

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

- - -

MICROCHIP TECHNOLOGY : C.A. No. 17-1194
INCORPORATED, :
:
Plaintiff, :
:
vs. :
:
APTIV SERVICES US, LLC, :
:
Defendant. :

- - -

TRANSCRIPT OF PROCEEDINGS
TESTIMONY/CHARGE CONFERENCE
VOLUME 4

- - -

Date: Monday, April 11, 2022
Time: 8:30 a.m.
Place: J. Caleb Boggs Federal Building
844 N. King Street
Courtroom 6B
Wilmington, Delaware 19801

Before: HONORABLE JOSHUA D. WOLSON, JUDGE

Reporter: Rose A. Tamburri, RPR, CM, CRR
Notary Public of Delaware

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TRIAL - VOLUME 4

Page 174

1	Your Honor.	11:40:36
2	THE COURT: Okay. Anything	11:40:36
3	further?	11:40:38
4	MR. WIENER: No further questions,	11:40:42
5	Your Honor.	11:40:44
6	THE COURT: Okay. All right.	11:40:45
7	Mr. Voto, you can step down.	11:40:46
8	THE WITNESS: Leave the binders	11:40:46
9	here?	11:40:47
10	THE COURT: No, take those with	11:40:47
11	you and give them back to the lawyers.	11:41:01
12	(Whereupon, the witness was	11:41:01
13	excused.)	11:41:22
14	THE COURT: Before you start, just	11:41:22
15	to clarify, I think where we were this	11:41:33
16	morning, that's the point at which plaintiff	11:41:36
17	is resting; is that correct? You have held it	11:41:38
18	open for that?	11:41:42
19	MR. SLAYDEN: Yes, Your Honor.	11:41:43
20	THE COURT: All right. Okay.	11:41:43
21	(Brief pause.)	11:41:43
22	MS. LI: Good afternoon. Aptiv	11:41:46
23	calls as its next witness, Michael Dreon.	11:41:48
24	THE COURT: Mr. Dreon, come on up.	11:41:50

1	THE COURT CLERK: Please state and	11:42:24
2	spell your name for the record.	11:42:25
3	THE WITNESS: Michael Joseph	11:42:27
4	Dreon, M-I-C-H-A-E-L, J-O-S-E-P-H, D-R-E-O-N.	11:42:29
5	- - -	11:42:31
6	...MICHAEL DREON, after having	11:42:31
7	first been duly sworn and/or affirmed, was	11:42:31
8	examined and testified as follows...	11:42:31
9	- - -	11:42:31
10	THE COURT: You can have a seat.	11:42:49
11	THE WITNESS: Thank you.	11:42:49
12	- - -	11:42:49
13	DIRECT EXAMINATION	11:42:49
14	- - -	11:42:50
15	BY MS. LI:	11:42:50
16	Q. Good morning, Mr. Dreon.	11:42:51
17	Could you please introduce	11:42:52
18	yourself to the jury.	11:42:52
19	A. Hello, I am Michael Dreon.	11:42:53
20	Q. Now, could you tell them a little bit	11:42:55
21	about yourself?	11:42:58
22	A. Yes. I grew up in Pittsburgh,	11:42:58
23	Pennsylvania and attended the University of	11:43:03
24	Pittsburgh for electrical engineering. During	11:43:06

1 my time at the University of Pittsburgh, I 11:43:08
 2 enrolled in a co-op program and I started 11:43:11
 3 working with Packard Electric, which was to 11:43:15
 4 become part of Aptiv Corporation, and so I 11:43:20
 5 have been with Aptiv Corporation for 33 years. 11:43:22

6 I currently reside in Michigan. 11:43:26

7 Q. Now, you said a co-op program. Can 11:43:30
 8 you explain to us what that is? 11:43:32

9 A. Yes. So it's a program offered by 11:43:33
 10 the university where you can work one semester 11:43:35
 11 in industry and then come back and go back to 11:43:38
 12 your studies, and you do that back and forth 11:43:42
 13 to gain practical experience. 11:43:45

14 Q. Did you enjoy that? 11:43:47

15 A. Yes, it was quite interesting to 11:43:48
 16 learn about real-world problems. 11:43:51

17 Q. Now, you mentioned Packard Electric. 11:43:53
 18 Does that relate to Aptiv? 11:43:55

19 A. It does. It's quite a complex 11:43:58
 20 history. Packard Electric, at the time, was 11:44:00
 21 part of General Motors. General Motors was a 11:44:04
 22 pretty vertically integrated company at the 11:44:07
 23 time, meaning they owned a lot of their supply 11:44:10
 24 base, so for wiring, they went to Packard 11:44:12

1	Electric, which they owned; for HVAC systems,	11:44:14
2	they went to Harris Radiator, with they owned.	11:44:17
3	But they decided over time that	11:44:20
4	they didn't want to be as vertically	11:44:22
5	integrated, so they combined those separate	11:44:24
6	divisions together which would become the	11:44:26
7	Allied Component Group, and in 1999, they spun	11:44:28
8	all those suppliers off to become Delphi	11:44:32
9	Corporation. That allowed Delphi to then	11:44:35
10	compete for business from all of the vehicle	11:44:38
11	manufacturers.	11:44:40
12	As you may recall, during the	11:44:43
13	recession in the early 2000s, many of the	11:44:46
14	automakers and the suppliers went into	11:44:49
15	bankruptcy, Delphi included, and so Delphi	11:44:51
16	restructured itself and really focused on more	11:44:55
17	the higher tech industries and components of	11:44:57
18	their -- of the company. And we came out of	11:45:03
19	bankruptcy and rebranded ourselves as Aptiv.	11:45:07
20	Q. And you have been at	11:45:11
21	Aptiv/Delphi/Packard Electric this entire	11:45:13
22	time?	11:45:15
23	A. I have, yes.	11:45:15
24	Q. What has made you stay all of these	11:45:16

1 years? 11:45:19

2 A. Yeah, so Aptiv, and all the prior 11:45:19

3 divisions, offered a lot of variety and work. 11:45:23

4 I am trained as an engineer, but I also enjoy 11:45:27

5 working the business. So I've had the 11:45:30

6 opportunity to do both engineering jobs and 11:45:32

7 business jobs, including working in the 11:45:34

8 operations and sales and business planning. 11:45:36

9 And so the variety has been quite 11:45:40

10 interesting for me, and they've been a pretty 11:45:42

11 good employer. I like working for them and 11:45:46

12 they have treated me well. 11:45:49

13 Q. Now, I'd like to talk a little bit 11:45:50

14 about what Aptiv does. Could you give us a 11:45:52

15 general overview of the sort of products you 11:45:54

16 have, groups you have? 11:45:57

17 A. Yeah. We are a technology company, 11:45:58

18 so we're supplying technology to the 11:46:01

19 automotive manufacturers. We have two 11:46:04

20 divisions within Aptiv; we have the active 11:46:06

21 safety and user experience and we have the 11:46:09

22 connection systems, and we like to brand 11:46:13

23 ourselves and market ourselves as supplying 11:46:16

24 the brains and the nervous system to the 11:46:19

1	vehicles.	11:46:21
2	And so on the brain side, we	11:46:21
3	supply products that would have the computers	11:46:24
4	and sensors that do features like adaptive	11:46:27
5	cruise control, and then we have the	11:46:33
6	connection system side which supply all the	11:46:35
7	wires that connect the sensors to the	11:46:38
8	computers throughout the vehicle. So that	11:46:41
9	would include the wires, the connectors and	11:46:44
10	the terminals for the products.	11:46:46
11	Q. Where does the dual role hub fall in	11:46:50
12	the brains of the nervous system?	11:46:53
13	A. Yeah, that business resides in the	11:46:54
14	connection systems business.	11:46:56
15	Q. How come it's not in the user	11:46:59
16	experience side of things?	11:47:01
17	A. A little bit from a historic	11:47:03
18	standpoint, when USB was first introduced, it	11:47:06
19	was really just a simple connection from the	11:47:09
20	head unit to the -- where the user would put	11:47:11
21	their phone or a memory stick. But as they	11:47:16
22	wanted to add more ports in a car, it then had	11:47:21
23	to have a USB hub added to it.	11:47:25
24	And then as charging standards	11:47:27

1 changed and they wanted to increase the 11:47:30
 2 charging rates and put more power to the 11:47:33
 3 phones, that box became quite complicated and 11:47:35
 4 had electronics in it. 11:47:40

5 But historically, it came from the 11:47:42
 6 connection system and it still resides there. 11:47:43

7 Q. And do you work with the dual role 11:47:46
 8 hub at Aptiv? 11:47:49

9 A. I do. 11:47:49

10 Q. Can you tell us a little bit about 11:47:50
 11 what your job is? 11:47:51

12 A. Yeah. My current role is Director of 11:47:53
 13 Product Line for the consumer connectivity 11:47:56
 14 business. That business has two product 11:48:00
 15 lines, the media modules, which are USB hubs, 11:48:03
 16 and also wireless charging. Those are the 11:48:06
 17 wireless charging mats that you would put your 11:48:09
 18 phone on and conductively charge your phone. 11:48:12

19 Q. Have you always been in the 11:48:15
 20 connectivity side of the business? 11:48:16

21 A. No. I have had a variety of 11:48:18
 22 different roles throughout my career with 11:48:19
 23 Delphi/Aptiv, but that's where I have been for 11:48:24
 24 the last seven years. 11:48:26

1 Q. And what drew you to connectivity 11:48:27
2 seven years ago? 11:48:33

3 A. Yeah, so Aptiv had made an 11:48:33
4 acquisition of a new company called Unwired, 11:48:36
5 and I thought that was a pretty interesting 11:48:39
6 development. And so I inquired about it and I 11:48:42
7 was able to get a position on the Aptiv side 11:48:46
8 to help integrate that business into the 11:48:50
9 business processes of Aptiv, but also to -- I 11:48:52
10 found the product very interesting. I could 11:48:58
11 tell that it was going to have a meaningful 11:49:00
12 impact in the market and I wanted to be part 11:49:03
13 of that. 11:49:06

14 Q. And the product you are talking about 11:49:06
15 is a dual role hub? 11:49:09

16 A. It is, yes. 11:49:11

17 Q. So let's talk about dual role hub a 11:49:12
18 little bit more. Who are Aptiv's customers 11:49:15
19 for the dual role hub? 11:49:17

20 A. So we supply to the vehicle 11:49:19
21 manufacturers. You've heard about The Big 3, 11:49:21
22 so Ford, Chrysler, General Motors, but we also 11:49:23
23 supply all over the world. 11:49:26

24 Q. Are there specific features of the 11:49:28

1 hub that your customers care about? 11:49:31

2 A. Yeah, we've talked about them. The 11:49:33

3 three main features of the OEMs, from a 11:49:35

4 functional standpoint, are interested in is 11:49:37

5 that it has a single connection to the head 11:49:39

6 unit, that any downstream port can enable 11:49:42

7 Apple CarPlay, and whenever CarPlay is being 11:49:48

8 utilized, the other ports are still active for 11:49:51

9 data communication. 11:49:54

10 Q. What about features not related to 11:49:56

11 CarPlay, any of those you care about? 11:49:58

12 A. Yes, absolutely. So you've seen 11:50:01

13 examples of these products. They come with a 11:50:04

14 cosmetic component, and so that's very 11:50:08

15 important to our customers. These are 11:50:09

16 integrated into the dashboard and the look and 11:50:11

17 feel of the vehicle, and so the color of it, 11:50:14

18 the texture of it, it's very important, as 11:50:16

19 well. 11:50:20

20 And the example you see, they are 11:50:21

21 also illuminated, and so the illumination and 11:50:22

22 matching the colors and the intensity within 11:50:26

23 the dashboard is very important to CarPlay. 11:50:29

24 MS. LI: Your Honor, I am marking 11:50:34

1	Exhibit 124, which is in the binder.	11:50:35
2	(Whereupon, Trial Exhibit 124 was	11:50:35
3	introduced.)	11:50:35
4	BY MS. LI:	11:50:35
5	Q. Could you please turn to that, Mr.	11:50:37
6	Dreon.	11:50:38
7	A. Yes.	11:50:38
8	Q. Just let me know when you're there.	11:50:41
9	A. I have it.	11:50:44
10	Q. Great.	11:50:45
11	What is Exhibit 124?	11:50:45
12	A. That's a customer presentation we	11:50:46
13	made to Volkswagen.	11:50:48
14	MS. LI: All right. I offer	11:50:51
15	Exhibit 124.	11:50:53
16	MR. ADAMS: No objection, Your	11:50:55
17	Honor.	11:50:56
18	THE COURT: It's received.	11:50:56
19	MS. LI: Let's go to Slide 13 of	11:50:59
20	this exhibit.	11:51:01
21	BY MS. LI:	11:51:01
22	Q. Are these some of the hub examples	11:51:05
23	you were talking about?	11:51:08
24	A. Yes, this is a slide demonstrating to	11:51:09

1	Volkswagen a variety of different products	11:51:12
2	that we were supplying with the cosmetic	11:51:15
3	illumination on it. You can see many of these	11:51:18
4	have rings around them that would light up	11:51:22
5	whenever we -- whenever the car is turned on.	11:51:24
6	The two in the middle are sort of	11:51:28
7	unique because those were laser etched, so the	11:51:30
8	front surface is painted and then laser	11:51:34
9	etched, and then it's actually illuminated	11:51:36
10	from behind. So a lot of complexity in the	11:51:39
11	cosmetic component.	11:51:41
12	Q. Now, I'd like you to turn to	11:51:43
13	previously marked Exhibit 18 in your binder.	11:51:45
14	A. Yes.	11:51:49
15	Q. What is Exhibit 18?	11:51:50
16	A. This was a presentation that we made	11:51:52
17	to the judges of the PACE Award.	11:51:54
18	MS. LI: I offer Exhibit 18.	11:51:57
19	MR. ADAMS: No objection, Your	11:51:59
20	Honor.	11:52:00
21	THE COURT: It is admitted.	11:52:00
22	BY MS. LI:	11:52:03
23	Q. What is the PACE Award?	11:52:04
24	A. Yeah, so the PACE Award is an award	11:52:06

1 that the Automotive News, in conjunction with 11:52:08
2 one of the sponsors, Ernst & Young, developed 11:52:12
3 to recognize innovations in the auto industry. 11:52:15
4 These are innovations that have made a real 11:52:18
5 impact to the features that consumers would 11:52:22
6 use. 11:52:25
7 Q. Can you give us some examples that 11:52:25
8 are one of the things? 11:52:28
9 A. Yes. One of the innovations that 11:52:31
10 Aptiv came up with is adaptive cruise control, 11:52:33
11 so this is when you're in cruise control, if 11:52:36
12 it senses an object, it will actually slow 11:52:38
13 down and maintain the speed of the object in 11:52:40
14 front of it. 11:52:43
15 Another example is Keyless Go from 11:52:44
16 Siemens. This is where your key fob, which 11:52:50
17 you normally would use to unlock your car, 11:52:53
18 once you enter your car, it would sense it and 11:52:55
19 you can actually just push a button on your 11:52:58
20 car and start it. I've sure you've seen that 11:53:00
21 in some vehicles. 11:53:03
22 So these are very noteworthy 11:53:04
23 innovations that have made a real impact to 11:53:06
24 the customers. 11:53:09

1	Q. And did Aptiv win the PACE Award for	11:53:10
2	the dual role hub?	11:53:13
3	A. We did.	11:53:14
4	MS. LI: Now I am going to mark as	11:53:16
5	Exhibit 369 a physical copy of the PACE Award	11:53:20
6	and I am going to offer it, if I don't break	11:53:22
7	it first.	11:53:26
8	(Whereupon, Trial Exhibit 369 was	11:53:26
9	introduced.)	11:53:26
10	MR. ADAMS: No objection, Your	11:53:28
11	Honor.	11:53:28
12	THE COURT: Okay. It will come	11:53:28
13	in.	11:53:30
14	MS. LI: Okay. We will leave that	11:53:31
15	here for now.	11:53:32
16	BY MS. LI:	11:53:36
17	Q. Let's turn to Slide 31 of this	11:53:37
18	presentation.	11:53:39
19	Now, this refers to FCA; is that	11:53:39
20	Chrysler?	11:53:43
21	A. Yes, it is.	11:53:44
22	Q. And what is this slide showing?	11:53:45
23	A. Yeah, so an important part of the	11:53:47
24	PACE Award and the judging is that nothing you	11:53:51

1	just innovated and came up with an interesting	11:53:56
2	invention that sits on the shelf. They want	11:53:59
3	to know that it actually made an impact. And	11:54:01
4	so they want to know are customers using it.	11:54:03
5	And this particular slide was	11:54:06
6	showing how we had -- were able to sell this	11:54:08
7	innovation to Chrysler.	11:54:12
8	Q. And it says on the third bullet here,	11:54:14
9	"Delphi's dual role hub will be on these 2016	11:54:17
10	and 2017 MY FCA programs."	11:54:20
11	What does that mean, 2016 and 2017	11:54:23
12	MY FCA programs?	11:54:26
13	A. Yeah, so that refers to model years,	11:54:28
14	so those are the model years of the programs.	11:54:30
15	So typically, a vehicle model year would come	11:54:32
16	out the year before, so that would be in 2015	11:54:35
17	and 2016 calendar year.	11:54:38
18	Q. And what's the program? Is that just	11:54:41
19	like a car model?	11:54:43
20	A. Yeah. In this case, it's like a car	11:54:44
21	line, so you can see some of the cars here	11:54:46
22	like the Dodge Charger and the Dodge	11:54:51
23	Challenger featured.	11:54:54
24	Q. Now, did Aptiv win the future leader	11:54:55

1	for these?	11:55:00
2	A. No, we won some of them, but not all	11:55:01
3	of them.	11:55:04
4	Q. How come only some of them?	11:55:04
5	A. Yeah, so in the sourcing process, and	11:55:06
6	you've heard some reference to the vehicle	11:55:09
7	manufacturer comes out with a specification	11:55:12
8	and then we have to meet that specification.	11:55:14
9	So Chrysler was making some changes to update	11:55:16
10	them -- the hubs and they had a unique	11:55:21
11	requirement where they required the use of	11:55:23
12	Microchip hub, and so in their specification,	11:55:27
13	they said we want you to supply the hub, but	11:55:29
14	it has to use a Microchip IC.	11:55:32
15	Q. Why was that unique?	11:55:35
16	A. Yeah, we usually don't see that	11:55:37
17	specified by the vehicle manufacturers.	11:55:39
18	Typically they would just say we need these	11:55:41
19	features and these functions, and it's up to	11:55:43
20	the supplier, like Aptiv, to decide how they	11:55:48
21	actually do that.	11:55:50
22	Q. So you got the specification and it's	11:55:51
23	got Microchip's chip in it. What did you do	11:55:54
24	next?	11:55:56

1	A. Yeah, so we needed to develop a	11:55:57
2	proposal to come back to Chrysler, so we would	11:56:00
3	try to go get those ICs from Microchip to say	11:56:03
4	hey, we want to build this into our proposal	11:56:07
5	to our customer and so we need the pricing, we	11:56:09
6	need to know the technical details of that	11:56:12
7	chip to be able to do that.	11:56:14
8	We were not able to get that from	11:56:16
9	Microchip, so we were sort of at a little bit	11:56:18
10	of a problem being able to quote this business	11:56:22
11	to Chrysler.	11:56:24
12	Q. You said ICs; are ICs the chip?	11:56:25
13	A. Yes, integrated circuit, chip.	11:56:28
14	Q. And you said that you were not able	11:56:31
15	to get this information. So you went to	11:56:33
16	Microchip and asked?	11:56:34
17	A. Yes.	11:56:36
18	Q. And they said no?	11:56:37
19	A. Yeah, we were not able to get the	11:56:40
20	information to quote the Microchip solution	11:56:42
21	for Chrysler.	11:56:46
22	Q. All right.	11:56:46
23	Were you here for Mr. Obolsky's	11:56:47
24	testimony last week?	11:56:50

1	A.	I was, yes.	11:56:51
2	Q.	Do you recall when he said when Aptiv	11:56:52
3		wins, Microchip loses?	11:56:55
4	A.	I do, yes.	11:56:58
5	Q.	Did you understand him there to be	11:56:59
6		referring to Aptiv's sales of the dual role	11:57:01
7		hub?	11:57:04
8	A.	Yes.	11:57:04
9	Q.	So does that statement make sense to	11:57:06
10		you, when Aptiv wins by selling its dual role	11:57:08
11		hub, Microchip loses?	11:57:11
12	A.	No, it's really not a fair comparison	11:57:13
13		because we're at different parts of the supply	11:57:16
14		chain, so we work directly with the vehicle	11:57:18
15		manufacturers and, you know, I don't see	11:57:21
16		ourselves as the competitors against	11:57:25
17		Microchip.	11:57:27
18	Q.	You said you are in different areas	11:57:28
19		of the supply chain. Can you expand on that a	11:57:30
20		little bit more?	11:57:32
21	A.	Yeah. So we are a direct supplier to	11:57:33
22		the vehicle manufacturers and so we have to	11:57:35
23		supply complete solutions, and those complete	11:57:38
24		solutions are made up of a variety of	11:57:41

1 components that come from a -- many different 11:57:44
2 suppliers. 11:57:49

3 When we needed to perform the hub 11:57:49
4 function, and in this case for Chrysler, we 11:57:52
5 needed to utilize the Microchip part. We 11:57:56
6 would go to Microchip and get -- and try to 11:58:00
7 get that. So we're not directly competing, 11:58:03
8 they are suppliers with us. 11:58:09

9 Q. Got it. 11:58:09

10 You are not selling your Boston 11:58:10
11 chip to other hub makers? 11:58:11

12 A. No. We don't supply our Boston chip 11:58:13
13 to any other automakers -- automakers or 11:58:16
14 suppliers like Aptiv. 11:58:20

15 Q. And, in fact, you were willing to buy 11:58:20
16 Microchip's chip from them and they said no? 11:58:22

17 A. Well, there was discussions of could 11:58:26
18 we work together, and I think we were open to 11:58:30
19 that at the time and we would be willing to 11:58:34
20 buy the Microchip solution if it met all the 11:58:37
21 functional requirements, as well as the 11:58:39
22 pricing needs. 11:58:41

23 Q. Now, we also heard from Mr. Obolsky 11:58:44
24 last week, and from Mr. Voto this morning, 11:58:46

1	about this meeting in October of 2015 between	11:58:49
2	Aptiv and Microchip.	11:58:52
3	Do you remember that?	11:58:53
4	A. I do.	11:58:54
5	Q. Were you at that meeting?	11:58:55
6	A. I was.	11:58:57
7	Q. Do you recall Mr. Obolsky's testimony	11:58:58
8	about the notes from that meeting?	11:59:02
9	A. I do, yes.	11:59:04
10	Q. Did they seem accurate to you?	11:59:05
11	A. Yes.	11:59:07
12	Q. All right.	11:59:08
13	I know it was quite awhile ago, so	11:59:09
14	I don't expect you to remember a lot, but can	11:59:12
15	you tell us generally what happened at the	11:59:15
16	meeting?	11:59:16
17	A. Yes. So a little bit of context. I	11:59:16
18	was still relatively new to the business. I	11:59:19
19	came in in March and I think this meeting	11:59:21
20	occurred in the fall, October timeframe. So I	11:59:23
21	was still learning the business.	11:59:27
22	This was the first time I had met	11:59:30
23	with Microchip, and the meeting was called	11:59:32
24	really to discuss what they have been	11:59:35

1 developing and talk about future features. We 11:59:39
 2 were interested in type C at that point and 11:59:42
 3 how we would implement the next generation of 11:59:45
 4 the connector, so we talked about those kinds 11:59:47
 5 of things, the features. 11:59:50

6 Q. And what were you talking about 11:59:51
 7 developing specifically? 11:59:54

8 A. Can you -- 11:59:57

9 Q. Was it related to CarPlay? 11:59:58

10 A. Yeah, we talked about a new chip that 12:00:00
 11 Microchip had come out with that did CarPlay. 12:00:03

12 Q. And what was your reaction to that? 12:00:06

13 A. Yeah, so by that time, we were 12:00:10
 14 already in production with CarPlay with 12:00:12
 15 General Motors and, you know, my feeling was 12:00:14
 16 that they finally figured out how we were 12:00:18
 17 doing it and came out with their own chip. 12:00:20

18 Q. But you were still willing to work 12:00:22
 19 with them going forward? 12:00:24

20 A. Yes. Again, Aptiv is not a chip 12:00:25
 21 developer and it's quite costly, it's a lot of 12:00:29
 22 engineering resources, there is a lot of risks 12:00:33
 23 associated with it. You know, we like to rely 12:00:36
 24 on our supply base to do that innovation, and 12:00:39

1	so we were open to working with Microchip. If	12:00:41
2	they had features that could be at a	12:00:44
3	competitive price, we would be willing to work	12:00:48
4	with them.	12:00:50
5	Q. Were you still feeling like you were	12:00:51
6	willing to work with them at the end of the	12:00:52
7	meeting?	12:00:54
8	A. No. The meeting sort of changed by	12:00:55
9	the end.	12:00:58
10	Q. What happened at the end?	12:00:59
11	A. Well, at the end, they brought up	12:01:00
12	that they felt that we may be infringing on	12:01:03
13	their patents and we told them we didn't think	12:01:07
14	we were. And it sort of ended on a sour note.	12:01:10
15	Q. Now, I want to go back to the	12:01:15
16	Chrysler bid.	12:01:16
17	Were you able to quote Microchip's	12:01:17
18	chip in your proposal to Chrysler?	12:01:19
19	A. We were not.	12:01:21
20	Q. Did you submit a proposal anyway?	12:01:22
21	A. We did. We ended up submitting a	12:01:24
22	proposal that used our Aptiv solution.	12:01:27
23	Q. And you mentioned that you were	12:01:31
24	awarded for some programs. What was your --	12:01:33

1 what was your understanding of why you got 12:01:36
2 those programs? 12:01:40

3 A. So, the electrical functionality is 12:01:41
4 one part of it, but the particular programs 12:01:43
5 that we were awarded had very complex cosmetic 12:01:47
6 requirements. In fact, the one had a door 12:01:51
7 that when you opened it, the illumination 12:01:53
8 changed, so it actually illuminated through 12:01:57
9 the door. 12:01:59

10 And so Chrysler wanted to work 12:02:00
11 with Aptiv because we have a lot of 12:02:02
12 capabilities in that area. And so they were 12:02:04
13 willing to allow a deviation from the 12:02:07
14 Microchip requirement to use our chip. 12:02:10

15 Q. Do you remember which programs those 12:02:15
16 were? 12:02:17

17 A. Yeah, it was the Jeep Wrangler and 12:02:17
18 the Jeep Cherokee, I believe. 12:02:19

19 Q. All right. 12:02:20

20 Now, I want to talk a little bit 12:02:21
21 about Microchip's damages expert, Dr. Becker. 12:02:23

22 Do you remember hearing from him 12:02:26
23 last week? 12:02:27

24 A. I do. 12:02:28

6	A. I do.	12:02:41
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10	A. Yeah, so there are rare instances	12:02:47
11	where we know specifically that the vehicle	12:02:50
12	manufacturer is not implementing CarPlay. The	12:02:53
13	references that Dr. Becker made were to Tesla;	12:02:57
14	we supply hubs to Tesla, but Tesla never	12:03:03
15	implemented CarPlay.	12:03:06

16	We also supply a USB port with our	12:03:07
17	hub chip in it that was used on a video module	12:03:11
18	for Chrysler, I believe it was, and they never	12:03:14
19	implemented it for CarPlay; it was just a	12:03:19
20	video input.	12:03:21

21	And then I think the third example	12:03:22
22	was with the customer, Renault, their head	12:03:24
23	unit, which was supplied by TomTom was never	12:03:29
24	updated to do CarPlay. So we were aware of	12:03:31

2 Q. Did you also provide information 12:03:35

3	about the earliest point a customer could have	12:03:36
---	--	----------

4 | used the dual role hub for CarPlay? 12:03:39

5 | A. Yeah. So in the data I provided when 12:03:41

6 we started to supply the chips, or supply the 12:03:44

7 total module to the vehicle manufacturer, and 12:03:47

8 based on that, we knew the earliest that they 12:03:52

```
9 | could have implemented CarPlay, but we didn't 12:03:55
```

10	know exactly when or if they ever implemented	12:03:57
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```
11 | CarPlay. 12:04:00
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12	Q. So you provided information on	12:04:01
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13	hundreds of hundreds, Dr. Becker said,	12:04:04
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14	hundreds and hundreds of models?	12:04:06
----	----------------------------------	----------

15 A. Yes, we supply a lot of part numbers. 12:04:07

16	Q. Do you have information about whether	12:04:10
----	--	----------

17	those other hundreds and hundreds, excepting	12:04:13
----	--	----------

18 the three we just talked about, were, in fact, 12:04:17

```
19 | used by your customers to do CarPlay?                                12:04:19
```

20	A. No, we don't know when or if they	12:04:20
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21 | ever implemented CarPlay on those products. 12:04:23

22	Q. And who decides whether to support	12:04:26
----	---------------------------------------	----------

23	CarPlay in a car?	12:04:28
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24	A. The vehicle manufacturer.	12:04:29
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1 Q. Can you do CarPlay in a car with just 12:04:31
2 the dual role hub? 12:04:34

3 A. No. We are just part of a system. 12:04:35
4 So, you've seen the system many times. So 12:04:37
5 there's the head unit, there is the cabling 12:04:42
6 that goes to our hub assembly and there is our 12:04:44
7 hub assembly. 12:04:48

8 So we are just part of the system. 12:04:49
9 You can't do CarPlay with just our hub. 12:04:51

10 Q. Does the head unit need to have any 12:04:53
11 particular features to work with the dual role 12:04:55
12 hub to do CarPlay? 12:04:57

13 A. Can you restate that? 12:05:00

14 Q. Sure. 12:05:02

15 Does the head unit need to have 12:05:02
16 any particular features to work with the dual 12:05:04
17 role hub to do CarPlay? 12:05:07

18 A. Well, the head unit has to be 12:05:08
19 designed for CarPlay, so you can't just take a 12:05:10
20 head unit that hasn't been developed 12:05:14
21 specifically for CarPlay and do CarPlay. The 12:05:16
22 head unit has to have the software to talk to 12:05:19
23 the Apple phone and then receive messages from 12:05:22
24 the Apple phone so it can display the icons 12:05:25

1 and you can push the icons and enable the 12:05:28
 2 features on the phone. So the head unit has 12:05:31
 3 to be specifically developed for CarPlay. 12:05:34

4 Q. And who is responsible for putting 12:05:36
 5 that whole system together, the head unit, 12:05:38
 6 dual role hub, the connection? 12:05:40

7 A. The vehicle manufacturer determines 12:05:42
 8 what the requirements are for each of the 12:05:46
 9 components and works with the supplier of each 12:05:48
 10 of those components, and then is ultimately 12:05:51
 11 responsible for knowing that it functions all 12:05:54
 12 together. 12:05:58

13 Q. Now, the examples we just talked 12:05:58
 14 about, Tesla, Renault, the Chrysler video 12:06:00
 15 module, were those examples where the 12:06:04
 16 customers chose not to support CarPlay? 12:06:07

17 A. Yeah, those particular systems, in 12:06:10
 18 the case of the video, didn't have CarPlay 12:06:14
 19 ever considered and the other ones, they did 12:06:16
 20 not implement CarPlay. 12:06:18

21 Q. So what if the carmaker wants to do 12:06:20
 22 CarPlay, and is there a reason they might not 12:06:23
 23 be able to, even if they have the dual role 12:06:25
 24 hub? 12:06:27

1 A. Yeah. So the vehicle manufacturer 12:06:28
2 has to eventually get Apple certified; I think 12:06:30
3 you heard some reference to that. So once 12:06:35
4 they have a system that's developed to their 12:06:37
5 specifications, they need to go to Apple and 12:06:39
6 get approval. And if they don't get approval 12:06:43
7 from Apple, Apple could make them not provide 12:06:47
8 that feature in the car. 12:06:51

9 Q. So say Ford gets Apple certified. 12:06:53
10 Does that mean Chrysler can go to Apple and 12:06:58
11 say hey, can I get automatically certified, 12:07:00
12 too? 12:07:02

13 A. No. The systems at the OEMs are all 12:07:03
14 very different, even down to the vehicle 12:07:06
15 level. So in many cases, each individual 12:07:08
16 vehicle has to be approved by Apple, certified 12:07:12
17 by Apple. 12:07:16

18 There are some instances where the 12:07:17
19 vehicle systems could be very similar, so it 12:07:21
20 is using the same head unit, very similar 12:07:24
21 cabling and the same hub assembly, and in 12:07:27
22 those cases, they could get Apple 12:07:29
23 certification for multiple vehicles, but never 12:07:32
24 across vehicle manufacturers. 12:07:35

1	Q. And you said you sell lots of	12:07:37
2	different models of the dual role hub. Do you	12:07:39
3	track if or when the customers for those	12:07:41
4	particular models get Apple certified?	12:07:43
5	A. No, we don't know when they submit	12:07:46
6	for Apple certification or if they even ever	12:07:50
7	get Apple certification.	12:07:53
8	Q. All right.	12:07:54
9	Let's go back to Exhibit 18, which	12:07:55
10	was the PACE Award certification, and let's	12:07:58
11	turn to slide 24.	12:08:01
12	What is this slide showing?	12:08:03
13	A. Yes, so part of the PACE Award, they	12:08:08
14	want to understand how the innovation came	12:08:12
15	about and what was the process to go from the	12:08:16
16	conception of the innovation to making it	12:08:20
17	commercially viable, and this is the summary	12:08:24
18	of that process.	12:08:26
19	Q. If we look at Box 1 here, it says,	12:08:28
20	"Identified industry relevant issues with	12:08:30
21	integrating iPhone into vehicle	12:08:33
22	architectures."	12:08:36
23	What relevant issues are you	12:08:36
24	talking about there?	12:08:38

1 A. Yeah, so the relevant issues that we 12:08:39
2 identified was the need to supply a hub that 12:08:43
3 had a single upstream port to the head unit 12:08:46
4 that allowed for any downstream port to do 12:08:50
5 CarPlay, and then while one of those ports was 12:08:53
6 in CarPlay mode, that the other port was still 12:08:55
7 able to communicate data to the head unit. 12:09:00

8 Q. And did you address all of those 12:09:03
9 issues with the dual role hub? 12:09:05

10 A. We did, yes. 12:09:07

11 Q. Was anyone else at the time 12:09:07
12 addressing all of those issues? 12:09:09

13 A. No. 12:09:11

14 Q. So was it a big deal that you did? 12:09:12
15 Did you get any feedback from your customers? 12:09:14

16 A. Yeah. All the customers were very 12:09:17
17 excited. I came into the group in March, and 12:09:19
18 one of my roles was to promote this to other 12:09:23
19 customers globally, and many of the customers 12:09:26
20 that we went into were very excited to see 12:09:30
21 this. They were facing the same problem and 12:09:33
22 same challenges. 12:09:36

23 In fact, I went to Korea to 12:09:37
24 promote this to Hyundai and we set up a 12:09:40

1 meeting with four or five engineers, and when 12:09:43
2 we turned -- we showed up for the meeting, 12:09:47
3 there were 25 engineers in the meeting excited 12:09:50
4 to see this innovation. 12:09:54

5 And when we demonstrated it and 12:09:56
6 showed the three key features to them, they 12:09:57
7 didn't believe that we had done it. There was 12:10:00
8 a lot of skepticism and, quite frankly, they 12:10:03
9 did not believe we had a solution. 12:10:05

10 Q. So you did a demo and they thought it 12:10:07
11 was great? 12:10:07

12 A. Yeah, we did the demo, and even after 12:10:11
13 the demo, they were quite skeptical, so it was 12:10:13
14 an innovation that was almost unbelievable. 12:10:16

15 Q. Now, I want to go to Box No. 2. 12:10:19

16 It says at the bottom there, 12:10:21
17 "Delphi," now Aptiv, "has a 'Patent Pending'
18 for the Dual Role Hub innovation," and then it 12:10:26
19 lists a number. 12:10:28

20 What is that referring to? 12:10:29

21 A. Yeah, so that was a patent that we 12:10:30
22 submitted for the dual role hub innovation. 12:10:33

23 Q. Did you end up getting any patent? 12:10:36

24 A. Yes, we ended up getting five 12:10:38

1	patents.	12:10:41
2	Q. Are those the patents that we just	12:10:41
3	saw Mr. Voto go through?	12:10:43
4	A. That's correct.	12:10:44
5	MS. LI: All right. Thank you.	12:10:46
6	No further questions.	12:10:47
7	- - -	12:11:07
8	CROSS-EXAMINATION	12:11:07
9	- - -	12:11:10
10	BY MR. ADAMS:	12:11:10
11	Q. Good afternoon now, Mr. Dreon. How	12:11:10
12	are you today?	12:11:12
13	A. I'm doing well. Good afternoon.	12:11:12
14	Q. Good to see you again. Darryl Adams	12:11:14
15	representing Microchip.	12:11:17
16	Mr. Dreon, you just testified that	12:11:18
17	you worked for Aptiv Corporation, let me get	12:11:22
18	my pen with me, in one form or another, for	12:11:24
19	33 years; correct?	12:11:30
20	A. Yes.	12:11:31
21	Q. And when you started at the first --	12:11:31
22	when you first started, Aptiv, what's now	12:11:34
23	Aptiv, was part of General Motors; correct?	12:11:37
24	A. That's correct.	12:11:39

1	Q. And then it subsequently got, I think	12:11:40
2	you used the term "spun out, divided off,"	12:11:43
3	from General Motors into Delphi Corporation;	12:11:46
4	correct?	12:11:49
5	A. That's correct.	12:11:50
6	Q. Okay.	12:11:50
7	And Delphi Corporation, itself,	12:11:51
8	was a very large corporation; correct?	12:11:54
9	A. Yes.	12:11:58
10	Q. It was the biggest auto parts	12:12:00
11	manufacturer/supplier in the United States;	12:12:04
12	correct?	12:12:06
13	A. I don't know where it fits in the	12:12:08
14	size, but it was very large, yes.	12:12:10
15	Q. Fair enough.	12:12:13
16	And then Aptiv was subsequently	12:12:14
17	spun off out of Delphi; correct?	12:12:18
18	A. No, it was a little different than	12:12:22
19	that. Aptiv -- Aptiv was actually the part	12:12:23
20	that stayed with Delphi and Delphi spun off a	12:12:30
21	subsidiary and that company kept the Delphi	12:12:34
22	name.	12:12:37
23	So it is a little complex, but	12:12:37
24	the -- the company that spun off was called	12:12:40

1	Delphi, but the company that stayed was	12:12:44
2	renamed as Aptiv.	12:12:47
3	Q. Okay. Thank you.	12:12:49
4	A. A little complicated.	12:12:51
5	Q. A little complicated, I'll say.	12:12:53
6	So Delphi, or at least some	12:12:55
7	portion of it, became Aptiv; correct?	12:12:57
8	A. That's correct.	12:12:58
9	Q. And Aptiv, even after these spin-offs	12:12:59
10	of divisions, is still a large company, isn't	12:13:02
11	it?	12:13:07
12	A. Yes.	12:13:07
13	Q. And Aptiv currently has over 190,000	12:13:08
14	employees; is that correct?	12:13:13
15	A. I don't know how many exactly they	12:13:15
16	have, but they have a lot of employees.	12:13:18
17	Q. Okay.	12:13:20
18	If I represent to you that Aptiv's	12:13:20
19	website indicates it has 190,000 employees,	12:13:23
20	you wouldn't disagree with that, would you?	12:13:27
21	A. I would say that I would believe it,	12:13:29
22	yes.	12:13:31
23	Q. Okay.	12:13:31
24	Now, Mr. Dreon, you're not only an	12:13:31

1	employee of Aptiv, but you are the Aptiv	12:13:35
2	corporate representative in this litigation;	12:13:37
3	correct?	12:13:40
4	A. Yes. Yes, I'm here on behalf of	12:13:41
5	Aptiv.	12:13:44
6	Q. Until recently that got you a front	12:13:44
7	row seat to this, but you were here when Mr.	12:13:46
8	Obolsky testified that Microchip has 18 to	12:13:51
9	19,000 employees; correct?	12:13:58
10	A. Yes.	12:14:00
11	MR. ADAMS: Mr. Ferrer, could you	12:14:03
12	put up our demonstrative there? Do I need to	12:14:04
13	do something? No? The PowerPoint on	12:14:09
14	employees.	12:14:17
15	BY MR. ADAMS:	12:14:24
16	Q. So Microchip has about 19,000	12:14:24
17	employees, you heard Mr. Obolsky say that;	12:14:26
18	correct?	12:14:29
19	A. Yes.	12:14:29
20	Q. And Aptiv has about 190,000	12:14:30
21	employees; correct?	12:14:34
22	A. Yes.	12:14:35
23	Q. Okay.	12:14:35
24	And I wouldn't use this term, I	12:14:36

1	think it is offensive, but you were here when	12:14:40
2	your counsel referred to Microchip as a	12:14:42
3	900-pound gorilla; correct?	12:14:45
4	A. Yes.	12:14:46
5	Q. And if Microchip, at 19,000	12:14:48
6	employees, is a 900-pound gorilla, then Aptiv	12:14:52
7	is a much bigger, more imposing force than	12:14:59
8	that; correct?	12:15:02
9	A. I don't know how you would make a	12:15:06
10	comparison between companies and gorillas.	12:15:10
11	Q. Okay. All right. Fair enough.	12:15:14
12	Microchip has been a long-time	12:15:15
13	supplier to Aptiv; correct?	12:15:19
14	A. Yes.	12:15:21
15	Q. Over 25 years?	12:15:22
16	A. I don't know exactly, but that	12:15:25
17	wouldn't surprise me.	12:15:27
18	Q. Okay.	12:15:28
19	You have been there for 33 years;	12:15:29
20	correct?	12:15:31
21	A. Yes.	12:15:31
22	Q. And you have been aware of Microchip	12:15:32
23	for the majority of your career; correct?	12:15:34
24	A. Yes, probably. I mean, we used some	12:15:40

1 of their microcontrollers early in my career, 12:15:43

2 yes. 12:15:47

3 Q. And Microchip has stuck with Aptiv 12:15:49

4 through some hard times for Aptiv; correct? 12:15:51

5 A. Yes. 12:15:54

6 Q. And you mentioned earlier that Aptiv, 12:15:55

7 when it was Delphi, had filed for bankruptcy; 12:15:58

8 correct? 12:16:02

9 A. Yes. 12:16:02

10 Q. And they were in bankruptcy for about 12:16:03

11 four years, from 2005 to 2009? 12:16:07

12 A. That sounds about right. 12:16:11

13 Q. Okay. 12:16:13

14 And during that time, Microchip 12:16:13

15 continued to supply parts to Aptiv; correct? 12:16:17

16 A. To the best of my knowledge. I 12:16:21

17 wasn't involved in the supply chain at that 12:16:23

18 time, so I don't know what happened between 12:16:26

19 the two companies during that timeframe. 12:16:28

20 Q. Okay. 12:16:31

21 But you -- you wouldn't dis -- 12:16:31

22 I'll just move on. 12:16:36

23 And Aptiv actually helped -- 12:16:37

24 excuse me, Microchip helped Aptiv during that 12:16:39

1 timeframe design new products; correct? 12:16:43

2 A. I'm not personally aware of that, but 12:16:46

3 it's conceivable. 12:16:49

4 Q. Okay. 12:16:50

5 And in 2006, while Aptiv or Delphi 12:16:50

6 is still in bankruptcy, there was more 12:16:59

7 turmoil; correct? There was an SEC 12:17:03

8 investigation into fraud at Delphi; correct? 12:17:05

9 MS. LI: Objection. 12:17:08

10 THE COURT: Sustained. 12:17:09

11 BY MR. ADAMS: 12:17:12

12 Q. But through the bankruptcy and for 12:17:13

13 25 years, Microchip continued to supply parts 12:17:17

14 to Aptiv; correct? 12:17:22

15 A. I don't have personal knowledge of 12:17:26

16 the supply of Microchip products throughout 12:17:29

17 that timeframe. I'm certain that we had a 12:17:33

18 relationship. I don't know whether there were 12:17:36

19 disruptions or not, so I don't have personal 12:17:39

20 knowledge of the -- of the continuance of 12:17:41

21 supply during that time. 12:17:46

22 Q. And Microchip considered, at least at 12:17:47

23 the time -- 12:17:58

24 MR. ADAMS: Would you put up 12:17:58

1	Exhibit 9, please.	12:17:59
2	BY MR. ADAMS:	12:18:04
3	Q. Were you at -- were you working with	12:18:04
4	Delphi data connectivity when this letter was	12:18:09
5	received, Mr. Dreon?	12:18:14
6	A. I was not.	12:18:15
7	Q. Okay.	12:18:16
8	In this letter, Microchip	12:18:18
9	indicates that it views Aptiv as a valued	12:18:22
10	business partner; correct?	12:18:26
11	A. That's what it states, yes.	12:18:31
12	Q. Did Aptiv consider Microchip a valued	12:18:33
13	business partner; do you know, Mr. Dreon?	12:18:36
14	A. At that time, I wasn't involved with	12:18:39
15	anything related to electrical or electronic	12:18:43
16	components, so I don't know what the business	12:18:48
17	relationship was.	12:18:50
18	Q. Gotcha.	12:18:51
19	You're now involved with	12:18:53
20	electrical and electronic components; correct?	12:18:54
21	A. Yes.	12:18:56
22	Q. Okay.	12:18:57
23	Do you believe Aptiv considers	12:18:57
24	Microchip a valued business partner?	12:19:01

1	A. Yes.	12:19:04
2	Q. Now, Mr. Dreon, you had a discussion	12:19:06
3	in your direct about CarPlay -- Apple	12:19:12
4	certification and head unit changes and	12:19:17
5	whether manufacturers are using -- how they're	12:19:19
6	using the dual role hubs.	12:19:22
7	You're not an expert in this	12:19:25
8	matter; correct?	12:19:26
9	A. No, I'm not.	12:19:27
10	Q. So you're not offering an opinion	12:19:28
11	that the dual role hubs or the Boston chip	12:19:31
12	would only be within the scope of the '243	12:19:34
13	Patent if it was used in an Apple certified	12:19:40
14	car. That's not what you're saying; right?	12:19:42
15	A. Could you restate that?	12:19:44
16	Q. Yeah, that was a long question. Let	12:19:46
17	me restate it.	12:19:48
18	You're not offering an opinion	12:19:49
19	about whether the Boston chips infringe	12:19:51
20	whether -- depending on whether they are used	12:19:55
21	in an Apple certified car?	12:19:58
22	A. No, I am not offering that opinion.	12:19:59
23	Q. Okay.	12:20:01
24	And you are not offering an	12:20:01

1	opinion about whether the Boston chips only	12:20:03
2	infringe if the head unit operates in a	12:20:09
3	certain way?	12:20:12
4	A. No.	12:20:14
5	Q. Okay.	12:20:15
6	You're not offering any opinions	12:20:15
7	at all about when the Boston chip does or does	12:20:17
8	not infringe; correct?	12:20:22
9	A. No, I'm not.	12:20:25
10	Q. Okay.	12:20:26
11	And there was a discussion about	12:20:28
12	Dr. Becker reviewing a spreadsheet, and there	12:20:30
13	were certain items that weren't CarPlay	12:20:33
14	enabled compatible.	12:20:38
15	You're not suggesting that Dr.	12:20:40
16	Becker miscounted the number of Boston chips	12:20:43
17	relevant to this case, are you?	12:20:46
18	MS. LI: Objection, calls for a	12:20:50
19	legal conclusion.	12:20:52
20	THE COURT: Sustained.	12:20:53
21	BY MR. ADAMS:	12:20:56
22	Q. Are you offering any opinions about	12:20:56
23	the number -- the proper number of accused	12:20:59
24	devices in this case?	12:21:03

1	A. As far as an opinion, I mean, I know	12:21:11
2	what data I provided, and that data shows	12:21:13
3	where we know Apple CarPlay was not used. In	12:21:17
4	any other case, we don't know when Apple	12:21:22
5	CarPlay was implemented.	12:21:24
6	Q. And you're not offering an opinion	12:21:26
7	about whether it's necessary for Apple CarPlay	12:21:28
8	to be used to infringe the '243 Patent;	12:21:32
9	correct?	12:21:35
10	A. I -- no, I don't have an opinion on	12:21:38
11	that.	12:21:40
12	MR. ADAMS: Nothing more, Your	12:21:41
13	Honor.	12:21:43
14	THE COURT: Okay.	12:21:43
15	Any follow-up?	12:21:44
16	MS. LI: No, Your Honor.	12:21:45
17	THE COURT: Why don't we say that	12:21:47
18	this is a good moment to take a break for	12:21:50
19	lunch. I am going to try to keep it, again,	12:21:52
20	to -- why don't we plan to be back at	12:21:54
21	1 o'clock. That should give you enough time	12:21:58
22	and also to keep things moving along. Okay.	12:22:02
23	(Whereupon, the jury was excused	12:22:05
24	from the courtroom.)	12:22:07

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 witnesses were duly sworn to tell the truth, the whole truth, and nothing but the truth; that the testimony of said witnesses was correctly recorded in machine shorthand by me and thereafter transcribed under my supervision with computer-aided transcription; that the transcript is a true and correct record of the testimony given by the witnesses; and that I am neither of counsel nor kin to any party in said action, nor interested in the outcome thereof.

WITNESS by hand at
this 11th day of April, 2022.



Notary Public

Job No. 5162170