

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

- - -

PRECISION PLANTING LLC, : U.S. PATENT NO.
Petitioner : 8,770,121

:

v. :

:

MASCHIO GASPARD S.p.A., : IPR CASE NO.
Patent Owner : IRP2024-00008

- - -

June 27, 2024

- - -

Oral deposition of MARK FLEMING,
Ph.D., P.E., in Naperville, Illinois, taken
remotely via Zoom, beginning at 1:00 p.m., and
reported stenographically by Denise A. Ryan, a
Professional Shorthand Reporter and Notary
Public.

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1 A P P E A R A N C E S: (All Appearances via Zoom) 2 3 4 HOVEY WILLIAMS, LLP BY: SCOTT R. BROWN, ESQUIRE 10801 Mastin Boulevard, Suite 1000 84 Corporate Woods Overland Park, KS 66210 Phone: 913.647.9050 Email: SBrown@hoveywilliams.com Attorneys for Petitioner, Precision Planting LLC 8 9 10 STRADLEY RONON STEVENS & YOUNG, LLP BY: KEVIN R. CASEY, ESQUIRE ASHLEY E. SHAPIRO, ESQUIRE Great Valley Corporate Center 30 Valley Stream Parkway Malvern, PA 19355 Phone: 610.640.5813 Email: KCasey@stradley.com AShapiro@stradley.com Attorneys for Patent Owner, Maschio Gaspardo S.p.A. 15 16 17 18 19 20 21 22 23 24	Page 2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
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Page 6 1 reporter, Denise Ryan, who you just 2 met, and counsel for Precision. 3 So I'll let you introduce 4 yourself, Scott. 5 MR. BROWN: This is Scott Brown 6 of Hovey Williams, appearing on behalf 7 of Petitioner, Precision Planting. 8 - - - 9 EXAMINATION 10 - - - 11 BY MR. CASEY: 12 Q. Okay. Dr. Fleming, I think 13 you've stated and spelled your full name for 14 the record, correct? 15 A. I don't believe I have. 16 Q. Good. Then would you please do 17 so? 18 A. Yes. My name is Mark Fleming, 19 M-A-R-K, F-L-E-M-I-N-G. 20 Q. Do you have any papers in front 21 of you? 22 A. Yes, I do. 23 Q. Okay. Are those the 10 24 documents that counsel gave you that we had	Page 8 1 A. On my computer I also have the 2 electronic copy of those. 3 Q. Uh-huh. 4 A. And I also have just some copies 5 of literature which I cited in my report. 6 Q. And by "report" you mean your 7 declaration? 8 A. My declaration, correct. 9 Q. Okay. 10 A. And it looks like that is all 11 that is on the thumb drive that I have with me. 12 Q. Very good. Do you have any 13 notes or anything like that? 14 A. No, I do not. 15 Q. Okay. And the only other person 16 in the room is your counsel, Scott Brown, 17 nobody else? 18 A. He is counsel for Precision 19 Planting. 20 Q. Right. Right. Okay. That's 21 fine. 22 So just some preliminary matters 23 so we can get on the same page, as we all know 24 videoconference audio tends to click on and off
Page 7 1 forwarded, which will prospectively be exhibits 2 that we're going to discuss today? 3 A. Yes, they are. And I've got the 4 depo notice. I don't have it memorized, 5 everything that you sent, but it was the -- 6 Q. Of course. 7 A. -- the documents that you sent. 8 I've got the depo notice, I've got my CV, the 9 '121 patent, the '807 patent, the '543 patent, 10 the Amazone Manual in English, I do have some 11 pages from the 7200 Flex Fold Max Emerge 12 Planter, I have the Petition for the Inter 13 Partes Review, and I have the Decision Granting 14 the Inter Partes Review, and I have the 15 Complaint from Maschio Gaspardo vs. Precision 16 Planting. 17 Q. Perfect. I think that's all 10. 18 We'll go through them one by one just so we're 19 on the same page on what the exhibit numbers 20 are that correlate with each of them, but 21 that's excellent. 22 Do you have anything else other 23 than the documents you identified in front of 24 you?	Page 9 1 or speakers start and stop. We've already done 2 a really good job of avoiding this problem, but 3 would you please wait to answer my questions 4 until I've had the opportunity to complete 5 stating them, so we don't talk over each other? 6 A. Yes, I will do my best to do 7 that. 8 Q. Sure. That's all we can ask. 9 Thank you. 10 If I ask you a question that's 11 unclear today, would you ask me to clarify it? 12 A. Yes, I will. 13 Q. Will you answer questions 14 clearly using your voice rather than using head 15 nods or shakes or shrugs or saying "uh-huh" or 16 "unh-unh"? 17 A. Yes, I will do my best. 18 Q. Yeah, it's difficult for those 19 of us who do use all those things, but I'll try 20 to remind you. 21 If you need more information to 22 answer a question, will you please ask me for 23 that information? 24 A. Yes, I will.

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Page 10 1 Q. If I use a term that you don't 2 understand, would you please tell me? 3 A. Yes, I will. 4 Q. Do you have any health 5 conditions or medications that might impair 6 your ability to answer any of my questions 7 fully and truthfully today? 8 A. I don't believe I do, no. 9 Q. Between questions will you 10 please tell me if you need a break? It's not 11 an endurance test, so if you need to use the 12 restroom or you need to just breathe, just tell 13 me. Would you do that? 14 A. Yes, I will. 15 Q. Do you have any hesitation in 16 answering any of the questions today fully and 17 truthfully? 18 A. No, I do not. 19 Q. Do you understand that you are 20 here to give a deposition in an IPR proceeding 21 before the United States Patent and Trademark 22 Office? 23 A. That is my understanding, yes. 24 Q. Okay. So let's talk through the	Page 12 1 from the depo notice -- 2 Q. Yeah. 3 A. -- just a small point of 4 clarification, I noticed that my name was 5 spelled wrong on there, the last name. 6 Q. Oh, it's got two M's in it, 7 doesn't it? 8 A. Yes. 9 Q. Our apologies. 10 A. That's all right. 11 Q. But thank you for pointing it 12 out. 13 So now we're on to Exhibit 1003. 14 Is Exhibit 1003 a copy of the declaration that 15 we've been talking about that you submitted in 16 the proceeding? 17 A. Yes, it is. 18 Q. Can we agree to call this 19 document simply your declaration today? 20 A. Yes, we can. 21 Q. Is it your understanding that 22 this proceeding is a challenge to the validity 23 of a patent that is assigned or owned to 24 Maschio?
Page 11 1 documents just to get them all marked. So one 2 of the documents is marked as Paper No. 15. 3 It's the Notice of Deposition of Dr. Mark 4 Flemming. 5 MR. CASEY: Ashley, if you 6 could, you can actually share the 7 document on the screen to orient the 8 witness. 9 BY MR. CASEY: 10 Q. Dr. Fleming, do you have that 11 document there in front of you? 12 A. Yes, I do. 13 Q. This is the deposition notice 14 for your deposition today. Are you appearing 15 today voluntarily? 16 A. Yes, I am. 17 Q. Do you understand that you are 18 here today because you have submitted a 19 declaration in the IPR, correct? 20 A. Yes, I understand that. 21 Q. Okay. Do you have a copy of 22 what has previously been marked as Exhibit 23 1003? 24 A. Real quick, before we go away	Page 13 1 A. That is my understanding. 2 Q. Okay. Can you locate a copy of 3 what has previously been marked as Exhibit 4 1001? 5 A. Is that the '121 patent? 6 Q. That is. And is Exhibit 1001 7 exactly that, a copy of U.S. Patent No. 8 8,770,121? 9 A. Yes. 10 MR. CASEY: Yes, Ashley has it 11 up on the screen, so you can certainly 12 see it. 13 THE WITNESS: Yes, I see that. 14 I think the copy that I have 15 printed out here does not have the 16 exhibit numbers on there. So that was 17 why I was clarifying. 18 BY MR. CASEY: 19 Q. No problem. Can we agree to 20 call it the '121 patent today, this document? 21 A. That is fine. 22 Q. Okay. Then we don't need to 23 worry about it. But just for the record, if 24 you note it, it happens to be Exhibit 1001 in

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Page 14 1 the proceeding. 2 A. Okay. 3 Q. And is the '121 patent the 4 patent that is at issue in the IPR proceeding? 5 A. Yes. 6 Q. You discuss the '121 patent in 7 your declaration, correct? 8 A. That is correct. 9 Q. As part of the IPR, do you 10 understand that Precision has challenged the 11 validity of the '121 patent based on certain 12 prior art references? 13 A. Yes, I understand that. 14 Q. I'm going to identify three of 15 those references now so that we understand 16 together what they are and what their exhibit 17 numbers are. 18 The first reference is what has 19 previously been marked as Exhibit 1006. So if 20 you could locate that? 21 A. And this is the '807 patent? 22 Q. That's right. So this is U.S. 23 Patent No. 7,228,807 issued to VenHuizen, and I 24 think that's how you pronounce his last name.	Page 16 1 Again, you may not have the 2 marking of the exhibit number on there, but 3 Ashley is showing you what has been marked. 4 A. Yes, this is what we've called 5 the Fiorido patent or the '543 patent. 6 Q. Good. Yep, it's European Patent 7 Application Publication number 0 536 543 filed 8 by Fiorido. And so we'll call that '543 or 9 Fiorido; all right? 10 A. Yes. 11 Q. You discuss Fiorido in your 12 declaration, correct? 13 A. Yes, I do. 14 Q. The third reference is what has 15 previously been marked as Exhibit 1011. 16 Ashley will pull that up for 17 you. 18 A. Is that the third or the 19 fourth -- the third reference? Okay. 20 Q. Correct. So can you identify 21 that reference for us? 22 A. Yes. This is the English 23 version of the Amazone Operator's Manual for a 24 Precision Airplanter.
Page 15 1 It's Dutch. But if you know better, correct 2 me. 3 But is this the '807 patent 4 issued to VenHuizen? 5 A. Yes. 6 Q. Can we call the document the 7 '807 patent? 8 A. That is fine with me. 9 Q. Okay. Since you've already done 10 did, I guess that would be a presumption that 11 would be highly likely. 12 A. It would -- I would either call 13 it the '807 or the -- I've been calling it 14 VenHuizen, it might be VenHuizen, but I've 15 called it either one, '807 or the VenHuizen 16 patent. 17 Q. Okay. Very good. We'll go with 18 that. 19 You discuss VenHuizen in your 20 declaration, correct? 21 A. Yes, I do. 22 Q. The second reference is what has 23 been previously marked as Exhibit 1007. This 24 is -- I'll ask you to identify it for me.	Page 17 1 Q. And that's published by a 2 company called Amazone? 3 A. Yes. 4 Q. Okay. Can we agree to call this 5 document the Amazone document today? 6 A. Okay. 7 Q. And you discuss Amazone in your 8 declaration, correct? 9 A. Yes, I do. 10 Q. Okay. Do you understand that 11 Precision began its challenge of the validity 12 of the '121 patent by filing a petition with 13 the United States Patent and Trademark Office? 14 A. I believe that is correct, yes. 15 Q. So can you locate a copy of what 16 has previously been marked as Paper No. 2 in 17 the IPR? 18 A. Yes, I have that here. 19 Q. Is Paper No. 2 a copy of the 20 petition? 21 A. Yes, it is. 22 Q. Did you help create this 23 petition? 24 A. No, I did not.

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Page 18 1 Q. You didn't contribute anything 2 at all to the attorneys or to the drafting of 3 the petition? 4 A. No. This -- I prepared my 5 report and supplied it to them. The petition 6 was something that was done apart from my, my 7 interaction. 8 Q. Very good. Do you understand 9 that the Patent Trial and Appeal Board of the 10 United States Patent and Trademark Office 11 issued a decision granting institution of the 12 IPR as requested by Precision's petition? 13 A. Yes, I understand that. 14 Q. And is Ashley showing you what 15 you understand that decision to be? It's 16 previously marked as Paper 12 in the IPR? 17 A. Yes, I see that. 18 Q. My question is, is Paper 12 a 19 copy of the board's institution decision? 20 A. Yes, it is. 21 Q. And, finally, do you understand 22 that Maschio has filed a Complaint with the 23 United States District Court for the District 24 of Delaware alleging that certain of	Page 20 1 A. Yes. 2 Q. Can you locate a copy of the 3 Complaint, which has been marked as Patent 4 Owner's Exhibit 2011, 2011? You should have 5 that in your stack. 6 A. Yes, I have that here. 7 Q. Is Exhibit 2011 a copy of the 8 Complaint? 9 A. Yes, it is. 10 Q. Did you help create the 11 Complaint? 12 A. No. My understanding was the 13 Complaint was filed by Maschio attorney -- or 14 attorneys for Maschio. I did not -- I was not 15 involved in that Complaint. 16 Q. And were you involved in any 17 answers or other pleadings or any documents or 18 any analysis of the Complaint? 19 A. No, I was not. 20 Q. Okay. Good. All right. So 21 let's talk a little bit more substance. So 22 what prior art are you relying on to challenge 23 the validity of the claims of the '121 patent? 24 A. It's the three pieces of prior
Page 19 1 Precision's products infringe the claims of the 2 '121 patent? 3 A. Yes, I understand that. 4 Q. Are you involved in the 5 litigation triggered by that Complaint? 6 A. I have had some discussions. 7 You know, "involved," I guess it's been very 8 limited as far as any involvement I've had to 9 this point. 10 Q. Are you providing expert 11 testimony for Precision in that litigation? 12 A. I guess that would be up to them 13 down the road if they wanted expert testimony 14 from me. We haven't gotten to that point yet. 15 Q. Did you submit a declaration in 16 that proceeding, in the litigation? 17 A. I believe there was a 18 declaration or affidavit that I had submitted 19 regarding some of the claim terms, but there 20 haven't been any expert reports that I've put 21 out there. 22 Q. So you're involved in the 23 litigation at least to that extent of 24 submitting this report on claim terms?	Page 21 1 art in -- that were in my declaration, which 2 would be the '807 patent or the VenHuizen 3 patent, is one of them, the second one is the 4 Fiorido patent application or the '543 patent 5 application, the third is the Amazone Planter 6 User Manual. Let me see what the correct term 7 is, yeah, Operator's Manual for Amazone. 8 And then we were also analyzing 9 the applicant admitted prior art from the '121 10 patent. 11 Q. So those are the four sources 12 that you relied on in your declaration to 13 support your opinion, correct? 14 A. Correct. 15 Q. Okay. Did you identify those 16 references as prior art? 17 To clarify, I know you analyzed 18 them, but were those things that you uncovered 19 by searching or were they just handed to you 20 and said, "Analyze these"? 21 A. I don't remember the exact 22 source. I mean, they were something that was 23 out there from the standpoint of they were 24 references from the '121 patent. They were

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Page 22 1 also at least for the VenHuizen patent and for 2 the Fiorido patent application, so I was aware 3 of them through that document. 4 The Amazone Operator's Manual 5 and the Amazone Planter, I was aware of that 6 through the -- in part through the European -- 7 or the EPO proceedings. 8 So I don't remember the exact 9 time when I became aware of these, these 10 precise references. 11 Q. Did you do any independent 12 searching on your own for additional prior art 13 that might help you in your opinion? 14 A. I guess I -- being aware of what 15 is out there through working in the industry, 16 you know, I don't know that I did independent 17 searching as much as I saw these particular 18 documents, and as I went through them, you 19 know, I formed the opinion that they were prior 20 art, and that was how I conducted my analysis. 21 Q. Okay. But I guess the question 22 is, you did not search for a fifth reference 23 that you might use? By searching I mean the 24 typical things for searching would be looking	Page 24 1 anticipate claims 1 and 10, the two independent 2 claims of the '121 patent, correct? 3 A. That was -- that was my opinion, 4 yes. 5 Q. Do you have any reason to doubt 6 the veracity or accuracy of your opinion? 7 A. No. 8 Q. What materials did you consider 9 regarding these references, other than the 10 references themselves? 11 A. Well, for anticipation, I guess 12 it would be two different things, one is I 13 looked at the patents themselves -- 14 Q. Uh-huh. 15 A. -- as far as evaluating those, I 16 evaluated the '121 patent, and then I used my, 17 my knowledge and experience, and particularly I 18 was analyzing them from the point of view of a 19 person of skill in the art, and as I stated in 20 my disclosure, that would be, you know, 21 somebody with a mechanical or agricultural 22 engineering degree and two to four years of 23 experience. 24 So when I talk about my
Page 23 1 on the Internet, looking at the Patent and 2 Trademark Office website, you mentioned the 3 European Patent Office, you might look on their 4 website to see if there is another reference 5 that might even be better to support your 6 challenge to the validity of the claims of the 7 '121 patent. Did you do any of that kind of 8 searching? 9 A. There was some, some analysis 10 that I performed. I didn't see anything that 11 supported my opinions that I ended up using. 12 You know, so there was some, you know, some 13 searching on the Internet, looking at other 14 documents and other pieces of equipment, but 15 not anything that I felt supported my opinions. 16 Q. Okay. So am I correct in 17 surmising that the four sources of prior art 18 that you used in your declaration that we have 19 just discussed are the best references that you 20 know about right now to support challenging the 21 claims of the '121 patent? 22 A. I would agree with that. 23 Q. Okay. So you opined that 24 VenHuizen and Fiorido each independently	Page 25 1 analysis, I'm analyzing it from the point of 2 view of that, a person of skill in the art. 3 Q. Okay. Each of claims 1 and 10 4 of the '121 patent recite an element or what we 5 would call a limitation of the claim called a 6 thrust-bearing element, correct? 7 Yeah, feel free to refer to the 8 '121. 9 A. Yes, that is correct. 10 Q. Okay. So let's consider 11 VenHuizen. 12 MR. CASEY: So, Ashley, if you 13 could pull it up. 14 And, Dr. Fleming, if you have a 15 copy of it, that would be helpful. 16 That's the '807 patent of VenHuizen. 17 BY MR. CASEY: 18 Q. Okay. So we're going to focus 19 on that, but to get you into the frame of 20 reference, Ashley, could you pull up the 21 petition, which is Paper No. 2, and focus on 22 Pages 45? Let's start on 45. 23 A. Are you looking at the petition 24 or are you looking at my declaration?

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Page 26 1 Q. I'm looking at the petition for 2 now. I'll get to your declaration in just a 3 second. 4 A. Okay. 5 Q. You're anticipating me well, to 6 use a term of art. 7 A. (Witness laughs.) 8 Q. So it looks to me like on Page 9 45 of the petition, under the Romanette X or 10 10, we're talking about a particular limitation 11 of the claims that refers to the thrust-bearing 12 element, correct? 13 A. Yes, that is correct. 14 Q. Okay. And it looks like, and 15 you can feel free to peruse this section of the 16 petition itself, I would focus you on the 17 drawing on the top of Page 46 -- the next page, 18 Ashley -- but it looks to me like your position 19 is that the hub handle 58, the winged hub 20 handle 58 disclosed by VenHuizen is what is 21 claimed in the '121 patent as the 22 thrust-bearing element; is that correct? 23 A. That is correct. 24 Q. Okay. So with that in mind,	Page 28 1 after Paragraph 86 in my declaration. 2 Q. Exactly. Okay. So what are the 3 functions of the hub handle 58? What does it 4 do? 5 A. The hub handle retains the seed 6 disk to the hub. So if you look at VenHuizen, 7 the '807 VenHuizen patent -- I'm trying to find 8 the correct location, bear with me. 9 Right, so, and I'm referring to 10 Column 5 of the '807 patent, in that paragraph 11 at the bottom, where it talks about the handle 12 58, they call it Part 58, and it -- I'll just 13 read you the sentence there: "Extending from 14 the rear wall 54, axially with respect to the 15 cylindrical outer wall 52, is a tubular 16 retaining hub 56 at the distal end of which is 17 a handle 58," which is the handle that we're 18 talking about, "which is rotatable between a 19 first position for receiving or removing a seed 20 disk 60 and a second position for removably 21 retaining a seed disk 60 to (sic) the hub." 22 So the purpose stated there is 23 that it is retaining the seed disk to the hub. 24 Q. Okay. So let's look at Page 69
Page 27 1 let's go to Pages 68 and 69 of your 2 declaration. 3 So, Ashley, if you pull those 4 up. 5 I think that you parallel that 6 analysis, Dr. Fleming, in your own declaration, 7 where you're equating the hub handle 58 with 8 the thrust-bearing element, correct? 9 A. Yeah, so which page? You're 10 on -- 11 Q. I'm on Pages 68 to 69 of your 12 declaration. 13 Do you see on the bottom of Page 14 68 there is the title "wherein," it's the claim 15 limitations highlighted in Italics and 16 underlined, and refers to the thrust-bearing 17 element, and then your analysis starts on 18 Paragraph 86 on the bottom of Page 68? 19 A. Yes, I see that. 20 Q. And I think the key there is 21 that, again, the winged hub handle 58 is what 22 you're equating with as corresponding to the 23 thrust-bearing element that's claimed? 24 A. That is correct, as annotated	Page 29 1 of your declaration, and if you look right 2 above the figure on that page you'll see a last 3 sentence of the prior paragraph. Let me know 4 when you're there. 5 A. I see it. 6 Q. It says, if I read correctly: 7 "This hub handle," which is, as I think you've 8 pointed out, element 58 in the patent, says: 9 "which constrains the movement of the seed disk 10 when a vacuum is applied, constitutes a 11 thrust-bearing element." Do you see that 12 sentence? Did I read that? 13 A. Yes, I do. 14 Q. Okay. So my question really is, 15 can you refer me in VenHuizen to where it 16 states the hub handle constrains movement of 17 the seed disk, quote, "when a vacuum is 18 applied"? 19 A. That would be my analysis as a 20 person of skill in the art. So when you have 21 the -- for VenHuizen, it describes a rubberized 22 seal, and that is in Column 7, Line 28 it looks 23 like, it refers to a rubberized seal which is 24 going to be -- yeah, you have it there on the

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Page 30 1 screen, it has a rubberized seal which is going 2 to be a compliant member. 3 It describes a vacuum, and so 4 when you apply a vacuum to something that has a 5 rubberized seal, you will get some amount of 6 compliance with the rubberized seal that if 7 there -- and then I guess one thing I would add 8 on top of that is when you look at the Figure 9 No. 6 from the VenHuizen patent, you can see 10 that the handle is adjacent or butts up against 11 the seed disk, and so when you have the 12 rubberized seal, which is going to be a 13 compliant seal, you're applying a vacuum to it, 14 which is going to try to move that, that disk 15 due to the vacuum load into the rubberized 16 seal, and you have that retained -- or the hub 17 handle that we're describing here which is 18 retaining it, it will -- and from the 19 description here in Figure 6, you can see that 20 it is adjacent, it will necessarily retain or 21 constrain that seed disk. 22 Q. If a vacuum weren't applied, 23 would the handle similarly retain the seed 24 disk?	Page 32 1 of it, correct? 2 A. That is correct. 3 Q. Okay. So with that in context, 4 let's look at the paragraph on the top of 5 Column 6, and specifically the last section of 6 it, maybe the last 40%, it starts: "Rotating 7 the retaining hub"? 8 A. I see that. 9 Q. Okay. And you go ahead and 10 peruse it to the end so you get where I'm 11 going. 12 A. I see that. 13 Q. Okay. So I'll focus on the last 14 sentence, it says: "Adjusting the retaining 15 hub 56 causes the axial adjustment of the seed 16 disk 60, after which the parts are locked into 17 their desired orientation by locking pin 59." 18 So if I read that literally, the 19 parts are locked together via the hub 56, the 20 handle 58 and the seed disk 60 by this pin 59; 21 is that correct? 22 A. I have to go look at pin 59. 23 Yes, so it appears to me from 24 that description they're just describing some
Page 31 1 A. Per the description, that's what 2 it says that it does, is it restrains the disk. 3 Let me go back to that 4 terminology so we get it right. Right, so 5 there at the bottom of Column 5 it talks about 6 it is retaining the seed disk to the hub -- 7 Q. Right, but it doesn't say -- 8 A. -- the highlight there at the 9 bottom. 10 Q. Sorry. You agree it doesn't say 11 anything about when a vacuum is applied there 12 though, right, in that section of VenHuizen? 13 A. That particular sentence does 14 not describe the vacuum. That's described 15 elsewhere within the teachings of the patent. 16 Q. Right, that a vacuum is applied 17 and et cetera? 18 A. Correct. 19 Q. If you look at the next 20 paragraph, which is on the top of Column 6 in 21 the '807 patent, I'm just trying to get an 22 understanding of how this hub handle, and you 23 just read the part where apparently the tubular 24 retaining hub 56 has the handle 58 on the end	Page 33 1 additional adjustments that you can make beyond 2 what is described there at the bottom of Column 3 5 that I was just describing. So in Column 6 4 they're describing some, some further 5 adjustments that they can make to the setup, 6 but, you know, we've still got the description 7 there that I was describing of the handle 8 retaining the seed disk against the hub. 9 Q. Yeah, I would agree with you 10 that VenHuizen certainly discloses retaining 11 the seed disk via the handle. My questions 12 really revolve around the portion about your 13 statement about when vacuum is applied. 14 So if you look at the next 15 paragraph in Column 6 after the first one, 16 you'll see, this is at Lines 19 through 35 in 17 the VenHuizen '807 patent, they talk about the 18 locking mechanism by which the last sentence in 19 the first paragraph of Column 6 states that 20 adjusting of the hub "causes the axial 21 adjustment of the seed disk, after which the 22 parts are locked," and then the next paragraph. 23 Take a reference to that, Dr. 24 Fleming, if you would, and see how they're

Page 34 1 engaged. 2 A. Which section are you referring 3 to? 4 Q. The very next paragraph. There 5 you go. 6 A. Where we're referring -- 7 Q. Ashley has got her dot on it, 8 the next paragraph in '807. 9 A. Where it's talking about 10 referring briefly to Figure 4 and 5? 11 Q. Correct. 12 And all I'm referring you to 13 this paragraph is to state the patent is 14 teaching us, I think, and I'm asking for your 15 interpretation, but it's teaching us how these 16 parts are locked, and specifically around Lines 17 27, 28, you'll see there are these "arcuately 18 shaped opposing ramped surfaces 63, 64 and 19 opposing locking notches 65, 66 for locking the 20 seed disk to the hub 56"? 21 A. Yes, I see that. 22 Q. Right, and then the handle is on 23 the end of the -- the end of that retaining hub 24 56, right? So that in my understanding, and	Page 36 1 it would be during the setup process. 2 Q. Right, and that would be before 3 operation of the device, right, the operator is 4 setting it up, getting ready to go, go with it? 5 A. That is my understanding, yes. 6 Q. Okay. So then let me ask you, 7 you know, if this statement is correct, so 8 VenHuizen never states that the hub handle 9 constrains movement of the seed disk when 10 vacuum is applied specifically, does it? 11 A. Not explicitly. What I -- it -- 12 during -- you know, from reading through the 13 entire patent where, as I mentioned before, you 14 talk about the rubberized seal, the application 15 of the -- of a vacuum combined with what we 16 talked about before, the retaining the disk to 17 the hub, coupling those, you know, the whole 18 teachings of the patent together with, you 19 know, those three things there is what I've 20 based my opinion on. 21 Q. Okay. Let's look at Paragraph 22 51 on Page 40 of your declaration. 23 A. I see that. Starting on Page 24 39?
Page 35 1 I'm asking for yours, is what the patent is 2 teaching us is that's how it's locked and 3 that's how the handle holds or constrains 4 movement of the seed disk, correct? 5 A. That is not my understanding of 6 what it's talking about there. 7 Q. Okay. Would you give me yours 8 then? 9 A. My understanding of what it's 10 talking about there is holding the handle in 11 position essentially so it doesn't unthread, so 12 it will -- you've got the arcuately shaped 13 opposing ramped surfaces and then the notches, 14 so as you install the handle or you rotate the 15 handle into position to retain the seed disk on 16 the hub, you would -- it would be locked in 17 position, the handle would be locked in 18 position via the notches as described there. 19 Q. Right, and at that time when the 20 operator is adjusting the handle as it's 21 described in that position of the patent, there 22 is no vacuum applied, correct? 23 A. I would assume that there is no 24 vacuum because as you're doing that, you know,	Page 37 1 Q. Page 40 -- you're right, 2 Paragraph 51 starts on 39. The sentence I want 3 to focus you on is on Page 40 though. 4 Are you with me? 5 A. Yes, I am. 6 Q. Okay. So the sentence I'm 7 focusing on states, the first full sentence on 8 that Page 40: "A handle," which, as we 9 identified, is 58, "is mounted on a hub," which 10 was identified as 56, "and extends through the 11 seed disk into the moveable portion," right, 12 and then you refer to Figure 6 of the VanHuizen 13 patent; do you see that? 14 A. Yes, I see that. 15 Q. I think that may be a 16 misstatement, but that's why I wanted to 17 clarify it. So let's look at Figure 6 of 18 VenHuizen. 19 This is the one that you just 20 were looking at before to answer my prior 21 question. So does the handle really extend 22 through the disk? 23 A. Yes, that's my understanding 24 from the analysis of the patent.

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Page 38 1 Q. And what do you base that 2 understanding on? 3 A. The teachings of the patent and 4 the images of the patent. 5 Q. So if you're looking at Figure 6 6, it looks like in the bottom right the seed 7 disk is 60; do you see that? 8 A. Yes, I see that. 9 Q. And in the middle on the right 10 you see the handle 58, which is the component 11 we've been talking about? 12 A. That is correct. 13 Q. Okay. So I see handle 58 being 14 entirely on one side of the seed disk 60. What 15 am I missing? And, therefore, not extending 16 through it. 17 A. You're seeing one orientation. 18 So if you look up at, for instance, Figure 4 -- 19 Q. Uh-huh. 20 A. -- Figure 5, you can see that 21 there is a slot where the handle would fit 22 through before it is rotated into position. So 23 the previous discussion that we just had about 24 the ramped surfaces and the locking the handle	Page 40 1 up against the seed disk in Figure 6. 2 Q. Right. So it's entirely on the 3 right-hand side in that figure of the seed 4 disk, "it" being the handle? 5 A. That is correct. 6 Q. And you're saying in a different 7 orientation, if I were to look at a similar 8 Figure 6 but in a new orientation, at least a 9 portion of that handle 58 would appear on the 10 left-hand side of seed disk? 11 A. No. 12 Q. It would always be on the 13 right-hand side? 14 A. I'm saying as installed, as 15 operational, it would be on the right-hand 16 side. 17 Q. Right. So then I'm confused, 18 back to my original question, when does the 19 handle 58 extend through the seed disk, from 20 the right-hand to the left-hand side of the 21 seed disk in Figure 6? 22 A. As installed, you see it as it 23 is on the right-hand side of the seed disk in 24 this particular image.
Page 39 1 into position, what you're -- what you're 2 seeing there in Figure 6 is after the handle 3 has already been rotated into position. So it 4 would -- it would extend through the disk and 5 then be rotated into position. 6 Q. So that at least portion of the 7 handle 58 would be in the Figure 6 position, 8 it's all on the right of the seed disk, so 9 you're saying a portion of the handle 58 would 10 appear on the left of the seed disk 60 in the 11 Figure 6 orientation? 12 A. I'm sorry; I don't understand 13 your question. 14 Q. Okay. So I think what you told 15 me is Figure 6 is just indicating a particular 16 orientation between the handle and the seed 17 disk, correct? 18 A. Yes. 19 Q. And you're saying in a different 20 orientation the handle -- well, let me stop 21 there, at least in that orientation in Figure 6 22 does handle 58 extend through the seed disk 60? 23 A. The handle is on the -- in the 24 moveable portion adjacent to the and pressing	Page 41 1 Q. Uh-huh. So I'm asking, when 2 would it appear to the left-hand side of the 3 seed disk, in a different image? 4 A. If it's not assembled, it's 5 not -- you know, they don't have it in the -- 6 yeah, they don't show an exploded view with the 7 disassembled state for that. So this is the -- 8 Figure 6 is the assembled view. 9 Q. Okay. Let's look at Figure 7 of 10 VenHuizen, although of course you're certainly 11 free and I encourage you to look at any figure 12 you would like to, but I'm going to focus you 13 on Figure 7. 14 So when I look at that figure, 15 it looks like VenHuizen teaches a housing 16 having a fixed portion 50 and a moveable 17 portion 90; is that correct? 18 A. Well, I think it calls it a 19 first portion and a second portion, and through 20 my analysis of the patent the 50 was the fixed 21 portion and 90 was the moveable portion. 22 Q. Understood. Does VenHuizen 23 disclose or suggest a shaft rotatably mounted 24 in the moveable portion of the housing?

Page 42 1 A. Sorry; can you repeat your 2 question? 3 Q. Does VenHuizen disclose or 4 suggest a shaft rotatably mounted in the 5 moveable portion of the housing? 6 A. The shaft is -- the shaft itself 7 is mounted in the fixed portion 50 and then 8 extends through to the fixed portion -- or 9 to -- sorry; to the moveable portion 90. So 10 the shaft itself is mounted in the fixed 11 portion and then extends through and connects 12 to the handle that we were just describing in 13 the moveable portion. 14 Q. Does VenHuizen disclose or 15 suggest any bearings? 16 A. I believe the drawing in Figure 17 6 would suggest bearings. 18 Q. Can you point me to where there 19 is bearings suggested in Figure 6? 20 A. So between the -- I believe it's 21 56 is the hub, and the shaft, you see that 22 there is a -- 23 Q. And the shaft you're talking 24 about is the drive shaft 55?	Page 44 1 Q. So you as a person of skill in 2 the art would read that "X" box in Figure 6 as 3 a bearing? 4 A. Yes. 5 Q. Does VenHuizen itself talk about 6 a bearing in any place? 7 A. I don't recall that it talked 8 specifically about a bearing. 9 Q. That's fine. I'm just asking 10 for what you remember. 11 You're free to read through it 12 or search on bearing, but, you know, good luck. 13 The "X" box that you're talking 14 about, that's located in which, the fixed or 15 the moveable portion of the housing? 16 A. That particular bearing that 17 we're looking at or the, you know, what's the 18 simplified version of a bearing is in the fixed 19 part of the housing or of the meter. 20 Q. Does VenHuizen disclose or 21 suggest a seat in which the bearings are 22 located? 23 A. I don't recall that it suggested 24 a seat.
Page 43 1 A. That is correct. 2 Q. Uh-huh. 3 A. So if you see there, there is 4 a -- you know, I'll say a gap with an X? 5 Q. Uh-huh. 6 A. Typically in engineering 7 drawings you may not draw the entire bearing 8 with all the detail, you just put something 9 like that, like an "X" that would denote a 10 bearing. 11 So as I went through and 12 analyzed it, looking at this particular 13 drawing, that was my analysis, was that that 14 would be a -- that would be a bearing right 15 there. 16 Q. Okay. So VenHuizen doesn't 17 label that "X" box with any number, does it? 18 A. I don't recall that it was 19 labeled explicitly as a separate component in 20 there. So that was just based on my 21 engineering knowledge, that that's a typical 22 way for denoting something like a bearing is to 23 have something with an "X" like that through 24 it.	Page 45 1 Q. And more specifically then 2 apparently it doesn't disclose a seat in which 3 bearings are located in the moveable housing, 4 right? If there were be a seat and the 5 bearings were as you're interpreting them, they 6 would both, the bearings and the seat, would 7 both be in the fixed portion of the housing, 8 correct? 9 A. Sorry; I didn't understand your 10 question. Can you restate that, please? 11 Q. Sure. And thank you for asking 12 for clarification. 13 So if I understand correctly, 14 the "X" box in Figure 6 is what you're 15 interpreting to be bearings, and I'm looking 16 for any disclosure that VenHuizen might have or 17 for your interpretation that says, okay, there 18 is a seat for these bearings. 19 A. What do you mean by "a seat"? 20 Q. A structure in which the 21 bearings sit. 22 A. I don't see that it explicitly 23 refers to a seat for the bearing in relation to 24 the shaft, for instance.

12 (Pages 42 - 45)

Page 46 1 Q. Is there any implication of a 2 seat? I mean, when I'm looking at Figure 6 and 3 the X-shaped box, it looks like it's just a box 4 interposed between the hash structure and the 5 shaft. 6 A. Well, it refers to -- if you go 7 through the teachings of the patent, it talks 8 about rotating the shaft and it talks about a 9 retaining hub, and coupling that together with 10 the drawing here where you can see in Figure 11 56 -- or in Figure 6, for instance, the 12 retaining hub 56 is going to be fixed in 13 position and the drive shaft will be, as the 14 patent describes, will be rotating. 15 Q. Uh-huh. I'm with you. 16 A. Then that would -- and then 17 couple that together with what I said, the box 18 with the "X" in it, that typically would denote 19 a bearing, that would say that the shaft would 20 be rotating inside of the hub. 21 Q. Agreed, but I don't see any seat 22 there particularly. 23 A. I guess I'm not sure what you 24 mean by "seat."	Page 48 1 A. No, I did not see VenHuizen 2 getting to that level of granularity as far as 3 those components. It's describing the 4 operation though and it's got what appears to 5 be kind of a genericized outline of a bearing. 6 Q. Understood. And if we did 7 interpret the retaining hub 56 to be sort of a 8 seat for the bearings, and the bearings being 9 the X-shaped box, am I correct in looking at 10 Figure 6, that both of those would be located 11 in the fixed portion of the housing? 12 A. Both of which? 13 Q. The seat and the bearings. 14 A. For -- for the -- what we're 15 calling the transmission drive shaft or the 16 shaft, that part of the shaft would be over 17 there, you know, and obviously, as we talked 18 before, it would extend through the seed disk 19 and the handle would then mount on the other 20 end of that shaft, in the moveable portion. 21 Q. Right, but the bearings would be 22 in that fixed portion you told me, right, and I 23 think any seat for the bearings would be in the 24 fixed portion too, correct?
Page 47 1 Q. A separate structure that 2 physically houses the bearing. 3 A. That would be the hub. 4 Q. So then the hub, the retaining 5 hub 56 would be a seat for the bearing? 6 A. The -- from this picture here in 7 this, you know, coupling that with the 8 description in the patent, I would say that 9 the -- that that would be what you're calling 10 the seat, you know, that would be where the 11 bearing would be, you know, the outer race of 12 the bearing would be supported. 13 Q. Okay. So I think we agree, but 14 let me clarify, you're interpreting the "X" box 15 to be bearings, but you didn't find anywhere in 16 VenHuizen that talks about bearings, did you? 17 A. I didn't see VenHuizen getting 18 down to that level of detail as far as the 19 components, like a bearing that was used. It 20 wasn't, wasn't describing that. 21 Q. Right. And, similarly, with 22 respect to a seat for the bearings, there is 23 nothing that VenHuizen specifically talks about 24 that's a seat for bearings?	Page 49 1 A. As outlined here by VenHuizen, 2 yes. 3 Q. Thank you. 4 MR. CASEY: Okay. We've been at 5 it just about an hour, Dr. Fleming. I 6 can keep going, but I'm about to go 7 from VenHuizen to Fiorido, so it's a 8 good stopping point for me. Do you 9 want to take five minutes and recover 10 and go from there or do you want to 11 just keep going? It's entirely up to 12 you. 13 THE WITNESS: No; I'd like to 14 refill my water glass. So if we could 15 take a five-minute break, that would be 16 great. 17 MR. CASEY: Absolutely. So I 18 got 2:02 Eastern. I'm assuming, by the 19 way, you're an hour earlier? 20 THE WITNESS: Yes. 21 MR. CASEY: So let's resume, you 22 know, about 1:07 your time? 23 THE WITNESS: Okay. 24 MR. CASEY: Perfect. See you

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Page 50 1 soon. 2 - - - 3 (Whereupon there was a recess in 4 the proceeding.) 5 - - - 6 BY MR. CASEY: 7 Q. So let's look at the Fiorido 8 reference, which is Exhibit 1007. So all three 9 figures of Fiorido, and, as I look at it, there 10 are Figures 1, 2 and 3, show a housing having 11 two portions, casing 12 and seed container 11, 12 correct? 13 A. Correct. 14 Q. Are these housing portions 15 connected to one another? 16 A. Yes, that's what the figures 17 show. 18 Q. And how are they connected to 19 one another? 20 A. What they show is there are tabs 21 that have a -- some kind of a bolt it appears 22 that goes through there. 23 Q. Okay. So they're bolted 24 together, at least as described by Fiorido?	Page 52 1 looking at Figure 1, it's got tabs that have 2 holes in them and -- 3 Q. And the tabs would be 18 and 181 4 in the Figure 1? 5 A. On one side and 19 and 191 on 6 the portion farthest from the screen there, 7 yes, where your cursor is. 8 Q. Yep. 9 A. That appear to have holes 10 through them and then a bolt passes through 11 there, you see the head of a bolt. 12 Q. Understood. Is one of these 13 housing portions moveable relative to the 14 other? 15 A. Yes. 16 Q. How so? 17 A. You would disconnect, you know, 18 in this case you would disconnect the 19 connecting bolts and pins and it would -- you 20 know, the one piece would move away from the 21 other one, which is illustrated in Figure 3. 22 Q. Right, which then Figure 3 23 doesn't have the bolt, it has the hole I see in 24 18 and 181, but there is no bolt there?
Page 51 1 A. That's what the figure shows. 2 Let me do a quick check to see if that's the -- 3 what the description was. 4 Q. Do you have the ability to do a 5 word search on the document? 6 A. Yes, I do. The documents that I 7 received from you were OCR'd. 8 So the document, Column 5 at 9 Line 26, refers to a connection "by means of 10 holes, pins and bolts." 11 Q. Right. So I gather that -- 12 would you interpret it as I would that there is 13 holes in one of the housing components or 14 portions and then a pin or a bolt is inserted 15 through the other and into the hole of the 16 first so that they're connected then that way? 17 A. I'm not sure what the exact 18 arrangement is going to be. Just what it says 19 there is that there is holes, pins and bolts. 20 Q. Right. So as a person of skill 21 in the art, how would you interpret that the 22 two housing components are connected? 23 A. It appears that they have got 24 those two kind of tabs sticking out, I'm	Page 53 1 A. Yes, they had been removed. 2 Q. You used an interesting word, 3 "removed." So the way you would put these two 4 housing portions together is you would put them 5 together, you insert the bolt in the hole, you 6 tighten I suppose a nut on the end of the bolt 7 or it would be a threaded bolt in some way, and 8 that would hold the portions together, correct? 9 A. That is my understanding from 10 this patent. 11 Q. And then to remove, the word you 12 just used, you would remove the bolt or 13 unthread it or remove the nut and take the bolt 14 out and then you would have what is shown in 15 Figure 3, which is the two separate housing 16 portions removed from each other, correct? 17 A. Figure 3 is showing them 18 separated, correct. 19 Q. Right. So they're now removed 20 from each other, the bolt is gone and there 21 they are? 22 A. Correct, one part is moved 23 relative to the other one. 24 Q. So which of the two housing

Page 54 1 portions is moveable relative to the other? 2 A. In the -- and I go through this 3 in my report but I'll describe it for you here, 4 in the first embodiment that's given, which you 5 can see there in Figure 2, you can see that 6 there is a shaft and a cogwheel and bearings, 7 and so that would be the fixed part, and in 8 that particular arrangement you would have -- 9 that would be the fixed part and then the 10 moveable part would be the other side where 11 you've got the seed hopper. So that's in the 12 first embodiment described. 13 And then I go through in my 14 report and it talks about you could introduce 15 the drive elements from the opposite side, 16 through the opening No. 40 there in Figure 1, 17 at which point that would become the fixed 18 side. 19 Q. So then it seems to me that 20 you're defining the fixed portion of the 21 housing as that portion which includes the 22 shaft 29 and the bearings 28; is that correct? 23 A. From my analysis of this, this 24 particular -- you know, in looking at it	Page 56 1 a little bit at the beginning of your question. 2 Can you restate that? 3 Q. Sure. So I'm basically asking 4 how do you know which is the movable portion 5 versus the fixed portion? And from the 6 analysis that you just explained to me, if I 7 understand it correctly, the way you decide 8 what is the fixed portion and what is the 9 moveable portion is you look to where the 10 bearings 28, the shaft 29 and the cogwheel 30 11 are located, and the portion of the housing in 12 which those components are located is the fix 13 portion, correct? 14 A. That is my analysis based on, 15 you know, like I said, my analysis from the 16 point of view of a person of skill in the art. 17 Looking at those components, they would require 18 some structure to support them, they would have 19 to be -- they would have to be on the fixed 20 portion. 21 Q. Right. So I think you said that 22 in another embodiment the bearings 28, the 23 shaft 29 and the cogwheel 30 might be inserted 24 through 40 and be on the other side, the other
Page 55 1 through the eyes of a person of skill in the 2 art, I see that you have a cogwheel and a 3 shaft, you've got bearings, so you've got kind 4 of a substantial structure that you're driving 5 this with, so that would necessitate a support, 6 which would make that, in my analysis, that 7 would be a fixed part, you would need that part 8 to be fixed in order to transmit the -- to 9 support those components and transmit the 10 torque that's required for the system. 11 If you rearrange those 12 components and move the shaft and the cogwheel 13 and the bearings to the other side through that 14 opening No. 40, then that would necessitate 15 that becoming the fixed part in order to 16 support those components. 17 Q. Right. So in order for us to 18 determine which is the moveable portion of the 19 housing and which is the fixed portion of the 20 housing, it seems to me that we look at or 21 you're explaining to me that you look at which 22 portion contains the bearings 28, the shaft 29 23 and the cogwheel 30? 24 A. I'm sorry; you were cutting out	Page 57 1 portion of the housing; is that right? 2 A. Yes, Fiorido describes a second 3 embodiment where you can introduce the drive 4 elements from the opposite side through that 5 opening No. 40. 6 Q. Could you point me to where 7 Fiorido makes that disclosure? I think you're 8 talking about Column 8, in the last paragraph 9 of the description, but that's just a 10 suggestion to start you and maybe expedite 11 things. 12 A. Yeah, so it's -- he is talking 13 specifically about the -- just about the moving 14 part, and there is some other things that I'll 15 get into in relation to that analysis, but in 16 relation to the just introducing the driving 17 elements and the support from the opposite 18 side, that would be at the top of Column 8. 19 Q. Right. So then back to Figure 20 2, you've already testified that the casing 12, 21 which has in this embodiment, I think you're 22 referring to it as the first embodiment 23 illustrated in Figure 2, where the bearings 28, 24 the shaft 29, the cogwheel 30 are all in the

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Page 58 1 casing 12, that's the fixed portion of the 2 housing in that embodiment, correct? 3 A. Yes. 4 Q. So if we flipped, per Column 8, 5 and said let's put the bearings 28, the shaft 6 29 and the cogwheel 30 in the other portion of 7 the housing, which is the seed container 11 in 8 Figure 2, then that would be the fixed portion 9 of the housing, correct? 10 A. That would necessitate that 11 being the fixed part of the housing, correct. 12 Q. Thank you. 13 Is there a difference in your 14 mind between components that are moveable 15 relative to each other and components that are 16 removable from each other? 17 A. Yes, I would say there are -- 18 there are some differences. 19 Q. So could you describe one 20 example or other differences? 21 A. Well, as I described before, 22 the -- where you -- we first talked about 23 remove was that the bolt, for instance, would 24 be taken from the hole, and so you can see in	Page 60 1 moveable part of the housing, if it is in a 2 disconnected state, then it would be removed. 3 Q. So when it's connected, i.e. 4 bolted together, are the two components 5 moveable with respect to each other? 6 A. Sorry; can you say that again? 7 Q. When the components -- you 8 talked about the components being removed, 9 removed from each other when the bolt is 10 removed, correct? 11 A. Well, I talked about removing 12 the bolts, at which point you could move the 13 moveable portion and if you -- and if you -- I 14 guess going back to the bolts, if you only take 15 one bolt out, then you may get some rotation 16 about that axis of the bolt and you may get 17 some movement. If you take both of them out, 18 then you would be able to move the moveable 19 portion of the housing away from the fixed 20 part, and if it's separated then it would -- 21 then you could call that removed. 22 Q. Right. So in operation these 23 devices are meant to have both bolts in place, 24 correct?
Page 59 1 Figure No. 1 the bolts are in position there 2 and the two parts of the -- the housing and the 3 casing are together. 4 When you go to Figure No. 3, the 5 bolts don't show up in there, they have been 6 removed and you can see that the components 7 are -- you know, you get an exploded view 8 there. 9 Q. Right. So I think -- well, let 10 me ask you this, would the housing components, 11 the casing 12 and the seed container 11, be 12 removable from one another? 13 A. Well, I guess by definition if 14 it is moveable and if you pull the pin out or 15 the pin and the bolt, then as it moves and it 16 is separated, then it would be removed. 17 Q. So I gather then that at least 18 for Fiorido, you would characterize the two 19 housing portions as both moveable and 20 removable, correct? 21 A. I guess if you take it to that 22 extent. I would characterize, you know, first 23 and foremost as, you know, one side has to be 24 fixed, when you disassemble and you move the	Page 61 1 A. I would agree with that. 2 Q. You wouldn't have one bolt in 3 place and one absent and operate the machine, 4 would you? 5 A. I would not expect it to, no. 6 Q. Right. So if we have both bolts 7 in place, as per normal operation of the 8 device, would the two housing components be 9 removable from each other? 10 A. If you have it fully assembled, 11 I mean, you would have to -- you would have to 12 disconnect one from the other in order to, you 13 know, move one part relative to the other. 14 Q. By removing the bolts, correct? 15 A. In this -- for this particular 16 situation you would remove the bolts. 17 Q. Right. So if I didn't remove 18 the bolts and I just had them connected 19 together by bolts in place, could you move one 20 of the housing components relative to the 21 other? 22 A. If you had it completely 23 connected, then they would not be moving -- one 24 would not be moving relative to the other one

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Page 62 1 that's fully connected. 2 Q. Understood. If you recall, 3 VenHuizen I think teaches a hinge connecting 4 the two housing components, correct? We can 5 look back if you need to. 6 A. That's my recollection, yes. 7 Q. That's fine. So I'm going down 8 because I'm trying to get a better 9 understanding of this moveable-removable 10 concept. So if we had the hinge that VenHuizen 11 teaches us that connect the two housing 12 portions of Fiorido, right, so instead of the 13 bolts we have a hinge, right, and we were to 14 weld that hinge to each of the two respective 15 housing portions -- are you with me? So I got 16 a hinge with the hinge welded to each of the 17 housing portions. 18 A. One hinge or two hinges? 19 Q. Well, you could have two hinges, 20 but each hinge is welded to one housing portion 21 and the opposite side of the hinge is welded to 22 the other housing portion, which is I think 23 what VenHuizen teaches us. It's got a hinge 24 attached to each housing portion and the	Page 64 1 hinge that's on the Fiorido, and so it's got 2 one portion of the hinge connected to one of 3 the housing portions, let's call it 12, and the 4 other part of the hinge connected to the other 5 housing portion, let's call it 11, and now we 6 have these two housing components connected, 7 right? 8 A. So if you're connecting, for 9 instance, 191 to 19 through a hinge? 10 Q. Correct. 11 A. Okay. 12 Q. All right. So those components 13 then would be moveable, right, via the hinge, 14 they could hinge and work together, and one 15 component of the housing would move as hinged 16 to the other component, correct? 17 A. That would -- that would allow 18 for movement, yes. 19 Q. Okay. But they couldn't -- 20 A. If you -- sorry; if you just 21 connected the other connecting point, which in 22 this case would be 18 and 181, if you had a 23 hinge over it, 19 and 191, then you would have 24 rotation that way.
Page 63 1 housing portions can rotate through that hinge. 2 A. Yeah, I would agree with that, 3 yeah, but I think that's only one hinge. 4 Q. Okay. Whether it's one or two 5 isn't necessary to understanding my question. 6 A. Okay. 7 Q. But you can think of it as two 8 or one. 9 So let's take that hinge or 10 hinges and they are welded to the housing 11 components of Fiorido now, so instead of bolts 12 we have got the two housing components 13 connected, which Fiorido teaches that the 14 housing portion is connected by a hinge, a 15 welded hinge; are you with me with my visual? 16 A. Not fully. 17 Q. Okay. So I'll try a different 18 way. So I want to connect the two housing 19 portions of Fiorido, right now they're 20 connected by bolts or pins, I'm going to say 21 let's incorporate VenHuizen's hinge in 22 Fiorido's structure. So far so good? 23 A. Okay. 24 Q. All right. So now I have a	Page 65 1 Q. Right. So let's just say there 2 is two hinges, one on each side, there is no 3 bolts anywhere, which would be essentially what 4 VenHuizen does, right? So now one component in 5 Fiorido would move via the hinge relative to 6 the other, correct, it would swing open and 7 shut just as VenHuizen does? 8 A. So basically you're just 9 changing the orientation of that bolt then; is 10 that what you're -- 11 Q. I'm replacing the bolt with a 12 hinge. 13 A. I mean, a hinge and a bolt are 14 very similar, it's just the axis of 15 orientation, because they're both a pin-like 16 structure, it's just the axis that it rotates. 17 So it sounds like you're describing rotating 18 that connection 19 and 191 to a different 19 orientation? 20 Q. Yeah. Yeah, I'm just trying to 21 better understand the concepts of moveable and 22 removable, right? So we walked through with 23 the bolted embodiment, right, of Fiorido, and 24 now I want to walk through Fiorido with a hinge

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Page 66 1 in it. 2 A. Okay. 3 Q. And the hinge is taught by 4 VenHuizen. So I'm basically combining the 5 hinge of VenHuizen with the connecting 6 mechanism of Fiorido. Are you with me? 7 A. Yes, yes. 8 Q. Okay. So in that concept, then 9 those components, the housing components, the 10 two housing components of Fiorido, they would 11 be moveable via the hinge relative to each 12 other, right, just as VenHuizen's are? 13 A. As long as you keep the hinge 14 pin in there, then it would be -- you know, it 15 would be -- you could rotate. If the hinge pin 16 was out, then the two parts would separate. 17 Q. Okay. Let's say the hinge pins 18 can't be removed, I've seen hinges, perhaps you 19 have too, that you can't separate the two parts 20 of the hinge, the hinge is an integral 21 component. 22 A. Okay. 23 Q. Okay. So now I've got the hinge 24 in place with no pin in the middle, it's just a	Page 68 1 Q. I'm connecting the two housing 2 portions via a hinge; that's all. It doesn't 3 matter to me where the hinge is. It's just 4 that the two housing components can now rotate 5 about the axis that the pin -- of the center of 6 the pin creates of the hinge. 7 A. Yes, understood. 8 Q. Okay. So now one of those 9 housing components of Fiorido would be moveable 10 relative to the other, right, it could swing 11 along the hinge and move out or towards the 12 other component, correct? 13 A. For the hypothetical that you're 14 describing with the permanent, you know, 15 nonremovable hinge pin, then it would -- it 16 would rotate and, you know, if you can't pull 17 the hinge pin out, then it would not be able to 18 separate. 19 Q. Right. So in that case the 20 characterization of my hypothetical would be 21 that the Fiorido embodiment that I'm describing 22 connected by the hinge, the two housing 23 components would be moveable with respect to 24 each other, but because the pin of the hinge
Page 67 1 permanent hinge that's welded to each of the 2 two housing portions of Fiorido, and I think 3 you would agree with me that those two housing 4 portions are now moveable, correct? 5 A. Well, one would be fixed and one 6 would be moveable relative to the fixed part 7 and -- 8 Q. Right, so the -- 9 A. I'm confused on your hinge. I 10 mean, you always have to have a hinge pin. 11 Q. Okay. But let's call it a 12 permanent hinge pin, a hinge pin that can't be 13 removed, a bearing surface, if you will, which 14 allows rotation of the two halves of the hinge. 15 A. Okay. So basically you're 16 taking this 19 and 191 from Fiorido and you 17 want to basically rotate it 90 degrees so that 18 the bolt is in a vertical orientation and then 19 not let the -- not let the bolt come out; is 20 that what you're describing? 21 Q. No; I'm just saying totally 22 replacing what's the connecting structure of 23 the 91 -- 181 of Fiorido with a hinge. 24 A. Sorry; which --	Page 69 1 can't come out they are not removable, right? 2 A. That would be -- you know, in 3 your hypothetical, yes, if you cannot take the 4 hinge pin out, then you wouldn't be able to 5 separate the two halves completely, it would 6 still be connected via the -- via the hinge. 7 Q. Right. So and that would be the 8 situation where in the actual embodiment 9 disclosed by Fiorido where the housing 10 components are bolted, I think we agreed they 11 can't move relative to each other once they're 12 bolted, correct? 13 They're removable because of the 14 bolt, but once the bolt is in they're not 15 moveable? 16 A. Once they're -- so just to 17 clarify, once they're bolted together, yes, 18 they're not going to be moveable, you're not 19 going to be able to move one part relative to 20 the other. Obviously, you take the bolts out 21 and you will be able to move one part relative 22 to the other. 23 Q. Understood. Thanks. 24 So let's take a twist now and go

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Page 70 1 to your declaration again and look at Pages 71 2 to 72. 3 A. Sorry; did you say 71 or -- Page 4 71 or Paragraph 71? 5 Q. 71, page. 6 A. Okay. 7 Q. No; it's Paragraph 90. So it's 8 under the heading, the limitation is 9 highlighted in bold and Italics: "a sowing 10 disc which is rotated by a motor-driven 11 transmission drive shaft at controlled speed." 12 Do you see Paragraph 90? 13 A. Yes, I see that. 14 Q. I think you identify the shaft 15 29 of Fiorido as the motor-driven transmission 16 drive shaft claimed in the '121 patent; is that 17 correct? 18 A. Well, you've got the cogwheel 19 and the shaft, so that would be the -- so you 20 got the shaft itself is 29 and then the 21 cogwheel is Part 30. 22 Q. So then is the claimed 23 motor-driven transmission drive shaft for the 24 '121, does that correspond to the Fiorido	Page 72 1 shaft? 2 A. The shaft itself is Part No. 29, 3 correct. 4 Q. Right. So the cogwheel 30 isn't 5 part of the transmission drive shaft itself as 6 claimed? 7 A. That would be the transmission 8 part that's driving the shaft, but if you're 9 just referring to the shaft itself, that would 10 be Part No. 29. 11 Q. Right. Okay. Thank you. 12 So what structure in Fiorido 13 corresponds to this thrust-bearing element 14 that's claimed in the '121 patent? 15 A. The thrust-bearing element is 16 going to be -- I'm trying to get the numbers 17 here off of this figure. 18 Q. Take your time. No problem. 19 Relax. 20 A. So the thrust-bearing element is 21 going to correspond to Part No. 31. 22 Q. Okay. Any other components 23 comprise the thrust-bearing element or is just 24 that?
Page 71 1 cogwheel and shaft 29? 2 A. So the shaft would be Part No. 3 29, and it's driven by the transmission, which 4 would be represented by the cogwheel, which is 5 Part 30. 6 Q. Right. I'm glad that you made 7 that clarification. So focusing on the 8 transmission drive shaft itself, is that just 9 the shaft 29 and not the cogwheel? 10 A. If you're just referring to the 11 shaft, then it would just be Part No. 29. 12 Q. Right. So the statement, the 13 last statement of that Paragraph 90 in your 14 declaration, I think what you're telling me, 15 but I'm asking you to confirm what you're 16 saying, it says: "The driveshaft," which is 17 29, "is on the fixed portion of the housing and 18 centered relative to the sowing disc, and 19 therefore constitutes a transmission drive 20 shaft;" do you see that? 21 A. Yes, I see that. 22 Q. So then am I correct in assuming 23 that your position is that the drive shaft 29 24 is what constitutes the transmission drive	Page 73 1 A. Well, as far as the actual, you 2 know, bearing of the thrust, you know, with -- 3 you know, where you've got the -- to step back 4 for a second, you've got thrust-bearing 5 element, so you've got a component or an 6 element that, you know, supports against an 7 axial load or bears thrust. The part that's 8 actually bearing the thrust from the seed disk 9 is going to be Part No. 31. 10 Q. Okay. So, yes, if you would, 11 read Paragraph 99, which is on Page 81, starts 12 on 81, it bridges Pages 81 and 82 of your 13 declaration. Let me know when you've had a 14 chance to read that paragraph, Dr. Fleming. 15 MR. CASEY: Ashley, it's the 16 next one down, 99. 17 THE WITNESS: Okay. 18 BY MR. CASEY: 19 Q. Okay. So, and there is a figure 20 right below it where I think you've got the 21 label "thrust-bearing element" and it looks 22 like it points to the driving disk 31; is that 23 correct? 24 A. That is correct.

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Page 74 1 Q. Which is consistent with what 2 you just told me, that your understanding is 3 that the thrust-bearing element that was in 4 Fiorido is this driving disk 31, correct? 5 A. Correct. 6 Q. Okay. Now, in the paragraph we 7 just read, there is a number of other 8 components that are mentioned, bearings 28, a 9 shaft 29. So the bearings 28 and the shaft 29 10 that were mentioned along with the driving disk 11 31 are not themselves part of the 12 thrust-bearing element, correct? 13 A. That is the -- no; that is -- 14 that is the support -- the bearings would be 15 the support and then the shaft would be the 16 transmission drive shaft that we talked about 17 before. 18 Q. Right. But they would not be 19 part of the thrust-bearing element? 20 A. No; they are connected to it but 21 as far as actually the part that, you know, 22 supports against the thrust, that would be Part 23 No. 31. 24 Q. Alone, correct?	Page 76 1 Q. All right. So "The driving disk 2 mounts against the perforated disk constraining 3 the movement of the disk in the axial direction 4 and withstanding some of the load applied to 5 the seal by the disk when a vacuum is applied." 6 So, again, I'm referring to that 7 "when a vacuum is applied" language that we 8 talked about with respect to VenHuizen, but now 9 we're -- 10 A. Yes. 11 Q. -- Fiorido. 12 Okay. So can you refer to me in 13 Fiorido where he states that the driving disk 14 withstands some of the load applied to the seal 15 by the seed disk when a vacuum is applied? 16 A. I don't recall that Fiorido 17 expressly states it that way, so it would be 18 based on my analysis of the teachings of the 19 patent, you know, through the eyes of a person 20 of skill in the art. 21 Q. I understand. And that makes 22 sense to me. But to just be clear about it, 23 Fiorido itself, regardless of your 24 interpretation, but Fiorido itself never states
Page 75 1 A. Well, I can't say alone because 2 it's, it's connected to the other components, 3 but it is the part that is actually being 4 loaded by the seed disk. 5 Q. Okay. So I guess to get my 6 clarification, the last sentence of that 7 Paragraph 99 that's in front of you, and this 8 is sort of where my confusion comes from, it 9 says: "This constitutes a thrust-bearing 10 element." 11 And as we talked about earlier, 12 in that paragraph above that concluding 13 sentence, we talked about the bearings 28, the 14 shaft 29, the driving disk 31, and so when you 15 refer to "This," what structure are you talking 16 about? 17 A. The disk 31. 18 Q. Okay. Thank you. All right. 19 Let's look at the sentence that bridges Pages 20 82 and 83 of your declaration. 21 And it says: "The driving 22 disk" -- I'm referring to "The driving disk 23 mounts," and we go from there, correct? 24 A. Okay.	Page 77 1 that the driving disk withstands some of the 2 load applied to the seal by the seed disk when 3 a vacuum is applied, does it? 4 A. I don't recall that it 5 explicitly states it that way. It talks about, 6 you've got a seal, and this is at the bottom of 7 Column 7, where it talks about the hollow 8 sealing ring or similar gasketing means of 9 plastic material may be appropriately provided 10 between the casing 12 and disk 13. So I'm on 11 the Fiorido patent. 12 Q. I'm with you, yep. 13 A. So it's talking about the hollow 14 sealing ring 39 and the gasketing material 15 being plastic, which is going to be a compliant 16 material, and then you couple that with the 17 figures that are provided for Fiorido, which 18 are going to be Figure -- in particular I'm 19 looking at Figure 2, where you can see that 20 that disk No. 31 that we showed before is going 21 to be up against the seed disk, and so if you 22 have the sealing ring 39, which is, you know, 23 up there at the top, and then it's going to 24 extend around, that -- once a vacuum is applied

Page 78 1 and it's a plastic material, then you are going 2 to have some amount of movement and deflection 3 of that, the seed disk, and with the teachings 4 there showing that the disk 31 is up against 5 the seed disk, then you will be having some of 6 the load up against the thrust-bearing element, 7 which is going to be the disk that we talked 8 about before. 9 Q. Thank you. Let's focus a little 10 bit on that analysis. So I'm going to focus us 11 on Figure 2, which you just did, and that 12 section at the bottom of Column 7 of Fiorido, 13 which you just referred to. 14 So start with the Column 7 text, 15 the very bottom, the last sentence is the 16 "Furthermore" sentence, which I think you were 17 just referring to. So you've got the hollow 18 sealing ring 39 or other similar gasketing 19 means and it's provided between the casing 12 20 and the disk 13, which you just described for 21 us and is shown in that Figure 2, and the 22 function it says is, "so as to ensure correct 23 positioning of the two elements and an 24 effective sealing element between them," and	Page 80 1 Q. Okay. Oh, it's actually the 2 seed disk 13, right? 3 So let me restate, the sealing 4 ring 39 is illustrated between the casing 12 5 and the seed disk 13? It seems to abut both of 6 them. 7 A. Yes. 8 Q. Okay. And one of the functions 9 of that sealing ring we just discussed was to 10 position those two components, correct? 11 A. That was talked about -- is that 12 where it used the term "effective"? 13 Q. I think effective was sealing, 14 which is the second function, but I'm talking 15 about -- 16 A. "Ensure correct positioning." 17 Q. Right, so positioning. So if I 18 were to put a properly sized sealing ring in 19 there, right, it could range in the spectrum 20 from ostensibly not allowing any positioning 21 touch between the seed disk 13 and the drive 22 disk 31, which wouldn't be good but it's 23 possible, correct? 24 A. Can you restate your question
Page 79 1 "Figure 2." Do you see that, that sentence? 2 A. It says "sealing effect," not 3 "element." 4 Q. Yeah. Well, it says 5 "positioning of the two elements," right? 6 A. Yes. 7 Q. "And an effective sealing 8 effect." So I think what it's telling us is 9 that this sealing ring 39 has two functions, 10 one is it positions the two elements, which are 11 the casing 12 and the seed disk 13, right? 12 A. It says it's to ensure correct 13 positioning. 14 Q. Right. And the second function 15 is to have an effective sealing effect between 16 them, right? 17 A. That's what it says, yes. 18 Q. Okay. So let's go up to Figure 19 2 then, with that in mind, and as you described 20 for us just a second ago, the sealing ring 39 21 is illustrated on the top and the bottom 22 between the casing 12 and the seed drive disk 23 31, correct? 24 A. That is correct.	Page 81 1 again? 2 Q. So I'm focusing now on the size 3 of the sealing ring 39, which is possible. I 4 don't think there was any description in 5 Fiorido about the size, it just says you put in 6 a sealing disk to effect the positioning as a 7 function. 8 A. Agreed. 9 Q. Okay. So if I put in, let's 10 call it an oversized but a large sealing ring, 11 it would be the case that you wouldn't have any 12 abutments between the seed disk 13 and the 13 drive disk 31, right, there would be a space 14 between the two because the sealing ring would 15 push the seed disk too far away? 16 A. So you're putting in a different 17 component than what he has described here? 18 Q. No; I'm using the same 19 component, I'm just putting in -- I'm sizing 20 the sealing ring, right? The text tells me I 21 need to use the sealing ring to position the 22 seed disk and the drive disk, right? 23 And as illustrated, you pointed 24 out I think correctly, that they look like

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Page 82 1 they're abutting, the seed disk abuts or 2 contacts the drive disk 31? 3 A. Correct. 4 Q. Okay. Now, if I put in a larger 5 sealing ring 39 than what is illustrated in 6 Figure 2, that would push the seed disk to the 7 right in the figure, correct? 8 MR. BROWN: Objection, 9 incomplete hypothetical. 10 THE WITNESS: Yeah, I mean, if 11 you're going to create a new design 12 that has a larger sealing ring that's 13 going to change the design, you know, 14 there will be some differences. 15 BY MR. CASEY: 16 Q. Well, if I put in a sealing ring 17 of a certain size, of some size, at that size, 18 at some potential size, it's going to push the 19 seed disk 13 to the right and the seed disk 13 20 then would no longer touch the drive disk 31, 21 correct? 22 A. Well, that's not what is taught 23 by the patent, and so that would be a new 24 design that, you know, I'd have to have a	Page 84 1 analysis anyway. Is it important to yours? 2 A. Well, as I read this, you have 3 a -- something that creates a seal, a hollow 4 sealing ring 39 -- 5 Q. Yep. 6 A. -- and then it's -- so when I -- 7 my understanding of something that's going to 8 provide a seal, it's going to have a -- some 9 kind of a -- generally a polymer material, 10 could be a rubberized surface. 11 Q. Uh-huh. 12 A. And so then it gives some -- it 13 sort of expands on you could have the ring or 14 similar gasketing means of plastic material. 15 So when it's talking about the hollow sealing 16 ring, it's talking about similar gasketing 17 means of plastic material, so it -- I read that 18 as the hollow sealing ring is something similar 19 to a plastic material and -- 20 Q. Agreed. 21 A. -- it's going to be a -- 22 Q. I'm with you. 23 A. -- a compliant material. 24 Q. Okay. But it doesn't say
Page 83 1 complete hypothetical in order to give you a 2 full analysis of that. 3 Q. Okay. Well, let's return to 4 Column 7, the bottom, that sentence we have 5 been focusing on, it says a hollow sealing ring 6 39 or similar may be appropriately provided 7 between the casing 12 and the seed disk 13 so 8 as to ensure correct positioning of the two 9 elements and an effective sealing effect 10 between them. 11 Is there anything else in this 12 disclosure that teaches us about that sealing 13 ring and what it does or how its positioning? 14 A. Did you mention the plastic 15 material? I didn't hear that when you were 16 reading the sentence. 17 Q. At least as I'm reading it, it's 18 a replacement for the sealing ring, because it 19 say: "a hollow sealing ring 39 or similar 20 gasketing means of plastic material." So it's 21 whatever, it's a gasket, it's a sealing ring? 22 A. Correct. 23 Q. Two different embodiments of the 24 same thing, and that's not important to my	Page 85 1 anything there about the size of the sealing 2 ring or the gasketing material? 3 A. No; that's shown in the figure 4 down below. 5 Q. Right. Okay. It just tells us 6 what the functions, those two functions we had 7 identified earlier, are for that sealing ring 8 or a gasket means, right, to position and to 9 effect a sealing effect? 10 A. And then it refers to Figure 2, 11 where, you know, as we've said, you can see it 12 abutted and you can see the size of it. 13 Q. Right. So now what I want to do 14 is -- we're all in agreement so far. So all I 15 want to do is investigate what happens for the 16 sealing ring 39 or a gasket means, it doesn't 17 matter to me, but I want to explore what 18 happens to the components that this sealing 19 ring is interacting with, namely the seed disk 20 13, the drive disk 31, the housing 12, when I 21 change the size of it, right? As illustrated 22 in Figure 2, it's the perfect size, right? 23 It's just -- well, I'm asking you, as 24 illustrated in Figure 2, the sealing ring 39 is

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Page 86 1 sized so that the seed disk 13 just touches the 2 drive disk 31, correct? 3 A. It shows it abutted up against 4 it, yes. 5 Q. Right. And if I were to make 6 that sealing ring smaller in horizontal extent, 7 right, then the seed disk 13 would contact the 8 drive disk 31 more I'll say urgently, more 9 deeply, it would not just abut but it would 10 push onto strongly the drive disk 31, right? 11 A. You said made it smaller or make 12 it larger? 13 Q. I think it's make it smaller, 14 but if you want to say -- I mean, I'm shrinking 15 the size of the sealing ring so that it's 16 shorter, right, so that the seed disk 13 would 17 push harder against the drive disk 31. In 18 other words, the spacing is less, right? 19 A. So in your -- in your 20 alternative then you've got a situation where 21 you don't really have a seal, if it's not -- 22 Q. No; on the contrary, it would be 23 a stronger seal. But we can take a -- if you 24 think that -- how would I create through the	Page 88 1 where I was a little bit confused with your 2 hypothetical of having a smaller piece No. 39, 3 at some point if it gets so small that it's not 4 contacting, then you don't have a seal. That's 5 where I was confused with your hypothetical. 6 Q. Right. But there is various 7 degrees of seal I can create by the sizing of 8 that sealing ring, correct? 9 A. Well, if it doesn't contact, 10 then it's not going to seal. 11 Q. Right. And that was my 12 hypothetical of a sealing ring that's too big. 13 So if I put -- if I were to put in a large 14 sealing ring there, even though it's flexible, 15 but at some size, then the components it's to 16 position won't contact, right, there won't be 17 any seal but it's still positioned them in a 18 way, it just positioned them in a way we don't 19 want, correct? 20 A. So you're talking about a larger 21 sealing ring now, not a smaller sealing ring? 22 Q. Right. I'll return to smaller 23 in a second, but for now I'm taking the other 24 extreme. So I'm focusing again on the size of
Page 87 1 size of the sealing ring, how would I create a 2 stronger seal than just abutting? 3 I don't want to -- I'm 4 positioning so I want to have maximum, maximum 5 pressure between the seed disk 13 and the drive 6 disk 31. 7 A. Well, that's kind of 8 positionally locked in there because you have 9 to close the two parts of the housing against 10 one another. 11 Q. Right. But the text tells us 12 that the sealing ring is what positions those 13 components. If you make it smaller or larger 14 or more or less flexible or change whatever 15 characteristics I want on the sealing ring, I'm 16 going to affect the position, relative position 17 of those components, correct? 18 A. But you still have to consider 19 that you've got the two halves of the housing 20 that are going to close against one another and 21 so you're still going to be -- at some point 22 you need to be putting that -- you know, the 23 one part of the housing against the other, 24 which is then going to -- you know, that's	Page 89 1 the sealing ring. So if I take a really big 2 one, a too big one in fact, then it would push 3 the components that its positioning away and it 4 wouldn't work to seal at all, correct? 5 A. So in your -- I don't know that 6 it wouldn't. In your alternative design you 7 would have a larger part No. 39, but you're 8 still closing the two halves of the housing 9 against one another, and the seal, as it's 10 described, is some kind of a plastic material 11 which is going to be compliant so you could 12 still be compressing that, so I can't say that 13 it would not be compressing that seal just 14 because you have to close the two halves of the 15 housing against each other. 16 Q. So the sealing ring 39 that's 17 selected for Figure 2, I think we agreed is 18 chosen and sized so that the seed disk 13 and 19 the drive disk 31 just abut, right? 20 A. That's what the drawings of the 21 patent show. 22 Q. Right. So if I took a bigger 23 seal than the embodiment illustrated in Figure 24 2, even though it's flexible, it's a bigger

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Page 90 1 seal or made less flexible, the patent doesn't 2 teach us characteristics, but if I took a 3 bigger seal and inserted it in the same 4 position, wouldn't it push the seed disk 13 to 5 the right more than it already is in Figure 2, 6 because it's bigger? 7 A. So you're creating another 8 design that specifically translates that seed 9 disk out of position. You know, at some point 10 as you, you know, you start modifying the 11 design to put in other components, you know, 12 you will potentially have that out of position 13 where at least when it's not operating there 14 may not be contact, but that's not what is 15 described by this patent. 16 Q. Yeah, I don't think it describes 17 anything about other than the Figure 2 18 embodiment, does it? It doesn't say anything 19 about the size of the sealing ring. 20 A. Well, that's what we see in 21 Figure 2, is you can see that it is butted up 22 against it, there in Figure 2. 23 Q. Right. So it's abutted up -- by 24 "it" you mean, as I read it, the sealing ring	Page 92 1 embodiment shown in Figure 2, correct? 2 A. Well, like I said before, you 3 start modifying the design, at some point you 4 can modify it to the point that it's, you know, 5 not -- no longer represented by this figure 6 here. 7 Q. Okay. Well, the text tells us 8 that we have put in that sealing ring to 9 position those two components that it's 10 between, right? 11 A. It says "to ensure correct 12 positioning." So if you put in the wrong size 13 ring, that is not going to ensure correct 14 positioning. 15 Q. Uh-huh. And is correct 16 positioning just abutting between the seed disk 17 13 and the drive disk 31? 18 A. Sorry; can you ask that again? 19 Q. Is correct positioning just 20 abutment between the seed disk 13 and the drive 21 disk 31? 22 A. That's what it shows in this 23 figure. 24 Q. Right. So in that situation,
Page 91 1 39 is positioned between the housing 12, right, 2 and the seed disk 13, it pushes on both of 3 those components or is inserted between them? 4 A. Yes, that is where the sealing 5 ring 39 is located. 6 Q. Right. So then there would be a 7 force horizontal in the orientation of Figure 2 8 between the sealing ring 39 and both the 9 housing 12 -- or the casing 12 on the left and 10 the seed disk 13 on the right? 11 A. You said there would be a 12 horizontal force? 13 Q. It could be some type of an 14 interactive force between the seed disk 13, the 15 sealing ring 39 on one side and the sealing 16 ring 39 and the casing 12 on the other side? 17 A. Yes, as you apply a vacuum, you 18 will get a horizontal force that's applied to 19 the seed disk. 20 Q. Right. So if I were to insert a 21 larger sealing ring in the same position in 22 Figure 2 that the force between the seed disk 23 13 and the sealing ring 39, when that vacuum is 24 applied, would be greater than the force in the	Page 93 1 where those two components, seed disk 13 and 2 drive disk 31, are just abutting, is there any 3 force transmitted between those two components? 4 A. Yes, there would be. 5 Q. And what would be the source of 6 that force? 7 A. You're going to have the -- when 8 a vacuum is applied, then you will be -- there 9 would be a horizontal force, in this particular 10 figure there would be a horizontal force that 11 is going to try to draw that seed disk to the 12 left in this image and it would be resisted by 13 then the disk in the middle. 14 Q. So there would be some movement 15 of the disk 31 or push or force on toward the 16 left by the seed disk 13, right? 17 A. There would be an attempt at 18 movement and it would be restrained or resisted 19 by the disk, which would act as a 20 thrust-bearing element. 21 Q. Right. Agreed. So if the 22 vacuum were such that the seed disk 13 just 23 abuts, doesn't push on, but simply let's call 24 it contacts but does not push on the drive disk

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Page 94 1 31, is there any force transmitted? 2 A. There could be, yes. If you 3 could contact -- 4 Q. And what would be the source of 5 that? 6 A. Sorry. 7 Q. Well, let me say, if two 8 components simply contact one another, their 9 faces contact, is there a force transmitted 10 between the two of them? 11 A. I would say that, yeah, if 12 they're in contact, that there could be some 13 force transmitted between the two. 14 Q. What would be the source of that 15 force? 16 A. Well, if they're in contact, 17 then there has got to be some force that, you 18 know, is there. So what's the -- what's the 19 source of it? It could be how it's positioned, 20 how it's held there. 21 So that would -- that would be 22 the -- you know, how it's installed. So in 23 your situation where you're talking about you 24 got the two that are put together in contact,	Page 96 1 there would not be any contact force. 2 Q. Okay. And now they approach 3 each other, they approach each other, they 4 approach each other, now they're 5 infinitesimally apart, there is the slightest 6 of separation, is there any force between them? 7 A. So you say they're separated, 8 then I would not expect any, at least no 9 mechanical forces between them. 10 Q. Okay. Now I've closed that 11 distance such that they basically 12 infinitesimally touch, right, is there any 13 force between the two of them? 14 A. If you push the two parts into 15 contact with one another, there is going to be 16 some amount of force, yes. I mean, that's -- 17 Q. So there is no -- I'm sorry; 18 finish. 19 A. I'm sorry. That's, you know, 20 going to be Newton's third law of, you know, 21 for every action there is an equal and opposite 22 reaction. So if you are pressing the two 23 surfaces together, even the small amount -- 24 Q. I'm not talking about pressing
Page 95 1 then there would be some force, it might be a 2 small force, before you apply the vacuum, which 3 would then increase that force, but if you're 4 pushing two things together in contact, I 5 would -- 6 Q. But let's assume contact means 7 just touching, only touching, barely touching, 8 is any force transmitted? 9 A. There is going to be a small 10 amount of force there, yes, if they're in 11 contact. Otherwise, you know, there would 12 either be a gap in one way or the parts would 13 be, you know, passing through each other, 14 which, you know, is physically not possible. 15 So if you got two parts that are 16 pushed up against each other and they are in 17 contact, I would expect there to be some force. 18 Q. So let's take the continuum of 19 two components approaching each other to 20 contact, right? So they are starting apart, at 21 the time the two components do not contact and 22 they're separated, is there any force between 23 the two of them? 24 A. If there is separation, then	Page 97 1 them together, Dr. Fleming. I'm just saying -- 2 I don't care how they get there, but they are 3 just first touching, all they are is barely 4 touching, so there is no gap but there is no 5 force pushing either of them toward each other 6 either, is there a force transmission? 7 A. If there is contact between 8 them, then there necessarily has to be some 9 amount of force. It might be a small amount of 10 force, but if there is contact between the two, 11 there will be a small amount of force 12 transferred. 13 Q. So there is no situation in 14 mechanical physics by which two components can 15 touch each other but not transmit at least some 16 force? 17 A. In the scenario that you're 18 proposing, that's correct, you would expect if 19 you push the two surfaces together, as you're 20 describing, that there would be some amount of 21 force transferred. 22 Q. Okay. I understand your 23 position. 24 MR. CASEY: Okay. Again, we've

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Page 98 1 completed another hour. I got 3:06 my 2 time, 2:06 your time. Do you want to 3 take another five minutes and replenish 4 or do you want to keep going? 5 THE WITNESS: A short break 6 would be great. 7 MR. CASEY: Okay. Let's take, 8 again, let's say, give you nine 9 minutes, come back at 2:15? 10 THE WITNESS: Okay. 11 MR. CASEY: Sounds good. See 12 you then. 13 THE WITNESS: All right. 14 - - - 15 (Whereupon there was a recess in 16 the proceeding.) 17 - - - 18 BY MR. CASEY: 19 Q. If you would, let's look at the 20 institution decision, which is Paper No. 12, 21 and go near the end to Page 36. Let me know 22 when you're with us. 23 A. Okay. I've got it. 24 Q. So this is the board's, the	Page 100 1 or suggest a thrust-bearing element? 2 A. I would put it like this, that 3 it does not explicitly show that. There is an 4 element in there, and I go through that in my 5 report, but it's not clear from the manual, I'm 6 talking about the Amazone manual, whether there 7 is contact between the surface of the seed disk 8 and the -- I will point you to -- 9 Q. So if you -- I think I can help 10 you and expedite again. So I think you're 11 looking at your declaration, and probably 12 Paragraph 116 on Page 94? If I'm wrong, 13 certainly say so. 14 A. Yes, that's where I begin to 15 discuss it. 16 Q. Right. So if I can paraphrase 17 your position, it's Amazone doesn't disclose or 18 suggest a thrust-bearing element in itself but 19 maybe you could modify the circular element 20 that you're talking about with the disclosure 21 of Fiorido and that would get you to a 22 thrust-bearing element? 23 A. Yes, as I say in Paragraph 116, 24 the manual does not state whether the circular
Page 99 1 Patent Office's Board's decision instituting 2 the IPR, and they're analyzing what they call 3 Ground 4. Do you see that title? 4 A. Yes, I do. 5 Q. And that ground asserts that the 6 claims, claim 1 and 10 at least are obvious in 7 view of the references that you cited earlier, 8 Amazone, Fiorido, VenHuizen, and AAPA, 9 applicant admitted prior art, correct? 10 A. Correct. 11 Q. Okay. So if you flip over to 12 the next page, Page 37, there is a header 13 called "Discussion." This is the board's 14 discussion or analysis of that ground. And 15 you'll see it says: "Although Petitioner 16 contends that Amazone teaches most of the 17 limitations of claim 1, Petitioner" -- that's 18 Precision -- "relies on Fiorido to teach the 19 claimed thrust-bearing element." Do you agree 20 with that? 21 A. Yes, I do. 22 Q. Okay. So I guess the related 23 question is, just to make sure, does Amazone 24 itself, without the help of Fiorido, disclose	Page 101 1 element, which I point out there on Page 95, 2 annotated Figure 227 from the manual, the 3 manual does not state whether that circular 4 element contacts the face of the singling disk. 5 Q. Right. So Amazone, and in 6 agreement with the institution decision of the 7 board, Amazone itself doesn't disclose a 8 thrust-bearing element, correct? 9 A. Correct, it does not say whether 10 there is contact between those is how I put it 11 in my report. 12 Q. Okay. Thank you. 13 Did anyone advise you on how to 14 evaluate Precision's invalidity allegations? 15 A. From what standpoint? 16 Q. Were you initially just given -- 17 well, let me ask you this, when you began the 18 process, what materials were you asked to look 19 at? 20 A. I know there were several 21 different patents and documents that were 22 provided to me, and, like I said before, I also 23 did some searching on the Internet, and so that 24 was from the -- from the technical side, that

Page 102 1 was where we were doing our evaluation. 2 I wasn't sure if you were asking 3 me from the, you know, more the litigation side 4 of, you know, the legal -- the legal side of it 5 and the patent side, obviously that came 6 through discussion with the attorneys, as I 7 outlined in my report. 8 Q. Yeah, I understand you're not a 9 patent attorney, correct? 10 A. Correct. 11 Q. Or a patent agent for that 12 matter? 13 A. Correct. 14 Q. Right. So is your understanding 15 of patent law based on what has been told to 16 you by Precision's patent attorneys? 17 A. In -- I mean, that's -- I have 18 had other applications where I've worked on 19 matters involving patents, so I have developed 20 some understanding through that work, but as 21 far as the details of this case, you know, most 22 of it is going to come through my discussion 23 with the patent attorneys. 24 Q. Okay. So the question I asked	Page 104 1 assumptions in evaluating validity in this 2 case? Did you have to assume any facts or any 3 aspects of the law? 4 A. I don't believe I had to assume 5 any facts, and as far as the parts of the law 6 go, that would have come from discussion with 7 the attorneys. 8 Q. Okay. All right. Do you agree 9 that whether the prior art anticipates or 10 renders obvious a patent claim depends 11 critically on the proper interpretation of that 12 claim? 13 A. The claim in the patent that's 14 under analysis? 15 Q. Correct. 16 A. I mean, obviously there is some 17 technical analysis -- from my part there is 18 technical analysis that's going to go into that 19 that, you know, is going to be, you know, part 20 of my work that I do in the matter, and I am 21 rendering opinions. 22 Q. Right. And part of the opinions 23 that you're rendering have to do with 24 interpreting the claims of the '121 patent,
Page 103 1 originally, I think the answer is, Precision's 2 patent attorneys, but did anyone advise you on 3 how to evaluate Precision's invalidity 4 allegations? 5 I'm not saying they dictated the 6 answer to you, I'm just saying, you know, how 7 do you go about it, how do you evaluate 8 invalidity? 9 A. There was discussions that we 10 had, I don't know that they told me especially 11 from a technical point of view how I was 12 supposed to do my evaluation, but, you know, 13 there were discussions that we had, you know, 14 and questions that I would ask as far as 15 evaluating, you know, this piece of prior art 16 and combining it with another piece of prior 17 art. 18 You know, for instance, my 19 understanding is the pieces do not have to fit 20 together like a perfect puzzle but it's the 21 concept of one and the concept from the other 22 and can you combine them together to come up 23 with a final design. 24 Q. Okay. Did you make any	Page 105 1 correct, what the terms of the claim mean? 2 A. That's -- that's part of my 3 analysis, yes. 4 Q. Right. So it's important to 5 your analysis that you properly interpret the 6 claims, correct? 7 A. That's part of my work, is to 8 analyze the claims, yes. 9 Q. Okay. So let's focus on the 10 claim limitation thrust-bearing element that's 11 recited in the claims of the '121 patent. So I 12 guess let's pull up the '121 itself, look at 13 the claims in the back. 14 And we'll start with claim 1 and 15 we'll focus on the last limitation, that starts 16 "wherein the seed distribution element," 17 because that's where we get the introduction of 18 the thrust-bearing element. So all the way 19 down, Column 4, and then we're in claim 1 on 20 the right-hand side and we're in that 21 highlighted section that you just had 22 highlighted, the very last section, "wherein." 23 That's where we are. Okay. 24 So you see that, Dr. Fleming,

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Page 106 1 where it says: "wherein the seed distribution 2 element further comprises a thrust-bearing 3 element of the sowing disc"? 4 A. Yes, I see that. 5 Q. Okay. And while we're here, 6 let's go to claim 10, which is the other 7 independent claim, and you'll see the last 8 limitation of that claim at the top of Column 9 6, and it says: "the moveable portion 10 pre-assembled with: a thrust-bearing element of 11 the sowing disc"? 12 A. I see that, yes. 13 Q. Okay. So both independent 14 claims and, therefore, all claims of the '121 15 recite this thrust-bearing element, correct? 16 A. Correct. 17 Q. Okay. What does this element 18 look like? 19 A. Well, according to the claims 20 itself, it's not explicitly described. There 21 is some description in preferred embodiments in 22 the teachings of the patent that show -- 23 Q. Well, let's stop there and just 24 focus on the claims first and then we'll go	Page 108 1 claims, there is not a description of what it 2 looks like. 3 Q. Okay. In fact, let's look at -- 4 keep where you are, if you can, because we'll 5 be going right back to it, Ashley, but let's 6 look quickly at the declaration on Page 36. 7 Actually, you want to start 8 probably so you get the context correctly all 9 the way back up to Page 33. 10 A. You're talking about my 11 declaration? 12 Q. Correct. Yes. 13 So if you start on 33, you'll 14 get where I need to go. 15 A. So are you referring to the 16 excerpt from the European Patent Office? 17 Q. Correct. 18 A. Okay. 19 Q. Okay. So the introduction 20 sentence that gets us to that excerpt says: 21 "As shown in the excerpt below," there is Page 22 33 of your declaration, "the European Patent 23 Office interpreted the exact same claim 24 language: 'thrust-bearing element' as I have."
Page 107 1 where you are going now. But I think you 2 alluded to it but I want to understand 3 correctly, that the claims themselves don't 4 tell us anything about what the element looks 5 like, do they? 6 A. Not the independent claims, no. 7 Q. Right. So does the limitation 8 element include any and all structural 9 elements? 10 A. My analysis, my understanding of 11 this would be that it would be some element 12 which would be, you know, in the context of a 13 mechanical structure like this, it would be a 14 piece of -- you know, a piece of structure 15 that -- which would be the element that resists 16 some kind of an axial force or a thrust. 17 Q. Right. But that would be the 18 function of the element, resisting an actual 19 force or thrust, but as far as the physical 20 attributes of the structural element itself, 21 does the claim tell us anything about what it 22 looks like? 23 A. Not from the claims itself, 24 there is not -- not from the independent	Page 109 1 Do you see that? 2 A. Yes. 3 Q. That's a correct statement, 4 correct? 5 A. Yes. 6 Q. Okay. So then we go through, 7 and this is why I needed to go back, so Page 8 33, 34, 35, 36, and includes on I guess the 9 bottom of 36, is all just the copying of the 10 EPO's analysis? 11 A. Correct. 12 Q. Okay. And at the very end of 13 that analysis, on Page 36, the board, the 14 European Patent Office says: "Thus, any 15 element that restrains the axial movement of 16 the disc when vacuum is applied, as does the 17 thrust-bearing element of the described 18 embodiment," of the '121 patent, "meets the 19 claimed limitation," yeah? 20 A. I see that, yes. 21 Q. Okay. And then you say at the 22 top of the next page, 37, you say, the very 23 first sentence: "I agree with the European 24 Patent Office's analysis and conclusions as to

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Page 110 1 the construction of 'thrust-bearing element'?" 2 A. Yes, that's what I've written. 3 Q. Okay. So then I think you would 4 agree with me that as claimed, any element 5 would correspond to the claimed limitation 6 "thrust-bearing element," as long as it 7 provides the function, but structurally it 8 could be any element? 9 A. Any -- yes, an element that 10 resists against some kind of an axial force is 11 my analysis of a thrust-bearing element. 12 Q. That's right. I understand. 13 That's consistent with my understanding of your 14 analysis too. 15 So as far as what the element 16 looks like, there is no particular appearance 17 for the element, correct, as long as it 18 achieves the function? 19 A. I would agree with that, there 20 is not a description of a physical shape -- 21 Q. Right. 22 A. -- associated with it. 23 Q. In fact, there is no description 24 of what any of the physical characteristics of	Page 112 1 A. After -- if it says "in order to 2 withstand," then that to me would describe 3 the -- what the functionality is. 4 Q. Gotcha. If I were to replace 5 the word "element" in claim 1 that we're 6 talking about with another term, like 7 "mechanism" or "device," would it change the 8 meaning of the claim in any way? 9 A. I would have to I guess analyze 10 that. You know, when you go and start just 11 replacing words, I don't want to, you know, 12 give you an off-the-cuff answer. So you want 13 to replace the word "element" with -- with 14 what? 15 Q. Well, let's just say I said 16 instead of "thrust-bearing element," I said a 17 "thrust-bearing mechanism," and then the claim 18 was otherwise the same, would that make a 19 difference in your claim interpretation? 20 A. Possibly. 21 Q. In what way? 22 A. I would view "mechanism" as 23 being a little bit more narrow than "element." 24 Q. Okay. So let's take a different
Page 111 1 the element would be, correct, just its 2 functions? 3 A. In the -- in the independent 4 claims I would agree. 5 Q. Okay. So let's focus on this 6 element then, what are its functions? 7 A. As stated in the '121 patent, 8 right at the end of the first claim, for 9 instance, what is written is -- you know, I'll 10 read the last three or four lines, "which 11 thrust-bearing element is supported rotatably 12 in the moveable portion in order to withstand 13 at least some of the axial load produced by the 14 disc on the seal." 15 Q. So having read that, what is the 16 function of the thrust-bearing element? 17 A. It is to withstand at least some 18 of the axial load produced by the disk on the 19 seal. 20 Q. Okay. And is there any language 21 in that portion of the claim that you read that 22 tells you that that's the function? 23 A. Where I say "in order to"? 24 Q. That would be a good spot, yeah.	Page 113 1 term, let's say it's a "thrust-bearing device," 2 does that change your analysis in any way? 3 A. Potentially. 4 Q. In what way? 5 A. The word "element" seems very 6 broad to me, and so when you start putting in 7 other terms, at least to me as an engineer, 8 that have certain more specific meanings, then 9 I would have to -- I would have to go through 10 and really study that to see whether it makes a 11 change to my opinion or not. 12 Q. Okay. So I think you referred 13 to "element" as in your mind a relatively broad 14 term; is that correct? 15 A. From an engineering point of 16 view, I would say "element" is rather generic, 17 yes. 18 Q. Okay. And in what way is 19 "device" less generic or broad than "element"? 20 A. To me "device" -- I mean, when I 21 think of "device," I think of almost like a -- 22 like a mechanism or, you know, some kind of an 23 apparatus that, you know, might be, you know, 24 electric or something like that. I mean,

Page 114 1 that's just -- I'm analyzing here on the fly, 2 so I'm trying to come up with examples. So 3 when you use the term, you know, they just 4 sound a little bit more specific than 5 "element," and "device" sounds like something 6 that has a more specific function to it. 7 Q. Okay. When you were describing 8 what your understanding of device was, you used 9 the term "mechanism." So do you interpret 10 "mechanism" and "device" as synonyms for the 11 same type of structure? 12 A. Not necessarily, no. I mean, 13 like I say, I would have to go and study these 14 terms to give you a better answer, so I'm kind 15 of trying to access my mental dictionary on the 16 fly here to -- without, you know, giving you an 17 erroneous response. 18 Q. I think you described "element" 19 as a generic term, correct? 20 A. From an engineering point of 21 view, I would say an "element" is a more 22 generic than some of the other ones that you've 23 suggested. 24 Q. So more generic, but would you	Page 116 1 understanding, what is a means-plus-function 2 claim limitation? 3 A. I don't recall off the top of my 4 head the exact definition of that. Like I 5 said, it was many years ago. 6 Q. And that, the concept of 7 means-plus-function claim limitation and 8 interpretation of it, didn't come up at all in 9 your analysis of the '121 patent? 10 A. It was not something that I 11 recall coming up, no. 12 Q. Have you ever written or made a 13 presentation about means-plus-function claims? 14 A. I don't recall that I have, no. 15 Q. So as you sit here today, your 16 best recollection is the answer would be no, 17 you haven't ever written or made a presentation 18 on means-plus-function claims, correct? 19 A. That would be my best answer 20 right now, yes. 21 Q. Okay. All right. Let's go back 22 to your declaration, and look at Paragraph 28 23 on Page 17. 24 A. Where are we?
Page 115 1 still classify under the heading of "Generic 2 Engineering Terms" the terms "mechanism" or 3 "device"? 4 A. I don't know that there is a -- 5 you know, necessarily a classification for what 6 is generic versus not generic, just in relation 7 between what you were asking me of "element" 8 versus "mechanism" or "element" versus, you 9 know, whatever else you were asking, it -- 10 "element" seemed more broad to me than those 11 terms. 12 Q. Okay. Do you know what a 13 means-plus-function claim limitation is? 14 A. I have heard of it but I have 15 not analyzed anything with that, you know, in a 16 long time. 17 Q. Did you ever analyze a patent 18 claim that included a means-plus-function 19 limitation? 20 A. Many years ago, working with 21 somebody at a previous job, there was some 22 issue that came up that I remember we were 23 discussing means-plus-function. 24 Q. So based on that or any other	Page 117 1 Q. I'm on Paragraph 28, which is on 2 Page 17. 3 A. Okay. I'm there. 4 Q. Okay. So you refer to what you 5 call "secondary considerations." I'll advise 6 you the law also calls them "objective," so if 7 I misstate, it's "objective" or "secondary 8 considerations," correct? 9 A. Okay. 10 Q. And you state that "secondary 11 considerations," quote, "concern real-world 12 evidence of non-obviousness," correct? 13 A. Yes, that's what I have there. 14 Q. Can you list some examples of 15 the types of such type of evidence? 16 A. From what standpoint? 17 Q. From, well, I'm looking for what 18 types of evidence would constitute these 19 secondary considerations you're talking about? 20 A. Well, I've got them listed 21 there. Oh, "'secondary considerations' of 22 non-obviousness," I mean, in the context of 23 this patent I can't think of any right off the 24 top of my head.

Page 118 1 Q. Well, just generically, you 2 know, if you were taking a quiz in class or 3 something and the professor asked you, list 4 some examples of these real-world evidence of 5 non-obvious, what would you answer? 6 I'm not asking for relative to 7 the '121 patent, just in general. 8 A. I guess if I'm looking at 9 something that's not obvious, it would be 10 something that requires some, some special 11 skill and combining aspects together in a way 12 that other people have not, and so that, that 13 would kind of be a generic definition of -- 14 that I would think of from your question about, 15 you know, professor asking me a question. 16 Q. Uh-huh. Any other examples of 17 this type of evidence of non-obvious that are 18 encompassed by secondary considerations other 19 than the ones you just gave us? 20 A. I mean, that's -- that's what I 21 can think of as I -- as I sit here. 22 Q. Okay. It says in your 23 declaration: "I am informed that if present, 24 these secondary considerations concern	Page 120 1 It says at 12: "Defendant 2 makes, uses sells and offers for sale, provides 3 and causes to be used, now and within the past 4 six years, the vSet, vSet Select, vSet-2, and 5 vDrive, among other similar products," which 6 are then defined as, quote, "(Accused 7 Instrumentalities')." Do you see that? 8 A. I see that, yes. 9 Q. Is that a correct reading of 10 Paragraph 12? 11 A. Appears to be, correct. 12 Q. Okay. So now with that context, 13 let's look at Paragraph 18. 14 Okay. This is an accusation by 15 the Plaintiff that "Upon information and 16 belief, Defendant has and continues to directly 17 infringe at least claim 1 of the '121 patent by 18 making, using, selling, importing, offering for 19 sale, providing, practicing, and causing to be 20 used the Accused Instrumentality that infringe 21 the patented methods as explained in attached 22 Exhibit 2." Did I correctly read that? 23 A. Appears to be, yes. 24 Q. Okay. So do you know when
Page 119 1 real-world evidence of non-obviousness." So am 2 I correct in assuming that the patent attorneys 3 representing Precision were the ones who 4 informed you? 5 A. Yes, this would have come from 6 discussion with the attorneys. 7 Q. Right. And you don't recall the 8 attorneys telling you anything about what the 9 examples of such evidence might be? 10 A. I don't recall that discussion, 11 no. 12 Q. Okay. Let's look, if you would, 13 at the Complaint now, which was filed in the 14 litigation, and it's Exhibit 2011, 2011. 15 Let me know when you have the 16 document, I'll give you a paragraph. 17 A. I see it here. 18 Q. Okay. Let's look at Paragraph 19 12, which is on Page 3. 20 A. I'm there. 21 Q. Okay. And for purposes of this, 22 I think you'll understand that the plaintiff in 23 this action is Maschio, right, the defendant is 24 Precision.	Page 121 1 Precision first sold one of these Accused 2 Instrumentalities? I'm just looking for 3 general time frame. 4 MR. BROWN: Objection, lacks 5 foundation. 6 THE WITNESS: I'm not sure what 7 the exact time frame is when they first 8 sold one of these products. 9 BY MR. CASEY: 10 Q. Do you have any personal 11 knowledge regarding how Precision developed the 12 Accused Instrumentalities? 13 MR. BROWN: Objection, lacks 14 foundation. 15 THE WITNESS: I -- I don't have 16 any special knowledge other than, you 17 know, they are people that work in this 18 field and have an understanding of 19 farming and planting and have, you 20 know, developed products, you know, 21 using their knowledge and skill in that 22 area. 23 BY MR. CASEY: 24 Q. Okay. Let's look at Paragraph

Page 122 1 21 on Page 4. Are you there? 2 A. Yes, I am. 3 Q. Okay. So it says, if I can read 4 it correctly: "Defendant has advertised the 5 compatibility of its infringing vSet devices 6 with seed meters manufactured by Plaintiff and 7 provided instructions for retrofitting 8 Plaintiff's seed meters with infringing vSet 9 devices since receiving notice of the '121 10 patent." Did I read that correctly? 11 A. Yes. 12 Q. Okay. Are you familiar with the 13 advertisement that's mentioned? 14 A. I'm not familiar with that 15 specific one. I may have seen it, but I did 16 not try to track through this and, you know, 17 line up the advertisement with that statement 18 there. 19 Q. Okay. So back up a second then 20 with me, if you will, so are vSet devices to 21 your knowledge used to retrofit Maschio seed 22 meters? 23 A. I'm not sure if they retrofit 24 Maschio -- Maschio planters or seed meters?	Page 124 1 Q. And I think you mentioned it 2 might even be as early as the '50s; is that 3 right? 4 A. I would have to look that up. I 5 think there is a section in my report where I 6 went through that, and I'd have to -- I'd have 7 to find the exact date in order to give you the 8 best number though. 9 Q. Okay. So let's go there. I 10 think you're referring to Page 19 of your 11 declaration, and Paragraph 33, Subparagraph c. 12 MS. SHAPIRO: I'm sorry, Kevin, 13 what page was that again? 14 MR. CASEY: Page 19. 15 MS. SHAPIRO: Page 19, thank 16 you. Subsection c? 17 MR. CASEY: The very bottom, 18 first section of Section c. 19 MS. SHAPIRO: Thank you. 20 THE WITNESS: Yes, so there I 21 describe that pneumatic and vacuum 22 precision seed distribution elements 23 have been known in the art since the 24 1960s.
Page 123 1 Q. Well, whichever one. Let's take 2 planters, they're more generic I guess, right? 3 So does the vSet devices retrofit Maschio's -- 4 any, any equipment sold by Maschio? 5 MR. BROWN: Objection, lacks 6 foundation. 7 THE WITNESS: I'm not sure if 8 they do or not. I'd have to look that 9 up. 10 BY MR. CASEY: 11 Q. Okay. All right. More 12 generically, vacuum precision seed drills have 13 been known since about the 1960s; is that 14 correct? 15 A. I would have to look that up. I 16 know I have seen documentation on that. I 17 don't remember exactly when vacuum precision 18 seed drills, you know, first came out onto the 19 market. There was some research going back 20 into, you know, '60s and '70s looking at using 21 vacuum and using, you know, pneumatic 22 conveyance for seeds going back a long time, 23 and I don't remember the exact time when that 24 was, but could be back in the '60s.	Page 125 1 BY MR. CASEY: 2 Q. So that refreshed your 3 recollection, that I think you referred to 4 you've seen some documents, obviously there was 5 some support for your statement here, but we 6 can agree that these devices have been around 7 since the '60s, correct? 8 A. Yes. 9 Q. And you're familiar generally 10 with the art of vacuum precision seed drills, 11 correct? 12 A. Yes, I am. 13 Q. Has the art of such seed drills 14 recognized a problem with abrasion of the seal 15 by the sowing disc and consequent seal wear? 16 A. Yes, I would say that they have. 17 Q. And when did the art first 18 recognize that problem, approximate time frame? 19 A. I don't know. I don't have a 20 good time frame to give you of when that first 21 happened. I know in agricultural equipment, 22 having worked on the design of these products 23 for many years, wear is always a big issue 24 because there is lots of, you know, parts

Page 126 1 rubbing together. 2 So the issue of wear and damage 3 is always something that's, you know, in the 4 forefront of the design of these products. 5 Q. So then as an engineer you would 6 expect, I would think, that at the very outset, 7 in the '60s, that that problem would have been 8 something to address, correct, the problem 9 being abrasion of the seal by the sowing disc? 10 A. It may have been on the mind. I 11 mean, the first challenge of a new design is to 12 get it to function, and then the durability 13 oftentimes comes in as -- you know, once you've 14 got a functioning design, then you would come 15 along and make it more durable. 16 So I wouldn't -- that would be 17 the typical design progression that I 18 experienced. 19 Q. Right. So given that typical 20 progression, I mean, I'm not holding you to a 21 date, but you would expect that relatively 22 early in the lifespan of this technology, which 23 began in the 1960s, the problem would have 24 become one that the art would address, correct?	Page 128 1 publication or recall any publication about the 2 problem that addresses, you know, the problem 3 or solutions or anything about the problem? 4 A. Well, for instance, the Amazone 5 manual talks about it. 6 Q. Uh-huh. 7 A. So that would be -- that would 8 be one. Then as far as wear on components, I 9 would have to go and -- you know, I mean, I've 10 got books that deal with, you know, failure 11 analysis, for instance, there is a whole -- 12 there is a whole section on wear. I'm not sure 13 if it deals with this exact component, but 14 there is, you know, wear of agricultural 15 components. 16 So it's always been a very 17 active topic within the agricultural community 18 of dealing with wear of your components, 19 whether it's, you know, your plow or your tires 20 or the seal for your vacuum seed meter. 21 Q. Okay. So you mentioned Amazone 22 talks about the problem. So let's look at 23 Amazone for a second. And that is Exhibit 24 1011.
Page 127 1 A. Well, when you say "address," it 2 may -- 3 Q. Well, how about recognize? 4 A. -- may recognize from a couple 5 different aspects. One is you may have to 6 replace parts or you may lose functionality. 7 So it would -- it would be something that would 8 be known. Would it be something that's, you 9 know, an active design topic? I'm not sure 10 when that became an active design topic, but, 11 you know, it's definitely something that 12 farmers would have to be aware of for that or 13 any other parts of their machine. 14 Like I said before, wear is a 15 big issue, particularly for farming equipment. 16 Q. Right. So my understanding 17 would be, but I'm asking for yours, it would be 18 relatively early in the lifespan of this 19 technology that this wear problem would be at 20 least recognized? 21 A. It may be recognized, and so 22 there may be some need to replace components, 23 as for instance. 24 Q. Okay. Can you identify any	Page 129 1 As you pointed out I think 2 earlier in our time together, that this is the 3 English version. I recognize that. But at any 4 rate, what I'm going to ask you is if you could 5 identify where in Amazone they talk about this 6 wear problem? 7 A. If you go to Page 166. 8 Q. I'm there. 9 A. Section 12.10. 10 Q. Yep. 11 A. And it says: "Check the 12 following functional parts for damage, 13 exchanging if necessary." So the second one is 14 the PE-foam profile seal, and it refers to the 15 seal there in the figure to the right. 16 So it has recognized that you 17 could have damage to that seal, and wear is a 18 form of damage, and so it is specifically 19 calling out that you could have damage to that 20 seal, and it says exchange, which I assume 21 means that you would be replacing that if 22 necessary. 23 Q. Understood. So I guess one 24 source of the wear, which would result in the

Page 130 1 damage that they're talking about in this 2 Amazone brochure, would be the abrasion of the 3 seal by the sowing disc? 4 A. Well, wear is a form of damage, 5 so I would agree with that, yes. 6 Q. Okay. So let's pull up the '121 7 patent, if you would, and specifically Column 8 1, and more specifically Lines 53 to 59 near 9 the bottom. Actually, before that, let's start 10 with Lines 38 to 49. 11 A. Sorry; which column are you in? 12 Q. Column 1. 13 So if you were to just read that 14 paragraph that starts at about Line 38 and 15 concludes at Line 49, let me know when you've 16 had a chance to peruse that. 17 A. Okay. I've read it. 18 Q. Okay. Do you agree that the 19 '121 patent identifies the problem of seal 20 abrasion or wear? 21 A. Yes, it describes it there, that 22 paragraph. 23 Q. Okay. So let's look at the next 24 paragraph, actually, two down, it's the	Page 132 1 paragraph in the '121 patent. So we're at 2 Column 1, Line, well, 53 where we just read, 3 and we're going to go to Column 2, Line 8, so I 4 guess read the next paragraph, if you would, 5 the transition paragraph. 6 A. Oh, start at the bottom and go 7 up to -- 8 Q. Yeah, so the bottom of Column 1 9 and top of Column 2, that paragraph that 10 bridges. 11 A. Okay. I've read that. 12 Q. Okay. So the '121 patent, at 13 least seems to me to identify problems with 14 putting the thrust-bearing element on the fixed 15 portion of the housing; do you agree? 16 A. That's what is written there, 17 correct. 18 Q. And what are those problems? 19 A. Well, it says -- so specifically 20 what it says, numerous drawbacks, including the 21 fact that opening the housing necessarily 22 involves removal of a portion of the seed 23 collection chamber from the hopper type store 24 above, and must necessarily be fixed to the
Page 131 1 paragraph that starts on Line 53, "In order to 2 remedy this drawback," and it concludes at 3 about Line 65. So if you could just peruse 4 that paragraph. 5 A. I've read it. 6 Q. Okay. So it seems to me the 7 '121 patent states the prior art addressed the 8 problem of seal wear in seed drills by 9 providing a thrust-bearing element on the fixed 10 portion of the housing, correct? 11 A. That's what it is at least in 12 part discussing there. 13 Q. Do you agree with that 14 statement? 15 A. I agree that's what it says, and 16 I don't have any reason to disagree. So, yeah, 17 I agree that's one possible solution. 18 Q. Do you have any separate 19 knowledge apart from the '121 patent about 20 thrust-bearing elements addressing any problem 21 on a seed drill? 22 A. Not that I can think of right 23 now. 24 Q. Okay. So let's go to the next	Page 133 1 framework of the sowing element. 2 Q. Okay. Do you independently 3 agree that the identified problems exist? 4 A. I -- I see what they're saying 5 there. I don't know necessarily view that as a 6 major issue. 7 Q. Just generally do you agree that 8 the identified problems exist though? It may 9 not be a major issue, but any issue. 10 A. I have a hard time saying that 11 it's a problem. It's -- you're already opening 12 up the -- opening up the machine, does not seem 13 like a problem that needed to be solved from 14 that standpoint. 15 Q. So if I stated it alternatively, 16 in your opinion, placing the thrust-bearing 17 element on the fixed portion of the housing 18 isn't a problem? 19 A. I wouldn't -- I wouldn't go to 20 that point. Just you were asking me if I 21 viewed it as a problem to be solved, and I -- I 22 see what they're trying to do and trying to 23 improve efficiency, but I don't see it as a -- 24 as something that was really a problem whenever

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Page 134 1 I've used these kinds of things to, you know, 2 do one more step, to, for instance, pull the 3 seed disk out of there. 4 Q. Okay. Do you know of any 5 publication discussing the problems with 6 putting the thrust-bearing element on the fixed 7 portion of the housing, other than the '121 8 patent? 9 A. I don't have any publications to 10 give you for that. 11 Q. Have you ever investigated or 12 discussed the secondary considerations that we 13 talked about of non-obvious pertinent to the 14 invention claimed in the '121 patent? 15 A. I don't recall. We may have had 16 something early on in the project, specifically 17 as you're writing the report, but I don't 18 recall having specific discussions about that 19 beyond just generic discussions. 20 Q. Did you ever discuss or consider 21 a concept called long-felt need? 22 A. I don't recall that we discussed 23 long-felt need. 24 Q. Did you ever discuss or think	Page 136 1 back at 4:10 my time, 3:10 your time. 2 THE WITNESS: Okay. Appreciate 3 it. 4 - - - 5 (Whereupon there was a recess in 6 the proceeding.) 7 - - - 8 BY MR. CASEY: 9 Q. Okay. Dr. Fleming, last hour. 10 It may not even take the whole hour. 11 So let's talk a little bit about 12 your Curriculum Vitae, if we could, which has 13 previously been marked as Exhibit 1018. 14 I think you're on mute. 15 A. Sorry about that; I clicked the 16 button before and I guess it didn't unmute me. 17 Q. So the question is, is Exhibit 18 1018 a copy of the CV, Curriculum Vitae, that 19 you submitted in this proceeding? 20 A. It appears to be, yes. 21 Q. Well, you have an impressive 22 list of Publications and Presentations, so 23 congratulations. 24 A. Thank you.
Page 135 1 about a concept called failure of others in the 2 industry? 3 A. I don't recall that we discussed 4 that in the context of the '121 patent claims. 5 Q. And finally and similarly, have 6 you ever thought about or discussed copying 7 with respect to the '121 patent? 8 A. I don't believe we had any 9 discussions about the copying either. 10 MR. CASEY: Okay. All right. 11 This, again, is a fairly good spot to 12 take our last break. So if you would 13 like to, we can take five minutes. If 14 you're ready to pursue, we can push on 15 to the end. 16 I think you know I get four 17 hours for this, so, we only got one to 18 go. You're getting there. 19 THE WITNESS: Okay. Yeah, I'd 20 like a break, refill my water glass. 21 MR. CASEY: Yeah, I'm trying to 22 do it every hour for you. Again, you 23 can ask for it if you need more. But 24 then let's take five and we'll come	Page 137 1 Q. Have you ever written about 2 vacuum -- well, let me ask you more generally, 3 have you ever written about seed drills? 4 A. I don't know if I have written 5 about it. I worked on them when I worked at 6 Case and CNH in the first six years of my 7 career, and so that was part of the -- part of 8 the work that we were doing there at that time 9 was we were developing a new planter and I was 10 doing some of the structural work on that 11 planter, and so -- and that was involving 12 vacuum, vacuum seed meters. So I had to become 13 familiar with vacuum seed meters in order to do 14 my work on that project. 15 Q. So that would constitute your 16 experience that you would say you have with the 17 seed drills, this prior work you talked about? 18 A. That would be part of my 19 experience when I was working at Case, you 20 know, CNH/Case Corporation there from '97 to 21 2003. During my time at Packer Engineering 22 there was also some projects that we were 23 working on, on seed planters, and so I helped 24 out with some of those given my experience.

Page 138 1 I was not the project leader on 2 those, but I did help out and so gained some 3 additional understanding, and so those are, 4 those are a couple of the ones that I have 5 worked on over the years, and then I did some 6 work with seed planter in the last few years 7 and visited farms and, you know, plus just 8 growing up in the Midwest, in the Great Plains, 9 you know, and working for agricultural 10 professors throughout college, that was part of 11 what I did was to, you know, help with, for 12 instance, help with planting in the spring. 13 So there is, you know, several 14 different -- several different areas that I 15 have been involved with from, you know, 16 working, working in the shop and helping 17 prepare for planting and working in the fields 18 and working on agricultural research, working 19 on the design of the products, and working on 20 analysis of them in a consulting environment. 21 Q. Okay. So I've got your two 22 experiences where you worked on seed planters 23 and your agricultural experience visiting farms 24 and being involved in planting and that kind of	Page 140 1 publications about that. 2 Q. So then can I conclude that, you 3 know, you can't identify at least today any 4 publications that I could review where you have 5 written about vacuum precision seed drills? 6 A. I don't believe that I've got 7 any that were external to the company. 8 Q. All right. And, again, external 9 to the company, have you made any presentations 10 about vacuum precision seed drills? 11 A. I know there were some 12 presentations that we made about our work as we 13 were going through the design of the new 14 planter. Like I said before, those also would 15 have been something that was internal to the 16 company. 17 Q. All right. So, again, external, 18 no presentations? 19 A. I don't recall any, no. 20 Q. Okay. Have you ever 21 participated in a case, and by "case" I mean 22 before an arbitrator, a court, by the U.S. 23 Patent and Trademark Office, involving vacuum 24 precision seed drills?
Page 139 1 thing. Any other experiences with seed drills? 2 A. Like I said, I worked in 3 agricultural research when I was at the 4 University of Nebraska, I worked my way through 5 school as a research technician, so part of 6 that was I had to go out and help with the -- 7 with the spring planting. 8 Q. Okay. I'm not questioning your 9 familiarity with seed drills. It seems from 10 all that background you certainly are familiar 11 with them. 12 But have you ever published 13 anything that I would be able to have access to 14 to read about your opinions or analysis or 15 anything about seed drills? 16 I'm thinking the work you would 17 have done in the companies would have been, if 18 not trade secrets, at least not generally 19 published. 20 A. Right. We didn't publish, you 21 know, at least external we didn't publish the 22 work, you know, the design that we did. You 23 know, we were selling the final product, not -- 24 so I don't believe that we wrote any external	Page 141 1 A. Before the patent board you say? 2 Q. The board or a court or an 3 arbitrator, a case involving a dispute that 4 involved the same technology at issue here or a 5 similar, in terms of a seed drill. 6 A. Yes, I have. 7 Q. Okay. Can you identify the case 8 for me? 9 A. It was a case called Deere vs. 10 AGCO. 11 Q. And what was involved with that? 12 Was it before a court, an arbitrator, PTO? 13 A. It was before a court in 14 Delaware. 15 Q. Okay. And what was your 16 involvement, just generally speaking? 17 A. I was analyzing how the -- 18 basically it was for Precision Planting as 19 well, and it was looking at the interface 20 between the vacuum seed meter and the seed tube 21 and how the seed was removed from the seed 22 meter. 23 Q. And did that involve a patent? 24 A. Yes, it did.

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Page 142 1 Q. Okay. And were you acting, as 2 you are here, in an expert capacity? 3 A. Yes, I was. 4 Q. Okay. Are you a named inventor 5 on any patents? Do you have any patents of 6 your own? 7 A. No, I do not. 8 Q. Okay. Let's go back to your 9 declaration. Let me know when you are there. 10 A. Where in the declaration do you 11 want to look? 12 Q. Let's start generally with, who 13 drafted your declaration? 14 A. It was written by me and I had 15 some collaboration with one of my colleagues 16 here at Fusion Engineering. 17 Q. And can you identify him or her? 18 A. It was an engineer named Nicole 19 Schimpf. 20 Q. So is it safe to assume that the 21 final result, that you would agree with all of 22 the words in there, whether you wrote it or he 23 did? 24 A. She.	Page 144 1 some kind of generic language that we started 2 with or not. 3 Q. Can you describe for me the 4 breakdown of how you went about the drafting 5 process with Ms. Schimpf, you know, how much 6 she drafted, how much you drafted, any specific 7 portions that were her responsibility versus 8 yours? Just generally. 9 A. We would get together and we 10 would go about, you know -- I mean, the biggest 11 part of this was analyzing the patents, you 12 know, and the technical literature and coming 13 up with -- you know, I needed to come up with 14 what my opinions were, and then between the two 15 of us we would -- we would write that down. 16 So I don't remember exactly 17 beyond that what the breakdown was of, you 18 know, how exactly it was done beyond that. 19 Q. Were preliminary versions of the 20 declaration prepared? 21 A. Well, it was a living document, 22 and so there was obviously, you know, on day 23 one it was more preliminary than the final 24 version, but we were working on it and going --
Page 143 1 Q. She I mean. 2 A. Nicole, yes. 3 Yes, it's my work, my words. 4 Q. Did anybody else assist you with 5 drafting the declaration? 6 A. I don't recall collaborating 7 with anybody else. Obviously I had 8 conversations with the attorneys and they 9 helped with what -- especially with the legal 10 part and the legal principles involved. But 11 the -- other than that, the technical part was 12 written by me and collaborated with Ms. 13 Schimpf. 14 Q. Did the attorneys write at least 15 certain portions of the declaration? I would 16 suspect the legal ones. 17 A. I can't remember if they -- you 18 know, if they sent it or we just had 19 discussions. I don't remember exactly how that 20 went, if we drafted something and went over it 21 with them, I don't remember the exact 22 methodology that we used for writing that part. 23 I know we had some conversations 24 about it, and I can't remember if they sent us	Page 145 1 you know, discussing that with the attorneys. 2 Q. So then it would be safe to say 3 there was an initial version and multiple 4 versions from the initial to the final product? 5 A. I would say it was not a 6 complete product on day one, so, yeah, there 7 would be an initial, an initial version that 8 was, you know, continued to evolve as we went 9 through and developed it. 10 Q. So other than you and Ms. 11 Schimpf and the attorneys for Precision, did 12 anybody else give you input on the declaration? 13 A. I don't recall anyone else 14 giving input on it, no. 15 Q. Okay. So let's look 16 particularly at Paragraph 16, which is on Page 17 9. I focus you on the penultimate sentence of 18 Paragraph 16, which is near the bottom on Page 19 9. It starts: "While there may be a 20 question." 21 A. I see that. 22 Q. Okay. And then after the 23 preamble it says: "I have been asked to assume 24 at this time that the time of invention of the

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Page 146 1 '121 patent is the filing date of the November 2 2010 Italian Application." Did I state that 3 correctly? 4 A. Yes. 5 Q. Okay. So who asked you to 6 assume? 7 A. I believe that would have been a 8 conversation I had with the attorneys. 9 Q. And did you independently verify 10 that assumption or they just said, "Please 11 assume this" and go from there? 12 A. I have seen it in the, for 13 instance, the prosecution history and the -- 14 and the EPO proceedings where it talked about 15 that date. So it was something that I was 16 initially told, but as I went through and 17 looked at the documents, it seemed to be, you 18 know, stated in other places as well. 19 Q. So as you sit here today, do you 20 have any reason to think that the date that you 21 are assuming is incorrect? 22 A. No, I do not. 23 Q. Okay. If you would, look at 24 Paragraph 20 on Page 13. And I'm specifically	Page 148 1 discussions with the attorneys, this was the 2 assumption that they asked me to make. 3 Q. Okay. So independently you 4 haven't made any determination about whether 5 claims 11 through 16 are definite or not? 6 A. I have not done an independent 7 analysis of that. 8 Q. Okay. All right. So let's look 9 at -- just peruse, if you would, that Paragraph 10 20, which goes from Page 12 to Page 13, and let 11 me know when you had a chance to do that. 12 A. I've read it. 13 Q. Okay. So if I can paraphrase, I 14 think what your position is, if the prior art 15 discloses the elements or limitations of claim 16 1, then the prior art must necessarily disclose 17 the elements or limitations of claim 10; is 18 that correct? 19 A. That's what -- that's what my 20 analysis was, correct. 21 Q. Okay. And you may recall this, 22 if not, we can look at the patent, but claim 1 23 requires the thrust-bearing element to be, 24 quote, "in," unquote, the moveable portion,
Page 147 1 looking at Note 1, which is off of the very end 2 of Paragraph 20 as it ends on Page 12. 3 So the note starts: "This claim 4 language lacks clarity?" 5 A. Yes. 6 Q. And then it continues on to Page 7 13, and then it says: "I have been asked to 8 assume claims 11 - 16 are definite." Did I 9 read that correctly? 10 A. You read, yeah, part of that: 11 "Nevertheless, for purposes of this 12 declaration, I have been asked to assume claims 13 11 - 16 are definite." 14 Q. Right. So, again, who asked you 15 to assume? 16 A. That would have been discussion 17 with attorneys. 18 Q. Okay. Did you independently 19 verify that assumption? 20 A. That the claims are definite? 21 Q. Yes. 22 A. I did not go about trying to 23 determine that. As I read through that, you 24 know, we had questions about it and there were	Page 149 1 correct? 2 A. Correct. 3 Q. And then claim 10 requires the 4 moveable portion to be pre-assembled, quote, 5 "with," unquote, the thrust-bearing element, 6 correct? 7 A. I will verify that in the 8 patent. 9 Q. Absolutely. So we're pulling up 10 the '121 and going to claim 10, and the very 11 last limitation on Column 6. 12 A. So as I read that, it says, that 13 last claim limitation that you've highlighted 14 there, "the moveable portion pre-assembled 15 with: a thrust-bearing element of the sowing 16 disc, which thrust-bearing element is supported 17 rotatably in the moveable portion in order to 18 withstand at least some of the axial load 19 produced by the disc on the seal." 20 Q. That's right. And then let's 21 look back at claim 1 and the last limitation 22 there. 23 A. You're talking from "wherein"? 24 Q. "Wherein," right, "the seed

Page 150 1 distribution element." 2 A. "Wherein the seed distribution 3 element further comprises a thrust-bearing 4 element of the sowing disc, which 5 thrust-bearing element is supported rotatably 6 in the moveable portion in order to withstand 7 at least some of the axial load produced by the 8 disc on the seal." 9 Q. Right. So the only difference 10 in the last limitation of claim 1 versus claim 11 10 is the very beginning part of the wherein 12 statement in claim 1 versus the beginning on 13 claim 6 (sic), because the language that starts 14 "which thrust-bearing element" is identical, 15 correct? 16 A. Right, where it describes, as we 17 said before, the thrust-bearing element in the 18 moveable -- in the moveable portion, supported 19 in the moveable portion. 20 Q. Uh-huh. 21 A. Yes, I see that. 22 Q. Okay. So claim 1, the language 23 that is not in claim 10 that is in claim 1 is, 24 quote, "wherein the seed distribution element	Page 152 1 claim 10 but not in claim 1 is, quote, "the 2 moveable portion pre-assembled with: a 3 thrust-bearing element of the sowing disc," 4 correct? 5 A. That's what I see there, yes. 6 Q. Okay. And it goes on to the 7 common language in claim 1 -- claim 10 rather, 8 that it says, not only is the moveable portion 9 pre-assembled with the thrust-bearing element, 10 but the thrust-bearing element is supported 11 rotatably in the moveable portion, the same 12 thing that claim 1 talks about, right? 13 A. That's what it says there in the 14 claim language, yes. 15 Q. So would you agree that the 16 words "in" and "with" are not the same? 17 A. You're talking for claim 10? 18 Q. Yep. Or for claim 1 for that 19 matter, because claim 1 doesn't have the "with" 20 language, right, claim 1 only has the "in" 21 language? 22 A. Right, so claim 10, like you 23 said, it's got the language there "the moveable 24 portion pre-assembled with," and then it's got
Page 151 1 further comprises a thrust-bearing element of 2 the sowing disc," right, that is in claim 1 but 3 that's not how claim 10 begins? 4 A. Sorry; I lost you there on -- 5 you were reading -- 6 Q. I'm reciting the portion of 7 claim 1 that is in claim 1 before we get to the 8 common language with claim 10, right, which 9 begins, "which thrust-bearing element is 10 supported rotatably." That's the common 11 language. 12 A. That's what I see, yes. 13 Q. Okay. So the language in claim 14 1 that's not in claim 10 is the beginning part, 15 right, "wherein the seed distribution element 16 further comprises a thrust-bearing element of 17 the sowing disc," correct? 18 A. You're reading claim 1? 19 Q. Correct. And the portion of 20 claim 1 that we're focusing on that's not in 21 claim 6 -- or claim 10. 22 A. Okay. 23 Q. Okay. And then if we go to 24 claim 10, the portion of claim 10 that's in	Page 153 1 "a thrust-bearing element of the sowing disc, 2 which thrust-bearing," and then it's got the 3 common language there that describes the 4 thrust-bearing element rotatably supported in 5 the moveable portion. 6 Q. Right. So, again, the words 7 "in" and "with" are not the same, correct? 8 A. They're different words, I would 9 agree. 10 Q. Right. Would you agree that 11 they have different meanings? 12 A. In this context it's describing 13 what the -- what the moveable portion is 14 pre-assembled with. 15 Q. Uh-huh. So if we stop there and 16 didn't include the rest of the language in 17 claim 10, then the thrust-bearing element could 18 be in or not in the moveable portion, right, 19 because it's just pre-assembled with one? 20 A. I'm sorry; I didn't follow your 21 question. 22 Q. I'm drawing the distinction that 23 I see in the claim that I'm trying to see if 24 you agree with, is that the words "with" and

Page 154 1 "in," as recited in claim 10, have different 2 meanings, and you agree that they're different 3 words but I'm not sure you were with me that 4 they have different meanings, and I'm trying to 5 point out what I see is a different meaning. 6 A. Well, I guess I'm seeing them in 7 different locations within the claim. So 8 you're -- I assume you're asking about the 9 "thrust-bearing element is supported rotatably 10 in the moveable portion"? 11 Q. Correct. 12 A. And then you're asking about 13 something in another part of the claim where 14 it's "the moveable portion pre-assembled with." 15 So you're -- I guess it's a 16 little bit confusing to me when you're looking 17 at, you know, two different parts of the same 18 claim and I'm not sure how you're trying to 19 dissect that. 20 Q. All right. Let me break it down 21 a little bit differently then, what does the 22 word "in" mean? 23 A. Well, as far as the way that 24 it's described here, it says that the	Page 156 1 A. That's what -- that's what the 2 claim language says, and from my analysis and 3 looking at this kit, there is nothing that is 4 inconsistent with, for instance, Fiorido or 5 with VenHuizen that would, you know, teach 6 differently than that. 7 Q. Okay. So the scope of claims 1 8 and 10, comparing those claims again, might 9 differ then, correct, because claim 1 doesn't 10 say anything about the moveable portion being 11 pre-assembled with the thrust-bearing element? 12 A. That language is not in claim 1. 13 Q. Uh-huh. So then the scope of 14 the claims is different, right, one claim has 15 the language and one claim doesn't? 16 A. Just from the standpoint of, it 17 says that the moveable portion is pre-assembled 18 with, and as I presented in my analysis, that 19 these could, if they're coming as a kit, it 20 would come pre-assembled with the, for 21 instance, the handle would be in the moveable 22 portion pre-assembled as a kit for 23 retrofitting. 24 Q. But the claim doesn't say
Page 155 1 "thrust-bearing element is supported rotatably 2 in the moveable portion," so that means that 3 the thrust-bearing element is, you know, I'll 4 say located within the moveable portion, it 5 is -- it is in there. 6 Q. Okay. And then what does the 7 word "with" mean? 8 A. "With" means together. 9 Q. Okay. So the words "in" and 10 "with," at least as used in the '121, are 11 different, they're not the same, correct, they 12 have different meanings? 13 A. I mean, they're in different 14 locations within the same claim, so they -- you 15 know, it's describing what the moveable portion 16 is pre-assembled with, and then it goes on to 17 describe, you know, what we just talked about. 18 Q. Okay. You used the word 19 "together," and I like that word, so let's try 20 that. So by requiring the moveable portion to 21 be pre-assembled with the thrust-bearing 22 element, doesn't claim 10 require the 23 thrust-bearing element to be included as part 24 of the moveable portion, together?	Page 157 1 anything about pre-assembling the handle or any 2 other component, does it? 3 A. It doesn't say one way or the 4 other. 5 Q. Right. So the only component 6 that the claim requires to be pre-assembled is 7 the moveable portion is pre-assembled with the 8 thrust-bearing element, correct? 9 A. Well, as I said, it doesn't say 10 one way or the other whether it's going to be 11 only the moveable portion or whether it would 12 be the whole meter that's -- 13 Q. Right. So back to my point -- 14 A. So the moveable portion is 15 pre-assembled and the seed meter is 16 pre-assembled, then my analysis of this was 17 that that would meet that claim limitation. 18 Q. So I think what you're telling 19 me is that you're interpreting claim 10 to at 20 least allow the possibility that all of the 21 components recited before the last one would be 22 pre-assembled to create the entire seed 23 distribution device or element; is that your 24 position?

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Page 158 1 A. That was my analysis of that 2 particular limitation of the claim. 3 Q. Right. But, now, comparing 4 again claim 10 and claim 1, claim 10 requires 5 that the moveable portion be pre-assembled with 6 the thrust-bearing element, correct? 7 A. I'm sorry; you said claim 10? 8 Q. Correct. 9 A. That's -- yeah, it calls for the 10 moveable portion pre-assembled with -- 11 Q. Uh-huh. 12 A. -- and then it recites what we 13 just talked about. 14 Q. Right. And claim 1 does not 15 require that, correct? 16 A. It does not have the language 17 there about the pre-assembly of the moveable 18 portion. 19 Q. So claim 1 doesn't require any 20 component to be pre-assembled or not, it 21 doesn't say anything about pre-assembling, does 22 it? 23 A. It doesn't say one way or the 24 other, no.	Page 160 1 feature of claim 10, correct? 2 A. Yes, it uses the word 3 "pre-assembled." 4 Q. So, therefore, is there not a 5 difference in scope between claims 1 and 10? 6 A. There may or there may not be. 7 Like I said, there is -- if you are 8 pre-assembling a kit -- 9 Q. I'm not talking about 10 theoretically or how you might read the claim, 11 I'm just saying with respect to the scope of 12 the claims, right, you focus on the limitations 13 recited in the claim, correct? 14 A. That is correct. 15 Q. And claim 1 does not recite a 16 limitation about pre-assembling, whereas claim 17 10 does, correct? 18 A. Claim 10 talks about 19 pre-assembly and claim 1 does not use the 20 language of "pre-assembly," I would agree with 21 that. 22 Q. Therefore, don't claims 1 and 10 23 have different scopes, one has the limitation 24 "pre-assembled" and one doesn't?
Page 159 1 Q. Right. So isn't there a 2 difference in scope then with respect to claims 3 1 and 10? 4 A. Well, as I've said, my analysis 5 of this was that if you are pre-assembling the 6 whole meter, you are necessarily pre-assembling 7 the moveable portion. 8 Q. Right. But we just established 9 that the claim doesn't require pre-assembling 10 or not pre-assembling any of the other 11 components except for the moveable portion and 12 the thrust-bearing element in claim 10? 13 A. It doesn't say one way or the 14 other, just like we said before, it just talks 15 about the moveable portion pre-assembled with. 16 Q. Right. Well, claim 1 doesn't 17 say anything about pre-assembling, correct? 18 A. Claim 1 does not deal with the 19 kit. 20 Q. Does it say anything about 21 pre-assembling any components? 22 A. I didn't see anything about 23 pre-assembly in claim 1. 24 Q. Okay. And pre-assembly is a	Page 161 1 A. They do have different, 2 different scopes from that standpoint, but 3 there is -- from my analysis of this, if you 4 are pre-assembling the whole meter for a 5 retrofit kit, for instance, you will 6 necessarily be pre-assembling the moveable 7 portion. 8 Q. But you agree that the claims 1 9 and 10 have different scopes, correct? 10 A. Well, claim 10 -- claim 1 does 11 not say one way or the other whether you would 12 pre-assemble or not pre-assemble. It does not 13 use that, that language. It's only used in 14 claim 10. 15 Q. Right. So then the prior art 16 might invalidate claim 1, which doesn't have 17 the pre-assemble requirement, and not claim 10, 18 correct, just theoretically? 19 A. Well, that was part of my 20 analysis that I went through. So, I mean, 21 that's why I'm giving you my -- my analysis 22 here as we're going through it, specifically 23 with regards to the pre-assembly language. 24 Q. Yeah, I understand your

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Page 162 1 analysis, I've read it, and, you know, I get 2 your position with respect to that. But I'm 3 just asking more broadly, given that claims 1 4 and 10 have different scopes, is it not 5 theoretically possible to have a piece of prior 6 art that, for example, does not teach the 7 pre-assemble limitation, right, but teaches 8 everything else that's in claim 1, therefore, 9 it would anticipate claim 1, correct? 10 A. That would be possible. 11 Q. And then because that prior art 12 reference does not disclose anything about 13 pre-assembling, when you get to claim 10, that 14 reference, that same prior art reference that 15 anticipated claim 1, would not therefore 16 anticipate claim 10, correct? 17 A. If there was no discussion -- I 18 guess from my reading through this and through 19 the prior art that I looked at, I did not see 20 anything that was contrary to having something 21 that was pre-assembled. 22 Q. My question is, theoretically, 23 my theoretical piece of prior art discloses all 24 the limitations of claim 1 but doesn't say	Page 164 1 doesn't say anything about it, and let's just 2 say it can't, whether it can or can't doesn't 3 matter, it doesn't say anything about or 4 suggest anything about pre-assembly, it doesn't 5 refer to kits. 6 A. I would have to look at the 7 particular piece of prior art that you're 8 looking at in order to say whether it could be 9 pre-assembled or not. 10 Q. Okay. So claim 10 recites a 11 kit, right, for retrofitting? Let's look at 12 the preamble. It begins with: "A kit for 13 retrofitting of seed distribution elements," 14 correct? 15 A. I see that, yes. 16 Q. What is your definition of a 17 kit? 18 A. As I think of it, it would be a, 19 a collection of components that would function 20 together. 21 Q. And they would function together 22 when they're assembled together, correct? 23 A. Ultimately for use you would 24 want them assembled together, yes.
Page 163 1 anything about pre-assembling. Are you with me 2 so far? 3 A. You're talking about claim 1? 4 Q. Correct. 5 A. Yeah, claim 1 does not say 6 whether a part would be pre-assembled or not. 7 Q. Right. And, similarly, the 8 hypothetical prior art reference that I'm 9 advising you about says everything claim 1 says 10 but doesn't say anything about pre-assembling, 11 because claim 1 doesn't require it so it still 12 anticipates, correct? 13 A. That would be correct. 14 Q. Okay. Now let's go to claim 10, 15 the same prior art reference that we just 16 agreed invalidates claim 1 because it discloses 17 all of claim 1 but says nothing about 18 pre-assembly, would that same reference 19 anticipate claim 10? 20 A. I would have to look at that 21 particular piece of prior art to see whether it 22 could come pre-assembled or not in order to 23 meet that. 24 Q. Well, I'm advising you it	Page 165 1 Q. Right. So I could tell you the 2 dictionary I looked up says a kit is, quote, "a 3 set of parts or materials to be assembled," end 4 quote. Would you agree with that definition? 5 A. That's one possible definition, 6 but it could also be, you know, something 7 that's already assembled that's, you know, made 8 to be, you know, used and assembled onto an 9 existing product. 10 Q. So if it was that situation, 11 where it's already assembled, it's a device, 12 it's a put-together assembly, would it then 13 comprise parts or materials, plural, to be 14 assembled? 15 A. Sorry; can you reask that 16 question? 17 Q. Well, in your example you're 18 saying, well, you would also interpret a kit as 19 being a pre-assembled set of components, right, 20 a kit is all of the components already 21 assembled and you would take that kit, if you 22 will, and stick it on some other device; am I 23 understanding your position correctly? 24 A. That was one possible definition

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Page 166 1 I gave, yes. 2 Q. Okay. So in that example, what 3 you're assembling is one component to another? 4 A. Yes. 5 Q. There are not a set of parts or 6 materials to be assembled, we're just 7 one-to-one, correct? 8 A. I'm sorry; you're kind of losing 9 me here. Can you -- 10 Q. Let me ask it to you this way -- 11 A. Okay. 12 Q. -- if the entire device is 13 pre-assembled, can it really be called a kit 14 for retrofitting? It's just one component in 15 that case. 16 A. No; it's several components that 17 have been put together. 18 Q. Right. But in the process of 19 assembling it with the second component, it's 20 no longer a kit, it's already put together. 21 When you buy it, you're not buying multiple 22 parts, you're buying one set of pre-assembled 23 components, correct? 24 A. Well, I mean, looking at the	Page 168 1 of those other elements as pre-assembled? 2 A. I don't see that it says one way 3 or the other on the other -- the other parts, 4 whether they're pre-assembled or not. 5 Q. Right. So it does say, however, 6 that the moveable portion is pre-assembled with 7 a thrust-bearing element, correct? 8 A. That's what -- that's what the 9 end of claim 10 says, the last limitation. 10 Q. Right. So why would you 11 interpret claim 10 to say that -- well, let me 12 ask it to you this way, if there is no 13 description or characterization of all the 14 other elements, besides the moveable portion 15 being pre-assembled with a thrust-bearing 16 element, that there is any pre-assembly 17 involved, but your position is that they could 18 be pre-assembled in the kit, why would I bother 19 having the language of the moveable portion 20 being pre-assembled? 21 A. That's just narrowing, narrowing 22 it down, but as far as the -- as I interpret 23 this language, it does not limit having the kit 24 also include the fixed portion. It's only
Page 167 1 teachings of the -- or the claims of the 2 patent, it's talking about a kit, I'm looking 3 at claim 10, you have a kit for retrofitting. 4 This is the beginning of claim 10. 5 Q. Uh-huh. 6 A. And then it talks about moveable 7 portion pre-assembled. So it is describing a 8 kit that's had some level of assembly done to 9 it. So when I look at the kit as it's being 10 described here, I see that it's got some level 11 of assembly and it's talking about the moveable 12 portion pre-assembled, and if you have the 13 moveable portion -- if you've got the entire -- 14 the entirety of the meter pre-assembled, then 15 necessarily you've got the moveable portion 16 pre-assembled. That's my analysis. 17 Q. Right. Do you see how claim 10 18 recites a number of components in parenthetical 19 order, ending in "the moveable portion 20 pre-assembled with," it starts with a sowing 21 disc, then a housing, a seed collection 22 chamber, et cetera? 23 A. Yes, I see that. 24 Q. Does claim 10 characterize any	Page 169 1 calling out what is on the moveable portion but 2 it's not excluding having the fixed portion 3 also pre-assembled with it. 4 Q. So I guess in answer to my 5 question, if the entire device, the seed 6 distribution element that's recited in claim 10 7 is pre-assembled, you would still call that a 8 kit for retrofitting? 9 A. If you were retrofitting say the 10 seed meter or portions of the seed meter, yes, 11 that could be a kit. 12 Q. So you would buy the seed 13 distribution element that has all the 14 limitations of claim 10 all pre-assembled, you 15 would buy that unit in the store or wherever 16 you got it and you would take it home to your 17 farm and you would put it into the seed drill; 18 right, are you with me? 19 A. No, I'm not. Which parts are 20 you retrofitting? 21 Q. Well, you want to put the seed 22 distribution element, right, and retrofit your 23 planter? 24 A. Yes, I do.

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Page 170 1 Q. Okay. So I go to the store and 2 I buy the seed distribution element, and in 3 your understanding, as I understand your 4 position, you would buy that as a unit all 5 pre-assembled? 6 A. The seed meter, yes. 7 Q. Right. And you would take that 8 seed meter home and you would put it on your 9 planter, you would retrofit the planter with 10 the seed meter? 11 A. That is one possibility to do, 12 yes. 13 Q. And in that scenario you would 14 call the seed drill a kit? 15 A. You're talking the entire 16 planter, seed drill or just the meter? 17 Q. The entire planter is the larger 18 device, right? 19 A. Right. 20 Q. And I'm going to retrofit that 21 larger device, the planter, with a 22 retrofittable piece, which the claim calls the 23 seed distribution element, and then it says it 24 has all these components to it, right?	Page 172 1 MR. CASEY: No; my apologies. 2 BY MR. CASEY: 3 Q. So the concept that we're 4 exploring is, if I buy all of the components of 5 the distribution element recited in claim 10 as 6 a single unit, I think your position is, you 7 could pre-assemble all of them, correct? 8 A. If you -- my position is that if 9 you have pre-assembled, for instance, the whole 10 meter, you will have necessarily pre-assembled 11 the moveable portion of the meter. 12 Q. Understand. So I buy the all 13 pre-assembled meter, which has all of these 14 components listed in claim 10 as including the 15 moveable portion with the thrust-bearing 16 element, your position is that's all together 17 now, correct, that's a unit, pre-assembled 18 unit? 19 A. If you had that as a whole unit, 20 pre-assembled, you would necessarily have the 21 moveable portion pre-assembled as well is what 22 I am saying. 23 Q. Understand. So let's focus 24 broader on the meter that you've pre-assembled,
Page 171 1 A. Yes. Right. So the claim 2 language is it's a kit for retrofitting a seed 3 distribution element and -- 4 Q. Of a seed drill, right? 5 A. Of a seed drill, of a precision 6 pneumatic seed drill -- 7 Q. Correct. 8 A. -- and -- 9 Q. So at home I have a seed drill 10 on my farm, and I go and I buy the seed 11 distribution elements that are all recited in 12 claim 10, right, and those are all 13 pre-assembled, that's I think what you're 14 telling me is a possibility, right, they're all 15 pre-assembled into a unit? 16 - - - 17 (Brief interruption.) 18 - - - 19 THE WITNESS: Sorry; was 20 somebody else saying something? 21 MR. CASEY: No; I just got a 22 call I had to stop on my cell, so 23 ignore it. 24 THE WITNESS: Sorry.	Page 173 1 and that is going to be used to retrofit the 2 planter, right? 3 A. That's what the claim is talking 4 about, yes. 5 Q. Okay. And you, I understand, 6 but I'm seeking clarification, would call that 7 pre-assembled meter a kit, the single unit of a 8 pre-assembled meter in your terminology then 9 would be a kit? 10 A. That could be a kit, yes. 11 Q. Okay. Thank you. All right. 12 Have you ever been deposed before? 13 A. Yes, I have. 14 Q. How many times, approximately? 15 A. I don't know. I only keep a 16 testimony list for the last four years, and it 17 might have been 15, 20 times over the last four 18 years. 19 Q. Okay. Have you ever testified 20 in a case involving Precision or Maschio? 21 A. I have testified for a case 22 involving Precision. You're talking Precision 23 Planting I assume. 24 Q. Yes. Just one case?

Page 174 1 A. Well, I gave a deposition and 2 then there was a trial, so twice. 3 Q. Was that a case we were talking 4 about earlier? 5 A. Yes, the case of Deere vs. AGCO. 6 Q. Gotcha. Thank you. What did 7 you do to prepare for today's deposition? 8 A. I mean, beyond the writing of 9 the report and all of that, I mean, just in the 10 last few days I read through the -- read 11 through the documents and had discussion with 12 the attorneys or with I guess only one 13 attorney, with Mr. Brown, and that's basically 14 a summary of my preparation. 15 Q. Did you do anything else that 16 you can think about? 17 A. No, I don't believe there is any 18 other thing I did. 19 Q. Other than with Mr. Brown, did 20 you speak with anybody else, any other 21 attorneys, in preparing for the deposition? 22 A. No, I don't believe I spoke with 23 any other attorneys. 24 Q. Did you speak with anyone else	Page 176 1 THE WITNESS: Mind if we take a 2 five-minute break? 3 MR. CASEY: No; that's fine. 4 It's a good spot for it. Come back -- 5 I got 4:57 my time, so let's do 5:05 my 6 time, 4:05 your time. 7 THE WITNESS: Okay. 8 MR. CASEY: Sounds good. 9 - - - 10 (Whereupon there was a recess in 11 the proceeding.) 12 - - - 13 BY MR. CASEY: 14 Q. Just a couple of quick points of 15 clarification, if you would, Dr. Fleming. So 16 you mentioned the case involving AGCO. Could 17 you spell that company name for us? 18 A. A-G-C-O. 19 Q. Okay. And then Ms. Schimpf, 20 what is her full name and spelling? 21 A. It is Nicole, N-I-C-O-L-E, 22 Schimpf, S-C-H-I-M-P-F. 23 MR. CASEY: Got it. Thank you. 24 With that, thank you for your
Page 175 1 besides attorneys? 2 A. I would have spoken with Ms. 3 Schimpf, who I said had worked with me on -- 4 when we were preparing this report. 5 Q. Did you review any documents? 6 A. I mean, yeah, all the documents 7 that we've had here were ones that I had -- I 8 had reviewed. 9 Q. I'm glad to see we're on the 10 same proverbial page then. 11 Any other documents besides the 12 10 that we've talked about today? 13 A. I mean, the ones that were 14 related to my report, so there were some, some 15 references that I had put in that I looked 16 through. 17 MR. CASEY: Okay. Let me take a 18 second just to review my notes and see 19 where we are, but I think we're about 20 done. 21 So, Mr. Brown, you can be 22 thinking about whether you have any 23 follow-up questions that you want to 24 ask.	Page 177 1 participation today, Dr. Fleming. We 2 are right about on my five hours. So I 3 have no further questions at this time. 4 Mr. Brown, do you have any 5 questions? 6 MR. BROWN: No, we have no 7 questions. 8 MR. CASEY: Okay. Then we're 9 concluded. Thank you. 10 - - - 11 (Witness excused.) 12 - - - 13 (Deposition concluded at 14 4:05pm CT/5:05pm ET.) 15 - - - 16 17 18 19 20 21 22 23 24

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MARK FLEMING, PhD, PE

Page 178 C E R T I F I C A T E I do hereby certify that I am a Notary Public in good standing, that the aforesaid testimony was taken before me, pursuant to notice, at the time and place indicated; that said deponent was by me duly sworn to tell the truth, the whole truth, and nothing but the truth; that the testimony of said deponent was correctly recorded in machine shorthand by me and thereafter transcribed under my supervision with computer-aided transcription; that the deposition is a true and correct record of the testimony given by the witness; and that I am neither of counsel nor kin to any party in said action, nor interested in the outcome thereof. WITNESS my hand and official seal this 2nd day of July, 2024. <i>Dennis A. Gail</i> ----- Notary Public	Page 180 Precision Planting, LLC v. Gaspardo, Maschio Mark Fleming , PhD, PE (#6742687) E R R A T A S H E E T PAGE____ LINE____ CHANGE_____ REASON_____ PAGE____ LINE____ CHANGE_____ REASON_____ PAGE____ LINE____ CHANGE_____ REASON_____ PAGE____ LINE____ CHANGE_____ REASON_____ PAGE____ LINE____ CHANGE_____ REASON_____ Mark Fleming , PhD, PE Date
Page 179 Kevin Casey, Esquire KCasey@stradley.com July 2, 2024 RE: Precision Planting, LLC v. Gaspardo, Maschio 6/27/2024, Mark Fleming , PhD, PE (#6742687) The above-referenced transcript is available for review. Within the applicable timeframe, the witness should read the testimony to verify its accuracy. If there are any changes, the witness should note those with the reason, on the attached Errata Sheet. The witness should sign the Acknowledgment of Deponent and Errata and return to the deposing attorney. Copies should be sent to all counsel, and to Veritext at cs-midatlantic@veritext.com. Return completed errata within 30 days from receipt of testimony. If the witness fails to do so within the time allotted, the transcript may be used as if signed. Yours, Veritext Legal Solutions	Page 181 Precision Planting, LLC v. Gaspardo, Maschio Mark Fleming , PhD, PE (#6742687) A C K N O W L E D G E M E N T O F D E P O N E N T I, Mark Fleming , PhD, PE, do hereby declare that I have read the foregoing transcript, I have made any corrections, additions, or changes I deemed necessary as noted above to be appended hereto, and that the same is a true, correct and complete transcript of the testimony given by me. Mark Fleming , PhD, PE Date *If notary is required SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20____. NOTARY PUBLIC

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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.

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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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Kevin Casey, Esquire

KCasey@stradley.com

July 2, 2024

RE: Precision Planting, LLC v. Gaspardo, Maschio

6/27/2024, Mark Fleming , PhD, PE (#6742687)

The above-referenced transcript is available for review.

Within the applicable timeframe, the witness should read the testimony to verify its accuracy. If there are any changes, the witness should note those with the reason, on the attached Errata Sheet.

The witness should sign the Acknowledgment of Deponent and Errata and return to the deposing attorney. Copies should be sent to all counsel, and to Veritext at cs-midatlantic@veritext.com.

Return completed errata within 30 days from receipt of testimony.

If the witness fails to do so within the time allotted, the transcript may be used as if signed.

Yours,

Veritext Legal Solutions

Precision Planting, LLC v. Gaspardo, Maschio
Mark Fleming , PhD, PE (#6742687)

E R R A T A S H E E T

PAGE 46 LINE 12 CHANGE retaining hub 56 to
first housing member 50

REASON clarification

PAGE 46 LINE 20 CHANGE hub to
first housing member

REASON clarification

PAGE 47 LINE 3 CHANGE hub to
first housing member

REASON clarification

PAGE 47 LINE 4-5 CHANGE retaining hub 56 to
first housing member 50

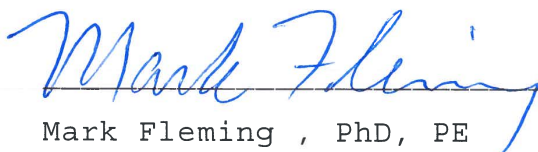
REASON clarification

PAGE 48 LINE 7 CHANGE retaining hub 56 to
first housing member 50

REASON clarification

PAGE 56 LINE 15 CHANGE analysis from to
analysis of the Florido patent from

REASON clarification


Mark Fleming , PhD, PE


Date

Precision Planting, LLC v. Gaspardo, Maschio
Mark Fleming , PhD, PE (#6742687)

ACKNOWLEDGEMENT OF DEPONENT

I, Mark Fleming , PhD, PE, do hereby declare that I
have read the foregoing transcript, I have made any
corrections, additions, or changes I deemed necessary as
noted above to be appended hereto, and that the same is
a true, correct and complete transcript of the testimony
given by me.

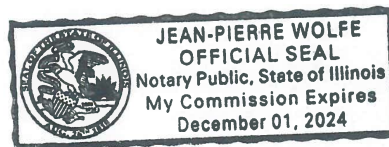
Mark Fleming 7/9/24
Mark Fleming , PhD, PE Date

*If notary is required

SUBSCRIBED AND SWORN TO BEFORE ME THIS

9th DAY OF July, 2024.

Jean Pierre Wolfe
NOTARY PUBLIC



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