Breither, Herhold and Schrunk in
13 combination, or is it something else?

14 A I think there's a whole lot of things that go
15 into, you know, a lot of industry knowledge. Yeah,
16 definitely reading, you know, Jones, Breither, Herhold,
17 NLB prior art, Schrunk, all of those added together
18 helps enlighten me.

19 Q So this best system that you think you built,
20 when was that built?

21 MR. PFEIFER: Objection; relevance; outside
22 the scope. Don't answer that.

23 BY MR. COHEN:

24 Q That's a direct follow up to something you
25 testified to.

1 MR. PFEIFER: You don't need to know the
2 date.

3 MR. COHEN: Why not?

4 MR. PFEIFER: Because the date directly goes
5 towards infringement.

6 MR. COHEN: I'm asking about prior art. Did
7 he build a machine that he thinks is the best prior to
8 or after July 2nd of 2004.

9 MR. LYTVYN: And just to clarify, build is
10 using -- is being used in a constructive sense; right,
11 constructively built? Is that what you were talking
12 about or actually physically built?

13 MR. COHEN: I'm asking the technical expert.
14 I mean I'm asking him.

15 BY MR. COHEN:

16 Q What do you mean by that? What did you build
17 and when?

18 A We build, you know, all kinds of systems. We
19 build equipment every day. So I'm not sure what the --
20 I don't have a date on when I built it. What I'm just
21 saying in general is what we did was to look at the
22 prior art, understand the prior art, and it was
23 motivation to improve the system and nothing to do with
24 violating the 116 patent.

25 Q What prior art are you referring to?

1 A I'm referring to Jones. I'm referring to
2 Breither, Herhold.

3 Q The machine you were just referring to --

4 A Which machine?

5 Q I don't know. I'm asking you. You said you
6 read references; right, and you built what you thought
7 was the best machine?

8 A I said we wanted to build the best machine.
9 If I used the wrong tense, then maybe that's the case,
10 but I said we wanted to build the best system.

11 Q And you reviewed prior art in your endeavor
12 to build the best system?

13 A I read this prior art, the Jones, Breither.

14 Q When's the first time you read the prior art?

15 A I can't recall. I don't know.

16 Q And then when you said you wanted to build
17 the best system, what's your time frame to start
18 building the best system?

19 A To be determined.

20 Q So it hasn't been built yet?

21 A No.

22 Q And are you contending that all the
23 references that you cite in your declaration is the
24 limit to the prior art in your industry area?

25 MR. PFEIFER: Objection; scope.

1 THE WITNESS: No, I don't think it's limited
2 to that. It could continue to improve. It's gets
3 outside those limits.

4 BY MR. COHEN:

5 Q So is there art, prior art that's outside of
6 the limit of what is disclosed in your declaration?

7 A No, not that I know of right now.

8 Q Okay. And you're not aware of any other
9 prior art prior to July 2nd, 2004 within your industry?

10 MR. PFEIFER: Objection; scope.

11 THE WITNESS: I said I'm not -- I don't know
12 for sure. I'd have to come back and answer that
13 question.

14 BY MR. COHEN:

15 Q And would you agree that that probably would
16 have been important if, in fact, that fact existed to
17 make it into your declaration?

18 MR. PFEIFER: Objection; scope.

19 THE WITNESS: I don't think it would have
20 been important enough.

21 MR. COHEN: All right. I'll mark this as
22 Blasters 1007.

23 (Blasters Exhibit No. 1007 was so marked for
24 identification.)

25 BY MR. COHEN:

1 Q I'm showing you what's been marked as
2 Blasters 1007.

3 A Yes.

4 Q Do you recognize this patent?

5 A I do.

6 Q Have you reviewed it before?

7 A I have.

8 Q For what purpose did you cite this in your
9 opinion?

10 A Because it's one method of collecting the
11 debris. You know, you have to have an angled floor
12 somehow to dump the water and debris, and this is one
13 of the prior art references that I looked at because
14 this is a tiltable body for collecting debris as a dump
15 truck would work.

16 Q So this is a dump truck?

17 A No, it's not a dump truck. It's just a
18 tiltable body like a dump truck. It just tilts. The
19 box tilts.

20 Q So then --

21 A This is a tank. Actually that's a tank for
22 holding water and debris.

23 Q So we're referring to Blasters Exhibit 1007,
24 and this a U.S. Patent to Sloan, Patent Number
25 4,975,205. And if you would turn to figure 1.

1 A Figure what?

2 Q 1?

3 A Figure 1, yes.

4 Q There's a truck with a body that's tiltable,
5 and it looks like there's a hinge on the rear for
6 dumping?

7 A Correct.

8 Q Would somebody in the art area that you're a
9 technical expert refer to this as some version of a
10 dump truck?

11 A I think the only similarity would be as it
12 lifts up to dumb, but it's not an open box. It's a
13 tank.

14 Q So if you categorize it as a tiltable dumb
15 body, would that be more accurate?

16 A A tiltable dump body? I wouldn't call it
17 that. I'd call it a -- it's a sump. It's a
18 reservoir. You know, it's a tank that tilts. It does
19 tilt. It's just somebody's example. It's just, you
20 know, a commonly known over-the-counter description.
21 Everybody knows what a dumb truck is.

22 Q Are trucks like this in your industry of
23 pavement marking and coating removals and vulcanized
24 rubber on airport runway removals, are trucks such like
25 this disclosed in the Sloan reference patent commonly

1 outfitted with high pressure pumps and high vacuum
2 pumps?

3 MR. PFEIFER: Objection; relevance.

4 THE WITNESS: Yes, they are.

5 BY MR. COHEN:

6 Q So in your industry, if you're going to build
7 a system for removing pavement markings or coatings,
8 you would start with a base truck like the Sloan
9 reference?

10 A Not necessarily. I mean you could start with
11 the Jones, with the Jones truck. It wouldn't matter
12 what chassis you used, cabin chassis. It wouldn't
13 matter.

14 MR. PFEIFER: I'm like to object to the
15 previous question to the scope and relevance.

16 BY MR. COHEN:

17 Q So this is added to the list of references
18 that you've reviewed in contemplating, you testified,
19 in building the best possible system you can. And it's
20 your testimony that a person of ordinary skill in the
21 art would start with these disclosed references being
22 all the exhibits in front of you to arrive at the best
23 system?

24 MR. PFEIFER: Objection; form; objection;
25 relevance.

1 THE WITNESS: I could, yes.

2 BY MR. COHEN:

3 Q Okay. And what exactly would you contemplate
4 the best system to be?

5 A The most viable system. I think it's
6 subjective, but the most viable system. The best
7 system is the most workable system and potentially the
8 economical system, simplest system, you know, the unit
9 that uses less parts, so the operating costs less. And
10 I think it's a whole multitude of a big cross-section
11 of things I would look at as the expert on building the
12 best possible system as in any industry. And there's a
13 lot of variables that determine what the best possible
14 system is, and at the end of the day, it's very
15 subjective, you know. It depends on who's asking and
16 who's answering.

17 Q So in reviewing the prior art to build the
18 best possible system --

19 A Yes.

20 Q -- technically what are your goal technical
21 parameters that the best system would have to employ?

22 A You'd have to look at the comprehensive, you
23 know, the overall machine. There would be a whole lot
24 of different components that I would look at. I mean
25 there's countless components that you would look at in

1 the design of the components, the orientation. I mean
2 there's a lot of things that goes into building a big
3 piece of equipment.

4 Q I mean you're a technical expert. Could you
5 give me some technicals on after reviewing the prior
6 art, what sort of components would have to be in the
7 best system?

8 MR. PFEIFER: Objection; scope.

9 THE WITNESS: You know, the components would
10 be the articulating head that's on it and how the head
11 works and how it vacuums, how the waterblast system,
12 does it drive off the truck engine; does it drive off
13 an auxiliary engine. You know, there would be a whole
14 multitude of -- I mean I would look at do you want to
15 use a tiltable sump reservoir or, you know, a sloped
16 floor reservoir. There would be a lot of different
17 variables that would be looked at to determine what the
18 best possible system is. And one thing I would focus
19 on is building the most -- is building a simple system
20 as well.

21 BY MR. COHEN:

22 Q So is it fair to say that if you're building
23 an improved yet simple system, that combining a bunch
24 of known elements to get them to work in a combination
25 that is simple and useful and for patent purposes

1 novel, would you agree that that involves some
2 ingenuity?

3 A No, not necessarily.

4 MR. PFEIFER: Objection; scope.

5 THE WITNESS: Not necessarily.

6 BY MR. COHEN:

7 Q So based on what?

8 A It's a bold statement to say that that
9 wouldn't be the easiest way to do it is to look at the
10 prior art patents that are out there, and I'm answering
11 not necessarily.

12 Q Well, I'm saying a person of -- your opinion
13 is a person of ordinary skill in the art would look at
14 the prior art references that you cite in your
15 declaration?

16 A Yes.

17 Q And based on that, it would be obvious to
18 that person of ordinary skill in the art to come up
19 with what's disclosed in the 116 patent. So I mean my
20 question is technically speaking in your opinion, would
21 that person of ordinary skill in the art expect to be
22 able to combine all these references? What's the
23 motivation for getting all these components to work
24 together in combination?

25 A The motivation would be to ultimately yield

1 the best system.

2 Q But why would a person of ordinary skill in
3 the art reading the combination of your references
4 expect success in using that parts list to come up with
5 what's disclosed in the 116 patent?

6 MR. PFEIFER: Objection; form.

7 THE WITNESS: They would expect to -- they
8 would expect to yield success. It's very obvious and
9 components that are commonplace in the industry, things
10 that are already successfully used. So my opinion was
11 the technology is proven and available.

12 BY MR. COHEN:

13 Q So the 116 patent is issued to James P.
14 Crocker, and it was filed July 2nd 2004. And are you
15 aware in your industry of anyone who read all these
16 cited prior art references in your opinion and derived
17 an invention that's disclosed in the 116 patent?

18 MR. PFEIFER: Objection; scope and
19 relevance.

20 THE WITNESS: I mean how would I know if
21 somebody else read those patents. I have no idea.

22 BY MR. COHEN:

23 Q Well, you've read the patents; correct?

24 A Correct.

25 Q And prior to July 2nd, 2004, are you aware of

1 a machine in your industry for removing pavement
2 markings, coatings and/or vulcanized rubber on airport
3 runways that is a combination of all of the prior art
4 references that you have put into your expert
5 declaration here?

6 MR. PFEIFER: Objection; scope.

7 THE WITNESS: I'm unaware, but it doesn't
8 mean that there isn't. But there are people that have
9 built systems very similar prior to 2004 like NLB.

10 BY MR. COHEN:

11 Q Like what, for example, in the 116 patent?

12 A I think PCS was building equipment and using
13 equipment themselves just like that. I think the
14 company that was started by James P. Crocker used that
15 technology. And that was available. You know, it was
16 out there, and everybody saw that work in the late
17 '90s.

18 Q And we talked about this earlier on the
19 record. For example, in the 116 patent, in talking
20 about the prior art background, the last paragraph in
21 column 1 is talking about NLB markets a high pressure
22 water jet system called the StarJet and the next
23 paragraph is the StripeJet. And then there's a similar
24 device marketed by Blasters Corporation, which is your
25 corporation. Are those exemplary of what you're saying

1 are similar devices that were in the marketplace at the
2 time in your industry?

3 A MR. PFEIFER: Objection; form.

4 THE WITNESS: Yeah. Yeah, those are
5 similar.

6 BY MR. COHEN:

7 Q Okay. So if we just categorize that for the
8 record as being prior art specific to the field of
9 invention of the 116 patent, are you aware of any
10 other -- and I think you just mentioned one. Are you
11 aware of any other disclosures or prior art or people
12 prior to July 2nd of 2004 doing anything else similar
13 within this field of invention?

14 MR. PFEIFER: Objection; relevance;
15 objection; scope.

16 THE WITNESS: Should I answer?

17 MR. PFEIFER: Yes.

18 THE WITNESS: I'm unaware of a system that
19 has all the components all combined, but definitely
20 people were out there doing each of the components of
21 the prior art.

22 BY MR. COHEN:

23 Q Individually?

24 A Individually.

25 Q But not combined that you're aware of?

1 MR. PFEIFER: Objection; scope and relevance.

2 MR. COHEN: Let's mark this as Blasters

3 1008.

4 (Blasters Exhibit No. 1008 was so marked for
5 identification.)

6 BY MR. COHEN:

7 Q I'm handing you what's been marked as
8 Blasters Exhibit 1008, which is a patent, a United
9 States Patent issued to Clemons. It's U.S. Patent
10 Number 6,381,801. You're familiar with this patent?

11 A Yes, I am.

12 Q Is this one of the patents that was in your
13 declaration?

14 A Yes, it is.

15 Q Okay. Is this an example of what somebody in
16 your field specifically pavement marking removals,
17 coating removals and rubber removal would be using to
18 remove those type of coatings?

19 A I mean that system is similar to a StarJet.
20 This doesn't have an utility tractor with it. It has a
21 pivotal link on it with a head on the front of the
22 straight truck. But you could easily by disconnecting
23 the hose that's going to the -- the high pressure hose
24 and the vacuum hose going to the head, run it to a
25 tractor. So the answer is, yes, it could be. It could

1 be used for something like that for stripe removal, but
2 not at the pressure that it's being run. But it could
3 be -- it could be used once you put a higher pressure
4 pump on it.

5 Q So at the pressures disclosed in the Clemons
6 reference --

7 A Uh-huh.

8 Q -- you would not be able to remove the
9 coatings, markings or vulcanized rubber that is
10 commonly removed in your industry in the field of
11 invention of the 116 patent?

12 MR. PFEIFER: Objection; form.

13 THE WITNESS: This is a 4,000 psi system. As
14 I said earlier, different pressures for different
15 applications. You would simply have to change the pump
16 that of NLB to go on the Clemons machine. It's similar
17 to that of what we talked about with Jones. So it
18 could be upgraded to be able to do that.

19 BY MR. COHEN:

20 Q So looking at figure 1 in the Clemons
21 reference, I notice there's a number of different
22 components here. See, like in the middle of the
23 reference, there's a number 908, and it seems to be
24 pointing to a box that says boiler?

25 A Yes.

1 Q Do the systems in your industry commonly use
2 boilers?

3 A No. The pump could be used without using the
4 boiler.

5 Q So if a person of ordinary skill in the art
6 which you are one, and you talked about reading the
7 prior art references earlier and building the best
8 machine. So you would expect by utilizing the Clemons
9 reference, that you could just shut the boiler off and
10 drop a 40,000 psi pump in here and be ready to go to
11 start removing pavement markings and rubber?

12 A I think what you're looking at isn't drawn to
13 scale. I mean this just shows you these components are
14 going to go on that truck. I don't think the
15 orientation is exactly the way it is on the truck
16 obviously by looking at it. So it's not drawn to
17 scale, and you don't know from an orientation
18 perspective where everything goes. But running the NLB
19 pump with the head off the front of the -- off of the
20 Clemons unit, yes, it could achieve the objective of
21 cleaning rubber.

22 Q But you would need a pump at a significantly
23 higher pressure than 4,000 psi?

24 A If you're not doing cleaning, the 116 patent
25 is a cleaning machine. But if you're specifically

1 asking me to do rubber removal, then, yeah, you would
2 run it higher than 4,000 psi.

3 Q So in your industry for removing rubber
4 and/or pavement markings, a person of ordinary skill in
5 the art would not select the Clemons machine by itself
6 to remove those coatings?

7 A You would use a -- somebody would use a
8 cross-section of the prior art examples that we gave.
9 So you wouldn't just use the Clemons machine stand
10 alone to go out and do pavement marking removal.

11 Q So what would motivate a person of ordinary
12 skill in the art to combine all these references, and
13 what manner would they combine them that they would
14 expect to achieve success in building a machine that's
15 workable that can remove pavement markings?

16 A Well, each one of the systems achieves the
17 objective. And so just a simple utilization of the
18 commonly-known components would make it easy for them
19 to see going into it, that they're going to be
20 successful.

21 Q So just so I'm clear, you've decided in your
22 opinion that the 116 patent discloses a cleaning system
23 for cleaning anything?

24 A I mean anything is broad, but it's a pretty
25 good cross-section of what that machine can be used for

1 as any other machine that is similar to that can be
2 used for a lot of different applications. That's what
3 makes them marketable.

4 Q And you would agree that if the 116 patent
5 was limited to ranges, for example, of 25,000 to 40,000
6 psi, that the prior art references of Jones, Breither,
7 Clemons would not have pumping systems that would be
8 capable of that operating parameter? Would you agree
9 with that?

10 A Those three systems do not operate to 25 to
11 40,000 psi, but the 116 patent only gives the 25,000 to
12 40,000 psi -- they give it as an example.

13 MR. PFEIFER: How much longer do you have? I
14 was wondering if we should take a break now?

15 MR. COHEN: We can take a break. That's
16 fine.

17 (Brief recess was taken at 5:30 p.m. to 5:52 p.m.)

18 MR. COHEN: Okay. I have no further
19 questions.

20 MR. PFEIFER: Oh, okay.

21 MR. LYTVYN: Okay.

22 MR. PFEIFER: Will you give us just a moment
23 to figure out on my end of redirect?

24 MR. LYTVYN: Yeah. So let's break away for a
25 few minutes.

1 MR. PFEIFER: Sorry. We didn't know this was
2 going to happen.

3 MR. COHEN: Sure.

4 (Brief recess was taken from 5:52 p.m. to
5 6:12 p.m.)

6 MR. COHEN: And if you don't mind, can I just
7 note something on the record?

8 MR. PFEIFER: Yeah.

9 MR. COHEN: I'm not sure that it's an issue
10 now, but I would just like to note it.

11 MR. PFEIFER: Sure.

12 MR. COHEN: I do notice that we took
13 approximately a 10, 12 minute break, give or take, and
14 I notice that the witness, Mr. Boos, was in the same
15 room with his two attorneys which are present in here.
16 And I just want to up front inquire of the witness
17 because this is mid his testimony under oath that none
18 of his prior testimony today, the questioning by me,
19 was discussed with your lawyer?

20 THE WITNESS: No. No, it was not.

21 MR. COHEN: Okay.

22 REDIRECT EXAMINATION

23 BY MR. PFEIFER:

24 Q So there's one thing just for the record I
25 kind of wanted to clear up. There was a lot of

1 discussion regarding who wrote the declaration, so I
2 just want to verify, who wrote the declaration, your
3 declaration?

4 A I wrote the declaration.

5 Q Now, was it a collaboration between you and
6 your attorneys in order to make sure that the legal --
7 the law corresponded to the technical aspects?

8 A Yes, because I'm not an attorney.

9 Q Okay.

10 A I'll let you guys handle that part of it, but
11 I was the one that wrote it. I was the one that signed
12 my name to it. It's my declaration, correct.

13 Q So when you were referring to collaboration,
14 were you referencing the combination of the legal parts
15 in which we were a part of and also -- well, yeah, just
16 the legal parts then, which we were helping you with?

17 A Yeah, you guys helped he with the legal parts
18 of the declaration which I'm unfamiliar with.

19 Q Okay. Now considering only the technical
20 aspects of the prior art in your conclusions, did we
21 come up with those conclusions or did you come up with
22 those conclusions?

23 A I wrote all the conclusions.

24 Q I also want to clarify on the record there
25 was a lot of discussion regarding building a system.

1 When you were discussing the desire to build the best
2 system, was that a hypothetical system or a physical
3 system?

4 A I think I said on the record a couple times,
5 I said it was a -- I didn't say hypothetical. But I
6 said we hadn't built the system, but it was something
7 that was in our minds and something that we -- you
8 know, whether it was us or somebody else could have
9 built up, looked at the prior art prior to the patent
10 filing date of July 2nd of 2004. So it was a
11 hypothetical. We've never built the system, but it was
12 something that could have been. Again a hypothetical
13 that could have been arranged back prior to the July of
14 2004 date whether it was by us or anybody else.

15 Q When considering this hypothetical system,
16 prior to the -- prior to the date of the 116 patent,
17 what was your motivation to modify Jones in view of
18 Breither?

19 A Well, the motivation to combine the systems
20 was that the Jones patent had to use a water supply
21 that came from a municipal source, and it made it less
22 portable and not self-contained. So by using the
23 Breither tank system and combining the two, the
24 motivation to combine those was to make it more useable
25 and workable and more portable and self-contained on,

1 say, a roadway project.

2 Q What about the motivation to add the
3 teachings of NLB to that same system?

4 A The teachings of NLB and the tractor were a
5 lot around the maneuverability and working in tight
6 places. And, you know I looked at this tractor system,
7 and, you know, obviously it's connected to something.
8 There's a vacuum hose. There's a high pressure hose.
9 You can see the hose coming off the top of the
10 tractor. So it needs to be connected to something.
11 And so it was very clear to me that my motivation to
12 combine the technology was to combine, you know, with
13 the Jones and then Breither and then NLB as well as the
14 high pressure pump because we weren't trying to do,
15 necessarily do artificial turf cleaning. But if we
16 wanted to go out and take markings off, it made sense
17 to combine the technology and use the NLB for
18 potentially roadway projects.

19 Q So a system with the 40 -- a system with the
20 pump of NLB that's capable of up to 40,000 psi, could
21 that pump be throttled back and then used to clean
22 something like dirt?

23 A I think that Ken asked me that question early
24 today about throttling it. But, yeah, you could run it
25 up to 40,000 psi. The NLB system, you could run it at,

1 you know, full RPM or 40,000 psi, but you also could
2 throttle it down to do all kinds of cleaning, grime,
3 mold, dirt. You know, you could do a lot of lesser
4 levels of cleaning by just simply throttling the engine
5 down to a lower pressure.

6 Q Why would a person of ordinary skill in the
7 arts at the time of -- prior to the date of the 116
8 patent consider modifying that system in accordance
9 with the teachings of Schrunk?

10 A So you're just asking me -- the question is,
11 is why would prior to the July 2nd, 2004 date, the
12 filing date, you're saying why would somebody want to
13 use the Schrunk system?

14 Q Correct.

15 A To basically just make it shorter and leave
16 more room for other components as well as the -- you
17 know, it's pivotally hinged as well as the safety for
18 loading and unloading.

19 Q Okay.

20 A So the main thing is to shrink it as opposed
21 to loading it longitudinally. It's better to load it
22 transverse and create more room for a bigger water tank
23 or bigger reservoir or sump.

24 Q Why would a person of ordinary skill in the
25 art at the time or prior to July 2nd of 2004 consider

1 modifying the system to include the teachings of
2 Herhold?

3 A Because if you didn't use Herhold, then the
4 shroud design, it talked about chaotic, you know,
5 aggressive flying of debris. And so if you use Herhold
6 and that shroud, it keeps everything contained, the
7 water and whatever debris or, you know, whatever this
8 coating is you're taking off within the shroud and then
9 back under negative pressure backing it up. So the
10 motivation would just be to do a better job and it to
11 be safer.

12 Q At the time of the filing date of the 116
13 patent, again the July 2nd of 2004 date, why would a
14 person of ordinary skill in the art consider adding the
15 tractor NLB to the Clemons reference?

16 A To the Clemons reference because the Clemons
17 reference is similar to the StarJet truck of NLB, which
18 has a head on the front of the truck, but the turning
19 radius isn't very good. So to add the tractor would
20 give you much more maneuverability and capability to
21 getting in the tight areas. So combining the two of
22 those would give you the best of both worlds which is
23 the same thing that NLB did with the StarJet and then
24 the StripeJet tractor, the StarJet truck and StripeJet
25 tractor.

1 Q Why would a person of ordinary skill in the
2 art as of July 2nd of 2004 consider adding the pump
3 from NLB to the Clemons device?

4 A To achieve the objective. The Clemons
5 machine was a street cleaning machine. And if you
6 wanted to take off markings, you know, if you wanted to
7 do marking removal or stipe removal, you would want to
8 utilize the higher pressure. So the motivation is to
9 combine the technologies to yield paint or marking
10 removal.

11 Q So you could use the full power of the engine
12 to remove markings from the street?

13 A Yes.

14 Q And you could throttle the pump down in
15 orders to remove different coatings?

16 A Yeah. That was the same question you asked
17 me a second ago with the Jones patent. I mean you just
18 lower the RPM of the engine, and you can do -- run it
19 at lesser pressures.

20 MR. COHEN: I haven't objected to all of
21 these questions, but I will note that some of them are
22 leading, and Mr. Boos is the technical expert. If you
23 could ask the questions in a nonleading manner, I would
24 appreciate it.

25 MR. PFEIFER: Sure.

1 BY MR. PFEIFER:

2 Q Is high pressure a range?

3 A I don't consider it to be a range. I think
4 it's, you know, anything above atmospheric pressure,
5 and there's different -- you know, it's somewhat
6 subjective too.

7 Q Okay. I want clarify the record. Earlier on
8 you explained that a thousand or maybe it was a hundred
9 psi would be a low pressure. Would 100 or 1,000 psi --
10 let's just say 100. Would a 100 psi still be high
11 pressure?

12 A I said earlier that 100 psi was high
13 pressure. I said I considered it a high pressure
14 because 100 psi would pierce a hole your hand or your
15 finger. So I consider high pressure at 100 psi --
16 obviously 100 psi or 1,000 psi is lower than that of
17 40,000 psi, but in my mind, I still call it high
18 pressure.

19 Q For the 116 patent, several times it was
20 brought to your attention that there was a range and
21 specification. Do you remember that?

22 A The range that was mentioned in the patent
23 was 25,000 to 40,000 psi.

24 Q Was that range found anywhere in the claims?

25 A I'm very familiar with claim 1 through 6 and

1 10, and nowhere in there -- I thought it was an example
2 and not a defining limitation or value.

3 Q You stated earlier that you reviewed the file
4 history, but that you didn't recall any specific
5 details; is that correct?

6 A I did say that, yes.

7 Q Do you recall seeing any -- strike that.

8 MR. PFEIFER: All right. I have no further
9 questions.

10 MR. COHEN: Can you guys give us like two
11 minutes?

12 MR. LYTVYN: Of course.

13 (Brief recess was taken.)

14 MR. COHEN: I have no further questions of
15 this witness.

16 MR. LYTVYN: All right.

17

18 (Inter Partes Review concluded at 6:38 p.m.)

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CERTIFICATE OF REPORTER OATH

STATE OF FLORIDA

COUNTY OF HILLSBOROUGH

I, the undersigned authority, hereby certify
that the witness named herein personally appeared
before me and was duly sworn.

WITNESS my hand and official seal this
October 11, 2018.



DAWN NEUKOMM, RPR

NOTARY PUBLIC - STATE OF FLORIDA

COMMISSION NO. FF 246558

EXPIRES JULY 26, 2019

REPORTER'S INTER PARTES REVIEW CERTIFICATE

STATE OF FLORIDA

COUNTY OF HILLSBOROUGH

I, Dawn Neukomm, Registered Professional Reporter and Notary Public in and for the State of Florida at large, hereby certify that I was authorized to and did stenographically and electronically report the Inter Partes Review, and that the transcript is a true and complete record of my stenographic notes and recordings thereof.

I FURTHER CERTIFY that I am neither an attorney, nor counsel for the parties to this cause, nor a relative or employee of any attorney or party connected with this litigation, nor am I financially interested in the outcome of this action.

DATED THIS October 11, 2018, at Tampa, Hillsborough County, Florida.



DAWN NEUKOMM, RPR

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF SEPTEMBER 1, 2016. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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