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IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

- - -

ETHANOL BOOSTING SYSTEMS, : CIVIL ACTION
LLC, and MASSACHUSETTS :
INSTITUTE OF TECHNOLOGY, :
Plaintiffs, :
vs. :
FORD MOTOR COMPANY, :
Defendant. : NO. 19-196-CFC-SRF

- - -

Wilmington, Delaware
Wednesday, January 8, 2020
9:00 o'clock, a.m.

- - -

BEFORE: HONORABLE COLM F. CONNOLLY, U.S.D.C.J.

- - -

APPEARANCES:

FARNAN LLP
BY: BRIAN E. FARNAN, ESQ.

-and-

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Official Court Reporter

1 APPEARANCES (Continued):

2 SUSMAN GODFREY LLP
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15 Counsel for Defendants

16 - - -

1 P R O C E E D I N G S

2
3 (Proceedings commenced in the courtroom,
4 beginning at 9:00 a.m.)

5
6 THE COURT: Good morning. Please be seated.
7 Mr. Farnan?

8 MR. FARNAN: Good morning, Your Honor. Brian
9 Farnan on behalf of the plaintiff, and with me today is Matt
10 Berry and Andres Healy, both from Susman Godfrey in Seattle,
11 Washington.

12 THE COURT: Thank you. Mr. Smith?

13 MS. SMITH: Good morning, Your Honor. Rodger
14 Smith from Morris Nichols on behalf of the defendant, Ford
15 Motor Company.

16 I'm joined at counsel table by my co-counsel,
17 Mike Connor, Natalie Clayton, and Andrew Ligotti. We're
18 also joined this morning by Joe Benz, who is chief IP
19 counsel at Ford.

20 THE COURT: All right. Thank you very much.

21 MS. SMITH: Thank you.

22 THE COURT: All right. Do you want to all start
23 with the claim terms I understand. Right?

24 MR. HEALY: Your Honor, may Mr. Farnan approach
25 to hand you up our slide deck?

1 THE COURT: Sure.

2 (Mr. Farnan handed a slide deck to the Court.)

3 THE COURT: Go ahead.

4 MR. HEALY: Thank you, Your Honor. Before
5 turning to the first term in dispute, and I would note for
6 the record that we jointly filed something yesterday that
7 should set forth what we had requested, an order of claim
8 terms in which to discuss the terms. I just want to
9 double-check that that is acceptable for Your Honor.

10 THE COURT: For right now, you can start with
11 claim E, yes.

12 MR. HEALY: Claim?

13 THE COURT: I thought you wanted to begin with
14 claim term E.

15 MR. HEALY: Yes. Before turning to the first
16 dispute, I would like to provide the Court with a little bit
17 of background because I think it's helpful to understanding
18 claim term E.

19 Number one, there are four patents in dispute,
20 the '839, the '519, the '166 and the '826. Each of these
21 patents is owned by MIT. Each of these patents continues
22 from and shares a common specification with U.S. Application
23 No. 10/991,774. That application was filed in November of
24 2004, eventually issued. And for purposes of today, Your
25 Honor, we have cited it because each of the patents shared

1 the specification with that application which was submitted
2 as Exhibit 1. All of our references are to Exhibit 1 for
3 the Court's convenience.

4 Each of these patents was invented by the same
5 group of three inventors, Dr. Daniel Cohn, Dr. Leslie
6 Bromberg and Dr. John Heywood. Each of these inventors are
7 employed by MIT. They're pictured here on the left.

8 Collectively, they spent roughly ten decades --

9 THE COURT: Let's go right to the merits.

10 MR. HEALY: Yes, Your Honor.

11 THE COURT: You want to give me background
12 technology. I don't need to know about the inventors'
13 background.

14 MR. HEALY: Yes, Your Honor. Did you say you
15 wanted to discuss background technology, Your Honor?

16 THE COURT: To the extent you think it's
17 necessary. It's pretty basic relative to a lot of
18 technology we see here. I think perhaps one term presents
19 me with some questions, but I think a lot of this is very
20 straightforward.

21 MR. HEALY: Absolutely, Your Honor. We'll turn
22 right to the terms.

23 Claim term E, fuel that is directly injected,
24 number one. There's certainly a number of versions of this
25 claim term, but this is the core and the crux of this

1 dispute.
 2 The parties' dispute to each of these terms
 3 effectively boils down to the meaning of the word fuel, Your
 4 Honor. As demonstrated by our agreed claim construction, we
 5 have largely agreed to what the direct injection, the
 6 directly injected term means. The same is true of the first
 7 fueling system. And so the core dispute here is as to the
 8 meaning of the word fuel and the crux of the dispute is
 9 this.

10 Ford says that number one, fuel cannot equal
 11 gasoline in the context of these terms.

12 Number two --

13 THE COURT: Well, wait. Where does Ford say
 14 that?

15 MR. HEALY: Ford's construction, Your Honor, and
 16 I will just turn back to the previous page. Fuel that
 17 contains an antiknock agent that is not gasoline. So Ford's
 18 position is that fuel cannot mean solely gasoline. It has
 19 to be gasoline plus or something other than gasoline
 20 entirely.

21 Number two, Your Honor, Ford's position is that
 22 rule must be construed for this purpose of these terms to
 23 require two different fuels. For the Court's benefit, that
 24 is the second part of its construction here. The terms must
 25 be different from the first fuel used for port injection in

1 the second fueling system.

2 No support exists for either of these
 3 limitations, Your Honor. First, none of the patents at
 4 issue define the word fuel to exclude gasoline or to require
 5 that different fuels be used. In fact, they do the
 6 opposite. The specification, and this is Exhibit 1, again,
 7 the original application at page 5, columns 25 through 26.

8 THE COURT: So that's clearly a criticism of the
 9 existing state of affairs. Right? It's saying the
 10 invention is designed to overcome this, isn't it?

11 MR. HEALY: I don't believe so, Your Honor.
 12 Certainly, I think that the specification contemplates that
 13 the ethanol is the preferred embodiment. It says that
 14 expressly, and it certainly contemplates that ethanol would
 15 be a more beneficial or more effective direct antiknock,
 16 direct injection antiknock agent, but the patent also
 17 contemplates that while perhaps less effective, the direct
 18 injection of gasoline as well is a potential, it has a
 19 viable benefit.

20 THE COURT: You were discussing kind of the
 21 problems. Right? You're saying it's possible to have an
 22 engine that does this, but clearly, the invention that's
 23 described in the specification is a dual fuel engine.

24 MR. HEALY: We would certainly disagree with
 25 that, Your Honor.

1 THE COURT: I know you would. This is the best
 2 you've got. Right?

3 MR. HEALY: It is not. This is the first
 4 reference in which the patent specifically contemplates that
 5 you could directly inject gasoline as well as solely
 6 ethanol, which is the previously described embodiment.

7 Skipping forward to the next reference, this is
 8 on the following page, page 6, columns 5 through 8. The
 9 patent then describes how direct injection of gasoline
 10 results in approximately a five-octane number decrease in
 11 the octane number required by the engine. This serves the
 12 purpose of the invention, which is if you directly inject a
 13 fuel, that entitles you, or that basically results in
 14 something called or a cooling effect on the cylinder, the
 15 cylinder temperature. That results in, as the patent
 16 explains, an effective increase in the octane of the fuel,
 17 which allows you to better resist knock.

18 So this is page 6. It talks about again direct
 19 injection of gasoline and then expressly identifies --

20 THE COURT: Again, it's saying this is what's
 21 unsatisfactory. Right? If you had direct injection of
 22 gasoline, you get a lower octane number, right, whereas the
 23 engine, the invention is saying you want a higher octane to
 24 address the knocking.

25 MR. HEALY: No, Your Honor. Right here what

1 it's saying, if you directly inject gasoline, that results
 2 in a five-octane number decrease in the octane number
 3 required by the engine.

4 By directly injecting the gasoline --

5 THE COURT: Do you think they are trying to
 6 teach you how to do it poorly?

7 MR. HEALY: No, Your Honor. I think what the
 8 patent is trying to do is say, here is the preferred
 9 embodiment, ethanol. If you directly inject ethanol, you
 10 get this much of an increasing effect of octane, you get
 11 this much of a benefit to the antiknock properties of the
 12 ethanol fuel. It's also saying, and this is demonstrated by
 13 the previous page, in addition to directly injecting
 14 ethanol, you could also directly inject gasoline. And then
 15 it doesn't certainly admittedly say that's not as effective
 16 as ethanol. Ethanol would be the preferred embodiment. But
 17 it the same benefit. It has a similar general benefit. The
 18 specifics and the number of the octane enhancement, the
 19 cooling effect of directly injecting gasoline is not as
 20 effective as ethanol, agreed, but it still accomplishes the
 21 purpose.

22 THE COURT: What's the title of the patent?

23 MR. HEALY: The title of the patent, Your Honor,
 24 I don't have it here directly in front of me, but I believe
 25 it is similar to what Your Honor said, which is fuel

1 management system for variable ethanol octane enhancement of
 2 gasoline engine.
 3 THE COURT: Who came up with the title?
 4 MR. HEALY: Presumably the inventors, Your
 5 Honor.
 6 THE COURT: Those three MIT guys that you wanted
 7 to tell me about their great bios?
 8 MR. HEALY: Yes, Your Honor.
 9 THE COURT: So when they wrote this patent, they
 10 were thinking it's a dual fuel system. Right?
 11 MR. HEALY: I don't believe so, Your Honor. I
 12 mean, this is outside the certain contexts of the record,
 13 and understandably --
 14 THE COURT: The title is not outside the record.
 15 Right?
 16 MR. HEALY: No, Your Honor.
 17 THE COURT: Who wrote the abstract?
 18 MR. HEALY: Also the inventors, Your Honor.
 19 THE COURT: All right.
 20 MR. HEALY: And now, Your Honor, with respect to
 21 the context of further support for certainly our position
 22 that the use of gasoline alone is contemplated by the
 23 inventors, was contemplated by the inventors when they
 24 invented the patent, the original application in 2004 is the
 25 original claim of the original patent.

1 Claim 1, fuel management system for efficient
 2 operation of a spark ignition gasoline engine comprising a
 3 gasoline engine, a source of an antiknock agent and an
 4 injector for direct injection of the antiknock agent into a
 5 cylinder of the engine, and a little bit more detail about
 6 that direct injection. And then claim 14 and claim 15
 7 embodiments specifically recite gasoline is port injected
 8 into the engine. Gasoline is directly injected into the
 9 cylinder, Your Honor. It's a direct injection component.
 10 And from our perspective, this is further
 11 support that consistent with what the specification says,
 12 absolutely, ethanol is a preferred embodiment. Ethanol is
 13 contemplated to be the ideal fuel to be directly injected,
 14 but the patentees and the inventors also contemplated that
 15 you could use gasoline, wouldn't be as effective admittedly,
 16 but it would still have the desired effect of increasing the
 17 knock resistance of the engine, which is the ultimate
 18 purpose of the patents, Your Honor.
 19 And --
 20 THE COURT: So what happened to claim 14, that
 21 original claim you just had up there?
 22 MR. HEALY: Claim 14 was, during the process of
 23 prosecution was amended and was never contemplated or was
 24 never included within the context of the final issued
 25 patent, Your Honor.

1 THE COURT: So why is it relevant?
 2 MR. HEALY: The Federal Circuit has held
 3 regardless of whether a claim is amended, that the original
 4 claims of the original application remain a part of the
 5 specification and are useful and certainly helpful in
 6 understanding the context and the scope of the
 7 specification, Your Honor.
 8 THE COURT: Doesn't the fact that they
 9 jettisoned that claim also inform me?
 10 MR. HEALY: I mean, I don't believe so, Your
 11 Honor. Certainly, the context of why it was jettisoned was
 12 with respect to specific prior art references and specific
 13 discussions. None of those bear -- certainly support is not
 14 demonstrated, bear relevance to a single gasoline embodiment
 15 as we're contemplating here, Your Honor.
 16 THE COURT: Okay.
 17 MR. HEALY: And I do just want to mention, the
 18 asserted patents also say when gasoline alone cannot be
 19 used. This is the '839 patent, which is the first of the
 20 four patents at issue here. Sparking is an issue of claim 1
 21 where the engine is fueled with ethanol. So, again, when
 22 the patentees, when the inventors intended for the specific
 23 fuel limitation to be in place, it said so expressly.
 24 THE COURT: Doesn't that just basically, they
 25 are limiting or they are identifying the specific second

1 fuel to be used?
 2 MR. HEALY: Absolutely correct, Your Honor. I
 3 agree with that. The key point for us, Your Honor, is that
 4 the definition of fuel is understood. It's a plain and
 5 ordinary meaning. Anyone on the street would understand
 6 what fuel is. Anyone that would understand probably better
 7 than the fact that ethanol or methanol might be fuel, that
 8 gasoline is a fuel. So when the patentees intended to limit
 9 the word fuel, when they intended to have a clear and
 10 unmistakable limitation as to the scope of that term, they
 11 said so expressly. Again, claim 15 of the '839 patent also
 12 demonstrates this. I will turn to the next slide.
 13 Compared with claim 1, which doesn't have the
 14 additional language limiting to a particular fuel type, it
 15 just says a spark ignition engine that is fueled both by
 16 direct injection and by port injection wherein above the
 17 selected torque value ratio of fuel that is directly
 18 injected to fuel that is port injected increases, et cetera.
 19 The only real substantive difference between
 20 claim 1 and claim 15 is that the second clause. Claim 15
 21 goes on to say, again, talking about fuel being directly
 22 injected, fuel, the same word being port injected, then goes
 23 on to say, and there's a limitation here. Where the engine
 24 must be fueled with gasoline and ethanol, so it's
 25 identifying gasoline, number one, as a fuel. Otherwise,

1 this paragraph, the element wouldn't make sense. So
2 gasoline and ethanol are fuel. That's defined specifically
3 in this claim. And then it says, and ethanol is directly
4 injected.

5 So under basic claim differentiation concepts,
6 Your Honor, to give effect to both claim 1 and claim 15,
7 this is evidence that there is no express fuel limitation.
8 There's no requirement, no limitation that for purposes of
9 claim 1, which is an asserted claim, that the fuel to be
10 directly injected is limited to a particular type of fuel,
11 Your Honor.

12 THE COURT: All right. Anything else?

13 MR. HEALY: I do have one other point, Your
14 Honor, and this just goes to Ford's point as to the initial
15 reference to the use of gasoline as a directly injected
16 fuel.

17 Ford's position on this is that this simply
18 says, this simply contemplates that you could mix gasoline
19 and ethanol and that that would be an acceptable fuel type
20 for the directly injected fuel.

21 Number one, we disagree for the reasons I
22 pointed out, but I do want to point out as well, Your
23 Honor --

24 THE COURT: Wait. You disagree with -- what is
25 that?

1 hand them up?

2 THE COURT: Sure.

3 (Mr. Connor handed a slide deck to the Court.)

4 MR. CONNOR: Okay. So in this part of the
5 specification, Your Honor --

6 THE COURT: So as I understood, your adversary
7 was suggesting that Ford interprets this to mean that it's
8 only directed to situations where you have both gasoline and
9 ethanol?

10 MR. CONNOR: Yes, Your Honor. That is what it
11 means, Your Honor. If you look at the specification and the
12 paragraph that this is in, it talks about Figure -- it's
13 discussing Figure 2 of the illustrations, Your Honor.

14 It starts off with, in the case of ethanol
15 direct injection.

16 THE COURT: All right. So you do agree with
17 it?

18 MR. CONNOR: So I agree. What it says, it's
19 also possible to use direct injection of gasoline as well
20 as. So it means in addition to, Your Honor.

21 THE COURT: Okay.

22 MR. CONNOR: And that's consistent entirely with
23 what the figures show, which never show, in fact, nowhere in
24 this patent, Your Honor, or these patents or in this
25 disclosure is there a disclosure of direct injection of only

1 MR. HEALY: We disagree with Ford's
2 interpretation of that language. Ford's interpretation of
3 this language as set forth in their brief of this language
4 is that all it contemplates here is that you are going to
5 take gasoline, you are going to mix that with ethanol, and
6 then you're going to directly inject a mix.

7 THE COURT: I will wait until Ford speaks. I
8 don't know that they are limiting themselves to that. We'll
9 hear from them.

10 MR. HEALY: Very well, Your Honor. Thank you,
11 Your Honor.

12 THE COURT: All right. Thank you.

13 All right. Ford, do you want to address this
14 last point?

15 MR. CONNOR: Sure. Actually, I have some slides
16 on that if I can turn to that and maybe address all of these
17 points they've made about the specification.

18 THE COURT: Well, let's start with that one.

19 MR. CONNOR: Okay. Could we put that slide up
20 again? Do you mind?

21 THE COURT: And for the record, you are, sir?

22 MR. CONNOR: Yes Your Honor. Mike Connor from
23 Alston & Bird for Ford.

24 THE COURT: All right.

25 MR. CONNOR: And we have some slides. May I

1 gasoline. And, in fact, this language is consistent with
2 claim 1 and claim 15 of the original application that
3 opposing counsel identified previously.

4 You recall -- I have to flip to the right slide.

5 THE COURT: When you say nowhere it discusses
6 just gasoline means directly injected, what about on page 6
7 of Exhibit 1?

8 MR. CONNOR: Yes.

9 THE COURT: At line 5 through 7. "Direct
10 injection of gasoline results in approximately a five octane
11 number decrease in the octane number required by the
12 engine."

13 MR. CONNOR: First of all, Your Honor, that's
14 not the invention. It can't be the invention.

15 THE COURT: Well, wait. You actually said
16 something, I thought this is what kind of led to these
17 questions.

18 MR. CONNOR: Yes.

19 THE COURT: I mean, there is discussion in the
20 written description. I thought you just said there's no
21 discussion whatsoever.

22 MR. CONNOR: It's part of the invention, Your
23 Honor.

24 THE COURT: It's part of the invention?

25 MR. CONNOR: Yes.

1 THE COURT: Okay.
 2 MR. CONNOR: Direct injection is known, Your
 3 Honor. These inventors, they didn't invent port injection.
 4 They didn't in invent direct injection. They didn't invent
 5 the combination of port and direct injection of a single
 6 fuel. That's all in the prior art. It's in the briefs,
 7 Your Honor. The Cajero (phonetic) reference shows that.
 8 And, certainly, direct injection of gasoline is known.

9 This sentence cites to the prior art, the Stokes
 10 article. Stokes is not one of the inventors. This is an
 11 article from 2001, I think, Your Honor.

12 THE COURT: This is almost a criticism for it.

13 MR. CONNOR: This is a starting point. What
 14 this paragraph deals with, Your Honor, is how good the
 15 octane enhancement is in this injection system for ethanol
 16 or another antiknock agent, and they start off with a
 17 baseline of what is known.

18 It is known that gasoline by direct injection
 19 gives you a five-octane number decrease in the octane number
 20 required by the engine. That's the starting point.

21 And they say that the contribution from gasoline
 22 is about five octane numbers and that gives you about a
 23 30-degree -- a 30-K drop in charge temperature, and then it
 24 talks about ethanol, Your Honor. And it says an ethanol
 25 charge can decrease the charge temperatures by about 120 K.

1 So that's about a four times better improvement than the
 2 gasoline. And actually the calculation behind that is tied
 3 to some of the text on page 5.

4 But it goes on and describes the improvement
 5 that you get from two different reasons, from use of direct
 6 injection of ethanol or another antiknock agent, Your Honor.
 7 That's what the focus of this invention is. It is the use
 8 on a variable basis of demand of ethanol or another
 9 antiknock agent to improve the engine performance,
 10 especially under turbo charged conditions, Your Honor.

11 THE COURT: Okay. All right. Thanks. I'm
 12 ready to rule.

13 I agree with Ford's construction of this term,
 14 and I think it's very, very clear that the specification in
 15 its entirety demonstrates that the patent claims are
 16 directed to dual fuel engines. I think the title makes it
 17 clear. I think the abstract makes it clear. I think the
 18 description of the invention, in particular column 1, lines
 19 14 through 17 of the patent, of the written description make
 20 it clear.

21 I think the fact that Dr. Cohn explained to the
 22 PTO that in the application, or the '774 application, what
 23 the invention was is consistent with what Ford says it is.
 24 I point the parties to Exhibit 6, DDX, page 97.
 25 I agree that on page 5 of Exhibit 1, the quote,

1 "It is also possible to use direct injection of gasoline as
 2 well as direct injection of ethanol," that's referring to
 3 the injection of a mixture of gasoline and ethanol.

4 I agree with Ford that at page 6, lines 5
 5 through 7 of Exhibit 1, what's being discussed there is a
 6 criticism, or better yet, I like the word the starting point
 7 from which the invention is designed to improve the art.
 8 And as far as the claim differentiation argument as that's
 9 made by the plaintiff, I just disagree. I think the
 10 dependent claims merely limit the antiknock agents to
 11 ethanol and to methanol.

12 All right. Let's move to the next term.

13 MR. CONNOR: Thank you, Your Honor.

14 MR. HEALY: May I ask one question, Your Honor?

15 THE COURT: Yes.

16 MR. HEALY: A point of clarification. For
 17 purposes of the construction of this term, if the port
 18 injection is also a dual fuel, a mixture of gasoline and
 19 ethanol, would that suffice for purposes -- I just want to
 20 clarify the Court's construction.

21 THE COURT: So I was given alternative
 22 constructions. You gave the plain and ordinary meaning.
 23 They gave a specific construction and I'm adopting their
 24 construction.

25 MR. HEALY: Thank you, Your Honor.

1 MR. BERRY: Good morning Your Honor. Matt Berry
 2 from Susman on behalf of the plaintiffs.

3 The next term, Your Honor, is above a selected
 4 torque value the ratio of fuel that is directly injected to
 5 fuel that is port injected increases. And here the dispute
 6 really is straightforward and simple, Your Honor. It's
 7 whether you can do a plain and ordinary meaning construction
 8 or whether you can take the word increases from the claims,
 9 cross that out and change it to is always increasing.

10 THE COURT: Let's do this. I have a hard time
 11 with Ford's arguments. Let me hear them first.

12 MR. BERRY: Thank you, Your Honor.

13 MS. CLAYTON: Good morning, Your Honor. Natalie
 14 Clayton for Ford.

15 The primary dispute here I think as plaintiffs
 16 just discussed is the use of the word always in Ford's
 17 construction.

18 Really, the crux of the argument is can above
 19 that selected torque value, can there be a decrease in the
 20 amount of direct injection. Ford used the phrase always
 21 increases to try to communicate there can never be a
 22 decrease above that selected toward value. We would be open
 23 to other language to try to capture that concept.

24 THE COURT: I know, but I don't think your
 25 construction is going to lend clarity to the jury by any

1 stretch, and I think it doesn't comport with some of the
2 interpretations of the claims that you have in your
3 briefing. I think you tried to add, add a limitation that I
4 don't see the word always is not used in the written
5 description, is it?

6 MS. CLAYTON: No. I agree, Your Honor. It is
7 not.

8 THE COURT: And I think what you just said is,
9 and I will give you credit for it, you recognize I don't
10 think your construction is a good one and you're saying,
11 well, you may have something better, but I don't, and, you
12 know, if you don't have something better, I'm inclined to go
13 with what the plaintiffs have.

14 MS. CLAYTON: Well, we could say where, you
15 know, above the selected torque value, the ratio never
16 decreases, because the concern is whether, and I'm going to
17 get to it, Your Honor. Plaintiffs say that this type of
18 ratio would be covered by the plain language of increases,
19 that above a selected torque value, there could be a
20 decrease. And the plain reading of the claim, Your Honor,
21 an increase cannot equal a decrease.

22 THE COURT: Well, it depends. I mean, the
23 problem is, is when? When are you measuring the increase?

24 MS. CLAYTON: Well, the language of the claim
25 says, above the selected torque value.

1 Now --

2 THE COURT: So is above a temporal term or is it
3 a quantitative term to measure torque?

4 MS. CLAYTON: It would be a quantitative term.

5 THE COURT: Right. But always is a temporal
6 term, and so that's why I asked you where in the patent or
7 where in the specification, and by that I mean claims or the
8 written description is it made clear and unequivocal that
9 temporally, there's no decrease.

10 MS. CLAYTON: I actually believe it's the '839
11 patent. It's this portion of the specification, Your Honor.
12 It's column 5, lines 49 through 53.

13 If we remember the premise of the invention,
14 it's that at these higher torque values, you're going to
15 have a higher chance of knock and therefore you have to
16 increase the level of direct injection to prevent that
17 knock. And the specification tells us that it's necessary
18 to enhance the octane number, i.e., increase the level of
19 direct injection at each point in the drive cycle where the
20 torque is greater than permitted for knock-free operation
21 with gasoline alone.

22 So we believe what this portion of the
23 specification is telling us is that as soon as you hit that
24 torque level where knock is likely to occur, you're always
25 going to be enhancing the knock, the octane number by direct

1 injection, and that --

2 THE COURT: But now, and this actually -- was
3 this in the brief?

4 MS. CLAYTON: It was.

5 THE COURT: I did not focus on this, and it's
6 informative. But what about, this seems to be at odds with
7 your concession in the brief that you could have a straight
8 line.

9 MS. CLAYTON: Because there is an increase in
10 direct injection from this area, right, which is before the
11 selected torque value.

12 THE COURT: What I'm getting at is this language
13 seems to be consistent with the language in the decrease
14 limitation, which has a with, so that seems to -- well,
15 actually, no, wait a second. I do remember this. You're
16 only dealing with the octane number here. You're not
17 dealing with the ratio. I do remember this from briefing.
18 This just tells me an octane number, which is that's only
19 one component of the ratio. Right?

20 MS. CLAYTON: No. Well, they're the correlation
21 between increasing the direct injection ratio and also
22 increasing the octane number. The more direct injection of
23 ethanol you have, the higher that octane number is going to
24 get. In other words, it's enhancing the octane number at
25 each point as you increase the ratio of direct injection of

1 port fuel injection.

2 THE COURT: But you could enhance the octane
3 number without enhancing the ratio. You agree with that?

4 MS. CLAYTON: You could, but that's not how the
5 claim describes the function in the '839 patent.

6 THE COURT: That's because the claim doesn't
7 describe the octane number. The claim describes the ratio.

8 MS. CLAYTON: Correct, Your Honor. The claim
9 describes the direct injection of, yes, the ratio of
10 direct injection to port fuel injection, which the
11 specification links to enhancing the octane number to
12 prevent the knock.

13 THE COURT: Okay. Go ahead.

14 MS. CLAYTON: And so really, the question is
15 whether above the selected torque value, can there be a
16 decrease in the ratio, and Ford believes the specification
17 and the claim language does not permit a decrease above
18 that.

19 THE COURT: But Ford concedes that you can have
20 a maintenance of the same ratio.

21 MS. CLAYTON: As long as there's some initial
22 increase, you could have an increase and then maintain it.
23 Yes, Your Honor.

24 THE COURT: The problem is that's just
25 inconsistent with always increasing.

1 MS. CLAYTON: And I think it was, if you think
 2 about it, it was, always was in relation to the amount of
 3 direct injection pre- the selected torque value. It's
 4 always increased as compared to the amount of direct, the
 5 ratio of pre- the selected torque value.
 6 THE COURT: And that though is in tension with
 7 even if I bought your argument that at column 5, lines 49 to
 8 53 of the '839 patent, "It is necessary to enhance the
 9 octane number at each point in the drive cycle where the
 10 torque is greater than permitted for knock-free operation
 11 with gasoline alone," and even if I read that as you asked
 12 me to to essentially equate the enhancement of the octane
 13 number with the enhancement of the fuel ratio, and I
 14 actually don't read it that way. I think the plaintiff has
 15 a better argument, but if I did, the problem is that would
 16 still be at odds with what you are now saying, which is that
 17 always just means you have an initial increase above the
 18 torque value and that can be maintained, because this
 19 language at column 5, lines 49 to 53, talks about
 20 enhancement at each point. This argument might work if you
 21 had enhanced the fuel ratio at each point, but it does not
 22 say that.
 23 MS. CLAYTON: Understood, Your Honor.
 24 THE COURT: All right. What else? Anything
 25 else?

1 MS. CLAYTON: We were going to do increase and
 2 decrease together. I don't know if you want me to --
 3 THE COURT: Well, make all of your arguments on
 4 the increase.
 5 MS. CLAYTON: Sure.
 6 THE COURT: Oh, can I ask you something, because
 7 we're talking about ethanol.
 8 MS. CLAYTON: Sure.
 9 THE COURT: Have you got the '839 patent in
 10 front of you? You just had it.
 11 MS. CLAYTON: Yes, Your Honor.
 12 THE COURT: Column 4, line 49.
 13 MS. CLAYTON: Column 4, line 49?
 14 THE COURT: Yes. "The lubricant will also
 15 denature the ethanol and make it unattractive for human
 16 consumption." What does that mean?
 17 MS. CLAYTON: I mean, as far as I know, it's not
 18 a good idea to consume ethanol at all, Your Honor.
 19 THE COURT: I mean, seriously, I read this and I
 20 thought, why in the world is this in a patent? Do you have
 21 any idea?
 22 MS. CLAYTON: Frankly, Your Honor, I have no
 23 idea.
 24 THE COURT: Does anybody?
 25 MR. CONNOR: Your Honor, I can make a guess at

1 it.
 2 THE COURT: Go ahead.
 3 MR. CONNOR: I think the reason is that the
 4 ethanol is being stored, maintained separately from the
 5 gasoline. Right? The idea is you've got a container of
 6 ethanol. You don't want people to drink it. I think that's
 7 what it is.
 8 You've got the gas station. Right? You're
 9 going down to the Wawa store or whatever. They've got gas
 10 and they've got ethanol. Somebody might come in and drink
 11 ethanol.
 12 THE COURT: Okay. All right. Something new.
 13 Thank you. Okay. So go ahead.
 14 MS. CLAYTON: So plaintiffs' first argument we
 15 just alluded to in addition to the always language, is
 16 always language, is that we exclude a single increase. Our
 17 intention with our construction was not to include a single
 18 increase. As we just discussed, it was to exclude a
 19 decrease at any point in the ratio above that selected
 20 torque value.
 21 THE COURT: Let me just ask you this. I think
 22 this kind of gets to the nub of it. Would you agree that
 23 you can't exclude a single one?
 24 MS. CLAYTON: Yes, Your Honor.
 25 THE COURT: I think that just defeats you, and

1 so for that reason alone, I reject the construction you
 2 pose. The construction that you've asked me to adopt
 3 precludes that, and for that reason alone, I can't adopt
 4 it.
 5 MS. CLAYTON: Understood, Your Honor. Do you
 6 want to hear the other arguments?
 7 THE COURT: On increase?
 8 MS. CLAYTON: Yes.
 9 THE COURT: On decrease?
 10 MS. CLAYTON: On either, Your Honor.
 11 THE COURT: Well, hold up a second.
 12 MS. CLAYTON: Decrease, the language is slightly
 13 different.
 14 THE COURT: Yes. When I finish up on the
 15 increase, because I'm going to adopt the plain and ordinary
 16 meaning. For starters, it's the reason, the number one
 17 reason is that the alternative to plain and ordinary meaning
 18 proposed by Ford does not allow for something that was just
 19 conceded. It meets it, which is at least a single increase.
 20 Second, the language of the claims does not
 21 require the ratio to be a function of torque. The increase
 22 could be a one-time change to the ratio. And that also
 23 addresses I think the problem with the construction
 24 proffered by the defendant. It excludes the possibility of
 25 the graph on page 34, which is basically the same issue

1 we're talking about.

2 I also think the defendant's construction would
3 render claim 2 superfluous, basically become a duplication
4 of claim 1. So for those reasons, I'm going to adopt -- I
5 am going to go with plain and ordinary meaning. All right?

6 Now, do you want to go to decrease?

7 MS. CLAYTON: Sure. Do you want to hear from us
8 first?

9 THE COURT: I do.

10 MS. CLAYTON: So this image is slightly
11 different. It's actually in line with claim 2 of the '839
12 patent that we just discussed, decreasing torque. And
13 Ford's plain and ordinary meaning is that it is always
14 decreasing with decreasing torque, and it would look akin to
15 something like this. It would be a linear decrease. It
16 could be an exponential, consistently decreasing. But we
17 believe that the plain and ordinary meaning of decreasing
18 with decreasing torque is that there is a direct correlation
19 and therefore a torque is decreasing, the ratio is always
20 decreasing in line with claim 2 of the '839 patent.

21 THE COURT: So I guess my question here is: Why
22 do you need always? I mean, if you have decreasing with
23 decreasing torque, you get that.

24 MS. CLAYTON: Again, it's because it has been
25 clear to us that plaintiffs want to capture with that

1 language an increase with decreasing torque, which we
2 think is not contemplated by the claim language of the
3 specification, so that's why we included the phrase
4 always.

5 THE COURT: So let me hear from the plaintiffs.

6 MR. BERRY: Your Honor, this term the Court
7 should reject for its construction for the same reasons as
8 the other term.

9 THE COURT: They're different. They're
10 different.

11 MR. BERRY: Really, but it goes to the same
12 point here. It goes to the point Your Honor keyed in on.
13 It's the always decreasing. And what Ford is asking the
14 Court to instruct the jury in construing this claim is that
15 you take decreasing and replace that with always decreasing,
16 but then they also admit at the same time that remaining the
17 same works.

18 But how are the jurors supposed to understand
19 the Court's construction of always decreasing also captures
20 remaining the same? The only thing that's going to happen
21 is it's going to confuse the jury.

22 THE COURT: Well, what does with mean?

23 MR. BERRY: When it decreases, as the torque is
24 decreasing.

25 THE COURT: Yes. Isn't that what Ford is

1 saying?

2 MR. BERRY: Ford is also admitting that it can
3 stay the same. That's what Ford says right here in their
4 brief a page 47 and 48. Ford is simply saying that there
5 can be no increase in the direct injection. It does not
6 prohibit the amount of direct injection remaining the same.

7 THE COURT: That's what it says -- maybe I
8 should get clarification on this. I thought it was saying
9 with respect to the increase. Is it also saying with
10 respect to the decrease?

11 MS. CLAYTON: Your Honor, they made an argument
12 that once you hit zero, right, you can't go any further. We
13 said, of course, if you hit zero, you can't decrease
14 further. But I think this is in line with, you know, the
15 argument that plaintiffs made at page 31 of the brief,
16 wherefore claim 2, they said that, right, they made a claim
17 differentiation argument. Claim 2, which we see here, you
18 know.

19 THE COURT: Yes. So my point is just for
20 clarity, so I understood your brief and it's actually put on
21 the screen right now, page 47 to 48, and it says, it's
22 quoting from what Ford said and it says, "Ford is simply
23 saying that there can be no increase in the direct
24 injection. It does not prohibit the amount of direct
25 injection remaining the same."

1 And I read that incorrectly, but I read that to
2 be directed to the increase. But when it comes to the
3 decrease -- so, in other words, and I've just said I think
4 that that was Ford's problem.

5 MS. CLAYTON: Right.

6 THE COURT: By saying it always increases,
7 because, no, Ford allows for the ratio to remain the same
8 after a single instance of increase.

9 So the flip side for me was, okay. I didn't see
10 Ford take that position with respect to decrease.

11 MR. BERRY: This is the decrease section of
12 their brief. This is what they said in relation to the term
13 we're arguing now about decrease.

14 THE COURT: But the sentence is referring to
15 being no increase, so I'm just saying for clarity. Okay.
16 They didn't have a sentence that said, and maybe you've got
17 it and show it to me now. Ford is simply saying there can
18 be no decrease. It does not prohibit the amount of
19 direction in the context of a decrease. This is a problem
20 with coming to this without the background and the
21 technology that you all have. This may be something that's
22 just impossible to differentiate increase from decrease. I
23 don't know.

24 So what does Ford say?

25 MS. CLAYTON: This argument was made in

1 connection with a claim differentiation argument that they
2 made.

3 THE COURT: Right.

4 MS. CLAYTON: Whereby it says that at some
5 point, it can decrease to zero. Ford agrees that if it
6 decreases to zero, there's no further decrease to go to and
7 it will remain the same at that point, but up until that
8 point, it's always decreasing, decreasing.

9 THE COURT: Right. It's not going to decrease a
10 little bit. Go back up. It's not going to do that.

11 MS. CLAYTON: Correct.

12 THE COURT: Okay. So help me out.

13 MR. BERRY: Two points, Your Honor. So Ford
14 admits that it can decrease and remain the same at zero.

15 THE COURT: When it gets to zero, yes.

16 MR. BERRY: When it gets to zero, but their
17 construction does not encompass that. They say always
18 decreasing. To go back to their construction, always
19 decreasing with decreasing torque. Torque can be
20 decreasing. It can keep on going down, but the ratio can
21 stay the same at zero. Their construction does not
22 encompass that and there's no reason to construe this term,
23 because decreasing, it decreases with decreasing torque,
24 it's straightforward.

25 THE COURT: But, see, do you agree when it gets

1 or is there some kind of implication that this thing has
2 that I don't know about?

3 MR. BERRY: There is one more point, Your Honor,
4 and it goes to a point that Your Honor raised with the last
5 term on the difference between absolute amount and ratios,
6 is that you can have the ratio going down, but the amount of
7 direct injected fuel can increase, and the opposite is true
8 as well. You can have the amount of directly injected fuel
9 decreasing with the ratio going up. And that just kind
10 of -- it's not a concern of why go away from very plain and
11 ordinary claim language and import this limitation of always
12 that appears nowhere in the specification or intrinsic
13 evidence. Frankly, I'm not sure what Ford is intending to
14 do with that, but what I do know --

15 THE COURT: That's why I wonder if this is all
16 about nothing.

17 MS. CLAYTON: Your Honor, we believe we have a
18 noninfringement argument based on this construction. We do
19 not believe that we decrease, always decrease.

20 THE COURT: Because you are going to say when
21 you get to zero --

22 MS. CLAYTON: No, Your Honor, that's not the
23 argument. We believe that there is a range at which our
24 direct injection is not always decreasing.

25 THE COURT: Is it before it gets to zero?

1 to zero -- what is the implication here? What's really
2 going on? Where does this all factor into infringement or
3 invalidity?

4 MR. BERRY: I'm not sure, Your Honor, because
5 when it gets to zero, it can't go lower.

6 THE COURT: Well, that's why I'm wondering, is
7 there really a difference between the parties here. That's
8 what I'm trying to get at.

9 MR. BERRY: Our concern is the claim language is
10 very straightforward. Decreases with decreasing torque.
11 They take this word always that appears nowhere in the
12 intrinsic evidence and they add that.

13 THE COURT: Right. And I am trying to figure
14 out the practical effect. In other words, look, I
15 understand why you are reluctant to say import the word
16 always. I get that. On the other hand, to a certain
17 extent, if it's decreasing with decreasing torque, it seems
18 to me that the with implicitly has an always. It's a
19 correlation. So as long as the torque is decreasing, the
20 ratio is decreasing. Right?

21 MR. BERRY: Or staying the same as zero.

22 THE COURT: Well, that's the point until we get
23 to zero. I mean, for instance, could you just work out a
24 compromise where you say it's decreasing until you get to
25 zero? I don't know. That's what I'm trying to figure out,

1 MS. CLAYTON: Yes.

2 THE COURT: Well, then, do I have to construe
3 it? Can you all agree then, instead of having always,
4 decreasing with decreasing torque until the torque is zero.
5 They can live with that.

6 MR. BERRY: I'm not sure that is correct, Your
7 Honor, because if you put up there a chart that Ford had
8 that showed that the torque is going down, the patent
9 doesn't say always decreasing. There can be a single
10 decrease, just like Your Honor asked was increasing. There
11 can be a single decrease.

12 THE COURT: Just so you all know, I think with
13 is a direct correlation. That's the way I read with. So I
14 see something to Ford's point. Okay? You can't have, if
15 it's decreasing with decreasing torque, you can't have the
16 torque start to go down with decreasing torque and then go
17 back up and come back down. No. It's a straight line. It
18 says with. That's the way I read it.

19 MR. BERRY: Yes, but, Your Honor, at one point
20 in the torque curve, you can have a decreasing with
21 decreasing torque and that satisfies the claim limitation,
22 and there can be other parts of the torque curve where
23 that's not true, but just because, you know, at one point it
24 satisfies the claim language where the ratio is decreasing
25 with decreasing torque, that's sufficient, because the claim

1 does not say it always does that.

2 THE COURT: No. But it has the word with and

3 it's temporal. So as it decreases in torque, the ratio

4 decreases. They are tied directly to each other. That's

5 the way I'm going to read it. And so, you know, then I

6 guess I do have to construe it, because you don't agree on

7 that. You don't agree -- in other words, you don't agree

8 that decreasing with decreasing torque means that you've got

9 a direct correlation over time. You want to allow for

10 decreasing at times with decreasing torque but not always

11 with decreasing torque, which is why they want to have

12 always, and it sounds like the issue about when torque gets

13 to zero, that's not an issue.

14 So I think because of the way you're trying to

15 limit decreasing with decreasing torque, I think I probably

16 have to go with always, but I'm open to some suggestion,

17 because I agree, you know, but that's the way I interpret

18 decreasing with decreasing torque.

19 Have you got an alternative, because you are not

20 going to interpret the way I think it should be interpreted

21 given what we just said.

22 MR. BERRY: Maybe then the point would be to

23 construe with. You said it is a correlation. I mean, the

24 problem is, I just think the claim language is so clear,

25 decreases with decreasing torque, and the issue I have with

1 always is we know that it can stay the same. And staying

2 the same is not saying to the jury is always decreasing.

3 So the jury is going to be instructed on the

4 term --

5 THE COURT: So here is the thing. Is the same

6 issue happening with decreasing for Ford, so is Ford going

7 to say at times it can remain the same?

8 MS. CLAYTON: That's not relevant to our

9 noninfringement defense. I mean --

10 THE COURT: That's not what I'm asking about.

11 This is the problem. This is the problem with always, too,

12 is decreasing with decreasing torque also means temporally,

13 you can't stop decreasing. It has got to be an absolute

14 correlation.

15 MS. CLAYTON: Correct, Your Honor.

16 THE COURT: And you admit on the increase side

17 that you can have -- you have a single increase. You can

18 you have a single decrease?

19 MS. CLAYTON: We believe it's a consistent

20 decrease. It can be exponential. It could be linear, you

21 know, but it's always to be decreasing.

22 THE COURT: Always, and that's how you

23 differentiate the first one where you admit with the

24 increase, there could be a single increase?

25 MS. CLAYTON: Correct. This language is like

1 claim 2 that we saw.

2 MR. BERRY: The problem is they can stay the

3 same as well.

4 THE COURT: If it does remain the same --

5 MR. BERRY: Ford here admits this quote from its

6 brief that if it stays the same, that also satisfies the

7 claim limitation. Not always decreasing. If it stays the

8 same. It said, Ford is simply saying there can be no

9 increase in the direct injection, it does not prohibit the

10 amount of direct injection remaining the same. So Ford

11 concedes that if the ratio stays the same, you would still

12 fall within this claim limitation we're talking about.

13 MS. CLAYTON: Again, Your Honor, this was in the

14 context of if you get to zero, you are going to remain the

15 same at the level of the ratio.

16 The last sentence of that paragraph, Your Honor,

17 says Ford does not disagree that the direct injection level

18 is already at zero. It cannot go any lower.

19 Your Honor, could I point out at page 31 of the

20 joint claim construction brief, plaintiff admits the reverse

21 of this language for claim 2. It means always increasing.

22 So by corollary, they try to state it with a footnote, but

23 the corollary is that this language means always decreasing.

24 It's that middle paragraph that starts with Ford's

25 construction, also renders superfluous.

1 THE COURT: All right. So this is a difficult

2 one. The language, the word with, in my view, makes clear

3 that the fraction of the fuel from the first fueling system

4 is correlated to torque, directly correlated. The problem

5 with putting the word always in is inconsistent with Ford's

6 position that at some point, zero, the level remains the

7 same.

8 What I'm really looking for is help from the

9 parties to figure out how to clarify to the jury what a

10 direct correlation is or what with means.

11 MS. CLAYTON: Always decreasing with decreasing

12 until the ratio reaches zero.

13 MR. BERRY: But then that requires, that would

14 add the requirement that it does reach zero.

15 MS. CLAYTON: Unless --

16 THE COURT: How about decreases with decreasing

17 torque unless and until the decreasing torque is zero?

18 MR. BERRY: Unless and until the ratio is zero.

19 Right?

20 THE COURT: Yes.

21 MR. BERRY: Could I confer for one minute?

22 THE COURT: Yes.

23 MS. CLAYTON: That would be fine with Ford, Your

24 Honor.

25 THE COURT: Just to be clear, we would construe

1 the term "decreases with decreasing torque: To mean,
2 "decreases with decreasing torque unless and until the
3 decreasing torque -- unless and until the torque is zero."

4 MR. BERRY: And the word --

5 THE COURT: I'm sorry. You want to say the
6 ratio?

7 MR. BERRY: And the word always would not be in
8 the construction?

9 THE COURT: Correct.

10 MS. CLAYTON: We would want it to be clear, Your
11 Honor, that there can't be an increase.

12 THE COURT: I'm sorry. What?

13 MS. CLAYTON: The only concern with taking
14 always out is --

15 THE COURT: You expressed -- if I were you, I
16 would think twice. I will hear you. Do you want to be
17 heard?

18 MS. CLAYTON: No.

19 MR. BERRY: The problem, Your Honor, so we think
20 that's a better construction than what Ford proposes, but
21 getting back to the actual claim language, we don't think it
22 needs to be construed at all.

23 THE COURT: You've made that point, and given
24 the argument you're making, I think it needs claim
25 construction, and here's why, because you said on page 31 in

1 your brief, when you are talking about the identical
2 language, right, the with, you say, under Ford's
3 construction, the language of claim 2 would be entirely
4 superfluous given that claim 1 already would require the
5 ratio of directly injected fuel to be always increasing. So
6 you are equating always increasing with the word with in
7 that claim. So under that, I could argue that you've
8 conceded that always should be construed, but I can see the
9 problem with always as well.

10 So what I'm trying to find is something you can
11 both live with. All right? Because patents, you know what
12 the Supreme Court said. Language has its limitations.
13 Impossible to capture all nuances of an invention using
14 language. Inventions outpace our ability to communicate
15 with language. I think this is a good example where we're
16 encountering the limitations of language. I'm trying to
17 do something that the parties can both live with. All
18 right?

19 So what I propose is that I construe the term,
20 the limitation, rather, decreases with decreasing torque to
21 mean, decreases with decreasing torque unless and until the
22 ratio is zero.

23 MR. BERRY: Two responses, Your Honor. First,
24 going back to page 31 of the brief, that's why we dropped
25 the footnote here.

1 THE COURT: That's lawyer stuff. The footnote
2 doesn't make sense to me.

3 MR. BERRY: Our point was even taking what Ford
4 was saying there, it renders the claim superfluous. Going
5 back to the argument now for this term, we simply don't
6 think it should be construed.

7 THE COURT: We've got to construe it because
8 you've got a different meaning. If you are not going to
9 construe something, I will go with the always. What do you
10 want to do?

11 MR. BERRY: Well, the problem is there's really
12 decreases with decreasing torque. It cannot get any more
13 straightforward I don't think.

14 THE COURT: Well, I think it can, because you
15 see, you've already indicated in your argument that that
16 would allow for an increase during the continuum of time,
17 all right, before it gets to zero, and I don't think that
18 that makes sense, because I think the language, decreasing
19 with decreasing torque is meant to communicate a direct
20 correlation without exception, a direct correlation over
21 time. All right.

22 So that is why on the one hand, I can see why
23 Ford would want always. On the other hand, the parties both
24 agree that when the torque reaches zero, there could not be
25 any more decrease. Right? So at that point, it remains the

1 same.

2 And I think -- and, again, I'm going to put your
3 words in your own mouth back at you. I will throw them back
4 at you, if you will. I think it's telling what you wrote on
5 page 31 and I don't think your footnote really helps, makes
6 sense to me.

7 So I don't think it can be denied, and I don't
8 think you have denied that with indicates a direct
9 correlation between the ratio and the torque.

10 MR. BERRY: Here's the issue, Your Honor. We
11 already heard on the last term, very similar term, that Ford
12 is arguing for a noninfringement position, which obviously
13 we don't have the documents. We don't know exactly how
14 these engines work and I fear the same is going on here.
15 For example, if you have a torque curve where you're coming
16 down and the ratio is decreasing with decreasing torque for
17 99 percent of that ratio and you get a blip up at the end,
18 for whatever reason they had to meet EPA requirements for
19 emissions, they are going to say, wait. We have this blip
20 at the end. Therefore, it's noninfringing. I assume that's
21 where they are trying to go with this.

22 THE COURT: When you write a patent, you don't
23 write it to -- actually, you do if you are a lawyer, I
24 guess, to figure out how can you capture as many things as
25 you can. In the ideal world, we have honest brokers, honest

1 inventors, they write and capture what they invented. I
2 guess you've got to live with that.

3 MR. BERRY: Right.

4 THE COURT: We're just trying to do what we're
5 supposed to do, which is informed by what's written in the
6 intrinsic evidence, written in the claims, informed by what
7 was written in the description, written description, and the
8 figures.

9 MR. BERRY: All right.

10 THE COURT: So I'm going to give you your
11 choice. You know, unless you want to come up with something
12 better, and I'm willing to listen to you, but it's clear
13 that we cannot just end this with the plain and ordinary
14 meaning. We can't because you want to now disown what
15 you've written on page 31 of the joint claim construction
16 brief and you basically want to not give meaning to with in
17 describing what you admit is a direct correlation.

18 So always isn't perfect. I agree with you. I'm
19 trying to come up with something else. You have not offered
20 anything else, so we'll either go with what I proposed or
21 we'll go with always unless you want to speak now and come
22 up with a third alternative.

23 MR. BERRY: Your Honor, I think that at this
24 time we have nothing better than the claim language itself.

25 THE COURT: Okay.

1 MR. BERRY: I'm sorry. So whatever Your Honor
2 thinks is best between those two. We still believe that the
3 claim language is the best here.

4 THE COURT: I'm going to go with the compromise.
5 I think it's better because I think it avoids the problems
6 created by the term always. I'm going to construe decreases
7 with decreasing torque to mean, decreases with decreasing
8 torque unless and until the ratio is zero.

9 MR. BERRY: Thank you.

10 THE COURT: All right. And I think again my
11 rulings, given that the Federal Circuit exercises de novo
12 review, I am not going to articulate everything that has
13 gone from my thought process to arrive at the construction I
14 have, but I think I've made it clear what informed my
15 construction. All right?

16 MR. BERRY: Thank you.

17 THE COURT: All right. Next?

18 MR. HEALY: Your Honor, the next issue are the
19 closed loop terms. Our position is similar to what
20 Mr. Berry just explained. None of these closed loom terms
21 require construction. The language is very straightforward,
22 very simplistic.

23 THE COURT: Yes. Let me hear from Ford. Again,
24 I tend to favor you, reading the briefs.

25 MR. HEALY: Thank you, Your Honor.

1 THE COURT: They've got to persuade me
2 otherwise.

3 MR. CONNOR: Yes, Your Honor. So on these
4 closed loop terms, the point here is that they are limited
5 again by what they disclosed, which is very limited. It's
6 not consistent with the claims in the subsequent
7 application.

8 THE COURT: The difference is when you led off
9 here on the first term, you've got the present invention
10 being described.

11 MR. CONNOR: Yes.

12 THE COURT: So where do you have similar type,
13 exclusive-type language in the written description that
14 would mandate the importation of a microprocessor?

15 MR. CONNOR: Okay. On the microprocessor, Your
16 Honor, all they disclosed is microprocessor. They disclosed
17 nothing else. They make this argument somehow that a
18 processor, not a microprocessor, is disclosed.

19 THE COURT: So that's in an embodiment.
20 Correct?

21 MR. CONNOR: Yes, Your Honor.

22 THE COURT: The disclosure is an embodiment?

23 MR. CONNOR: Yes.

24 THE COURT: And clearly, the Federal Circuit

25 makes the distinction between language that is attributed to

1 the invention and language that is attributed to
2 embodiments. Correct?

3 MR. CONNOR: Yes, Your Honor.

4 THE COURT: All right. That's why I found
5 compelling your first argument with respect to the first
6 term.

7 So can you point me to anything that is in the
8 written description that makes it clear and unequivocal that
9 a microprocessor is required for the invention, not for
10 embodiment?

11 MR. CONNOR: Well, I would just point to
12 description of the preferred embodiment, number one.

13 THE COURT: That's again a preferred embodiment.

14 MR. CONNOR: Yes, Your Honor.

15 THE COURT: All right. And isn't the Federal
16 Circuit pretty clear that you're not to limit an invention
17 to a preferred embodiment in construing the claim?

18 MR. CONNOR: I think this is an issue where,
19 Your Honor, they've disclosed, they have to enable
20 something, Your Honor.

21 THE COURT: So they've enabled it, the disclosed
22 embodiment.

23 MR. CONNOR: I think that's all they've enabled,
24 Your Honor, and I think the Federal Circuit would agree with
25 that view. But I understand the difference, Your Honor, in

1 stating what the inventor, the present invention is versus
2 this description of Figure 1.

3 THE COURT: I mean, if I adopted you, I'm
4 getting reversed. Right? They are going to say you can't
5 limit the invention to the embodiment. Right?

6 MR. CONNOR: Understood, Your Honor. There's
7 really two points here. I mean, there's the issue of the
8 microprocessor. There's the issue of the direct feedback
9 being used in the closed loop system.

10 THE COURT: All right. So let's talk about
11 that.

12 MR. CONNOR: That -- I'm sorry?

13 THE COURT: Go ahead.

14 MR. CONNOR: That one, Your Honor, all they have
15 disclosed is for purposes of controlling the amount of
16 ethanol or the other antiknock agent that is controlled by a
17 control, a closed loop system, Your Honor, all they've
18 disclosed in all of the embodiments, Your Honor, is a system
19 that uses closed loop control with a knock detector. Direct
20 feedback from a knock detector.

21 THE COURT: Direct. Do they have the word
22 direct in there?

23 MR. CONNOR: If you look at the picture, the
24 direct is taken from the illustrations, Your Honor, of
25 Figure 1 and Figure 5. You see Figure 1 to Figure 5.

1 There's a line that shows feedback from the engine to the
2 knock detector and onto the microprocessor or to the control
3 system, Your Honor.

4 That's what's being used. There's no other
5 input, Your Honor. It is being used to control the ethanol
6 that's being injected. If you look at the difference
7 between Figure 1 and Figure 5, and the plaintiffs do point
8 to that, Figure 5 is only an embodiment where you've run out
9 of ethanol, so you're not controlling the amount of ethanol
10 that is injected there using the fuel management system.
11 You're out of ethanol, and Figure 5 is a situation where,
12 well, you're out of ethanol. What do you do? You are stuck
13 on the side of the road or you get to drive home? We are
14 going to produce less horsepower. You won't have the
15 antiknock agent, but you can still get home, and when the
16 system detects a lack of ethanol, well, then, maybe you can
17 control the turbo charger or maybe you can control the spark
18 retard. But that's not using closed loop control to control
19 the amount of ethanol or antiknock agent that's being put
20 in. And that's why there should be a direct feedback and a
21 direct feedback loop, closed loop control, which is what is
22 required by this claim language and is described in the
23 specification.

24 THE COURT: But show me something that says it
25 is exclusive. I mean, that's what the invention is limited

1 to.

2 MR. CONNOR: Well, the invention, there are
3 claims, Your Honor, that do not require -- I believe there
4 are claims that do not require a knock detector. This
5 is -- if a knock detector is used, this is the only way to
6 use it.

7 THE COURT: The problem with your rationale,
8 it's an embodiment with a knock detector and the claim
9 doesn't have it. I guess I have to read the knock detector
10 into the claim.

11 MR. CONNOR: No. We're saying if there's closed
12 loop control. This is the only closed loop control that
13 they've identified. If there's a knock detector and if it's
14 used, then it has to be used in a closed loop control and
15 there has to be direct input and that signal has to be used.
16 There's no disclosure of using anything else to control the
17 amount of the first fuel to put in, the antiknock agent.

18 THE COURT: You know, I don't see direct or
19 microprocessor as limitations that are required by the
20 written description as limitations that were clearly or
21 unequivocally disavowed or clearly and unequivocally defined
22 in the written description or anywhere in the intrinsic
23 evidence. You've pointed to embodiments. They're not
24 exclusive. And I think you are trying to read importations
25 into the claim that absent clear and unequivocal language

1 shouldn't be.

2 MR. CONNOR: I mean, I would say that with
3 regard to the direct feedback, I think that -- I think this
4 is akin to the Techtronic case that we cited in the
5 supplemental authority, that all they disclosed is the one
6 embodiment.

7 THE COURT: Here's the thing. The Techtronic
8 case, which follows up really on the Trustees of Columbia
9 case --

10 MR. CONNOR: Yes.

11 THE COURT: -- it uses the word explicit. And
12 the way I read Trustees of Columbia is that you don't have
13 to have an explicit disavowal or an explicit lexicography.

14 MR. CONNOR: Right.

15 THE COURT: Right. But what that means in my,
16 to my understanding is, so you don't have to have language
17 that says, I am disavowing, or I am defining, or the term
18 means --

19 MR. CONNOR: Correct.

20 THE COURT: That's what explicit means, explicit
21 as opposed to clear and unambiguous. The Federal Circuit
22 did not jettison in Trustees of Columbia or the case that
23 you brought to my attention, supplemental authority, I
24 forget the name of the case.

25 MR. CONNOR: Techtronic.

1 THE COURT: Techtronic. I did read it. It did
2 not get rid of the standard that there has to still be a
3 clear and unequivocal -- and, in fact, a clear and
4 unequivocal disavowal or lexicography, and, in fact, I think
5 it used the word clear in its holding. But it did say it
6 doesn't have to be explicit, and what I'm saying is not
7 different from that. I'm not requiring the written
8 description or anything in the prosecution history to say
9 that the patentee is hereby defining or hereby disclaiming.
10 That's what explicit means in my mind, the only way I can
11 read it.

12 MR. CONNOR: Yes.

13 THE COURT: It means something different than
14 clear and unequivocal.

15 MR. CONNOR: May I point, Your Honor, in the
16 Techtronic case, the Federal Circuit said in that case the
17 entire specification focused on enabling placement of the
18 passive infrared detector. That was the issue. Where was
19 the passive infrared detector going to be? The construction
20 was it has to be in the wall console. That's all they
21 disclosed. That's all they enabled. That's all the
22 embodiment showed.

23 THE COURT: I think if the Federal Circuit had
24 wanted to change the rules to say that it has to be
25 disclosed in the embodiment so that, you know, you've gotten

1 enablement, they would have said that. They didn't say
2 that, and that seems to me to be at odds with a long line of
3 cases. So you can take the issue up, I guess, but I don't
4 see it for the reasons I've just articulated and I'm going
5 to go with the plain and ordinary meaning.

6 MR. CONNOR: Thank you, Your Honor.

7 THE COURT: All right. The last two terms, I
8 believe. Now, before I hear argument, I don't know why I'm
9 hearing argument on these last two terms. I don't know why
10 this is not an issue for infringement. And you can have
11 your experts tell the jury how do you measure torque. I
12 don't understand why this issue is a claim construction
13 issue.

14 MR. BERRY: We couldn't agree with you more,
15 Your Honor. We don't think it is. Torque is understood
16 by -- as far as what you need to do with these patents of,
17 is torque increasing, is it decreasing, is it staying the
18 same, it's a simple comparison of numbers. If you start at
19 torque 470 and you go to 490, it's increasing. The jury
20 gets that. To the extent they don't, we will have experts,
21 both sides, who will explain that to them. But these
22 concepts are not technical. There's no calculating torque.
23 There's nothing about torque being a vector quantity.

24 THE COURT: Maybe I will hear from Ford, because
25 obviously, they're the ones that are pushing this.

1 MR. BERRY: Thank you.

2 THE COURT: So let me ask: Is it Ford's intent
3 to give a calculator to the jury and have them do a torque
4 calculation?

5 MR. LIGOTTI: No, Your Honor. Ford's intent is
6 that the proposed construction is designed to give clarity
7 and to give guidance to the jury to understand a concept
8 that they may not be familiar with.

9 Ford's proposal is broken up into three parts.
10 The first, plaintiffs do not disagree with.

11 The second, plaintiffs admit in their reply
12 brief that torque can be calculated by applying force and
13 distance, and that there are other ways as well.

14 And, finally, with respect to the third portion
15 of Ford's construction, it's a vector quantity. This is
16 added so that jurors will understand that there are two
17 components to the term torque, a direction and a magnitude,
18 and these claims require --

19 THE COURT: So your expert testifies to that and
20 he gets cross-examined or she gets cross-examined.

21 MR. LIGOTTI: That very well may be the case,
22 but clarifying it for the jury in the construction will
23 provide guidance --

24 THE COURT: See, here's the thing. To me, you
25 are either saying, do you think we need extrinsic evidence

1 to construe the term torque?

2 MR. LIGOTTI: No, Your Honor.

3 THE COURT: Because that's essentially what I
4 think you're putting forward. You are saying you're going
5 to have an expert who says you need to have a vector
6 quantity, got magnitude and direction. I mean, do the
7 plaintiffs dispute that?

8 MR. BERRY: There should be no extrinsic
9 evidence for this.

10 THE COURT: No. Do you dispute that it has
11 direction and magnitude when you talk about torque?

12 MR. BERRY: For these claims in this patent?
13 The jury should never hear about --

14 THE COURT: I'm just asking as a general matter.

15 MR. BERRY: Oh, general matter, I think that's
16 correct, but is it relevant or germane to this dispute in
17 this case? No.

18 THE COURT: Right. So I mean, why not have your
19 expert just do battle in front of the jury. The jury
20 decides. How is it going to help them to know that torque
21 can have a vector quantity?

22 MR. LIGOTTI: Well, Your Honor, the reason is
23 that there's a difference between a torque in a clockwise
24 direction and torque in a counterclockwise direction.

25 THE COURT: Okay.

1 MR. LIGOTTI: And so when the jury is asked to
2 match torques and compare torques, one torque value to
3 another and say that they are the same, they should be doing
4 so in a way where they are matching the direction as a
5 magnitude. And for jurors who might not have an
6 understanding of that term torque, that it has those two
7 components, they might not think, plaintiffs cited in their
8 opening brief 470 foot pounds of torque. They might think
9 that 470 is the same as 470, but what's important to
10 understand is that the patents disclose torque in the
11 context of engine output. They are disclosing torque in
12 terms of what the engine is doing, not what is happening to
13 the engine. So there's torque that is enacted upon an
14 engine and there's torque that an engine is enacting upon
15 other things. The patent is directed to the latter.

16 THE COURT: Here's what I'm going to do. I'm
17 not going to construe these terms now. I think the plain
18 and ordinary meaning is sufficient and I think you can do
19 battle of the experts.

20 Now, if we're at trial and I thought the
21 plaintiff came up with something that, or maybe it's not
22 even a name, but it struck me that, wait a second, maybe I
23 need to construe these, I can always do it. Federal Circuit
24 law permits me to do that and I don't think I will have to
25 do it, but maybe I will do it after I hear the experts

1 testify and all of a sudden I have to make a decision. But
2 I don't think I have to make it now for either of these two
3 terms. I think, I mean, Ford advertises using the word
4 torque. I've seen their commercials. I have fooled around
5 with enough lawnmowers and cars and trucks to have an idea
6 what torque means as a layman and I don't think it's going
7 to lend clarity to add what Ford has proposed right now,
8 but I'm not saying, depending on how things transpire at
9 trial, I wouldn't think otherwise.

10 MR. LIGOTTI: Thank you, Your Honor.

11 THE COURT: So right now I'm going to go with
12 the plaintiffs on the two terms.

13 MR. LIGOTTI: On both terms?

14 THE COURT: Yes.

15 MR. LIGOTTI: Thank you.

16 THE COURT: All right. Anything else?

17 MR. BERRY: No, Your Honor.

18 THE COURT: I'm going to ask plaintiffs to put
19 together, and Mr. Farnan, if you could lead this with
20 Mr. Smith, but an order that just says essentially for the
21 reasons articulated during today's hearing, the Court adopts
22 the following constructions of the disputed limitations.

23 MR. BERRY: Thank you.

24 THE COURT: All right. Anything else?

25 MR. CONNOR: Your Honor, I think there will be

1 some management issues going forward, I think, on limiting
2 the number of asserted claims based on the rulings today.
3 We could take those up now if Your Honor would like, or we
4 can --

5 THE COURT: What do you mean? Why don't you
6 spell it out while I've got you. It might be an incentive
7 for me to refer it to the Magistrate.

8 MR. CONNOR: Sure. Yes, Your Honor. Right now
9 there are 91 patent claims that have been asserted across
10 four patents.

11 THE COURT: That's not workable.

12 MR. CONNOR: Right.

13 THE COURT: Right.

14 MR. CONNOR: So we think that should be
15 restricted. I think that the rulings that Your Honor made
16 today as to the dual fuel terms I believe affect every
17 asserted claim, either directly --

18 THE COURT: Maybe plaintiffs are willing to tell
19 me right now you're going to cut this down, which would be a
20 wise thing to do.

21 MR. BERRY: So what we suggested to Ford last
22 week is that once we had Your Honor's Markman rulings, that
23 we meet and confer with Ford and come up with a reasonable
24 number of claims to assert at the same time that they do the
25 same with their prior art references. And so we take your

1 Honor's guidance and rulings today, we meet and confer with
2 them and come back to Your Honor with a proposal that
3 hopefully makes sense to everybody.

4 MR. CONNOR: We're happy to meet and confer.
5 That's fine, Your Honor.

6 THE COURT: All right. Okay. Well, I will
7 leave it to you all and be judicious.

8 MS. CLAYTON: Your Honor, I think it would be
9 helpful to us to get some guidance from you. I've seen some
10 prior orders from you where at this stage of the case, it
11 has been limited to say five asserted claims per patent. I
12 understand that varies from case to case.

13 THE COURT: The problem is they're not
14 translatable. They're just not. And the other problem is,
15 I'm just encountering this right now to share with you. I
16 was talking to my clerk yesterday and I'm reading post-trial
17 briefs and I see really good lawyers and then they write
18 these briefs and they make every single argument they can
19 possibly make, and you know what? They lose. They lose
20 because I can tell you, we don't have time. I mean, we are
21 just inundated. And so you spend time making a weak
22 argument, you lose as an advocate when it comes to later
23 arguments in the brief.

24 I mean, it sounds so fundamental, but it seems
25 with patent lawyers in particular, the message doesn't get

1 across. I don't know if it's client-driven. I practiced a
 2 little bit. I saw clients drive it. I know I'm sure a lot
 3 of it is the Federal Circuit, the de novo review in a lot of
 4 areas, but if I could communicate one thing to lawyers and
 5 say you are a much better advocate if you pick and choose,
 6 and so it's the same thing with case management.
 7 You know, I know you want to preserve everything
 8 you can, and there's one that counsel takes to heart, you
 9 lose when you overreach, you know. I mean, I can't tell you
 10 already just the few trials I've had, everybody is
 11 preserving 50 prior art references. We get to trial. We
 12 know there are six of them and the jury only wants to hear
 13 about three of them.
 14 And so I just offer that, but I've been offering
 15 it for 18 months. It does not seem to have made a huge
 16 impact. But the best lawyers, and I mean they're
 17 noticeable, the best lawyers, they wisely select. The best
 18 lawyers I've seen drop the weak invalidity case or
 19 infringement argument because they know what they are doing.
 20 Those are the best lawyers.
 21 MR. BERRY: Your Honor, there's one more point.
 22 THE COURT: And then on that, you just -- this
 23 case hasn't been one, but the same case, it's amazing. They
 24 keep coming to the Court with countless discovery disputes,
 25 can't work it out, and then what happens and when I spot the

1 real unreasonable actor, is that person loses credibility
 2 for the rest of the case.
 3 MR. BERRY: Your Honor, we have been trying to
 4 find out from Ford are they going to assert the advice of
 5 counsel defense in this case. This is a substantial
 6 completion of document productions in November, and we've
 7 been asking them, how about ten days after the Markman
 8 order. Can we find out? Is Ford going to do advice of
 9 counsel, and if so, can you produce those documents within
 10 ten days.
 11 We don't want it to interfere with the schedule
 12 of in case and they've not yet committed to that. We're
 13 hoping with guidance from the Court --
 14 THE COURT: Go ahead.
 15 MR. CONNOR: May I address this, Your Honor?
 16 THE COURT: Please.
 17 MR. CONNOR: This is all bound up, Your Honor,
 18 with the number of asserted claims that they're going to go
 19 forward with. If they drop all of the claims or most of the
 20 claims, that makes a big difference in terms of waiver of
 21 counsel, Your Honor.
 22 THE COURT: Yes.
 23 MR. CONNOR: So we think that decision ought to
 24 be made first.
 25 THE COURT: First of all, I agree. I think

1 you've got the limit the claims first. Then they can decide
 2 on advice of counsel.
 3 MR. BERRY: Okay.
 4 MR. CONNOR: Is there a time by which you would
 5 like us to get back to you about the number of claims?
 6 THE COURT: No. You can sit down. You don't
 7 have to keep standing. I appreciate you doing that.
 8 There's no time. I'm not going to set a time.
 9 I don't have enough -- it might be helpful for you all to
 10 hear, especially Delaware counsel, how things get to the
 11 Court's attention.
 12 So for starters, there are miscellaneous
 13 matters. A lot of those are the most urgent matters that
 14 come to the Court, and basically, the staff kind of are
 15 screening these things and they bring them to my attention.
 16 Now, there are a lot of these matters that don't have an
 17 urgency to them and they can sit, and frankly, because
 18 they're not reportable motions, they don't get my attention
 19 necessarily.
 20 So lawyers ought to think twice about do you
 21 want to file a case versus file a miscellaneous matter,
 22 because some of these things you can do either. You might
 23 be advised to file a case.
 24 And then in terms of priority, you know, if
 25 something was marked urgent, it's apparent on its face that

1 it's urgent, that gets to my attention right away.
 2 Otherwise, it's my calendar and the reportable issues that
 3 drive or get my attention.
 4 So, in other words, that's a long way, but
 5 background to provide you with I have no idea what your
 6 schedule is in this case. I don't know when the trial is.
 7 I don't know when discovery ends, because none of that comes
 8 to my attention in an immediate way. So I don't have a
 9 calendar to tell you when you need to get your case
 10 management issues decided.
 11 Have I had discovery disputes with you all?
 12 MR. CONNOR: We had an issue on production of
 13 documents from plaintiffs. Yes, Your Honor. I will tell
 14 you what the calendar is generally.
 15 Fact discovery closes the middle of March. I'm
 16 not sure of the exact date, but it's the middle of March.
 17 We have a trial date in November. So I think that limiting
 18 the number of claims is rather more urgent rather than not.
 19 THE COURT: Yes. Mr. Farnan?
 20 MR. FARNAN: You referred discovery to Judge
 21 Fallon.
 22 THE COURT: Oh, I did?
 23 MR. FARNAN: Yes.
 24 MR. CONNOR: Yes, Your Honor. There was an R&R
 25 and an objection.

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1 THE COURT: Was it objected to?

2 MR. CONNOR: It was.

3 THE COURT: All right. I can't remember.

4 MR. CONNOR: It was about production by
5 plaintiffs of documents about conception, reduction to
6 practice.

7 THE COURT: Yes. All right. Okay. All right.
8 So right now all discovery is referred to Judge Fallon.
9 Right?

10 MR. FARNAN: Yes, Your Honor.

11 THE COURT: All right. Well, so I would say
12 obviously that I am going to speak in just general terms.
13 Do what you can. Come together. Be reasonable. I may
14 just, in fact, refer the case management issues that you've
15 just described to Judge Fallon in the first instance because
16 we just have to get through things here, and obviously,
17 there's more deference afforded to a Magistrate Judge in the
18 context of discovery, case management issues, and I hope you
19 can all work it out.

20 MR. CONNOR: Thank you, Your Honor.

21 MR. BERRY: Thank you.

22 THE COURT: Thank you, all. Have a great day.

23 (Hearing concluded at 10:27 a.m.)

24 - - -

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