# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND BALTIMORE DIVISION

PAICE LLC and
THE ABELL FOUNDATION, INC.,
Plaintiffs,

Case: 1:14cv00492-WDQ

vs.

FORD MOTOR COMPANY,

Defendant.

DEPOSITION OF JEFFREY L. STEIN

Southfield, Michigan

January 12, 2015

Reported by:

Anne E. Vosburgh, CSR, RPR, CRR

Job no: 13175



	Page 2		Daga 4
	Page 2		Page 4
1		1	APPEARANCES, CONTINUED:
2		2	
3 4	DEPOSITION OF JEFFREY L.STEIN, taken on January 12,	3	FOR THE DEFENDANT:
5	2015 by the Plaintiffs, at the Law Offices of	4 5	I ATHAM & WATVING LID
6	Brooks Kushman, 1000 Town Center, Southfield,	6	LATHAM & WATKINS, LLP BY: AARON PEREZ-DAPLE, ESQ.
7	Michigan, before Anne E. Vosburgh, Certified	7	330 North Wabash Avenue
8	Shorthand Reporter, Registered Professional	8	Suite 2800
9	Reporter, Certified Realtime Reporter, and Notary	9	Chicago, Illinois 60611
10	Public in and for the State of Michigan, County of	10	312.876.7602
11	Oakland.	11	aaron.perez-daple@lw.com
12		12	unioniperez unpre e inicom
13		13	
14		14	ALSO PRESENT:
15		15	Frances M. Keenan, Paice LLC
16		16	,
17		17	
18		18	
19		19	
20		20	
21		21	
22		22	
23		23	
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25		25	
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1	APPEARANCES:	1	INDEX TO EXAMINATIONS
2		2	WITNESS: JEFFREY L. STEIN
3	FOR THE PLAINTIFF:	3	EVALUE CORREY
4	Elait a Dicht Dodon	4	EXAMINATION BY MR. CORDELL:7
5	FISH & RICHARDSON	5	
6 7	BY: RUFFIN B. CORDELL, ESQ.	6	
8	PETER GUARNIERI, ESQ. 1425 K Street NW, 11th Floor	8	INDEX TO EXHIBITS
9	Washington DC 20005	9	EXHIBIT DESCRIPTION PAGE
10	202.783.5070	10	Exhibit 1 Declaration of Dr. Jeffrey Stein 12
11	cordell@fr.com	11	in Support of Petition for Inter
12	guarnieri@fr.com	12	Partes Review; Appendix A, CV
13	<b>6</b>	13	and Appendix B, List of
14	FOR THE DEFENDANT:	14	Materials; Bates FMC 1002.
15		15	Exhibit 2 US Patent 5,343,970 Filed 154
16	BROOKS KUSHMAN, PC	16	September 6, 1994, Severinsky
17	BY: FRANK A. ANGILERI, ESQ.	17	Exhibit 3 SAE Paper 950493, The Effects of 174
18	SANGEETA G. SHAH, ESQ.	18	APU Characteristics, by
19	ANDREW B. TURNER, ESQ.	19	Catherine Anderson and Erin
20	1000 Town Center, Floor 22	20	Pettit; Bates FMC 1006, 9 pages
21	Southfield, Michigan 48075	21	Exhibit 4 US Patent 4,707,984, November 251
22	248.358.4400	22	24, 1987 Katsuno; Bates FMC 1008
23	fangileri@brookskushman.com sshah@brookskushman.com	23	(Exhibits attached.)
$^{\prime}$		144	CEXHIDIIS ATTACHEO.)
24 25	aturner@brookskushman.com	25	(2.111101113 411141111)

2 (Pages 2 to 5)



	Page 6		Page 8
1	PROCEEDINGS	1	JEFFREY STEIN
2		2	A If you think it's wise to repeat 09:26:58
3	Southfield, Michigan	3	them, I'm certainly willing to listen. 09:27:00
4	January 12, 2015	4	Q Sure. 09:27:03
5	9:25 a.m.	5	Let me give you a little bit of a 09:27:03
6	7.25 d.iii.	6	refresher. If I ask you a question and you 09:27:06
7	MR. CORDELL: Ruffin Cordell and 09:25:45	7	give me an answer, I'm going to assume you 09:27:08
8	Pete Guarnieri from Fish & Richardson on 09:25:46	8	understood my question. So if you don't, 09:27:11
9	behalf of Paice. 09:25:49	9	please tell me. 09:27:11
10	MR. ANGILERI: Frank Angileri, 09:25:52	10	If you need to take a break, wave 09:27:12
11	Brooks Kushman, for Ford. 09:25:53	11	your hand, say something, talk to Mr. Angileri, 09:27:14
12	MS. SHAH: Sangeeta Shah for Ford. 09:25:57	12	something. This is not an endurance test by 09:27:21
13	MR. TURNER: Andrew Turner for 09:26:01	13	any stretch. 09:27:26
14	Ford. 09:26:05	$\begin{vmatrix} 13\\14 \end{vmatrix}$	A Okay. Thank you. 09:27:26
15	MR. PEREZ-DAPLE: Aaron 09:26:06	15	MR. ANGILERI: Objection, form. 09:27:27
16	Perez-Daple, Latham & Watkins, for Ford. 09:26:06	16	BY MR. CORDELL: 09:27:29
17	MR. ANGILERI: And just for the 09:26:11	17	Q So with that understanding, is there 09:27:29
18	record, Mr. Perez has not entered an 09:26:11	18	any reason today why you can't testify fully 09:27:30
19	appearance but he is present, obviously. 09:26:14	19	and truthfully? 09:27:32
20	09:26:16	20	A None that I can think of. 09:27:33
21	JEFFREY STEIN,	21	Q You're a professor at the University 09:27:40
22	Having taken an oath to testify	22	of Michigan, correct? 09:27:41
23	truthfully, was examined and	23	A Yes. 09:27:43
24	testified as follows.	24	
25	testified as follows.	25	Q What do you teach? 09:27:44 A Mechanical engineering is the 09:27:46
25		23	
	Page 7		Page 9
1	JEFFREY STEIN	1	JEFFREY STEIN
2	EXAMINATION 09:26:16	2	department in which I teach. 09:27:48
3	BY MR. CORDELL: 09:26:16	3	Q What kinds of courses do you teach? 09:27:49
4	Q Good morning, Dr. Stein. 09:26:17	4	A I teach courses in mechanical design, 09:27:52
5	A Good morning. 09:26:19	5	mechatronics, systems and controls, dynamics, 09:27:57
6	Q Thank you for joining us on a chilly 09:26:21	6	machine control. 09:28:01
7	morning. 09:26:24	7	Q So dynamics sounds like an undergrad 09:28:10
8	Can you give us your full name and 09:26:24	8	class; is that correct? 09:28:12
9	address for the record. 09:26:26	9	A Well, we have both undergraduate and 09:28:14
10	A Certainly. Jeffrey L. Stein, 3055 09:26:27	10	graduate courses in almost all of those topics. 09:28:17
11	Whisperwood Drive, Ann Arbor, Michigan 48105. 09:26:30	11	Q Tell me how many of your courses that 09:28:19
12	Q And you understand that you're under 09:26:35	12	you're currently teaching are undergrad 09:28:20
13	oath? 09:26:36	13	classes? 09:28:23
14	A Yes. 09:26:42	14	A I teach approximately even numbers of 09:28:24
15	Q And you're testifying as if you were 09:26:42	15	undergraduate and graduate classes. 09:28:26
16	in a court of law? 09:26:43	16	Q So four? 09:28:30
17	A Yes. 09:26:45	17	A This past term I taught two 09:28:31
18	Q Or before the patent office? 09:26:45	18	undergraduate classes and one graduate class. 09:28:34
19	A Yes. 09:26:47	19	Q And what are you teaching are you 09:28:37
20	Q And have you been deposed before? 09:26:48	20	between terms right now? 09:28:40
21	A Yes. 09:26:51	21	A Our new term just started last week. 09:28:41
22	Q How many times? 09:26:53	22	Q And what are you teaching this 09:28:45
23	A I don't know exactly, but several 09:26:53	23	semester, or term? 09:28:48
24	times. 09:26:54	24	A I don't have any formal classroom 09:28:50
25	Q You understand the rules pretty well? 09:26:55	25	teaching this term. 09:28:51

3 (Pages 6 to 9)



JEFFREY STEIN   Q Are you supervising any grad   09:28:55   2   A Some number like that   09:31:34     A Yes   O9:29:00   4   A Yes   O9:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   5   O Generally, how many grad students do   09:29:01   6   O Generally, how many grad students do   09:29:01   7   O Generally, how many grad students do   09:29:02   8   O Generally, how many grad students do   09:29:01   8   O Generally, how many grad students do   09:29:02   8   O Generally, how many grad students do   09:29:02   8   O Generally, how many grad students do   09:29:02   8   O Generally, how many grad students do   09:29:02   10   O Generally, how many grad students do   09:29:02   10   O Generally, how many grad students do   09:29:31   10   O Generally, how many grad students do   09:29:31   11   O Generally, how many grad students do   09:29:31   11   O Generally, how many grad students do   09:29:31   12   O Generally, how many grad students do   09:29:31   12   O Generally, how many grad students do   09:29:31   13   O Generally, how many grad students do   09:29:31   13   O Generally, how many grad students do   09:29:31   14   O Generally, how many grad students do   09:29:31   15   O Generally, how many grad students do   09:29:31   15   O Generally, how many grad students do   09:29:31   16   O Generally, how many grad students do   09:30:05   16   O Generally, how many grad students do   09:30:05   18   O Generally, how many grad students do   09:30:05   18   O Generally, how many grad students do   09:30:05   18   O Generally, how many grad do   09:30:05   18   O Gene		Page 10		Page 12
A Yes.   Q-32-No   Q-32-	1	_	1	
3   Students?   09:29:57   3   MR. CORDELL: Let ne go ahead and   09:31:37				
A Yes. Q Generally, how many grad students do   09:29:01   5   1   1   1   1   1   1   1   1				
5				•
Figure 1				•
A Well, that anumber does fluctuate   09:29:20   7   Front of me for United States Patemt   09:31:48   8   Approximately six at the moment. Maybe as high   09:29:21   8   88.214,097, IPR Case No. IPR2014-00570.   09:31:36   10   In this case it's marked as FMC-1002.   09:31:36   11   supervision of a grad student attending the   09:29:31   11   12   University of Michigan? What generally do you   09:29:34   12   in Support of Petition for Inter   09:32:13   13   do?   09:29:45   15   Declaration of Dr. Jeffrey L. Stein   09:32:13   14   A Could you repeat the question,   09:29:44   14   A Could you repeat the question,   09:29:45   15   Ogenetic Project Stein   09:29:45   16   Ogenetic Project Stein   09:32:13   Ogenetic Project Stein   Ogenetic Project				
8				
9		,		
Q Can you describe the process for your   09:29:28   10   (Marked Deposition Exhibit 1;   09:32:13				
11				
12				· · · · · · · · · · · · · · · · · · ·
13   A Could you repeat the question.   09:29:44   14   A Could you repeat the question.   09:29:44   14   A Could you repeat the question.   09:29:45   15   Considered. Bates (1002.)   09:32:13   16   Q What does it mean to supervise a grad   09:29:45   16   Considered. Bates (1002.)   09:32:15   17   20   Mr. Stein, let me hand you your, and   09:32:15   18   A There are different roles as a mentor   09:29:50   18   attached to the back is your CV. correct?   09:32:15   18   A There are different roles as a mentor   09:29:59   19   A Yes.   16   10   10   10   10   10   10   10		-		•
14				
15				* *
16   No what does it mean to supervise a grad   09:29:45   16   17   18   18   18   18   18   18   18				**
17 student? 09:29:47		•		,
18		•		
19				
20				· ·
21		* * * *		
22   In which role are you   09:30:03   22   A Yes.   09:33:01   24   Q Well, a graduate student that's   09:30:05   23   Q I actually counted them up in your   09:33:19   25   you do with that person?   09:30:10   25   you do with that person?   09:30:10   25   you do with that person would tend to require   09:30:16   2   authored over 65 journal articles, 13 of which   09:33:27   15   you do with that person would tend to require   09:30:16   2   authored over 65 journal articles, 13 of which   09:33:31   16   you do with that person would tend to require   09:30:16   2   authored over 65 journal articles, 13 of which   09:33:31   16   you discussion about research options that they   09:30:28   4   A Yes. 1 see that paragraph.   09:33:39   4   A Yes. 1 see that paragraph.   09:33:59   Q Is that accurate?   09:34:00   09:30:30   6   A I've authored 65 journal articles   09:34:02   over 65 journal articles, including at least 13   09:34:03   over 65 journal articles   09:34:00   over 65 journal articles   09:34:00   over 65 journal articles   09:34:00   ove				
Q   Well, a graduate student that's   09:30:05   23   Q   I actually counted them up in your   09:33:19   declaration. In paragraph 10, you said you've   09:33:27   you do with that person?   09:30:10   25   authored over 65 journal articles, 13 of which   09:33:27   Page   13		*		•
24   pursuing a master's, what kinds of things do   09:30:07   24   you do with that person?   09:30:10   25   authored over 65 journal articles, 13 of which   09:33:27   1   25   25   authored over 65 journal articles, 13 of which   09:30:27   13   25   25   25   25   25   25   25   2		•		
Page 11   Page 12   Page 13   Page 13		-		- · · · · · · · · · · · · · · · · · · ·
Page 11   JEFFREY STEIN   1 JEFFREY STEIN   1 JEFFREY STEIN   1 JEFFREY STEIN   2 A So that person would tend to require   09:30:16   2 are related to hybrid electric vehicles; is   09:33:31   4 discussion about research options that they   09:30:28   4 A Yes.   1 see that paragraph.   09:33:59   2 Is that accurate?   09:34:00   09:34:14   2 New fire Point (which is possible)   1			24	
1 JEFFREY STEIN 2 A So that person would tend to require 09:30:16 3 some counseling about course choices, some 09:30:18 4 discussion about research options that they 09:30:28 5 might consider, some options or discussion 09:30:30 6 about companies they might work with in 09:30:37 6 about companies they might work with in 09:30:37 7 different kinds of industries, different kinds 09:30:41 8 of areas that the courses that they're doing 09:30:41 9 work in might lead to 09:30:45 10 And there are also those master's 09:30:58 11 students who I actually specifically end up 09:30:58 12 engaged in a research project with, which 09:31:00 13 and then, of course, there's considerable 09:31:03 14 discussion about the content of the research 09:31:09 15 that we're doing together. 09:31:10 16 Q Do you write papers with your 09:31:14 17 students? 09:31:15 18 A Yes. 09:31:16 19 Q How often? 09:31:18 10 A Well, we have my CV. There's 09:31:21 21 number of years by the number of publications, 09:31:28 22 vice versa, you'll get a number. 09:31:28 24 Prosthesis: Knee Control Versus SACH Foot 09:34:58	25	you do with that person? 09:30:10	25	authored over 65 journal articles, 13 of which 09:33:27
A So that person would tend to require 09:30:16  3 some counseling about course choices, some 09:30:18  4 discussion about research options that they 09:30:28  5 might consider, some options or discussion 09:30:30  6 about companies they might work with in 09:30:37  6 different kinds of industries, different kinds 09:30:39  8 of areas that the courses that they're doing 09:30:41  9 work in might lead to. 09:30:45  10 And there are also those master's 09:30:58  11 students who I actually specifically end up 09:30:58  12 engaged in a research project with, which 09:31:00  13 and then, of course, there's considerable 09:31:03  14 discussion about the content of the research 09:31:04  15 that we're doing together. 09:31:09  16 Q Do you write papers with your 09:31:14  17 students? 09:31:15  18 A Yes. 09:31:16  19 Q How often? 09:31:18  10 A Well, we have my CV. There's 09:31:19  20 A Well, we have my CV. There's 09:31:28  21 are related to hybrid electric vehicles; is 09:33:39  22 that right? 09:33:39  33 that right? 09:33:39  4 A Yes. I see that paragraph. 09:33:09  4 A I've authored 65 journal articles, including at least 13 09:34:02  4 over 65 journal articles, including at least 13 09:34:08  4 articles that are related to hybrid electric 09:34:08  4 and I've also contributed over 115 09:34:13  5 Papers that are related to hybrid electric 09:34:14  6 Q So not quite 200, but almost; is that 09:34:21  7 right? 09:34:24  6 A That would be fair. In the CV that's 09:34:35  8 attached, there are a few more that are not 09:34:38  18 A Yes. 09:31:16  18 p Q Let's go back to the CV and Appendix 09:34:41  19 Q Let's go back to the CV and Appendix 09:34:44  20 articles that are related to hybrid electric 09:34:54  21 articles that are related to hybrid electric 09:34:54  22 number of years by the number of publications, 09:31:28  23 vice versa, you'll get a number. 09:31:28  24 Prosthesis: Knee Control Versus SACH Foot 09:34:58		Page 11		Page 13
some counseling about course choices, some 09:30:18 discussion about research options that they 09:30:28 discussion about research options that they 09:30:28 discussion about research options that they 09:30:30 b might consider, some options or discussion 09:30:30 b Q Is that accurate? 09:34:00 b A I've authored 65 journal articles 09:34:00 b A I've authored 65 journal articles 09:34:02 over 65 journal articles, including at least 13 09:34:03 b articles that are related to hybrid electric 09:34:08 b work in might lead to 09:30:45 b work in might lead to 09:30:54 b Work in might lead to 09:30:55 b Q Is that accurate? 09:34:08 b articles that are related to hybrid electric 09:34:08 b work in might lead to 09:30:45 b Work in might lead to 09:30:55 b Q And I've also contributed over 115 09:34:13 b Point of Students who I actually specifically end up 09:30:58 b Point of Students who I actually specifically end up 09:30:58 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:00 b Point of Students who I actually specifically end up 09:31:10 b Point of Students who I actually specifically end up 09:31:10 b Point of Students who I actually specifically end up 09:31:10 b Point of Students who I actually specifically end up 09:31:10 b Point of Students who I actually specifically end up 09:31:10 b Point of Students who I actually specifically end up 09:31:10 b Point of Student	1	JEFFREY STEIN	1	JEFFREY STEIN
some counseling about course choices, some 09:30:18 discussion about research options that they 09:30:28 discussion about research options that they 09:30:38 discussion about research options that they 09:30:30 5 might consider, some options or discussion 09:30:30 5 Q Is that accurate? 09:34:00 about companies they might work with in 09:30:37 6 A I've authored 65 journal articles 09:34:02 over 65 journal articles 09:34:02 over 65 journal articles, including at least 13 09:34:03 articles that are related to hybrid electric 09:34:08 work in might lead to 09:30:45 9 vehicles. 09:34:12 vehicles. 09:34:12 10 And there are also those master's 09:30:54 10 And I've also contributed over 115 09:34:13 11 students who I actually specifically end up 09:30:58 11 referee conference papers, including at least 09:34:14 engaged in a research project with, which 09:31:00 12 18 papers that are related to hybrid electric 09:34:16 and then, of course, there's considerable 09:31:03 13 vehicles. 09:34:20 14 discussion about the content of the research 09:31:09 15 right? 09:34:24 16 Q Do you write papers with your 09:31:14 16 A That would be fair. In the CV that's 09:34:35 17 students? 09:31:16 18 A Yes. 09:31:16 18 included. 09:34:41 19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:44 19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:44 19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:44 19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:44 19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:44 19 Q Somewhere around eight to ten a year, 09:31:24 10 22 11 16 16 16 16 16 16 16 16 16 16 16 16	2	A So that person would tend to require 09:30:16	2	are related to hybrid electric vehicles; is 09:33:31
might consider, some options or discussion 09:30:30 5 Q Is that accurate? 09:34:00 4 A I've authored 65 journal articles 09:34:02 over 65 journal articles 09:34:02 over 65 journal articles, including at least 13 09:34:03 of areas that the courses that they're doing 09:30:41 8 articles that are related to hybrid electric 09:34:08 over 65 journal articles, including at least 13 09:34:08 over 65 journal articles articles directed to hybrid electric 09:34:14 over 60:34:14 over 60:35:14 over 60:35:	3	· · · · · · · · · · · · · · · · · · ·	3	that right? 09:33:39
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different kinds of industries, different kinds 09:30:39 of areas that the courses that they're doing 09:30:41 work in might lead to. 09:30:45  And there are also those master's 09:30:54  and there are also those master's 09:30:58  and there are also those master's 09:31:00  and there are also those master's 09:31:10  and then, of course, there's considerable 09:31:10  and then	5	might consider, some options or discussion 09:30:30	5	Q Is that accurate? 09:34:00
of areas that the courses that they're doing 09:30:41  work in might lead to. 09:30:45  And there are also those master's 09:30:54  and there are also those master's 09:30:54  and there are also those master's 09:30:54  and there are also those master's 09:30:58  and then, of Lactually specifically end up 09:30:58  and then, of course, there's considerable 09:31:00  and then, of course, there's considerable 09:31:03  discussion about the content of the research 09:31:06  discussion about the content of the research 09:31:09  that we're doing together. 09:31:14  Q Do you write papers with your 09:31:14  A Yes. 09:31:15  A Yes. 09:31:16  Q How often? 09:31:18  Q How often? 09:31:19  A Well, we have my CV. There's 09:31:21  and then, of course, there's considerable 09:31:21  and then, of course, there's considerable 09:31:21  and then, of course, there's considerable 09:31:00  12 18 papers that are related to hybrid electric 09:34:16  vehicles. 09:34:13  referee conference papers, including at least 09:34:14  vehicles. 09:34:14  Q So not quite 200, but almost; is that 09:34:21  right? 09:34:24  A That would be fair. In the CV that's 09:34:35  attached, there are a few more that are not 09:34:38  included. 09:34:41  Q Let's go back to the CV and Appendix 09:34:41  A Well, we have my CV. There's 09:31:19  A And just picking the first few, you have 09:34:44  hundreds of publications there. So divide the 09:31:21  articles directed to things like "Influence of 09:34:48  pright? 09:34:54  Prosthesis: Knee Control Versus SACH Foot 09:34:58	6	about companies they might work with in 09:30:37	6	A I've authored 65 journal articles 09:34:02
work in might lead to. 09:30:45 9 vehicles. 09:34:12  10 And there are also those master's 09:30:54 10 And I've also contributed over 115 09:34:13  11 students who I actually specifically end up 09:30:58 11 referee conference papers, including at least 09:34:14  12 engaged in a research project with, which 09:31:00 12 18 papers that are related to hybrid electric 09:34:16  13 and then, of course, there's considerable 09:31:03 13 vehicles. 09:34:20  14 discussion about the content of the research 09:31:06 14 Q So not quite 200, but almost; is that 09:34:21 right? 09:34:24  15 that we're doing together. 09:31:10 15 right? 09:34:24  16 Q Do you write papers with your 09:31:14 16 A That would be fair. In the CV that's 09:34:35 attached, there are a few more that are not 09:34:38  18 A Yes. 09:31:16 18 included. 09:34:41  19 Q How often? 09:31:18 19 Q Let's go back to the CV and Appendix 09:34:41  20 A Well, we have my CV. There's 09:31:21 21 articles directed to things like "Influence of 09:34:48 11 articles directed to things like "Influence of 09:34:48 12 22 vice versa, you'll get a number. 09:31:28 23 and "Stance Phase Control of Above-Knee 09:34:58 13  10 And I've also contributed over 115 09:34:14 18 papers that are related to hybrid electric 09:34:14 18 papers that are related to hybrid electric 09:34:16 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:16 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are related to hybrid electric 09:34:21 15 18 papers that are rel	7	different kinds of industries, different kinds 09:30:39	7	over 65 journal articles, including at least 13 09:34:03
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Q Somewhere around eight to ten a year, 09:31:30 24 Prosthesis: Knee Control Versus SACH Foot 09:34:58	22	number of years by the number of publications, 09:31:24	22	Fifth Wheel Location on Truck Ride Quality," 09:34:52
			1	
25 if my math is right? 09:31:33 25 Design," and "Evaluation of DC Servo Machine 09:34:58		vice versa, you'll get a number. 09:31:28	23	and "Stance Phase Control of Above-Knee 09:34:54
	23	Q Somewhere around eight to ten a year, 09:31:30		

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1	JEFFREY STEIN	1	JEFFREY STEIN
2	Tool Feed Drives as Force Sensors." 09:35:01	2	do you generally try to write up the new 09:38:26
3	How do you select topics for these 09:35:07	3	developments as a particular traunch of 09:38:31
4	papers? 09:35:10	4	research? 09:38:35
5	A That's an interesting question, a 09:35:32	5	A Can you rephrase that question? 09:38:36
6	complicated question, I think. 09:35:36	6	Q I'll try again. 09:38:39
7	But just generally speaking, papers 09:35:37	7	So you mentioned a few minutes ago 09:38:39
8	are generated as a result of of results you 09:35:39	8	that when you write a paper, you try to present 09:38:42
9	get from your research work. You decide where 09:35:43	9	whatever new developments you've come up with. 09:38:44
10	the new contributions are and you write a paper 09:35:47	10	And I would like you to try to describe that 09:38:48
11	on the contribution. 09:35:50	11	for me a little bit. 09:38:50
12	Q So maybe my question should be 09:35:52	12	MR. ANGILERI: Objection, 09:38:52
13	different then. 09:35:54	13	foundation. 09:38:53
14	How do you decide the direction or 09:35:55	14	BY MR. CORDELL: 09:38:54
15	focus of your research work? 09:35:58	15	Q Let me try it this way, Dr. Stein: 09:38:54
16	A That's also an interesting question, 09:36:09	16	Why do you write a paper? 09:38:56
17	a complicated question. It's a question that 09:36:11	17	A As part of the scientific process, 09:39:11
18	all faculty members have to think long and hard 09:36:14	18	the idea is to inform the rest of your 09:39:13
19	about. 09:36:20	19	colleagues in particular, but the world more 09:39:17
20	But you it's a combination of a 09:36:27	20	generally, of new discoveries that you have 09:39:20
21	number of factors, things that you have some 09:36:32	21	made so that everybody can benefit from the 09:39:25
22	inherent interest in; things that are important 09:36:37	22	knowledge. 09:39:27
23	to local industry and the country and the 09:36:40	23	It helps inform other researchers. 09:39:27
24	world, in terms of problems that need to be 09:36:44	24	It helps industry be able to, you know, utilize 09:39:30
25	solved. 09:36:48	25	in discoveries in what they are doing. 09:39:34
	Page 15		Page 17
1	JEFFREY STEIN	1	JEFFREY STEIN
2	There are also issues that are 09:36:49	2	It is to everybody's benefit to take 09:39:41
3	related to what the national funding agencies 09:37:00	3	the research results, the new results that you 09:39:47
4	are thinking are important topics. They 09:37:04	4	have, and to explain it and provide it in a 09:39:49
5	release call for proposals in particular areas, 09:37:07	5	form that's available to everybody. 09:39:55
6	so that also drives it. 09:37:12	6	Q And when you say "to take the new 09:39:57
7	There are many, many things that 09:37:16	7	research results that you have," I take it the 09:40:00
8	drive the different kinds of decisions that are 09:37:18	8	point of the paper is not to repeat what you've 09:40:01
9	made by faculty members to work in different 09:37:20	9	said before? 09:40:04
10	areas and different topics. 09:37:26	10	MR. ANGILERI: Objection, form. 09:40:06
11	Q So sometimes do your students suggest 09:37:29	11	THE WITNESS: So I guess I would 09:40:15
12	areas of interests that you then pursue as a 09:37:31	12	ask you to rephrase that question, 09:40:15
13	topic of research? 09:37:35	13	please. 09:40:20
14	A Certainly all students bring to the 09:37:47	14	BY MR. CORDELL: 09:40:21
15	table their own personal interests, both 09:37:49	15	Q Why? 09:40:21
16	intellectually and in terms of industry that 09:37:52	16	A Because it's unclear to me. 09:40:22
17	they're interested in working in, and 09:37:54	17	Q What's unclear? 09:40:23
18	applications they're interested in working on. 09:37:56	18	A Well, if I had a clear understanding 09:40:24
19	That ends up blending in with the 09:37:59	19	of what was confusing me, I wouldn't have to 09:40:26
20	needs of the research lab, my lab in this case; 09:38:03	20	ask you. 09:40:28
21	or if I'm working with other faculty members, 09:38:06	21	Q Well, unfortunately, though, that's 09:40:28
22	then these might be group efforts that 09:38:10	22	the only way I know how to clean it up is 09:40:30
23	represent a confluence of interest in a 09:38:16	23	A Well, just take a random stab at it 09:40:33
24 25	confluence of funding agencies. 09:38:20  Q When it comes time to write a paper, 09:38:23	24 25	and I'll tell you the next time it comes back. 09:40:36  Q I don't know. Maybe with this we can 09:40:39
∠ ⊃	Q When it comes time to write a paper, 09:38:23	45	Q I don't know. Maybe with this we can 09:40:39

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# DOCKET

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