1
IN THE UNITED STATES DISTRICT COURT
2 FOR THE DISTRICT OF DELAWARE
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- - -
4
MICROCHIP TECHNOLOGY : C.A. No. 17-1194
5 INCORPORATED, :
:
6 Plaintiff, :
:
7 vs. :
:
8 APTIV SERVICES US, LLC, :
:
9 Defendant. :
10 - - -
11 TRANSCRIPT OF PROCEEDINGS
12 TESTIMONY
13 - - -
14 Date: Thursday, April 7, 2022
15 Time: 9 o'clock a.m.
16 Place: J. Caleb Boggs Federal Building
844 N. King Street
17 Courtroom 6B
Wilmington, Delaware 19801
18
19 Before: HONORABLE JOSHUA D. WOLSON, JUDGE
20
Reporter: Rose A. Tamburri, RPR, CM, CRR
21 Notary Public of Delaware
22 - - -
VERITEXT LEGAL SOLUTIONS
23 MID-ATLANTIC REGION
1801 Market Street, Suite 1800
24 Philadelphia, Pennsylvania 19103

Slayden, are you going next? 13:25:05

MR. SLAYDEN: Yes. 13:25:08

THE COURT: All right. Who do you 13:25:08

call? 13:25:09

MR. SLAYDEN: I call Mr. Obolsky. 13:25:11

THE COURT: All right. Mr. 13:25:12

Obolsky, please come up. 13:25:13

THE COURT CLERK: Would you please 13:25:33

stand and raise your right hand. Please state 13:25:35

and spell your name for the record. 13:25:37

THE WITNESS: My name is Mitch 13:25:39

Obolsky, it's M-I-T-C-H, last name is 13:25:40

O-B-O-L-S-K-Y. 13:25:45

- - - 13:25:46

...MITCHEL OBOLSKY, after having 13:25:46

first been sworn and/or affirmed, was examined 13:25:46

and testified as follows... 13:25:46

- - - 13:25:58

DIRECT EXAMINATION 13:25:58

- - - 13:26:02

BY MR. SLAYDEN: 13:26:02

Q. Please state your name for the 13:26:03

record. 13:26:04

A. Yes, my name is Mitch Obolsky. 13:26:05

Q. When did you join Microchip? 13:26:09
A. I joined Microchip in 1995. 13:26:11
Q. What's your current title in 13:26:14
Microchip? 13:26:16
A. My current title is Senior Vice 13:26:16
President of the Networking and Data Center 13:26:19
Business Unit. 13:26:23
Q. Can you describe your 13:26:23
responsibilities to the jury, please. 13:26:24
A. Yes. At the highest level, I run 13:26:26
four business units of Microchip and they all 13:26:29
are related to wire connectivity. 13:26:31
Q. How long have you been in your 13:26:35
current position? 13:26:38
A. The current position I've held is 13:26:39
about four years. 13:26:41
Q. And as Senior Vice President, do you 13:26:42
manage any engineers? 13:26:45
A. Yes, I do. 13:26:46
Q. How many? 13:26:47
A. Today, roughly 2,000 engineers. 13:26:48
Q. Can you describe to the jury the type 13:26:51
of products that fall under your 13:26:54
responsibility at Microchip? 13:26:55

A. Yeah. At a high level, they are all 13:26:56
wire connectivity. Do you want me to give a 13:27:00
little more detail? 13:27:02
Q. Maybe just a little bit. 13:27:03
A. Okay. So the ones we're talking 13:27:05
about come from one of my business units 13:27:07
that's a USB and Ethernet, we've seen a lot 13:27:09
about USB. 13:27:13
Another business unit does what's 13:27:13
called host, the automotive infotainment 13:27:16
group, and that business does connectivity 13:27:20
from the head unit out to the speaker. 13:27:22
Another business unit works on 13:27:24
data center storage products, and the last one 13:27:25
works on telecom products. 13:27:28
Q. And are you in charge -- is your 13:27:31
group in charge, I'm sorry, or is it your 13:27:35
responsibility over the Sandia chip that's 13:27:38
involved in this case? 13:27:41
A. Yes. That falls under my 13:27:42
responsibility. 13:27:45
Q. Okay. 13:27:45
Let's back up a little bit and let 13:27:47
the jury know a little bit about you. 13:27:49

1 Where did you attend college? 13:27:50
2 A. I attended college in upstate New 13:27:52
3 York; I went to Cornell University. 13:27:54
4 Q. And what did you study? 13:27:56
5 A. I studied electrical engineering. 13:27:57
6 Q. What year did you graduate? 13:28:00
7 A. I graduated in 1983. 13:28:01
8 Q. Well, over the past 40 years, have 13:28:04
9 you had time to have a family? 13:28:09
10 A. Yes, I did. 13:28:09
11 Q. Are you married? 13:28:10
12 A. Yes, I am. 13:28:11
13 Q. How long have you been married? 13:28:12
14 A. I've been married also about 13:28:14
15 40 years. 13:28:16
16 Q. And do you have kids? 13:28:16
17 A. Yes, three. 13:28:17
18 Q. Okay. 13:28:17
19 Are they still at home? 13:28:18
20 A. No, they've all left. 13:28:19
21 Q. Well, did you have the chance -- did 13:28:22
22 they have any grandchildren for you? 13:28:25
23 A. Yes, I have four granddaughters so 13:28:28
24 far. 13:28:31

1 Q. You said 1995. I guess if my math is 13:28:31
2 right, I think you've been at Microchip for 13:28:33
3 27 years? 13:28:36
4 A. Yes, 27 years. 13:28:37
5 Q. Can you tell the jurors why you've 13:28:38
6 been at Microchip for 27 years? 13:28:39
7 A. Yes. You know, Microchip is a 13:28:41
8 special company in semiconductors in that it's 13:28:45
9 purpose built. Culture is one that's 13:28:49
10 enjoyable in that world. We have a definition 13:28:51
11 of what we expect out of an employee, we 13:28:56
12 measure it regularly, and, you know, the 13:28:59
13 people work very well together. 13:29:02
14 Q. Has Microchip changed over the 13:29:06
15 27 years you've been there? 13:29:09
16 A. Yes, it has. 13:29:10
17 Q. And has Microchip's product offerings 13:29:11
18 grown over those 27 years? 13:29:13
19 A. Yeah. So that's the change. 13:29:14
20 Microchip has grown substantially. Microchip 13:29:16
21 was -- you know, when I joined originally, it 13:29:18
22 was a small company. Now it's maybe 30 times 13:29:21
23 the size it was when I first joined. And, you 13:29:23
24 know, we were a very narrow product offering, 13:29:27

you know, what was called microcontrollers, 13:29:31
that was one or two business units, and today 13:29:34
we have 25 business units, so we're a much 13:29:36
bigger company today. 13:29:39
Q. About how many different products 13:29:39
does Microchip offer today? 13:29:41
A. So, yeah, it's a big number that's 13:29:43
roughly 180,000 different part numbers that 13:29:46
are available for sale today. 13:29:49
Q. Can you describe to the jury some 13:29:51
examples of the products Microchip makes? 13:29:53
A. Sure. We talked about the ones that 13:29:56
were under my direct responsibility, so in the 13:30:01
world of USB, there would be products for 13:30:04
microcontrollers, for all kinds of PCs, for 13:30:07
consumer products. Microcontrollers were a 13:30:11
key to the company. What we described as 8, 13:30:14
16 and 32-bit, which is basically a small, 13:30:17
medium and large size. Those products are 13:30:20
used to drive a very large number of 13:30:22
electronic devices. 13:30:24
Probably most of you have a 13:30:25
hundred different parts of a microchip in some 13:30:27
part that you've bought, just hidden inside. 13:30:31

1 Q. Does Microchip make consumer 13:30:33
2 products? 13:30:35
3 A. Yeah, Microchip does make products 13:30:36
4 that are sold into consumer products. 13:30:38
5 Q. Okay. All right. 13:30:41
6 Has Microchip's capacity to 13:30:42
7 produce and make microchips grown since you've 13:30:44
8 been at the company? 13:30:49
9 A. Yeah. As a rough estimate, we 13:30:50
10 probably produced about a million parts a day 13:30:51
11 when I first joined, and today we produce more 13:30:54
12 than 20 million parts today, so about 20X. 13:30:56
13 Q. So what is that per year do you 13:30:59
14 think, on average, of chips that Microchip 13:31:01
15 makes? 13:31:03
16 A. At a high level, we currently are 13:31:04
17 running roughly eight billion units per year, 13:31:06
18 so that's like more than there's every person 13:31:09
19 on the planet to get a sense where you likely 13:31:12
20 have one. 13:31:15
21 Q. Does Microchip make the same number 13:31:16
22 of chips of each chip each month or does it 13:31:18
23 vary? 13:31:20
24 A. So we -- we make whatever the 13:31:20

1 customers ask for, and that varies 13:31:23
2 considerably across the year. So yes, we 13:31:26
3 respond to the needs. For example, a lot of 13:31:29
4 our customers buy a lot of their products 13:31:33
5 Christmastime. They make consumer products 13:31:36
6 that are only used from October to December 13:31:38
7 and sold only at Christmas. 13:31:40
8 Other companies like automotive 13:31:42
9 industry tends to ramp in June by every year 13:31:44
10 and by March have stopped buying product. So 13:31:48
11 every one of our customers has a different 13:31:50
12 pattern, so we're quite flexible. 13:31:52
13 Q. And talking about customers, what is 13:31:54
14 the preferred customer at Microchip? 13:31:56
15 A. So a preferred customer is usually 13:31:57
16 one of our larger customers and someone we 13:31:59
17 have a strong relationship, we give them 13:32:02
18 preferred service, preferred support. In most 13:32:04
19 cases, what's important to them is the 13:32:08
20 technical support. We have a very large 13:32:11
21 number of sales and technical people that are 13:32:13
22 application engineers and we would help them 13:32:17
23 develop a design, get it into production, work 13:32:20
24 with all the qualification testing and even 13:32:22

solve issues later. 13:32:25

Q. Pricing, do your preferred customers 13:32:27

get discounts on Microchip products? 13:32:30

A. Yes. If you are a larger preferred 13:32:32

customer, certainly you get a price that's 13:32:34

well below what would be our normal list 13:32:36

price. 13:32:38

Q. And can you explain to the jurors how 13:32:38

that pricing is set for preferred customers? 13:32:40

A. Yes. So for large customers, we use 13:32:43

sort of a long-term agreement. They are not 13:32:49

formal agreements, but, in essence, what we do 13:32:51

is quote all the parts we sell to them once a 13:32:53

year; we give them the prices for that year 13:32:57

and they give us a forecast of how much 13:32:59

they're going to buy. And then, you know, how 13:33:01

much they intend to buy the next four years, 13:33:03

and we give them a rough estimate of what 13:33:05

they'll pay. So they can make give us a 13:33:07

forecast. 13:33:10

Q. Would it be correct to say that if 13:33:10

they buy more chips or earn more chips, they 13:33:12

get a better pricing? 13:33:15

A. Yes, certainly. During the annual 13:33:16

1 agreements, often we find if they decided to 13:33:18
2 use our product in more locations, then they 13:33:21
3 would pay less per unit, or if they were going 13:33:23
4 to use it less, then they would pay more. 13:33:25
5 Q. Do the terms of the long-term 13:33:28
6 agreements that you mentioned change year to 13:33:30
7 year? 13:33:32
8 A. Yes. So again, you know, it's just a 13:33:34
9 forecast. The customers' business changes 13:33:37
10 over time and, you know, based on that most 13:33:40
11 recent use for last year, often it will be 13:33:42
12 higher or lower than first said. The plans 13:33:46
13 change. It's hard to have five years correct. 13:33:48
14 But each year, we review it and 13:33:50
15 then we come up with a price for the next 13:33:52
16 coming year. 13:33:55
17 Q. Is that an agreement between you and 13:33:56
18 the customer? 13:33:58
19 A. Yes, it is. 13:33:59
20 Q. This case is about Microchip's '243 13:33:59
21 Patent. 13:34:02
22 During your 27 years, have you 13:34:02
23 seen Microchip invest in innovation? 13:34:05
24 A. Yes. Microchip has a large number of 13:34:07

1 engineers and their jobs are research and 13:34:12
2 development to provide new features to new 13:34:15
3 products. 13:34:18
4 Q. Does Microchip file patent 13:34:19
5 applications to protect its innovations? 13:34:22
6 A. Yes, it does. 13:34:24
7 Q. And do you know how many patents 13:34:25
8 Microchip currently owns worldwide? 13:34:28
9 A. Yeah, today roughly 7,000 worldwide 13:34:30
10 patents. 13:34:32
11 Q. And during your 27 years, have you 13:34:32
12 ever been granted a patent? 13:34:35
13 A. Yes, I have. One patent. 13:34:35
14 Q. Does Microchip use your invention? 13:34:39
15 A. No, it does not. 13:34:42
16 Q. Do you think there's a future market? 13:34:44
17 A. Potentially. You know, the patent 13:34:47
18 has applicability. The challenge is to find a 13:34:50
19 way to use it, and the price point has to be 13:34:54
20 right for a customer, so some day. 13:34:59
21 Q. Okay. 13:35:01
22 I think you have your exhibit 13:35:01
23 notebook there. Can you turn to Exhibit 1, 13:35:03
24 please. 13:35:05

1 MR. SLAYDEN: Mr. Ferrer, can we 13:35:13
2 look at Exhibit 1. 13:35:14
3 BY MR. SLAYDEN: 13:35:15
4 Q. Do you recognize Exhibit 1, Mr. 13:35:16
5 Obolsky? 13:35:18
6 A. Yes, I do. 13:35:18
7 Q. And on the first page, do you see 13:35:19
8 where it lists assignee? 13:35:21
9 A. Yes, I do. 13:35:23
10 Q. And what company does it identify? 13:35:24
11 A. It lists Standard Microsystems 13:35:26
12 Corporation. 13:35:30
13 Q. And do you have a nickname for that? 13:35:30
14 A. Yeah, we call it SMSC. 13:35:32
15 Q. Did Microchip purchase SMSC? 13:35:35
16 A. Yes, we did. 13:35:37
17 Q. And when was that, if you know? 13:35:38
18 A. It was roughly 2012, when the deal 13:35:40
19 closed. 13:35:43
20 Q. Do you know how much Microchip paid 13:35:44
21 for SMSC? 13:35:46
22 A. Yes. Net we paid about $750 million 13:35:47
23 for SMSC. 13:35:50
24 Q. Can you explain to the jury why you 13:35:52

1 would pay $750 million for SMSC? 13:35:53
2 A. Yes. Microchip buys many companies, 13:35:56
3 and the reason we buy the companies and why we 13:36:01
4 would pay that price is we're buying their 13:36:03
5 engineers, we're buying their technology, 13:36:06
6 we're buying their product, we're buying their 13:36:08
7 customers, and then often, ultimately, the 13:36:12
8 market. 13:36:16
9 Q. You mentioned technology as part of 13:36:16
10 the acquisition. Did Microchip acquire SMSC 13:36:18
11 patents? 13:36:21
12 A. Yes, we did. All of their patents. 13:36:22
13 Q. And the '243 is one of those patents? 13:36:24
14 A. Yes, it is. 13:36:28
15 Q. Okay. 13:36:29
16 After the purchase, did SMSC 13:36:32
17 remain a stand-alone company? 13:36:35
18 A. No, it did not. We merged the 13:36:36
19 division of SMSC into Microchip, into what we 13:36:39
20 call Microchip classic, the historical part of 13:36:42
21 Microchip. 13:36:44
22 Q. And did you become responsible for 13:36:45
23 any SMSC business units? 13:36:48
24 A. Yes. I took on what later became 13:36:50

1 named the USB Networking Business Unit which 13:36:54
2 was responsible for the USB product line and 13:36:57
3 the Ethernet product line. 13:37:00
4 Q. Did Mr. Bohm, the inventor of the 13:37:02
5 patent here, join part of Microchip at the 13:37:06
6 SMSC acquisition? 13:37:08
7 A. Yes, he did. 13:37:11
8 Q. And what position did he hold when he 13:37:12
9 joined? 13:37:14
10 A. Yeah, so as you heard earlier from 13:37:15
11 Mark, he was the manager for the architectural 13:37:20
12 engineering group. 13:37:23
13 Q. And that group was part of your 13:37:24
14 business unit? 13:37:27
15 A. Yes, it was. 13:37:27
16 Q. When Microchip purchased SMSC, did 13:37:32
17 SMSC sell you products that used Mr. Bohm's 13:37:35
18 multi-host patent? 13:37:40
19 A. No, they did not. Microchip did not. 13:37:41
20 Q. And after the purchase of SMSC, did 13:37:43
21 Microchip immediately take any action to 13:37:46
22 produce a product using Mr. Bohm's patent? 13:37:48
23 A. No, we did not. 13:37:50
24 Q. And can you explain to the jury why 13:37:51

1 you didn't produce a product under Mr. Bohm's 13:37:53
2 patent? 13:37:56
3 A. So at that point, there was not yet a 13:37:57
4 market that would clearly have that need where 13:38:01
5 we could. 13:38:04
6 Q. Are you responsible for approving 13:38:09
7 patent maintenance fees for your business 13:38:12
8 unit? 13:38:13
9 A. Yes, I am. 13:38:14
10 Q. For example, have you approved the 13:38:14
11 patent maintenance fees for Mr. Bohm's 13:38:17
12 patents? 13:38:19
13 A. Yes, that's part of my 13:38:19
14 responsibility. 13:38:21
15 Q. Did Microchip sell any products using 13:38:21
16 Mr. Bohm's patent between 2012 and 2016? 13:38:24
17 A. No, we did not. 13:38:28
18 Q. Can you explain to the jury why 13:38:29
19 Microchip would pay maintenance fees on Mr. 13:38:30
20 Bohm's patent if Microchip was not using Mr. 13:38:33
21 Bohm's invention? 13:38:36
22 A. Yes. If we believe a patent still 13:38:37
23 has value today or in the future, you know, if 13:38:40
24 we intend -- there's the possibility of using 13:38:43

that patent, we will pay maintenance fees to 13:38:46
keep it alive. 13:38:49
Q. Is that because you think maybe in 13:38:51
the future, a market might materialize? 13:38:53
A. Yes. It's not clear always what the 13:38:55
future will bring, but we could see the value 13:38:59
of the patent. 13:39:02
Q. Okay. 13:39:03
Did the market materialize for Mr. 13:39:04
Bohm's multi-host invention? 13:39:07
A. Yes, it did. That was the advent of 13:39:09
a complex spec. 13:39:13
Q. I'd like to transition to discuss 13:39:15
Microchip's USB hub business. 13:39:17
What is a USB hub chip? 13:39:20
A. So at a high level, and I think it 13:39:22
was a bit described earlier, but at a high 13:39:25
level, USB hub chip, so normally you have a 13:39:27
connection to a computer and you need more 13:39:31
connections. What a USB hub chip will do is 13:39:34
take a single host and fan that out into a lot 13:39:38
more ports at that point. 13:39:40
Q. And what year did Microchip introduce 13:39:43
the hub chip? 13:39:48

A. So Microchip, including its history 13:39:48
of SMSC, started selling USB hub chips around 13:39:51
2006. 13:39:55
Q. Okay. Roughly 16 years? 13:39:57
A. About 16, 16 years, yeah. 13:39:59
Q. How many hub chip manufacturers are 13:40:02
there? 13:40:04
A. There are actually many hub chip 13:40:04
manufacturers. There are very few automotive 13:40:06
hub chip manufacturers. 13:40:11
Q. And can you explain why there are few 13:40:11
automotive USB hub chip manufacturers? 13:40:13
A. Yeah. So the primary high volume use 13:40:16
of hub chips is into PCs and consumer products 13:40:20
like monitors, and the hub you can go to the 13:40:25
store and buy, and so those are usually -- 13:40:28
they work over a temperature range, they don't 13:40:31
have intrinsic quality requirements. 13:40:33
Taking that market to the 13:40:37
automotive business is much different. We 13:40:38
need higher reliability, higher qualities, we 13:40:41
have to cover a wide temperature range. There 13:40:43
is a lot of tougher requirements on an 13:40:45
automotive hub. 13:40:47

Q. Just in general, automotive hubs seem 13:40:48
to be more robust and tough -- 13:40:51
A. Absolutely. 13:40:53
Q. -- than consumer PC hub chips? 13:40:53
A. Sorry. Yes. They certainly do need 13:40:56
to be more robust than a standard lower cost 13:40:59
consumer product. 13:41:03
Q. Do you know, since it's in your 13:41:05
business, about how many USB hub chips 13:41:06
Microchip sells to the automotive industry 13:41:09
each year? 13:41:11
A. Yeah. So roughly the last year or 13:41:12
two, I would say about 35 million units per 13:41:14
year. 13:41:17
Q. Have you heard of the term "The Big 13:41:18
3"? 13:41:21
A. Yes. 13:41:21
Q. What does it refer to? 13:41:22
A. It refers to the historical large 13:41:24
three U.S. automotive manufacturers, so Ford, 13:41:28
Chrysler, GM. Tesla may want to be called The 13:41:31
Big 4 some day. 13:41:35
Q. Before Unwired began selling its dual 13:41:36
role hub, who was the first supplier of hub 13:41:40

chips to the three big automakers? 13:41:42
A. So before Unwired entered the market 13:41:44
and even Unwired, itself, Microchip had almost 13:41:46
100 percent of the business with The Big 3; 13:41:50
all three of those manufacturers were using 13:41:54
Microchip's hub chip in their break out box. 13:41:56
Q. And where are Microchip's automated 13:41:59
USB hub chips produced? 13:42:03
A. So it's a little complex. Let me 13:42:05
take you through how you usually make a chip 13:42:07
so I can tell you how it's produced. 13:42:09
So the first step is we have to 13:42:11
produce a wafer. Those wafers today are 13:42:12
produced for all of the hub chips as a Taiwan 13:42:15
semiconductor, TS1C. 13:42:18
The second step is we bring them 13:42:20
back and we probe them and we separate out 13:42:22
which are the good, which are no good. We put 13:42:25
plastic around them. By the way, we probe 13:42:28
them in our facilities at Microchip. We put 13:42:30
the plastic around it. That can be done in 13:42:32
one of three places. We use Amcore, one 13:42:34
manufacturer that makes -- puts the plastic 13:42:37
around it; ASC is another one, or we do it in 13:42:39

our factories. 13:42:43

And as a final test, we bring them 13:42:44

back to our Thailand facility, we test 13:42:46

everything and then ship it out to the 13:42:48

customer. 13:42:49

Q. What portion of Microchip's yearly 13:42:50

chip production is automotive USB hub chip 13:42:52

production? 13:42:56

A. Yeah, so at a high level, I gave you 13:42:56

two numbers. We sell about 35 million chips 13:42:58

to automotive USB hubs out of eight billion, 13:43:02

so it is about one out of every 200 chips. 13:43:05

Q. Between 2017 and 2021, did Microchip 13:43:07

have the capacity to produce an additional 10 13:43:13

million Sandia chips per year? 13:43:16

A. Yes. Certainly. If you look at our 13:43:17

production of eight billion chips, you know, 13:43:20

we talked about it being 20 million chips per 13:43:22

day, so an entire year's worth of -- if you 13:43:25

add 10 million more chips, was that the 13:43:29

question? 13:43:31

Q. Yes. 13:43:31

A. It would only be about a half a day 13:43:32

of our equipment production. So it's a very 13:43:34

1 small amount for Microchip. 13:43:36
2 Q. So what happens to Microchip's yearly 13:43:38
3 sales and marketing calls when Microchip sells 13:43:40
4 additional units of an existing product to an 13:43:43
5 existing customer? 13:43:46
6 A. So a bit of a complex question. Let 13:43:48
7 me break that down. 13:43:50
8 Q. Sorry. 13:43:51
9 A. Let me break that down in pieces. 13:43:52
10 So -- so if we're visiting a customer and -- a 13:43:55
11 customer like Aptiv in this example, selling 13:43:58
12 them a hundred parts already and we want to 13:44:01
13 sell them one more, it's not a big expense. 13:44:03
14 So we go in there, he knows everybody, it's a 13:44:06
15 very small incremental expense. 13:44:09
16 Now, if we are selling the same 13:44:11
17 product family, we've always told the world 13:44:13
18 the marketers have already prepared all the 13:44:16
19 material, they have already sold all of their 13:44:18
20 competitors, so the amount of effort to sell 13:44:20
21 it to one more person is actually quite small 13:44:21
22 of, essentially, the same product family to 13:44:24
23 the same customers. 13:44:28
24 Q. Right. 13:44:28

1 Now, you mentioned that 13:44:30
2 Microchip's chips are in a lot of car 13:44:32
3 manufacturers. Can you give the jury a sense 13:44:35
4 of which car manufacturers have Microchip 13:44:38
5 chips in them? 13:44:42
6 A. Yeah. So across time, you can pretty 13:44:43
7 much name almost every car manufacturer. Let 13:44:45
8 me just take you through some of The Big 3 13:44:48
9 have it in U.S. across time, Tesla does; if 13:44:51
10 you go to Europe, Audi, VW, BMW, Dimer, 13:44:54
11 Mercedes, they all use our chips for at least 13:45:00
12 some of their cars. 13:45:04
13 We go to Asia, a Kia, Mazda, 13:45:06
14 Toyota, Honda, Nissan. You know, we pretty 13:45:09
15 much at times have been in every one of those 13:45:14
16 customers. 13:45:17
17 Q. And would that be true for what's at 13:45:17
18 issue here; that is, in relation to USB hub 13:45:19
19 chips? 13:45:21
20 A. Yes. Most certainly. And actually, 13:45:22
21 that was my reference with the USB -- 13:45:24
22 automotive USB hub chips have been, at times, 13:45:26
23 pretty much in every one of them. 13:45:30
24 Q. Okay. 13:45:32

1 Was Microchip selling an 13:45:33
2 automotive USB hub chip in 2014? 13:45:35
3 A. I'm sorry, repeat? 13:45:38
4 Q. Was Microchip selling a automotive 13:45:39
5 USB hub chip in 2014? 13:45:41
6 A. Yes. Yep. We were. 13:45:43
7 Q. More than one? 13:45:46
8 A. Yeah, there were many products by 13:45:47
9 that time. 13:45:49
10 Q. In 2014, could you connect the iPhone 13:45:50
11 to a car using one of Microchip's USB hub 13:45:54
12 chips? 13:45:57
13 A. Yes, you could. As you heard 13:45:57
14 earlier, the Athens chip was in the 13:46:00
15 marketplace and it offered two different 13:46:02
16 solutions to CarPlay. You know, the single 13:46:04
17 upstream solution, which we call FlexConnect 13:46:08
18 or Flex, and then also the Dual upstream. 13:46:10
19 Sometimes a car wanted two wires 13:46:14
20 so we gave them the Dual upstream solution, 13:46:16
21 but either one of those two could have worked 13:46:18
22 CarPlay in pretty much any car. 13:46:20
23 Q. I don't know if you were here 13:46:23
24 yesterday, I think you were, Aptiv's counsel 13:46:24

1 referred to Microchip's old technology in 13:46:26
2 opening statements. 13:46:29
3 Does Microchip still sell the 13:46:30
4 Athens USB hub chip today? 13:46:32
5 A. Yes, it does. Athens was actually 13:46:35
6 brand new in 2014, we were just reaching 13:46:37
7 production, so -- and then today, Athens is 13:46:39
8 still a very high seller. As a matter of 13:46:43
9 fact, the volume continues to grow even this 13:46:45
10 year. 13:46:48
11 Q. Are Athens hub chips compliant with 13:46:48
12 USB standard? 13:46:51
13 A. Yes, they are. USB standard, I think 13:46:52
14 one of the challenges in all of this 13:46:55
15 discussion, a USB standard called out for one 13:46:57
16 host and the Athens chip can give you one host 13:47:00
17 and is compliant and has a USB logo, which 13:47:05
18 means we have taken it to a third party lab, 13:47:08
19 checked that we complied with the current 13:47:10
20 standards, and they give us a logo to prove 13:47:12
21 the compliance. 13:47:15
22 Q. Shifting gears a little bit, can you 13:47:15
23 please describe for the jury the different 13:47:18
24 players and their roles in the USB hub 13:47:20

business? 13:47:23

A. Yeah. This one -- so first you have 13:47:25

to understand how this fits in the car. So 13:47:27

you've heard some discussion today, there is a 13:47:31

head unit, that's one of the two computers in 13:47:34

the car, one of the computers in the car. 13:47:37

Then there is always a connector and a wire 13:47:39

and a break out box, okay. So those are all 13:47:41

pieces. 13:47:45

So if you go through the whole 13:47:45

sequence, there is a manufacturer of a head 13:47:47

unit, there is a manufacturer of connectors, 13:47:49

manufacturer of cables, another manufacturer 13:47:51

of the break out box very often and then there 13:47:53

are contract manufacturers for each of them. 13:47:57

And then, of course, the automotive 13:47:59

manufacturer would buy it all and puts it 13:48:01

together and Microchip makes the chip. So a 13:48:04

lot of different companies involved. 13:48:06

And there's software. So Apple 13:48:07

has, say, for instance, in CarPlay, so 13:48:10

everything had to work with Apple, and there's 13:48:12

always an operating system, so a lot of 13:48:14

different companies have to work together. 13:48:17

Q. So all of those companies you just 13:48:21
mentioned need to work together to integrate a 13:48:23
phone into a car? 13:48:26
A. Yes. They certainly all need to work 13:48:27
together or it won't work. 13:48:30
Q. Were you in the courtroom yesterday 13:48:36
when Aptiv's counsel referred to Microchip as 13:48:38
a 900-pound gorilla? 13:48:41
A. Yes. 13:48:43
Q. Do you know the relative size of 13:48:45
Aptiv compared to Microchip? 13:48:48
A. If you look at just raw head count, 13:48:49
right, Microchip today has about 18,000, 13:48:52
19,000 employees and Aptiv has about 180,000 13:48:56
employees, so roughly 10 times the number of 13:49:02
people in the size of Aptiv. 13:49:04
Q. Is Aptiv currently a customer of 13:49:07
Microchip? 13:49:10
A. Yes. We sell many, many products to 13:49:10
Aptiv today. 13:49:12
Q. Did you previously know Aptiv by a 13:49:13
different name? 13:49:17
A. Yes, the history was just before 13:49:17
being Aptiv, they were known as Delphi, and 13:49:21

before that, they were a subsidiary or a 13:49:24
portion of General Motors before they were 13:49:26
spun out separately in around 1999. 13:49:28
Q. How long has Aptiv or Delphi been a 13:49:31
Microchip customer? 13:49:34
A. I've been with Microchip for 13:49:36
27 years, and they were a customer right when 13:49:38
I came, so certainly more than 25 years. 13:49:40
Q. I don't know if you mentioned it 13:49:42
already, but how many different products does 13:49:44
Microchip supply to Aptiv each year today? 13:49:46
A. Today, and I did a quick check in 13:49:48
preparing, but it's slightly more than 100 13:49:52
different part numbers are still sold to Aptiv 13:49:54
today. 13:49:57
Q. Do multiple Microchip business units 13:49:57
supply products to Aptiv today? 13:50:01
A. Yeah. At a high level, you know, 13:50:03
roughly 12 of the 25 business units today are 13:50:06
selling to Aptiv. 13:50:09
Q. Can you identify for the jury some of 13:50:12
the products that Microchip supplies to Aptiv 13:50:14
today? 13:50:17
A. Yeah. So let me start with the ones 13:50:18

that are directly under me and kind of fan out 13:50:20
a little bit so you get an idea. 13:50:23
We talked about the USB chips from 13:50:25
my USB networking division. Also the Ethernet 13:50:27
chips are being sold to Aptiv. Another 13:50:31
division that's under me, the automotive 13:50:33
infotainment division, sells a lot of chips to 13:50:36
Aptiv today. 13:50:39
And then from there, many other 13:50:40
divisions, micro divisions selling to General 13:50:41
Motors, we have RF division and I don't know 13:50:47
exactly how Aptiv uses it, but they're 13:50:49
typically used for buttons in your car that's 13:50:51
the garage door opener or the key fob you push 13:50:53
the button on. 13:50:57
But there are many, many, many 13:50:58
products like that out there that we are 13:51:00
partners together on. 13:51:02
Q. So you are still business partners in 13:51:03
a sense? 13:51:05
A. Oh, absolutely. Absolutely. 13:51:05
Q. Switching gears a little bit, what is 13:51:07
list price? 13:51:10
A. List price would be if you go to the 13:51:11

website, you know nobody at Microchip and you 13:51:12
want to buy one or you want to buy 100 or a 13:51:16
thousand, there's a price there. And many 13:51:19
customers still do that today; they'll go 13:51:20
there and push a button and that's the price 13:51:23
you'll pay. 13:51:25
Q. Does Aptiv pay this price for 13:51:26
Microchip products? 13:51:28
A. Aptiv certainly does not. 13:51:29
Q. Do they pay more or less than this 13:51:30
price? 13:51:32
A. Aptiv -- as all large customers, I 13:51:33
would say Aptiv today probably pays between 13:51:36
one-third to one-half of our list price. 13:51:39
Q. And how is that price set? 13:51:42
A. So we talked a little earlier in that 13:51:44
annual review, we discussed how many parts do 13:51:47
you plan to buy, what is our future together 13:51:50
in this family, assuming you have one product 13:51:53
today, could be two tomorrow and then four, 13:51:56
right. And so we'll set a price. 13:51:58
So it's based on how much they're 13:52:01
currently buying and how much they plan to 13:52:02
buy. We review that again every year, you 13:52:05

1 know, annually to chew everything up and then 13:52:08
2 we do it again one year later. 13:52:12
3 Q. So even though this litigation is 13:52:13
4 ongoing, you're still selling product to Aptiv 13:52:15
5 and supporting those products on behalf of 13:52:18
6 Aptiv? 13:52:20
7 A. Absolutely. That's -- you know, we 13:52:21
8 have a narrow quarrel. We're here today on 13:52:24
9 one item. As a matter of fact, even the last 13:52:27
10 two weeks, Aptiv has been asking for a lot of 13:52:30
11 help, essentially the same group of engineers 13:52:32
12 on the Ethernet products. 13:52:35
13 Q. So are automotive industry customers 13:52:39
14 like Aptiv treated differently by Microchip 13:52:41
15 than some other customers? 13:52:44
16 A. Yes. We typically put dedicated 13:52:45
17 teams in place. So, for instance, one of my 13:52:49
18 responsibilities is something called 13:52:52
19 automotive product group, and it has engineers 13:52:53
20 and marketers that are able to do both, you 13:52:57
21 know, applications support or technical 13:53:01
22 support, and they put in place so that we can 13:53:04
23 be far more responsive because the needs of 13:53:07
24 this type of customer, you know, say you have 13:53:09

a single fail somewhere, if it's a consumer 13:53:12
product, it can take a week or two to respond. 13:53:16
If it's an automotive product, everybody wants 13:53:18
to know what is going on, what is causing 13:53:21
this, could there be more of them. 13:53:22
Did Microchip have some issue? Is 13:53:24
it a software issue? Is it their issue? So 13:53:26
very quickly we have to resolve issues for 13:53:28
automotive customers. 13:53:31
Q. Understand. 13:53:32
Now, switching gears a little bit, 13:53:33
are you familiar with a company named Unwired? 13:53:34
A. Yes, I am. 13:53:36
Q. And can you give a little background 13:53:38
of your understanding of who Unwired was or 13:53:40
is? 13:53:43
A. Yeah. So Unwired, prior to being 13:53:44
acquired by Aptiv, was a customer of 13:53:48
Microchip, and Unwired made break out boxes 13:53:51
that originally were based on our technology 13:53:56
and then decided to do some based on this new 13:53:58
technology that was infringing our patents. 13:54:02
Q. You mentioned the term "break out 13:54:07
box," and I don't want the jury to be 13:54:09

1 confused. I believe Mr. Bohm referred to a 13:54:11
2 break out box also known by another name 13:54:14
3 sometimes? 13:54:16
4 A. So it depends. And I know there may 13:54:16
5 have been a little confusion because we make a 13:54:19
6 chip, we make a USB hub chip, right? It goes 13:54:21
7 into what we would call a break out box. 13:54:25
8 Because we sell USB hub chips that go into 13:54:27
9 thousands of applications, we identify that 13:54:29
10 break out box as a plastic module in a car 13:54:31
11 where one port goes over to the head unit and 13:54:34
12 then brings out whatever they bring out, two 13:54:37
13 or four. 13:54:39
14 We call that a break out box and 13:54:39
15 it breaks out functionality. So that's my 13:54:41
16 reference. And I think on the other side, 13:54:44
17 sometimes they call that a hub. 13:54:47
18 Q. Call it a hub? 13:54:48
19 A. So I apologize if we don't use the 13:54:49
20 same terminology. 13:54:51
21 Q. All right. 13:54:52
22 What parts did Unwired -- excuse 13:54:53
23 me. Was Unwired ever a Microchip customer? I 13:54:57
24 think you mentioned that. 13:55:00

A. Yeah. As I mentioned, yeah, 13:55:01
certainly. Certainly they were. 13:55:03
Q. What parts did Unwired buy from 13:55:04
Microchip? 13:55:06
A. So in the -- you know, the early part 13:55:06
of their existence, in the early use of break 13:55:12
out boxes, I believe they were using a 13:55:17
standard hub, automotive hub, and they also 13:55:18
used a hub car combo, but they were all 13:55:21
automotive hubs. 13:55:26
Q. And when did they start to become a 13:55:27
customer, about what timeframe? 13:55:28
A. So I would say 2010-ish. 13:55:30
Q. So you mentioned Aptiv is also a hub 13:55:35
or break out box manufacturer. Before Aptiv 13:55:37
acquired Unwired, were they competitors in the 13:55:40
market? 13:55:43
A. They absolutely were competitors, 13:55:43
trying to bid on the same programs against 13:55:47
each other, at the end, automotive 13:55:50
manufacturers. 13:55:53
Q. And were they both buying Microchip 13:55:54
chips to put in their hubs to break out boxes? 13:55:59
A. Yes, they were both buying Microchip 13:56:01

1 hubs. 13:56:03
2 Q. In 2014, before Unwired was acquired 13:56:04
3 by Aptiv, about how many USB hub chips did 13:56:06
4 Microchip provide Unwired that year? 13:56:10
5 A. So I think right before they were 13:56:13
6 acquired, you know, roughly two-and-a-half 13:56:15
7 million chips per year. 13:56:17
8 Q. So did Unwired have a long-term 13:56:19
9 customer relationship with Microchip? 13:56:22
10 A. So at that time, Unwired was a 13:56:24
11 smaller company. You know, usually we have a 13:56:26
12 long list of products and we do them based on 13:56:28
13 the list. They were buying very few part 13:56:31
14 numbers from us, and so a small company not 13:56:33
15 buying many products, we did not have a 13:56:35
16 long-term agreement. 13:56:38
17 Q. Did Unwired pay you more or less than 13:56:38
18 list price for Microchip USB hub chips? 13:56:41
19 A. Yeah, Unwired was buying a reasonable 13:56:44
20 volume so they did not pay list price. They 13:56:47
21 probably were somewhere between 30 and 13:56:50
22 50 percent of list price. 13:56:52
23 Q. I think you mentioned it, but just to 13:56:53
24 confirm, Unwired was a customer when Aptiv 13:56:55

1 purchased them in 2014? 13:56:57
2 A. Unwired was a customer of Microchip. 13:57:00
3 Q. Microchip? 13:57:02
4 A. Yes, when they were purchased by 13:57:03
5 Aptiv. 13:57:06
6 Q. In 2014, did Unwired ask Microchip to 13:57:07
7 quote USB hub chips for its hubs for any of 13:57:10
8 The Big 3 automakers? 13:57:15
9 A. Yes. 13:57:16
10 Q. In 2014, besides Unwired, did other 13:57:19
11 hub manufacturers ask Microchip to quote USB 13:57:22
12 hub chips? 13:57:25
13 MS. DURIE: Your Honor, objection, 13:57:27
14 leading. 13:57:27
15 THE COURT: Overruled. 13:57:28
16 Go ahead. 13:57:30
17 BY MR. SLAYDEN: 13:57:30
18 Q. In 2014, besides Unwired, did other 13:57:31
19 hub manufacturers ask Microchip to quote USB 13:57:34
20 hub chips for hubs for any of the three big 13:57:39
21 automakers? That's a mouthful. 13:57:42
22 A. Besides Unwired, all of our current 13:57:45
23 customers for hubs also were asking to quote 13:57:48
24 the next generation of product for The Big 3. 13:57:52

Q. Okay. 13:57:54
When you quoted products to the 13:57:55
other hub manufacturers, did you have an 13:57:57
expectation that you would win the business? 13:58:00
A. Yes. You know, as we looked into 13:58:03
beginning of CarPlay being announced where we 13:58:08
had two solutions, we believed were the best 13:58:10
solutions on the market, they certainly were 13:58:12
the best on buying solution, but some wanted 13:58:16
one, some wanted the others. 13:58:18
But in the middle of 2014, we 13:58:19
thought we were going to win almost every one 13:58:21
of them. 13:58:24
Q. And who won The Big 3 USB hub CarPlay 13:58:24
business in 2014? 13:58:27
A. Yeah, so -- so we got to the middle 13:58:29
of the year, and later in the year, as we 13:58:33
learned more about Unwired, we learned that we 13:58:35
had lost all three of them to Unwired. 13:58:38
Q. And what was Microchip's reaction 13:58:41
when it found out its customer had now become 13:58:43
a competitor for USB hub chips? 13:58:45
A. As you saw earlier, as anybody would, 13:58:48
when you lose, we looked at, okay, what's it 13:58:52

take? What are their needs, what didn't we 13:58:54
meet and what do we have to do to win the next 13:58:56
one? 13:58:58
Q. So it's clear for the jurors, did 13:58:58
Microchip have a CarPlay solution at that 13:59:02
time? 13:59:03
A. Yes, we had two different CarPlay 13:59:03
solutions; one for one wire and one for two, 13:59:05
that pretty much every car manufacturer had 13:59:09
planned to use. 13:59:11
Q. And was there a particular hub chip 13:59:12
that was being used at that time? 13:59:13
A. Yes. The Athens family that was 13:59:16
discussed earlier was the target for all of 13:59:19
those discussions. 13:59:22
Q. Okay. 13:59:23
Going back to this timeframe 13:59:24
around 2014, before Aptiv bought Unwired, did 13:59:26
Aptiv contact Microchip about investigating 13:59:30
what Unwired was doing? 13:59:33
A. Yes, they did. 13:59:36
Q. Okay. 13:59:38
Let's turn to -- can you turn in 13:59:39
your binder to Exhibit 245. I can't find it. 13:59:42

A. There it is. I found it. 13:59:57

(Whereupon, Trial Exhibit 245 was 13:59:57

introduced.) 13:59:57

BY MR. SLAYDEN: 13:59:57

Q. Do you recognize this document? 14:00:02

A. Yes, I do. 14:00:04

Q. And what is it? 14:00:05

A. It's an internal Microchip email. 14:00:06

MR. SLAYDEN: Okay. I move to 14:00:09

admit Exhibit 245. 14:00:10

MS. DURIE: No objection. 14:00:13

THE COURT: All right. It's 14:00:14

admitted. 14:00:15

BY MR. SLAYDEN: 14:00:16

Q. This email is dated May 1st, 2014. 14:00:16

At this point, had Aptiv acquired Unwired yet? 14:00:19

A. No, not yet. 14:00:22

Q. And during -- 14:00:25

A. I think -- sorry. Can you ask again? 14:00:27

Q. I'm sorry, who were the -- do you 14:00:29

know any of the people on this email? 14:00:34

A. Yes. So this email was written by 14:00:35

one of our salesman to, it looks like, a range 14:00:37

of marketers and other salespeople and 14:00:40

applications engineers. 14:00:44
Q. Okay. 14:00:45
You see the first sentence there 14:00:46
it states, "The director of program management 14:00:48
of Delphi called." 14:00:52
Do you see that? 14:00:53
A. Yes, I do. 14:00:54
Q. And so this was referring to Delphi 14:00:54
contacting Microchip? 14:00:56
A. Yes, it appears to say that. 14:00:58
Q. Okay. 14:01:01
It goes on to state, "Delphi has 14:01:01
been promoting our Flexconnect solution to 14:01:03
some key OEMs like, GM and Chrysler." 14:01:06
Do you see that? 14:01:09
A. Yes, I do. 14:01:09
Q. What is that referring to? 14:01:11
A. Yeah, so what that means is in this 14:01:11
period of time, we had been working closely 14:01:14
with Delphi, and from what we had understood, 14:01:17
we were likely together to win both of them 14:01:20
with Microchip's FlexConnect solution for 14:01:23
CarPlay. 14:01:26
Q. Okay. 14:01:27

1 The next sentence, as you see 14:01:28
2 there, refers to or references "Unwire Carplay 14:01:31
3 silicon solution is around $1.60 range." 14:01:35
4 Can you provide some context for 14:01:40
5 the jurors on how Unwired's pricing at this 14:01:41
6 time compared to Microchip's pricing on its 14:01:45
7 own USB hub chips? 14:01:47
8 A. Yes. So at this point of time, in 14:01:48
9 the reasonable absence of competitors, we were 14:01:53
10 selling products for about $3 each, and this 14:01:55
11 was roughly half of what we were selling them 14:01:58
12 for. 14:02:00
13 Q. And the last sentence there, this is 14:02:02
14 an important point there, and the "He" 14:02:05
15 referring there, "He requested us," first of 14:02:10
16 all, who is "He"? 14:02:12
17 A. As I read this message, it appears to 14:02:14
18 be that director or program management at 14:02:16
19 Delphi. 14:02:19
20 Q. So that's Delphi? 14:02:19
21 A. Yes. 14:02:20
22 Q. And it reads, "He requested us" -- 14:02:21
23 and I guess "us" is Microchip -- "to find out 14:02:23
24 more information on this and want to work with 14:02:27

us to fight against this solution ASAP." 14:02:30
Do you have an understanding of 14:02:35
what he's referring to? 14:02:36
A. Yes, because at that point, we 14:02:36
thought we were likely to win our solution, 14:02:38
and all the sudden, this alternate solution 14:02:42
from Unwired had showed up, and they were 14:02:44
asking us to say what we could do to find a 14:02:48
solution for them to compete against it. 14:02:51
Q. So just to be clear, they were asking 14:02:54
you to investigate the Unwired solution? 14:02:57
A. Oh, absolutely. They were asking us 14:02:58
to look into it. 14:03:00
Q. And that's because Aptiv at that time 14:03:01
was a direct competitor with Unwired? 14:03:04
A. Yes. Aptiv was -- was still a 14:03:06
competitor of Unwired just three or 14:03:09
four months before they acquired this, it 14:03:11
appears. 14:03:13
Q. And at that time, was Aptiv promoting 14:03:14
Microchip's FlexConnect solution? 14:03:17
A. At this point, that was a solution 14:03:19
they were trying to use, as we understood it. 14:03:22
As we also understood it from, you know, 14:03:25

1 talking to Chrysler themselves, they were 14:03:27
2 planning to use it also. 14:03:29
3 Q. And after Delphi's request, did 14:03:30
4 Microchip investigate Unwired's solution and 14:03:32
5 response to Aptiv? 14:03:36
6 A. Yes, we certainly did. 14:03:37
7 Q. Now, you explained earlier that Aptiv 14:03:40
8 acquired Unwired later in 2014. After 14:03:42
9 Microchip was informed that Aptiv had won The 14:03:45
10 Big 3 USB CarPlay business in 2014, what did 14:03:49
11 Microchip do? 14:03:52
12 A. So, yes, once we learned that we had 14:03:54
13 lost, you know, we went down a path of what 14:03:59
14 can we do to respond, what's our next chip, 14:04:02
15 right? 14:04:05
16 So the reality of what -- where we 14:04:05
17 were was we had two what we viewed as USB 14:04:11
18 standard compliant solutions. They had come 14:04:13
19 up with noncompliant solution, didn't match 14:04:16
20 the standard. We didn't actually think 14:04:18
21 anybody was going to buy it because it was 14:04:21
22 noncompliant. 14:04:23
23 But if, at the end of the day, 14:04:23
24 Apple was going to allow it and the automotive 14:04:25

1 manufacturers were going to allow it, then 14:04:28
2 fine, we would bring one to market also. 14:04:30
3 Q. So did you determine what Microchip 14:04:38
4 specifically needed to do to win The Big 3's 14:04:40
5 business the next time? 14:04:43
6 A. Yes. So that's when we started on 14:04:44
7 the path of developing the Sandia business 14:04:47
8 plan, and began the investigation of what we 14:04:50
9 would have to do. 14:04:52
10 Q. Do you understand the term "USB 14:04:56
11 persistent"? 14:04:57
12 A. Yes. It's not a term I normally use, 14:04:58
13 but yes, I do. 14:05:01
14 Q. And what relevance does this have in 14:05:02
15 a car? 14:05:05
16 A. So -- so when you look at CarPlay, 14:05:06
17 you plug in and your phone works and it all 14:05:09
18 comes up on the display; that's the simple 14:05:12
19 part. 14:05:14
20 What we view as a minor feature 14:05:15
21 turned out to be something that both Unwired 14:05:19
22 can do and became a request from The Big 3. 14:05:21
23 So normally you would have, you're playing 14:05:24
24 music with MP3 player, another phone, it's the 14:05:28

head unit playing in the car. The challenge 14:05:32
was that that host needed to talk to that item 14:05:35
so the two could stay connected and talk. 14:05:37
You plug in your iPhone, the 14:05:39
iPhone became the host, the head unit no 14:05:42
longer could talk to that item, but the only 14:05:46
one host in the system would have been that 14:05:49
one. So there needed to be a way -- so this 14:05:51
notion of persistence needed to be a way to 14:05:54
continue to talk to that music player, as an 14:05:57
example. 14:06:00
It could have been Maps, it could 14:06:01
have been something else, but there needed to 14:06:03
be a way to continue to have the head unit 14:06:04
talk to it. 14:06:06
So at the time, Apple said they do 14:06:07
not want -- they don't want to take it over, 14:06:09
they want to let the head unit deal with it. 14:06:11
And the standard just at this point, normal 14:06:13
set of products don't allow it because it 14:06:16
would require two systems. 14:06:19
Q. What was it that The Big 3 wanted at 14:06:22
the time back in 2014 that Microchip wasn't 14:06:25
offering in their solution for CarPlay and 14:06:28

1 specifically -- I'm sorry? 14:06:32
2 A. So for CarPlay, itself, we could do 14:06:35
3 everything. What we couldn't do was, at the 14:06:37
4 point of the CarPlay connection, allow these 14:06:39
5 other items to stay connected to the end unit, 14:06:41
6 so that's this persistence. You could drop 14:06:44
7 temporarily and come back, but you couldn't 14:06:47
8 keep both active at the same time. 14:06:48
9 Q. So as you investigated further and 14:06:50
10 tried to determine how to win the business 14:06:53
11 next time, did you determine anything else 14:06:56
12 that Microchip needed to do to win the 14:06:59
13 business next time? I'm sorry, that was a 14:07:02
14 terrible question. 14:07:05
15 A. I'm sorry, maybe you can rephrase 14:07:06
16 that. 14:07:08
17 Q. Aside from what you've already 14:07:08
18 listed, when you were doing a determination of 14:07:10
19 what you needed to do to win The Big 3 14:07:12
20 business next time, was there anything else 14:07:15
21 you determined that must be offered by 14:07:16
22 Microchip to get that business? 14:07:19
23 A. So, yeah. So if you look -- if you 14:07:22
24 look at where we were in time, right, we 14:07:27

needed -- we needed a noncompliant solution. 14:07:29
We looked at it and said, you know, there are 14:07:32
lots of ways we could do this. The software 14:07:35
we wanted to be a Microchip solution in some 14:07:39
of the alternatives that were being proposed, 14:07:43
but we began to look at it and we began to 14:07:45
analyze what should the chip be, what should 14:07:49
the features be. 14:07:53
Q. Did you ever come to understand that 14:07:54
the '243 Patent was involved? 14:07:55
A. Yes. Yes. So a different question. 14:07:58
So yeah, as you start to look at the fact that 14:08:00
you need two hosts, multi-host system, yeah, 14:08:03
at that point, right. And as you heard Mark 14:08:07
say, in the background they were already 14:08:10
thinking about what might it be. 14:08:12
At this point, we said we're going 14:08:13
to do a chip and I put the burden on them 14:08:15
guys; we're late, we have to use all the IP we 14:08:17
already have, how do we get it to market 14:08:20
quickly. 14:08:22
And so they said, yeah, we have 14:08:22
all this IP. In fact, we already should be 14:08:24
able to do this quite quickly. 14:08:27

1 Q. And in response to Aptiv's specific 14:08:29
2 request for you to investigate Unwired's 14:08:31
3 solution, did you determine anything relating 14:08:34
4 to the '243 Patent at that point or had 14:08:36
5 technology? 14:08:39
6 A. Yeah. So it also became obvious, as 14:08:40
7 we started to get serious about what that next 14:08:42
8 chip would have to be, we were looking at 14:08:45
9 options again. We were constrained on cost, 14:08:47
10 we were constrained on time. The team was 14:08:50
11 looking to alternatives. 14:08:52
12 But what also started to become 14:08:53
13 obvious was that, you know, we couldn't find 14:08:54
14 another way to do it except for to do it the 14:08:57
15 way that was outlined originally on the 14:08:59
16 multi-host patent. And as we thought about 14:09:02
17 it, we said well, okay, we can't do it a 14:09:03
18 different way, then what is Unwired doing? 14:09:06
19 Are they also doing it that same way, right? 14:09:08
20 Are they, therefore, infringing our patent, 14:09:11
21 right? 14:09:14
22 So that was that whole-sided 14:09:14
23 discussion about if they're doing this, we 14:09:17
24 don't know for certain, they may have 14:09:19

1 something clever or they were infringing on 14:09:21
2 the patent, right? But if it's a multi-host, 14:09:23
3 they are likely infringing on the patent. 14:09:26
4 Q. Changing gears a little bit, did it 14:09:28
5 surprise Microchip that the car manufacturers 14:09:29
6 would accept a non-standard USB hub chip? And 14:09:31
7 I'm back in 2014 when they lost The Big 3 14:09:34
8 business. 14:09:38
9 A. Yeah, we were certainly surprised. 14:09:38
10 Historically, the automotive industry is 14:09:41
11 extremely conservative. They didn't want to 14:09:44
12 put anything out there to start a problem in 14:09:47
13 the field. So the fact that they would do 14:09:50
14 something out of standard certainly is 14:09:52
15 surprising. 14:09:53
16 Q. And can you explain to the jurors 14:09:55
17 what you mean by standard or non-standard USB 14:09:56
18 in the context of the iPhone? 14:10:00
19 A. Yeah. So we talked about this 14:10:04
20 complex ecosystem where everybody makes 14:10:06
21 different pieces of it and they all have to 14:10:09
22 come together and work. The beauty of 14:10:11
23 standard and why standards exist in the 14:10:13
24 industry is that we define all of those 14:10:15

electrical connections and we know that the 14:10:17
minute we plug them together, they all should 14:10:19
work. 14:10:21
But when you don't follow the 14:10:22
standard, you introduce risk. And you never 14:10:23
know for sure whether all the pieces will work 14:10:25
together. So our bias would have been to stay 14:10:28
with something standard if, you know, if we 14:10:31
could. 14:10:33
At the end, if we could not 14:10:34
accomplish that one additional feature, they 14:10:36
went to non-standard. And we were surprised. 14:10:38
We were surprised that automotive 14:10:40
manufacturers would allow it, also surprised 14:10:43
Apple would allow it. 14:10:45
Q. And why were you surprised, just from 14:10:48
historically that was a change? 14:10:51
A. Yeah. So we had sold -- every USB 14:10:53
hub we had ever sold, they had always asked 14:10:56
that we produce local documentation to prove 14:10:58
it met the standard. So up until then, if it 14:11:01
wasn't standard, we couldn't even show it to 14:11:03
you. And then all of the sudden, they were 14:11:06
going to allow something not standard. 14:11:07

1 Q. And did it surprise you that 14:11:09
2 Microchip -- did it surprise you that 14:11:12
3 Microchip -- that any of the manufacturers 14:11:14
4 would accept something non-standard? 14:11:16
5 A. Yeah. The head manufacturers are a 14:11:19
6 little less concerned; they don't directly 14:11:22
7 talk to the outside world. The only thing 14:11:23
8 that surprised us about it was that it added 14:11:25
9 complexity. 14:11:28
10 So the solution on the table that 14:11:28
11 was being offered added a lot of additional 14:11:30
12 software and some custom drivers, and so we 14:11:32
13 were surprised because a lot of the people say 14:11:35
14 we have this, you buy it. They don't really 14:11:38
15 want to go change it for, you know, specific 14:11:40
16 special needs. But they did. 14:11:42
17 Q. And you mentioned that the solution 14:11:44
18 on the table at that time back in 2014, whose 14:11:46
19 solution was that? 14:11:49
20 A. The solution was the Unwired 14:11:49
21 solution, but at that point, the head units 14:11:52
22 had all changed their software. 14:11:54
23 Q. Was anyone from your USB and 14:11:58
24 networking group -- business unit, excuse 14:12:01

me -- involved in designing the architecture 14:12:03
for a new USB hub chip for CarPlay? 14:12:05
A. Yes. 14:12:08
Q. And who was it from your business 14:12:09
unit who was involved? 14:12:12
A. As you saw earlier, Mr. Bohm was 14:12:13
responsible for the architecture, the 14:12:16
architecture team that did that work. 14:12:18
Q. And did your business unit determine 14:12:20
that architecture for a new multiple-host hub 14:12:22
chip? 14:12:26
A. Yes. Yes, it did. 14:12:26
Q. And did you give it a name? 14:12:27
A. Yes, that was the beginning of the 14:12:29
Sandia chip that we've talked about earlier. 14:12:32
MR. SLAYDEN: Mr. Ferrer, can you 14:12:36
bring up Exhibit 25, please. 14:12:37
BY MR. SLAYDEN: 14:12:40
Q. And do you have 25? You can look at 14:12:41
it right here. 14:12:43
Are you familiar with this 14:12:44
document? 14:12:45
A. I got it. Where am I supposed to 14:12:46
look? 14:12:48

Q. You can look at 25, yep. I'll wait 14:12:48
for you. 14:12:51
A. Okay. 14:12:52
Q. Are you familiar with it? 14:12:57
A. Yes, I am. 14:12:59
Q. Did you write it? 14:13:00
A. No, I did not write it. 14:13:01
Q. Who wrote this document? 14:13:02
A. This document was written by Dave 14:13:04
Sroka. 14:13:09
Q. And who is Dave Sroka? 14:13:09
A. Dave Sroka is one of the marketing 14:13:11
managers within the UNG business unit. 14:13:13
Q. He is not an engineer? 14:13:17
A. Yes, he is also an engineer. 14:13:18
Q. Oh, is he? 14:13:20
A. Yes. 14:13:20
Q. Does Mr. Sroka report to you? 14:13:21
A. He does report in to my group, but he 14:13:24
doesn't report directly to me. 14:13:26
Q. When did Dave Sroka publish 14:13:27
Exhibit 25, the Sandia business plan? 14:13:31
A. It appears to be published August of 14:13:33
2015. 14:13:34

Q. As a VP for the business unit, did 14:13:36
you ultimately approve this plan, Exhibit 25? 14:13:38
A. Yes, I did. 14:13:40
Q. Before the Sandia business plan was 14:13:43
published, had Mark Bohm's team already 14:13:44
defined the Sandia architecture? 14:13:47
A. Yes. He would have had to. 14:13:50
Q. Why is that? 14:13:54
A. You want me to elaborate? 14:13:55
So to write a business plan, 14:13:57
what's the purpose of a business plan? We 14:13:58
have engineers. So what we have to do is 14:14:00
define what is it we're going to do, okay? 14:14:03
How much will the product cost to sell, how 14:14:05
much time will it take to develop, right? 14:14:08
And then -- and then, you know, 14:14:10
how many units might we sell given certain 14:14:13
features; should this feature be in, should it 14:14:15
be out? If we add a feature, that cost went 14:14:19
up, take it out; it went down. Both ways 14:14:21
impact sales. 14:14:24
So we have to know roughly what it 14:14:26
is before we can agree to know what to build. 14:14:28
Q. Does Microchip sell Sandia hub chips 14:14:31

today? 14:14:35
A. Yes, we do. 14:14:35
Q. When did planet Microchip start 14:14:37
selling Sandia hub chips? 14:14:40
A. So Sandia was first sampled somewhere 14:14:41
in 2016 and the sales began in 2017. 14:14:43
Q. Does Microchip offer different Sandia 14:14:46
solutions to support CarPlay? 14:14:49
A. Yes, we do. And as you saw earlier, 14:14:51
we offer three different CarPlay solutions; 14:14:54
the two that Athens previously had done and 14:14:57
now this multi-host in Mark Bohm's patent. 14:15:00
Q. Okay. 14:15:04
Can you briefly identify, just by 14:15:04
name, the three different solutions? 14:15:06
A. Yes. So there's the FlexConnect 14:15:08
solution, that's a single upstream that allows 14:15:11
different ports to take over and become the 14:15:15
host; there is a Dual upstream with the two 14:15:17
wires, and then there is the multi-hub 14:15:19
solution where you have a single wire with two 14:15:22
hosts simultaneously. 14:15:24
Q. About how many Sandia hub chips does 14:15:25
Microchip make a year? 14:15:28

A. So today, we are running roughly 10 14:15:29
million a year. 14:15:31
Q. About what percentage of Microchip's 14:15:33
annual chip production is Sandia production? 14:15:35
A. Yeah, so if you follow through the 14:15:38
math, 10 million and eight billion, it is 14:15:41
about one out of every 800 chips. 14:15:44
Q. How did the actual demand for Sandia 14:15:46
compare to the forecast in the Sandia business 14:15:49
plan, Exhibit 25? 14:15:51
A. So we are roughly on track, you know, 14:15:53
volume is roughly on the same order of what 14:15:55
was originally expected today. 14:15:58
Q. Okay. 14:15:59
And does Microchip's Sandia hub 14:15:59
chip compete against Aptiv's Boston 2 hub chip 14:16:04
that Microchip accuses of infringement in this 14:16:09
case? 14:16:11
A. Yes, it does. 14:16:12
Q. How many multiple-host CarPlay units 14:16:15
USB hub solutions are currently offered in the 14:16:18
market? 14:16:21
A. Yeah, right now today, generally 14:16:21
available, offered, I am only aware of two; 14:16:25

1 the one Microchip offers and the one that 14:16:29
2 Aptiv offers. 14:16:31
3 Q. Okay. 14:16:32
4 And how does Aptiv's price of its 14:16:32
5 USB hub chip compare to Microchip's Sandia 14:16:35
6 chip? 14:16:38
7 A. So Aptiv's pricing was reasonably 14:16:38
8 aggressive, and as we noted, prior generations 14:16:41
9 were $3 and Aptiv was, you know, the 14:16:44
10 equivalent because they sell modules for about 14:16:48
11 a dollar and-a-half, and so reasonably 14:16:50
12 impressive compared to what we were. 14:16:54
13 Q. So did Aptiv's USB hub pricing impact 14:16:57
14 Microchip's Sandia pricing? And I meant to 14:17:01
15 say chip pricing. 14:17:06
16 A. Yes, certainly. In the absence of a 14:17:07
17 competitor, right, we would have -- you know, 14:17:09
18 we would have reduced the price, but not as 14:17:12
19 far as we had to, to continue to compete with 14:17:14
20 that solution in the market. 14:17:20
21 Q. Just to be clear for the jurors, does 14:17:22
22 this mean Microchip had to price Sandia chips 14:17:23
23 lower than it would have if Aptiv was not 14:17:27
24 selling its own multi-host chip? 14:17:29

A. Yeah, to be clear, certainly. Yeah. 14:17:32
Having a competitor at a much lower price and 14:17:35
we still go head-to-head in many dockets, we 14:17:38
needed to lower our price in the marketplace. 14:17:42
Q. Does Microchip's USB hub solution 14:17:44
offer any advantages over Aptiv's USB hub 14:17:46
product? 14:17:49
A. So, yes. So Microchip offers many 14:17:50
advantages over the Aptiv solution. The 14:17:54
product itself, we talked about, had a lot of 14:17:58
flexibility. We required far less software. 14:18:01
We are not really invasive, very easy to 14:18:03
implement, the head units don't have to change 14:18:06
very much. We offer very high quality, very 14:18:09
high reliability, large sales force that can 14:18:11
help customers around the world very quickly. 14:18:16
And then compatibility. So one 14:18:20
very strong advantage is we sell a lot of 14:18:22
chips that go into PCs and into consumer 14:18:25
products, and, you know, when you plug a USB 14:18:28
product, right, into a car, we've already 14:18:31
plugged in likely very similar products for 14:18:35
many, many years in these other products that 14:18:38
Microchip sells. 14:18:41

1 So we know pretty much any phone 14:18:41
2 that comes out is going to come up. So 14:18:43
3 compatibility, if you're going to buy your 14:18:45
4 car, new phone comes out tomorrow, you plug it 14:18:48
5 in, it doesn't work. 14:18:50
6 So our history and the very high 14:18:51
7 number of parts we've sold helps with 14:18:53
8 compatibility. 14:18:56
9 Q. Okay. 14:18:57
10 Is Microchip planning a next 14:18:59
11 generation of USB hub chips? 14:19:00
12 A. We certainly are. 14:19:02
13 Q. Is your business unit presently in 14:19:04
14 the development -- excuse me. 14:19:07
15 Is your business unit presently in 14:19:08
16 the development phase of additional chips? 14:19:10
17 A. Certainly. The USB and networking 14:19:13
18 business group typically works on about 12 14:19:15
19 different products at a time. The way they 14:19:19
20 are used, usually we can start about three or 14:19:23
21 four a year, so four products are year-end 14:19:25
22 products, four in the early part of the 14:19:28
23 development, and then we're doing the research 14:19:30
24 work and the business planning work on four 14:19:32

about to start. 14:19:34

So pretty much about 12 being 14:19:35

debated at any one time and being developed. 14:19:37

Q. Is there any time when Microchip is 14:19:40

not developing the next generation USB hub 14:19:42

chip? 14:19:45

A. No, there is no time, and the roadmap 14:19:45

we have extends on. We have -- Sandia was 14:19:48

released, the next product after it was 14:19:51

already released, it's in production, and the 14:19:54

next part is in development, and the one 14:19:56

behind it is already in the plan, so there is 14:19:58

already a long process. 14:20:01

Q. And I don't know if I will say it 14:20:02

right, but is there already a next generation 14:20:04

past Sandia? 14:20:06

A. Yes. As I said, I mentioned briefly, 14:20:07

yeah, there is a product past Sandia, but 14:20:09

that's already -- called Olympus. That's 14:20:13

already selling in the marketplace. 14:20:15

Q. Does it have advantages over Sandia? 14:20:16

A. It does. We added -- so when you 14:20:19

plug in today into a car, you pick up two 14:20:21

things; you pick up charging of your phone and 14:20:24

1 you also pick up the ticket connection to the 14:20:27
2 head unit or play music or whatever it might 14:20:29
3 be. 14:20:32
4 And externally on Sandia, all the 14:20:33
5 components that had to do with charging were 14:20:36
6 external. With the next generation, we 14:20:39
7 brought a lot more of those components into 14:20:42
8 the chip. 14:20:43
9 Q. Okay. 14:20:44
10 Changing gears a little bit, did 14:20:46
11 the fact that Unwired and Aptiv used 14:20:49
12 Microchip's patented technology upset 14:20:51
13 Microchip? 14:20:55
14 A. Yes. 14:20:55
15 Q. Can you explain to the jurors why 14:20:56
16 that would upset Microchip? 14:20:57
17 A. We were bothered on two fronts. So 14:20:59
18 up 'til then, you know, we had been partners. 14:21:03
19 When we won, we won together. They knew our 14:21:07
20 roadmap, they knew what we had planned. And 14:21:10
21 so after that, fine, they decided to do their 14:21:12
22 own chip. That, in itself, is not a problem. 14:21:15
23 But at that point, they became 14:21:18
24 competitors; it starts to bother us. But now 14:21:19

they become unfair competitors because they 14:21:22
are using technology that Microchip has 14:21:24
developed as the key feature of their product. 14:21:25
So yes, it bothered us. 14:21:29
Q. And did you have concerns about 14:21:30
sharing products and pricing information with 14:21:32
Aptiv going forward? 14:21:34
A. Yes. So we were still partners in 14:21:35
many ways, but it became problematic to share 14:21:39
our product roadmaps, our costs, our features 14:21:42
with somebody who would be competing with us. 14:21:45
So more specifically, right, if 14:21:48
you can sell both my product and yours and you 14:21:49
know my pricing, pretty easy to figure out 14:21:53
where you should set your pricing. So we did 14:21:55
not want to share those products with them 14:21:58
after that. 14:22:00
Q. That's because they're actually not 14:22:01
selling chips, they're actually selling a 14:22:03
break out box or a hub that the chip is 14:22:04
inside; correct? 14:22:06
A. Yes. They are selling a module at 14:22:07
the end of the day, and if that module could 14:22:09
have either their internally developed chip or 14:22:11

our chip, it is a bit of a problem with us, 14:22:13
because at that point, very often when they 14:22:14
sell their chip, they win and we lose, right? 14:22:17
Up until now, up until they have their own 14:22:19
chip, when they win, we win, right? But now 14:22:23
all the sudden, if they win, we lose, right? 14:22:25
So that's very competitive. 14:22:28
Q. Did Microchip ever specifically 14:22:31
inform Aptiv about Bohm's multi-host patent? 14:22:33
A. Yes, we did. 14:22:36
Q. And what did you expect Aptiv to do 14:22:38
in response to your notice of infringement? 14:22:41
A. Yeah, so certainly in that period of 14:22:43
time, what I really expected is we would sit 14:22:45
together, given we were already working 14:22:48
together, given we actually all knew each 14:22:50
other, I thought we would sit down and work 14:22:53
out some sort of business solution. I really 14:22:54
did not expect us to be here, so... 14:22:56
Q. Okay. 14:23:00
And before this lawsuit then, did 14:23:00
you personally talk to your customer, Aptiv, 14:23:02
to resolve this dispute? 14:23:04
A. Yes, I -- we talked something like 10 14:23:06

1 different times. 14:23:10
2 Q. And no result? 14:23:11
3 A. We could not find a solution. 14:23:13
4 Q. Okay. 14:23:15
5 Has Aptiv asked Microchip to 14:23:16
6 supply Sandia hub chips for its product during 14:23:19
7 the period Aptiv has been selling its own 14:23:22
8 multi-host chip? 14:23:24
9 A. Yes, they did. 14:23:25
10 Q. Were any of Aptiv's requests for U.S. 14:23:28
11 carmakers? 14:23:30
12 A. Yes, our understanding is they were. 14:23:31
13 Q. And what was Microchip's response to 14:23:33
14 Aptiv's request? 14:23:36
15 A. So, you know, at first we said yes, 14:23:36
16 possibly -- a method by which we can do this. 14:23:40
17 But then it started to become obvious that it 14:23:42
18 was very hard to do this. And as a 14:23:45
19 competitor, we said fine, going forward, you 14:23:48
20 know, we won't offer you that product. You 14:23:50
21 can buy the early one still, but any of the 14:23:52
22 new ones that we're developing, we don't want 14:23:55
23 to give you those details anymore. 14:23:56
24 Q. Okay. 14:23:59

1 In 20 -- I want to change gears a 14:23:59
2 little bit to some pricing questions. 14:24:03
3 In 2014, after -- after Aptiv won 14:24:05
4 the new Big 3 business with Unwired's Boston 2 14:24:08
5 hub chip, did Microchip change any prices it 14:24:15
6 charged to Aptiv? 14:24:17
7 A. Yes, we did. 14:24:18
8 Q. And what did you change? 14:24:19
9 A. So we got to the point where the 14:24:21
10 long-term agreement was up for renewal and we 14:24:24
11 knew we had a quandary. And as we discussed 14:24:26
12 it, what we decided was -- at first we said 14:24:29
13 let's give them all the pricing for everything 14:24:33
14 but this sub-piece of the market, and for all 14:24:36
15 the other products, we said everything is 14:24:38
16 business as usual. We're still partners. We 14:24:40
17 win together; we lose together. Nothing needs 14:24:43
18 to change. 14:24:45
19 For this sub-piece, what we said 14:24:46
20 is -- at first, you know, we wouldn't even 14:24:48
21 give them an update, and then we decided that 14:24:50
22 all the forecasts they had given us were no 14:24:52
23 longer going to be true. They had their own 14:24:55
24 alternate solution. It's very likely they're 14:24:57

1 going to buy far less chips than anything they 14:24:59
2 had told us in the past. 14:25:02
3 So we did raise prices, but also, 14:25:03
4 you know, our intent was not to -- not to stop 14:25:05
5 relationships with the other parts of the 14:25:09
6 company because they are -- we are both large 14:25:11
7 companies. So to the point where what got 14:25:14
8 interesting is another part of their company 14:25:17
9 was buying the exact same chip and we said 14:25:19
10 fine, as long as we can keep track of who buys 14:25:21
11 what, do not touch the pricing for the other 14:25:24
12 part of the company, just in this narrow area 14:25:27
13 where we're directly competing and you are no 14:25:29
14 longer going to buy the committed volume, so 14:25:31
15 we are going to raise the pricing. 14:25:34
16 And we said -- we gave them a 10 14:25:35
17 to 20 percent increase; I don't remember 14:25:38
18 exactly. 14:25:39
19 Q. And you talked about long-term 14:25:41
20 agreements, and we talked about earlier that 14:25:42
21 those long-term agreements were based on 14:25:44
22 forecasted volumes. 14:25:47
23 Can you give an example, some 14:25:49
24 context to the jury, for example, in 2017, how 14:25:51

1 the forecast may have changed from what you 14:25:54
2 had agreed to previously? 14:25:56
3 A. So, yeah. Just at a high level, for 14:25:57
4 instance, they were forecasting about seven 14:26:01
5 million units to purchase and then I have 14:26:02
6 around two million units instead. 14:26:06
7 Maybe a better way to look at it, 14:26:07
8 right, actually look at the real history of 14:26:09
9 what was going on. In the year before the 14:26:11
10 acquisition, the two companies combined, the 14:26:13
11 Delphi side and the Unwired side purchased 14:26:17
12 $16 million worth of USB hub chips from us. 14:26:21
13 The year after, that dropped to eight million. 14:26:23
14 And then, although we were just 14:26:26
15 starting to reset pricing, what we then 14:26:27
16 learned the year after was five million. None 14:26:29
17 of the forecasts were for business to drop by 14:26:32
18 a half and a third. Everything was up, up, up 14:26:34
19 until they had this alternate solution all the 14:26:37
20 sudden. 14:26:40
21 Q. So after removing Aptiv's 14:26:40
22 advantageous long-term agreement, the pricing 14:26:43
23 on USB hub chips alone, not affecting the 14:26:45
24 other products, was Aptiv still paying less 14:26:48

1 than some other of Microchip's customers for 14:26:51
2 the same products? 14:26:54
3 A. Yes. If you go look at the pricing, 14:26:55
4 what you see is very often, they were in the 14:26:58
5 bottom third of where the customers were. 14:27:00
6 Even after the price increases, sometimes they 14:27:03
7 still were almost the lowest price, but in no 14:27:06
8 case were they the highest price. 14:27:08
9 There was often many other 14:27:10
10 customers who, you know, we didn't have strong 14:27:12
11 relationships that are paying much higher 14:27:14
12 prices than Aptiv was paying. 14:27:16
13 Q. That's even after they continued in 14:27:18
14 the market with Boston 2? 14:27:21
15 A. Even after we adjusted prices up, 14:27:22
16 right, they are still nowhere near the top. 14:27:25
17 So I still had hoped we would find a solution, 14:27:27
18 right? 14:27:30
19 Q. Yeah. 14:27:30
20 A. So that was the essence of it. 14:27:31
21 Q. So I think you mentioned 14:27:33
22 previously -- well, maybe not, but how many 14:27:35
23 products does Microchip still supply to Aptiv 14:27:40
24 today? 14:27:43

A. Yeah, so a brief check, it's a little 14:27:43
bit more than a hundred different part numbers 14:27:45
are being sold to Aptiv today. 14:27:47
Q. So how many parts were affected by 14:27:48
this price change out of the hundred? 14:27:52
A. I think it's five or six part numbers 14:27:53
total. And again, only in some parts of their 14:27:56
business. 14:27:58
Q. And I guess I wonder why, since we're 14:28:00
in this litigation, you didn't change the 14:28:05
prices on all of Aptiv's parts? 14:28:07
A. Yeah, so at the end, obviously, you 14:28:09
know, telling them that we were unhappy about 14:28:12
our -- about their patent infringement, you 14:28:15
know, led to a little more challenges in the 14:28:18
business. But at the end of the day, we could 14:28:20
easily win together in many, many other fields 14:28:23
of play. 14:28:25
We kept a good relationship. We 14:28:26
didn't bring this up. It didn't come up in 14:28:28
any of our discussions with them. Who knows 14:28:31
what happened on their side. And we continued 14:28:33
to work together, and 'til this day, we 14:28:35
continue to win new programs together and many 14:28:38

other products in the business. 14:28:40
Q. Can you turn to Exhibit 45 in your 14:28:42
notebook, please. 14:28:44
(Whereupon, Trial Exhibit 45 was 14:28:44
introduced.) 14:28:44
BY MR. SLAYDEN: 14:28:44
Q. Do you recognize this document? 14:28:52
A. Yes, I do. 14:28:54
Q. What is it? 14:28:55
A. So this document shows the unit 14:28:56
sales, revenue and sales price, and as well as 14:29:00
the costs and therefore profits for each of 14:29:03
the products in the automotive USB hub product 14:29:07
line. 14:29:11
Q. Okay. 14:29:11
How was it created? 14:29:11
A. Actually I created it. I pulled the 14:29:13
data, the sales data, from our sales database 14:29:15
and the cost data from our cost database. 14:29:19
MR. SLAYDEN: Move to admit 14:29:22
Exhibit 45. 14:29:24
MS. DURIE: No objection. 14:29:24
THE COURT: All right. It is 14:29:25
admitted. 14:29:25

BY MR. SLAYDEN: 14:29:25
Q. Can you turn to Exhibit 46 in your 14:29:26
notebook. 14:29:28
A. Okay. 14:29:33
(Whereupon, Trial Exhibit 46 was 14:29:33
introduced.) 14:29:33
BY MR. SLAYDEN: 14:29:33
Q. Are you there? Okay. 14:29:33
Do you recognize this document? 14:29:35
A. Yes, I do. 14:29:36
Q. What is it? 14:29:37
A. This is a subset of the data from the 14:29:39
prior report. It doesn't include in it the 14:29:41
cost of profit; it just shows the units, 14:29:44
revenue and sales price for each of those same 14:29:47
products. 14:29:49
MR. SLAYDEN: Move to admit 14:29:51
Exhibit 46. 14:29:53
MS. DURIE: No objection. 14:29:53
THE COURT: Okay. It's admitted. 14:29:53
BY MR. SLAYDEN: 14:29:55
Q. Can you turn to Exhibit 48 in your 14:29:56
notebook, please. 14:29:58
A. Okay. 14:29:59

1 (Whereupon, Trial Exhibit 48 was 14:29:59
2 introduced.) 14:29:59
3 BY MR. SLAYDEN: 14:30:01
4 Q. And do you recognize this document? 14:30:01
5 A. Yes, I do. 14:30:04
6 Q. And what is it? 14:30:05
7 A. It's similar to the last one we just 14:30:06
8 talked about, but just extends the period to 14:30:09
9 add more years. So it has revenue units and 14:30:11
10 sales price up through about two, three 14:30:15
11 quarters ago. 14:30:19
12 MR. SLAYDEN: Move to admit 14:30:19
13 Exhibit 48. 14:30:21
14 MS. DURIE: No objection. 14:30:21
15 THE COURT: It is admitted. 14:30:22
16 BY MR. SLAYDEN: 14:30:23
17 Q. Please turn to Exhibit 88 in your 14:30:24
18 notebook, please. 14:30:26
19 A. This one is not here. 14:30:30
20 Q. 88 is not there? 14:30:33
21 (Brief pause.) 14:30:57
22 MR. SLAYDEN: One minute. Sorry. 14:31:22
23 My apologies. 14:31:24
24 (Brief pause.) 14:31:25

1 THE COURT: I'm not sure what 14:31:39
2 you're asking, Mr. Slayden. 14:31:40
3 MR. BANNER: Your Honor, we'd like 14:31:41
4 to put it on the screen. 14:31:43
5 MR. SLAYDEN: It is a native 14:31:44
6 document. We don't have a paper copy of it. 14:31:45
7 There's no objection to it. We're just 14:31:48
8 getting it into the record. 14:31:49
9 (Whereupon, Trial Exhibit 88 was 14:31:49
10 introduced.) 14:31:51
11 THE COURT: Are you moving it into 14:31:51
12 admission or are you putting it up for 14:31:52
13 foundation purposes? 14:31:54
14 MR. SLAYDEN: I'm just going to 14:31:55
15 move it into admission, yes, sir. 14:31:56
16 MS. DURIE: No objection. 14:31:58
17 THE COURT: Fine. It is admitted. 14:31:59
18 If you want to show it, you can. 14:32:01
19 MR. SLAYDEN: Okay. 14:32:03
20 BY MR. SLAYDEN: 14:32:12
21 Q. I think we are getting about done 14:32:05
22 here, Mr. Obolsky. Just one minute, and I 14:32:07
23 apologize. 14:32:10
24 Now, you explained earlier that 14:32:12

1 Aptiv, the defendant in this case, had asked 14:32:14
2 Microchip to look into the Unwired chip back 14:32:16
3 in May 2014; correct? 14:32:19
4 A. Yes, I did. 14:32:21
5 Q. Okay. 14:32:22
6 I'd like to ask you a few 14:32:23
7 questions about Microchip documents Aptiv's 14:32:24
8 counsel referenced during her opening 14:32:28
9 statement. 14:32:30
10 Can you turn to Exhibit 246 in 14:32:30
11 your notebook. 14:32:33
12 A. Okay. 14:32:33
13 (Whereupon, Trial Exhibit 246 was 14:32:33
14 introduced.) 14:32:33
15 BY MR. SLAYDEN: 14:32:38
16 Q. Do you recognize this document? 14:32:38
17 A. Yes, it's an internal Microchip 14:32:39
18 email. 14:32:42
19 MR. SLAYDEN: Move to admit 14:32:44
20 Exhibit 246. 14:32:46
21 MS. DURIE: No objection. 14:32:46
22 THE COURT: All right. It will be 14:32:47
23 admitted. 14:32:48
24 MR. SLAYDEN: Mr. Ferrer, can you 14:32:48

please bring up Exhibit 246. 14:32:51
BY MR. SLAYDEN: 14:32:53
Q. Now, look at 246. This is an email 14:32:53
from July 20th, 2014. 14:32:56
Do you recognize the names on this 14:32:58
email? 14:33:00
A. Yes. 14:33:02
Q. And can you describe to the jury 14:33:03
generally who are the people on this email? 14:33:05
A. Yes. The first sent email is one of 14:33:08
the marketing managers in the group, and then 14:33:13
the people that are copied on it -- on the 14:33:14
"To" list are marketers, some salespeople and 14:33:18
some application engineers. 14:33:21
Q. Now, the second paragraph, second to 14:33:25
the last sentence, see if you can follow me, 14:33:27
it starts with, "Our 'Flex Hub.'" 14:33:32
Do you see that? 14:33:34
A. Yeah. 14:33:34
Q. It says, "Our 'Flex Hub' and the 14:33:35
associated AIPD solutions was generally well 14:33:37
received and is winning at many of the 14:33:40
automotive accounts." 14:33:42
Can you explain to the jury what 14:33:44

1 that means? 14:33:45
2 A. Yeah. So this was midyear 2014. The 14:33:46
3 salesmen went out, visited the customers at -- 14:33:51
4 you know, this is all The Big 3 and more, and 14:33:55
5 our belief at that time was our CarPlay flex 14:33:57
6 hub solution was likely to win almost all of 14:34:00
7 them. 14:34:04
8 Q. The next paragraph, the last sentence 14:34:06
9 starts with, "We have proposed that we do a 14:34:08
10 CES reference design with Delphi (both BoB and 14:34:13
11 head unit)" -- and BoB referring to break out 14:34:20
12 box -- "and we are proceeding..." 14:34:24
13 Now, this was referring to Delphi; 14:34:26
14 right? 14:34:28
15 A. Yes, I believe it is. 14:34:28
16 Q. Okay. 14:34:30
17 Can you explain what the sentence 14:34:30
18 is referring to? 14:34:32
19 A. So, yes. At this point, we were 14:34:33
20 still partners and this was all new, and so 14:34:35
21 what we wanted to do was go to the Consumer 14:34:40
22 Electronics Show, which is a very big show in 14:34:42
23 Las Vegas every January, and we wanted to show 14:34:45
24 a demonstration that showed a Delphi head unit 14:34:47

1 and then a Delphi break out box that uses 14:34:50
2 Microchip's flex solution and show that, you 14:34:53
3 know, as an example. 14:34:55
4 Q. Does Microchip sell chips to Aptiv 14:34:57
5 for its head units also? 14:35:00
6 A. Yes, we do. 14:35:02
7 Q. And what do you sell to them? 14:35:03
8 A. We sell almost the same part numbers 14:35:05
9 to them also. 14:35:08
10 Q. But -- okay. 14:35:09
11 So I take it the last sentence 14:35:10
12 refers to jumping outside of USB standards and 14:35:15
13 flex on every port. 14:35:18
14 Do you see that? 14:35:19
15 A. Where is that? 14:35:21
16 Q. Second to the last paragraph and it 14:35:24
17 refers to stepping outside. There you go. 14:35:34
18 And flex on every port. 14:35:38
19 Do you see that? 14:35:39
20 MR. SLAYDEN: Just keep going and 14:35:41
21 highlight, please. 14:35:44
22 BY MR. SLAYDEN: 14:35:44
23 Q. Can you explain to the jury what this 14:35:45
24 means? 14:35:47

A. Yeah. So this is the solution we did 14:35:48
not have. So up 'til this point, all of our 14:35:50
hubs, what was available to sell, were 14:35:55
standard compliant. They all had one upstream 14:35:56
port or one host and multiple downstream ports 14:35:59
or endpoints. 14:36:03
And at this point, right, we could 14:36:05
handle the idea of flexing on one port, no 14:36:07
problem. You could plug in, you could switch 14:36:10
from the head unit being the computer to our 14:36:12
chip -- to the USB -- sorry, to the iPhone 14:36:15
being the computer using our USB chip. 14:36:20
What we could not do was also 14:36:23
allow all the ports to be able to stay 14:36:25
connected to one or the other, right? The 14:36:29
minute the iPhone shows up, the head unit 14:36:33
computer would lose connection to everything 14:36:36
else. 14:36:37
Q. Okay. 14:36:37
So can you explain to the jurors 14:36:38
why Microchip did not want to make a chip that 14:36:40
was not compliant with the USB standards? 14:36:42
A. So, yes. The point I was making a 14:36:44
little bit earlier was, you know, the 14:36:48

1 automotive customers are generally pretty -- 14:36:50
2 they don't want you to have problems. And up 14:36:53
3 until this point, pretty much everything they 14:36:56
4 had ever asked from us had to be standard 14:36:58
5 compliant. 14:37:00
6 And also, Apple is very 14:37:01
7 controlling, and we had quite a bit of concern 14:37:04
8 would they allow chips that were non-standard 14:37:06
9 compliance to be used in a system with the 14:37:08
10 iPhone. 14:37:10
11 Q. Can you turn to Exhibit 66 in your 14:37:12
12 notebook, please. 14:37:15
13 A. Okay. 14:37:25
14 (Whereupon, Trial Exhibit 66 was 14:37:25
15 introduced.) 14:37:25
16 BY MR. SLAYDEN: 14:37:26
17 Q. Do you recognize this document? 14:37:26
18 A. Yes. It is an internal Microchip 14:37:28
19 email. 14:37:31
20 MR. SLAYDEN: Move to admit 14:37:32
21 Exhibit 66. 14:37:34
22 MS. DURIE: No objection. 14:37:34
23 THE COURT: Admitted. 14:37:35
24 MR. SLAYDEN: Mr. Ferrer, can you 14:37:36

bring up Exhibit 66. 14:37:37

Thank you, sir. 14:37:39

BY MR. SLAYDEN: 14:37:40

Q. Now, this is an email from 14:37:40

December 1, 2014, and just for reference, as 14:37:42

you talked about, this is before Aptiv 14:37:47

acquired Unwired. 14:37:50

Do you recognize the names on this 14:37:53

email? 14:37:55

A. Yes, I do. And I think it might be 14:37:56

after they were acquired, December. 14:38:00

Q. Excuse me? 14:38:02

A. I think this is slightly after they 14:38:03

were acquired in December. 14:38:05

Q. Okay. 14:38:06

Let's move down to -- do you 14:38:13

recognize the names on the email, first of 14:38:15

all? 14:38:18

A. Yes, I do. 14:38:18

Q. And who are they, in general? 14:38:19

A. In general, they are marketers inside 14:38:20

of the USB and networking group. 14:38:26

Q. And at the bottom of the page, last 14:38:28

paragraph, the first sentence, "When 14:38:30

1 persistent USB is a requirement we definitely 14:38:38
2 have run into a wall." 14:38:41
3 Now, can you give some context to 14:38:44
4 the jurors what is meant by that? 14:38:49
5 A. Yeah. What it means, and again, 14:38:51
6 remember this is from a marketer's point of 14:38:53
7 view, right? Their job is to sell the chips 14:38:55
8 we already have and none of the chips we had 14:38:57
9 could handle this requirement from Apple that 14:39:01
10 was a dual host. So the fact that you needed 14:39:05
11 a multiple host in the system and they tried, 14:39:08
12 they tried to find potential answers, and at 14:39:11
13 the end, we said we can't do it. All the 14:39:14
14 chips we have are standard compliant. We 14:39:16
15 cannot use these chips directly. We are going 14:39:18
16 to need something different. 14:39:20
17 Q. Okay. 14:39:21
18 So was Microchip having trouble 14:39:22
19 technically with developing a persistent USB 14:39:24
20 solution at that time? 14:39:26
21 A. No, it wasn't a technical problem; it 14:39:27
22 was a matter of having something that we had 14:39:29
23 that would be, you know, available in the near 14:39:31
24 term, right. It wasn't a longer term 14:39:33

1 question, it was an immediate type of 14:39:35
2 question. Chips could not do it. 14:39:38
3 Q. Can you turn to Exhibit 36 in your 14:39:41
4 notebook, please. 14:39:43
5 (Whereupon, Trial Exhibit 36 was 14:39:43
6 introduced.) 14:39:43
7 BY MR. SLAYDEN: 14:39:43
8 Q. Do you recognize this document? 14:39:57
9 A. Yes, it's an email that I sent to our 14:39:59
10 CEO. 14:40:02
11 Q. And what is it? You said it already. 14:40:04
12 MR. SLAYDEN: Move to admit 14:40:05
13 Exhibit 36. 14:40:06
14 MS. DURIE: No objection. 14:40:07
15 THE COURT: All right. It's 14:40:07
16 admitted. 14:40:08
17 MR. SLAYDEN: Mr. Ferrer, can you 14:40:09
18 bring up 36, please. 14:40:10
19 BY MR. SLAYDEN: 14:40:11
20 Q. So I think you just stated, but is 14:40:17
21 this an email you sent? 14:40:19
22 A. Yes, it is. Right. 14:40:20
23 Q. Okay. 14:40:22
24 The second bullet point, it says, 14:40:24

"We have been working on the business case and 14:40:28
technical details to provide a single 14:40:31
connection solution similar to Unwired." 14:40:34
Do you see that? 14:40:36
A. Yeah. 14:40:38
Q. Can you explain to the jurors what 14:40:39
you meant by a "solution similar to Unwired"? 14:40:41
A. Yes. At this point, right, we had 14:40:43
our compliant solutions, we had two solutions 14:40:48
in the market, but at the end of the day, if a 14:40:50
noncompliant solution could be sold, fine. If 14:40:53
automotive manufacturers would accept it, if 14:40:56
Apple would accept it, then we should add the 14:40:58
missing features and bring out a noncompliant 14:41:03
solution. 14:41:05
Q. So was Microchip copying Unwired? 14:41:06
A. I'm sorry? 14:41:08
Q. Was Microchip copying Unwired? 14:41:09
A. No, we were listening to the 14:41:11
customers, right? This specific email was a 14:41:12
discussion with Tecvox. Tecvox said, hey, we 14:41:16
need this, and many other customers came in 14:41:20
with difficult requirements. 14:41:23
But no, at the end, we were to 14:41:24

1 provide what the market had asked for, the 14:41:26
2 spec with the requirement in place. 14:41:28
3 Automotive dealers had asked for it and we 14:41:30
4 were responding to, you know, a request from 14:41:33
5 customers. 14:41:35
6 Q. And I think that point is made later 14:41:35
7 in that paragraph, which states -- it is 14:41:38
8 talking about "The key is to develop a 14:41:41
9 solution that works for Chrysler, but also 14:41:45
10 potentially works for another ten Automotive 14:41:47
11 manufacturers." 14:41:50
12 Explain to the jury why it was 14:41:52
13 important to Microchip to find a solution that 14:41:54
14 worked for multiple auto manufacturers. 14:41:57
15 A. Yeah. So there's more here than may 14:41:59
16 meet the eye. So we knew we had had a 14:42:03
17 multi-host solution, but we also had chips 14:42:06
18 like we saw from Sandia was a variety of chips 14:42:10
19 that had -- do they want two connections, do 14:42:12
20 they want four connections, do they want to 14:42:13
21 have a car reader? 14:42:16
22 And by the way, in this period of 14:42:17
23 time, a lot of you were buying SD cards and 14:42:19
24 put your music on it and put it in to have it 14:42:23

play where car manufacturers were using SD 14:42:26
cards to load Maps. So you pay, you know, and 14:42:29
your car had the ability to run Maps, you 14:42:32
would pay 200 bucks for a Map update, put the 14:42:34
card in. 14:42:37
So each one of the automotive 14:42:37
manufacturers had different requirements. So 14:42:39
we were trying to sort out what is the chip we 14:42:41
should build and how can we get it done at a 14:42:43
cost point and reasonably quickly. But you 14:42:46
get many requirements at the same time. 14:42:48
Q. I understand. 14:42:50
Can you turn to Exhibit 41 in your 14:42:51
notebook, please? 14:42:55
A. Okay. 14:42:57
(Whereupon, Trial Exhibit 41 was 14:42:57
introduced.) 14:42:57
BY MR. SLAYDEN: 14:42:57
Q. Do you recognize this document? 14:43:02
A. Yes, I do. 14:43:05
Q. And what is it? 14:43:06
A. It's a email from myself to Ganesh 14:43:08
Moorthy, the CEO at the time. 14:43:16
MR. SLAYDEN: Move to admit 14:43:17

Exhibit 41. 14:43:19

MS. DURIE: No objection. 14:43:19

THE COURT: All right. It is 14:43:20

admitted. 14:43:21

BY MR. SLAYDEN: 14:43:21

Q. So this is another email by you dated 14:43:22

October 18th, 2015. 14:43:24

Do you see that? 14:43:26

A. Yes, I do. 14:43:27

Q. The first sentence refers to Unwired, 14:43:31

and the email reads later, "They also 14:43:33

mentioned they had been pushing for a 14:43:36

while...for lower prices, and later for a chip 14:43:39

to support single upstream head unit." 14:43:41

Do you see that? 14:43:44

A. Yes, I do. 14:43:45

Q. What pricing was Unwired pushing 14:43:47

Microchip for? 14:43:51

A. That's what -- in this period, and 14:43:51

even before the advent of CarPlay, Unwired was 14:43:54

buying chips from us and wanted them at lower 14:43:59

prices, so they were pushing for a very 14:44:01

specific subset, and they wanted to pay 14:44:03

roughly half of what we were selling them for. 14:44:06

Q. Okay. 14:44:08
Why didn't Microchip provide 14:44:09
Unwired with a single chip they requested? 14:44:12
A. So at the time when they first 14:44:14
requested, right, we didn't view it as 14:44:16
something that would necessarily be accepted. 14:44:18
Still was a lot of risk; it was one customer's 14:44:22
request. And if, at the end of the day, GM 14:44:25
and all the other car manufacturers wouldn't 14:44:28
accept it or Apple wouldn't accept it, it was 14:44:30
just not a priority for our investment, right? 14:44:33
Again, working on 12 chips, we are 14:44:35
going to continue on the ones we're working on 14:44:37
and we'll pick one of the slots in the future 14:44:40
if this becomes a viable solution. 14:44:42
Q. Right. 14:44:43
So later on in that next sentence, 14:44:44
it says -- and this was referred to in the 14:44:46
opening -- it says, "Bottom line we missed 14:44:49
it." 14:44:52
A. Yeah. 14:44:53
Q. Can you explain to the jury what you 14:44:53
meant by that? 14:44:55
A. We've seen it a couple times. What 14:44:55

1 it means is we had two solutions and, you 14:44:57
2 know, we thought they would use it. The 14:45:01
3 ability for the automotive manufacturers to 14:45:05
4 accept what we viewed as non-standard, for 14:45:08
5 Apple to accept it, we did not expect that to 14:45:11
6 happen. So that's what this refers to, right. 14:45:14
7 And so, yeah, we did not develop 14:45:17
8 that chip in that period of time because we 14:45:20
9 did not believe it was going to be accepted. 14:45:23
10 Q. Mr. Obolsky, does Microchip have an 14:45:26
11 issue with competition? 14:45:28
12 A. No, we do not. We do have an issue 14:45:30
13 with unfair competition. 14:45:33
14 Q. Okay. 14:45:34
15 So this is my last question for 14:45:35
16 you: Why is Microchip in court today? 14:45:37
17 A. Yeah, so -- so we're here because we 14:45:42
18 made a large investment in developing new 14:45:45
19 products, new features. You know, we do 14:45:48
20 things that are proprietary, and so we have 14:45:52
21 intellectual property and, you know, it's our 14:45:54
22 job to protect that intellectual property to 14:45:57
23 make sure nobody uses it without -- without 14:45:59
24 paying for it, whether it be a royalty or some 14:46:02

other way. 14:46:05

MR. SLAYDEN: Thank you. That's 14:46:06

all I have. Thank you, Mr. Obolsky. 14:46:07

THE COURT: Ms. Durie, before you 14:46:12

step up, we have been going for about an 14:46:14

hour-and-a-half. I have to stop today, as I 14:46:16

said, somewhere between 3:30 and 3:45. Do you 14:46:19

all want to take five minutes, or are you okay 14:46:22

to press on? Really up to you. 14:46:25

Anyone who wants to take a drink, 14:46:27

let me know, just raise your hand. 14:46:29

MS. DURIE: Could we take five 14:46:34

minutes? 14:46:35

THE COURT: Absolutely. We will 14:46:35

take five minutes, we'll head out. And 14:46:36

remember, don't talk about the case, okay, no 14:46:39

testimony and we are moving along. 14:46:41

(Whereupon, the jury was excused 14:46:48

from the courtroom.) 14:46:51

THE COURT: Okay. Five minutes 14:47:10

and be back at 2:50. 14:47:12

(Whereupon, a recess was taken at 14:47:33

2:45 p.m.) 14:47:41

THE COURT CLERK: All rise. 14:52:28

1 THE COURT: Get the jury, Mr. 14:55:20
2 Koehler. 14:55:21
3 You can be seated. I'm sorry. 14:55:22
4 (Whereupon, the jury entered the 14:55:24
5 courtroom.) 14:55:27
6 THE COURT: Be seated. 14:56:18
7 Ms. Durie. 14:56:24
8 MS. DURIE: Thank you, Your Honor. 14:56:24
9 - - - 14:56:24
10 CROSS-EXAMINATION 14:56:24
11 - - - 14:56:26
12 BY MS. DURIE: 14:56:26
13 Q. Mr. Obolsky, good afternoon. 14:56:27
14 You said that you are an inventor 14:56:29
15 on a patent; is that right? 14:56:31
16 A. Yes, I am. 14:56:32
17 Q. You said, in fact, Microchip has paid 14:56:33
18 maintenance fees on that patent; right? 14:56:35
19 A. No, not on my patent, I think that 14:56:37
20 one has expired already. 14:56:40
21 Q. That's right. You filed for that 14:56:42
22 patent in 2001; right? 14:56:44
23 A. Probably. 14:56:46
24 Q. And I think I heard you say you never 14:56:47

1 found a market opportunity for it; is that 14:56:49
2 right? 14:56:52
3 A. Yeah, no, it was not used. 14:56:52
4 Q. Okay. 14:56:53
5 And -- and that happens; right? 14:56:54
6 A. (Indicates affirmatively.) 14:56:56
7 Q. Now, you said, in your direct 14:56:58
8 examination, I think, that Microchip used to 14:57:02
9 control 100 percent of sales of microchips to 14:57:05
10 The Big 3; is that right? 14:57:12
11 A. Um-hmm, yes. 14:57:13
12 Q. So Microchip is the 900-pound gorilla 14:57:14
13 of the automotive microchip world; right? 14:57:17
14 A. No, that's not correct. 14:57:21
15 Q. Well, Microchip is basically a 14:57:22
16 monopolist with respect to those chips; right? 14:57:25
17 A. In this very narrow market, yes. 14:57:28
18 Q. Yes. And Microchip often would like 14:57:29
19 to keep it that way; right? 14:57:33
20 A. Not necessarily. We actually prefer 14:57:35
21 to keep a large market share. 14:57:37
22 Q. Okay. 14:57:38
23 Now, you said that Aptiv and 14:57:39
24 Boston 2 chip compete with Microchip and the 14:57:41

1 Sandia chip; is that right? 14:57:46
2 A. Yes. 14:57:50
3 Q. You said Aptiv competes with a lower 14:57:50
4 price; right? 14:57:53
5 A. Lower equivalent price, yes. 14:57:54
6 Q. Yeah. Can you name a single hub 14:57:55
7 maker that was choosing between a Boston 2 14:58:01
8 chip and a Sandia chip? 14:58:03
9 A. Sorry? 14:58:04
10 Q. Sure. 14:58:05
11 Can you name a single hub maker, 14:58:06
12 another company, that was choosing between 14:58:09
13 Boston 2 or Sandia, between Aptiv and 14:58:12
14 Microchip, for its hub? 14:58:15
15 A. When you say, "hub," this is what I 14:58:18
16 would call the break out box, just to make 14:58:22
17 sure. 14:58:24
18 Q. Sure. 14:58:24
19 A. Yeah, you want me to name one? Is 14:58:25
20 that the question? 14:58:28
21 Q. Sure. 14:58:29
22 A. So, potentially Tecvox. 14:58:29
23 Q. Okay. 14:58:32
24 But Aptiv doesn't actually sell 14:58:32

1 its chips to anyone else; right? 14:58:35
2 A. As I understand it. I don't know 14:58:37
3 what Aptiv does, but as I understand it, yes. 14:58:39
4 Q. Right. 14:58:41
5 So there is no other hub maker 14:58:42
6 that is looking at buying chips from either 14:58:44
7 Aptiv or Microchip, because Aptiv doesn't sell 14:58:47
8 anything? 14:58:52
9 A. Okay. 14:58:52
10 Q. Okay? 14:58:53
11 A. That's true. 14:58:54
12 Q. So really, when you say that Aptiv 14:58:54
13 and Microchip are competing, what you mean is 14:58:57
14 that Aptiv isn't buying that category of chips 14:59:00
15 from Microchip anymore? 14:59:04
16 A. I'm not sure I follow. Can you ask 14:59:06
17 again? 14:59:08
18 Q. When you say that Aptiv and Microchip 14:59:08
19 are competing, what you mean is just that 14:59:12
20 Aptiv isn't buying those microchips from you 14:59:14
21 anymore? 14:59:18
22 A. No, that's not what I mean. 14:59:18
23 Q. In August of 2016, you sent a letter 14:59:21
24 to your customers and to the car companies 14:59:27

1 telling them that you had sued Aptiv for 14:59:31
2 patent infringement; right? 14:59:35
3 A. Yes. 14:59:36
4 Q. You signed the letter; right? 14:59:36
5 A. Yes. 14:59:38
6 MS. DURIE: If we could please 14:59:39
7 have PX-238 marked for identification, and I 14:59:40
8 can hand copies out. 14:59:47
9 (Whereupon, Trial Exhibit PX-238 14:59:50
10 was introduced.) 14:59:55
11 BY MS. DURIE: 14:59:57
12 Q. Mr. Obolsky, you recognize what's 14:59:57
13 been marked as Exhibit 238 as a copy of the 14:59:59
14 letter that you sent? 15:00:02
15 A. Yes, I do. 15:00:03
16 MS. DURIE: We offer it. 15:00:06
17 MR. SLAYDEN: I have no objection. 15:00:07
18 THE COURT: Okay. It will be 15:00:08
19 admitted. 15:00:09
20 MS. DURIE: If we can please see 15:00:10
21 Exhibit 238. 15:00:13
22 BY MS. DURIE: 15:00:13
23 Q. You signed it; right? 15:00:14
24 A. Yes. 15:00:15

Q. And if we go back to the text of the 15:00:16
letter, you said, "Dear Valued Customer, 15:00:18
Microchip would like to inform you of legal 15:00:22
action that is being taken by Microchip 15:00:24
against a supplier of electronic components in 15:00:26
the automotive USB connectivity market," and 15:00:30
you listed three patents; right? 15:00:35
A. Yes. 15:00:37
Q. Now, you hold an engineering degree; 15:00:38
right? 15:00:44
A. Yes, I do. 15:00:44
Q. You have been working at Microchip 15:00:45
for around 27 years? 15:00:47
A. Yes. 15:00:49
Q. You are a senior vice president; 15:00:50
right? 15:00:51
A. I am today. Not at this time. 15:00:52
Q. Okay. 15:00:53
Do you report to the CEO? 15:00:54
A. I do today, yes. 15:00:56
Q. Okay. 15:00:57
And you have some technical 15:00:58
understanding of USB; right? 15:01:00
A. Yeah. High level understanding, yes. 15:01:02

1 Q. Now, you sent this letter to your 15:01:05
2 customers so that they would have a bias 15:01:07
3 against using -- or I should say a bias 15:01:12
4 towards using Microchip's solution instead of 15:01:15
5 buying a component from Aptiv that has a copy 15:01:19
6 of the Aptiv chip in it; right? 15:01:23
7 A. That's a narrow part of the reason, 15:01:26
8 yes. 15:01:29
9 Q. Okay. 15:01:30
10 But you wanted to inform them so 15:01:30
11 they would have a bias to use the Microchip? 15:01:34
12 A. Certainly. 15:01:41
13 Q. Now, you didn't investigate, you 15:01:43
14 personally as the person who signed this 15:01:46
15 letter -- 15:01:49
16 A. Yeah. 15:01:49
17 Q. -- you didn't investigate how Aptiv's 15:01:49
18 chip actually worked before you sent this 15:01:52
19 letter; right? 15:01:54
20 A. I certainly personally didn't 15:01:55
21 investigate, no. 15:01:58
22 Q. Right. 15:01:58
23 Your deposition was taken in this 15:01:59
24 case; right? 15:02:00

A. Yeah. 15:02:01
Q. And obviously, that was after the 15:02:01
lawsuit was filed and after this letter was 15:02:04
sent; right? 15:02:06
A. Yes. 15:02:07
Q. Okay. 15:02:07
And at that point in time, you 15:02:08
still didn't know any details about how the 15:02:09
Aptiv chip actually worked; right? 15:02:14
A. We didn't know, we suspected. At 15:02:18
that point, we did not have all the answers. 15:02:23
Q. And what it does, how it works, you 15:02:26
couldn't explain? 15:02:30
A. I'm sorry? 15:02:31
Q. What it does, how it works, you 15:02:32
couldn't explain? 15:02:34
A. I couldn't personally explain, right, 15:02:36
how their chip works, no. 15:02:40
Q. Okay. 15:02:42
A. I could explain what it does, not how 15:02:43
it works. 15:02:45
Q. All right. 15:02:46
MS. DURIE: Your Honor, I would 15:02:48
like to -- I'm sorry. 15:02:49

BY MS. DURIE: 15:02:50
Q. And you're saying at the time of your 15:02:51
deposition, you were capable of explaining 15:02:52
what the Aptiv chip does? 15:02:54
A. At a high level. 15:02:56
Q. Okay. 15:02:57
At a high level? 15:02:58
A. At a high level. 15:02:59
Q. Not in any detail; right? 15:03:00
A. Not in any detail, no. 15:03:01
MS. DURIE: Now I'd like to mark 15:03:06
for identification Exhibit 252. 15:03:08
(Whereupon, Trial Exhibit 252 was 15:03:15
introduced.) 15:03:20
BY MS. DURIE: 15:03:20
Q. Now, Exhibit 252 is an email exchange 15:03:29
with David Sroka and Don Perkins, among 15:03:34
others, from August of 2014 timeframe; right? 15:03:39
A. Yes, it appears to be. 15:03:44
MS. DURIE: We offer it. 15:03:47
MR. SLAYDEN: No objection. 15:03:48
THE COURT: Okay. Received. 15:03:49
MS. DURIE: If we could publish, 15:03:51
and I'd like to begin on page 2. If we can go 15:03:52

to page 2. 15:04:00
BY MS. DURIE: 15:04:01
Q. There's an email here that begins on 15:04:01
the second page from Sal Canu; right? 15:04:03
A. You want me to look here or up there? 15:04:09
I apologize. 15:04:11
Q. Sorry, it's on the second page of the 15:04:11
exhibit, about a third, quarter of the way 15:04:14
down. 15:04:16
Do you see where I am? 15:04:21
A. Yes. 15:04:22
Q. An email from Sal Canu; who is he? 15:04:23
A. Sorry? 15:04:28
Q. Who is he? 15:04:29
A. I didn't catch it. 15:04:29
Q. Mr. Canu, who is he? 15:04:30
A. Oh, yes. He's one of the sales 15:04:32
engineers. 15:04:34
Q. Okay. 15:04:35
And this is August 14th, 2014; 15:04:36
right? And it says, "We want to take a strong 15:04:41
stance going into OEMs. We went into GM last 15:04:49
week and we are going to Chrysler tomorrow. 15:04:53
At GM we brought up a design showing 1 Host 15:04:55

1 coming down from the Head Unit. We didn't 15:04:59
2 mention Unwired." 15:05:03
3 Do you see that? 15:05:05
4 A. Yes, I do. 15:05:06
5 Q. And if we take a look now at the 15:05:07
6 response that is on the first page, there is a 15:05:11
7 response from Don Perkins at the bottom of the 15:05:17
8 page and then Mr. Sroka responds to that email 15:05:22
9 at the top; right? 15:05:27
10 A. Yes, that appears right. 15:05:28
11 Q. Okay. 15:05:30
12 And if we take a look at Mr. 15:05:31
13 Sroka's email -- and by the way, you've seen 15:05:34
14 his name before; right? 15:05:37
15 A. Yes. 15:05:38
16 Q. Okay. 15:05:38
17 He is the person who wrote the 15:05:39
18 specification or the product specification 15:05:44
19 that we were looking at a little while ago for 15:05:45
20 the Sandia chip; right? 15:05:48
21 A. Yes. He wrote the business plan. 15:05:50
22 Yes. 15:05:52
23 Q. And you said, I think, he is both a 15:05:52
24 marketing person, but also an engineer; right? 15:05:54

A. Yes. He is. 15:05:56

Q. And he says, "Couple additional 15:05:57

points: Carplay REQUIRES the head unit to 15:06:01

become a USB device. This is so the Apple 15:06:04

phone is the host and controls the USB bus. 15:06:07

In your diagram, the head unit stays the 15:06:10

host...NOT COMPLIANT...right there. CarPlay 15:06:12

requires a dedicated path...this solution 15:06:17

allows other USB devices to access the 15:06:19

host...this is NOT Compliant." 15:06:22

And then he goes on to note that 15:06:23

this is a completely non-standard USB; right? 15:06:25

A. Yes. 15:06:28

Q. And he says it's a completely 15:06:29

non-standard USB because two USB hosts are 15:06:31

implementing a single transaction by splitting 15:06:35

it into two serial transactions, instead of 15:06:39

one. "This goes against the primary 15:06:42

requirement of USB; one bus/one Host." 15:06:45

So the problem that he was 15:06:50

identifying here is that the way that 15:06:51

Microchip was conceptualizing of a solution to 15:06:55

this problem, it would require two hosts to be 15:07:01

controlling a single device in violation of 15:07:05

1 the USB standard; right? 15:07:07
2 A. At a high level. 15:07:11
3 MR. SLAYDEN: I'll object, Your 15:07:13
4 Honor. That's an awful long narrative to give 15:07:14
5 the witness. 15:07:16
6 THE COURT: Overruled. 15:07:17
7 BY MS. DURIE: 15:07:18
8 Q. Now, at the time of this email, 15:07:18
9 Microchip was promoting its FlexConnect 15:07:20
10 solution; right? 15:07:24
11 A. Let me check. Yes. 15:07:26
12 Q. Okay. 15:07:27
13 And FlexConnect did not allow for 15:07:27
14 persistent USB in all of the other ports in 15:07:32
15 the car; right? 15:07:35
16 A. Yes. As I understand it today, yes. 15:07:37
17 Q. Right. 15:07:39
18 So at this point in time, 15:07:40
19 Microchip's solution offered customers a 15:07:43
20 choice between either having a single-lane 15:07:46
21 solution or having persistent USB, but not 15:07:50
22 both; right? 15:07:53
23 A. Hang on. Can you say that again? 15:07:56
24 Q. Sure. 15:07:57

1 At this point in time, Microchip 15:07:58
2 could offer its customers either a single-lane 15:08:00
3 solution or persistent USB, but not both? 15:08:04
4 A. Or two upstream solutions if you 15:08:09
5 wanted persistent. 15:08:12
6 Q. Right. 15:08:15
7 Two lanes instead of one, so not 15:08:15
8 single lane; right? 15:08:17
9 A. Yes. Single lane would not have 15:08:18
10 persistence, yes. 15:08:20
11 Q. Right. 15:08:22
12 And at this point in time when you 15:08:22
13 learned that Unwired had a solution that was 15:08:26
14 single lane, you thought at that point in time 15:08:29
15 that carmakers weren't really going to care 15:08:31
16 that much about the combination of single lane 15:08:34
17 and persistent USB; right? 15:08:39
18 A. Yes, that's correct. 15:08:42
19 Q. Okay. 15:08:43
20 You also thought, during this 15:08:44
21 period of time, that Unwired was never 15:08:46
22 actually going to finish its chip; right? 15:08:50
23 A. Well, we certainly weren't sure. 15:08:52
24 Q. Okay. 15:08:54

1 You thought Unwired wasn't big 15:08:54
2 enough to get it done; right? 15:08:57
3 A. Yeah, we thought it was hard and they 15:08:58
4 may not get there, right. 15:09:00
5 Q. Okay. 15:09:01
6 Because they weren't big enough to 15:09:02
7 get it done? 15:09:03
8 A. In essence, yes. 15:09:04
9 Q. Okay. 15:09:05
10 So you kept trying to sell the car 15:09:06
11 companies on your FlexConnect solution that 15:09:09
12 didn't provide for connectivity throughout the 15:09:12
13 car; right? 15:09:15
14 A. That's not about connectivity through 15:09:17
15 the car; it's about the persistent, right? We 15:09:20
16 could be all four ports. 15:09:24
17 Q. Fair enough. Fair enough. That is 15:09:25
18 absolutely fair. 15:09:27
19 You did not have the solution that 15:09:28
20 would provide for persistent connections 15:09:29
21 throughout the car? 15:09:31
22 A. Yeah, we didn't have the solution, 15:09:32
23 and at that point, it hadn't even been asked 15:09:34
24 for in the early part of the year, right? 15:09:37

Q. Now, you said before that you were 15:09:39
concerned that you wouldn't be able to get USB 15:09:44
certification for a one-lane persistent USB 15:09:47
solution; right? 15:09:52
A. Yeah. Not those exact words, but 15:09:55
yes, certification. 15:09:58
Q. And the way you get certification is 15:09:59
you submit your product to a USB logo place 15:10:00
that runs some tests on it; right? 15:10:03
A. Yes. 15:10:05
Q. And if it passes those tests, then 15:10:06
you get a USB logo; right? 15:10:09
A. Yes, in essence. 15:10:11
Q. Now, you said you were also worried 15:10:12
that Apple wasn't going to like your solution, 15:10:14
right, that solution of a single-lane 15:10:17
persistent USB, Apple might not like it? 15:10:18
A. I mean, allow it. 15:10:21
Q. Fair enough. I guess that's even 15:10:23
stronger than not liking it. 15:10:25
And if Apple doesn't allow it, you 15:10:27
can't sell it; right? 15:10:29
A. Yes. 15:10:30
Q. And so you didn't want to do what you 15:10:31

1 thought was going to be a noncompliant 15:10:35
2 solution until you were sure that Apple was 15:10:37
3 going to approve it; right? 15:10:39
4 A. Yeah, or at least had some 15:10:41
5 confidence, we wouldn't have done it yet. 15:10:45
6 Q. Right. 15:10:46
7 You didn't know what the rules 15:10:47
8 were going to be and you didn't want to spend 15:10:48
9 the money until you knew what those rules 15:10:50
10 were; right? 15:10:52
11 A. Yes, that's true. 15:10:54
12 Q. Okay. 15:10:55
13 MS. DURIE: Let me go to 246 in 15:11:03
14 evidence, Mr. Glass, and if we could start on 15:11:05
15 page 1. 15:11:11
16 BY MS. DURIE: 15:11:13
17 Q. So we looked at this email a little 15:11:15
18 while ago. It's from July of 2014. And if we 15:11:17
19 can pull up the paragraph that begins, 15:11:20
20 "Competitive Threats have emerged." It's on 15:11:23
21 the first page. There we go. 15:11:29
22 Now, this email is a trip report 15:11:31
23 that Mr. Perkins made from a visit to the 15:11:33
24 Detroit area; right? 15:11:36

A. Yes, it is. 15:11:38
Q. And he identified Unwired as the 15:11:39
largest threat for the USB flex hub solution; 15:11:43
right? 15:11:48
A. Yes, that's right. 15:11:49
Q. And Mr. Perkins said that he was 15:11:52
gathering information on the Unwired solution 15:11:56
and had begun to understand what their 15:11:59
architecture is; right? 15:12:01
A. That's what it says, yes. 15:12:04
Q. And what Mr. Perkins thought was that 15:12:05
the Unwired solution stepped outside of the 15:12:09
USB standard because it offered flex on every 15:12:13
port and connectivity throughout the car; 15:12:16
right? 15:12:19
A. No, that's not a car, it's just 15:12:21
combined. It did step out of Sandia. 15:12:24
Q. Okay. 15:12:29
A. I don't know that one causes the 15:12:29
other. 15:12:33
Q. Okay. Fair enough. 15:12:33
And in the last sentence there, 15:12:34
you said, "It is very important that we 'set 15:12:35
the standard' for these architectures before 15:12:38

1 Unwired has an opportunity to compete with 15:12:41
2 their ASIC solution." 15:12:44
3 So Mr. Perkins was suggesting that 15:12:47
4 Microchip try to use its position to set the 15:12:49
5 standard for what everyone was going to use 15:12:53
6 before Unwired could get their chip to market; 15:12:56
7 right? 15:12:59
8 A. Can you ask that question again? I'm 15:13:00
9 not sure I completely understood what you 15:13:02
10 said. 15:13:04
11 Q. Sure. 15:13:04
12 He was saying that Microchip 15:13:05
13 should try to set the standard for the 15:13:06
14 architecture before Unwired had an opportunity 15:13:08
15 to get its solution to market? 15:13:11
16 A. That's what it says, yes. 15:13:14
17 Q. Okay. 15:13:16
18 Now, if we go to the second 15:13:17
19 page -- 15:13:22
20 MS. DURIE: Mr. Glass, can you 15:13:23
21 pull up the paragraph that begins, "Unwired is 15:13:24
22 our largest threat." There we go. 15:13:26
23 BY MS. DURIE: 15:13:26
24 Q. And he says, "Unwired is our largest 15:13:30

1 threat for the USB Flex hub," and if we go 15:13:32
2 down a little bit, he says, "It is difficult 15:13:35
3 to believe that the car makers would commit to 15:13:38
4 an ASIC from a small company like Unwired." 15:13:39
5 That was also your view; right? 15:13:43
6 A. Yeah, that's a fair estimate. Yes. 15:13:46
7 Q. Okay. 15:13:49
8 You thought that Unwired was too 15:13:49
9 small to get it done? 15:13:51
10 A. At that time, yes. 15:13:55
11 Q. Now, if we could take a look at 15:13:59
12 Exhibit 248. 15:14:05
13 (Whereupon, Trial Exhibit 248 was 15:14:13
14 introduced.) 15:14:15
15 MR. SLAYDEN: No objection. 15:14:24
16 MS. DURIE: I hadn't offered it 15:14:27
17 yet, but I will. I offer it. 15:14:28
18 THE COURT: All right. 15:14:29
19 Since there is no objection, we'll 15:14:30
20 admit it. 15:14:32
21 MS. DURIE: Good. So if we can 15:14:32
22 put up Exhibit 248. 15:14:34
23 BY MS. DURIE: 15:14:36
24 Q. This is an email again from Mr. 15:14:37

1 Sroka; right? 15:14:42
2 A. Hang on. 15:14:42
3 Yes, it appears to be. 15:14:44
4 Q. And it's from July of 2014; right? 15:14:45
5 A. Hang on. I'm not on the copy, I am 15:14:52
6 just looking -- yes. 15:14:55
7 Q. Sure. 15:14:56
8 And the email's Subject line is, 15:14:57
9 "Debunking Unwired"; right? 15:15:01
10 A. That's what it says, yes. 15:15:04
11 Q. And there is an attachment, and if we 15:15:06
12 go to page 6 of the attachment -- actually 15:15:12
13 page 6 of the PDF, I apologize, before the 15:15:18
14 attachment, there is a slide that says, "Break 15:15:21
15 Out Box Alternative Approach" {sic}; right? 15:15:26
16 A. Yes, I found it. 15:15:26
17 Q. Okay. 15:15:27
18 And this slide reflects what 15:15:28
19 Microchip had learned about the Unwired 15:15:31
20 solution from multiple customers; right? 15:15:34
21 A. I would assume that's true. I'm not 15:15:38
22 sure if I've seen this one before, but yes, I 15:15:42
23 assume that's true. 15:15:44
24 Q. Microchip was trying to figure out, 15:15:45

1 as best it could, how the Unwired solution 15:15:47
2 worked; right? 15:15:50
3 A. Yes. 15:15:52
4 Q. And if we take a look towards the 15:15:54
5 bottom, and it is the text that's in red 15:15:59
6 there, it says, "Note if the iPhone connects 15:16:02
7 to a standard Hub, the architecture is 15:16:05
8 flawed." 15:16:08
9 Do you see that? 15:16:09
10 A. Yes, that's what it says. 15:16:11
11 Q. Okay. 15:16:12
12 Microchip thought that the 15:16:13
13 architecture of the Unwired product was flawed 15:16:14
14 because it was not USB compliant; right? 15:16:19
15 A. Yes, that's at least what someone 15:16:23
16 thought, whoever wrote this. 15:16:27
17 Q. Well, it was apparently what Mr. 15:16:28
18 Sroka thought, if we go to the first -- or Mr. 15:16:35
19 Steele thought, if we go to the first page of 15:16:42
20 the exhibit, it is an email from Brigham 15:16:44
21 Steele, and is it Sroka or Sroka? 15:16:48
22 A. Either way is fine with me. 15:16:50
23 Q. Mr. Steele wrote, "More new slides, 15:16:53
24 you may want to clean them up a little," and 15:16:56

1 then Mr. Sroka is the one who sent them 15:16:58
2 around; right? 15:17:01
3 A. Yeah. 15:17:09
4 MS. DURIE: Now, let's go to 15:17:09
5 Exhibit 62. 15:17:11
6 (Whereupon, Trial Exhibit 62 was 15:17:12
7 introduced.) 15:17:16
8 BY MS. DURIE: 15:17:16
9 Q. Exhibit 62 is another email exchange 15:17:26
10 among various individuals at Microchip in 15:17:29
11 October 1, 2014; right? 15:17:32
12 A. Yes, it appears to be. 15:17:36
13 MS. DURIE: We offer it. 15:17:37
14 MR. SLAYDEN: No objection. 15:17:39
15 THE COURT: Okay. It is admitted. 15:17:40
16 BY MS. DURIE: 15:17:42
17 Q. And this is an email from October of 15:17:42
18 2014, if you look at the top, talking about 15:17:45
19 "project for fiat and Chrysler"; right? 15:17:51
20 A. Hang on. Yes. 15:17:57
21 Q. And if we take a look at the second 15:17:59
22 page, there is an email from Chris, is it 15:18:02
23 Behal? 15:18:07
24 A. I don't know how to pronounce the 15:18:07

name. That's good. 15:18:09
Q. Well, he is a senior field 15:18:10
applications engineer at Microchip; right? 15:18:12
A. Okay. 15:18:16
Q. And I am cheating because it's on the 15:18:17
signature line. 15:18:19
A. Yeah. I trust you. 15:18:20
Q. And if we take a look at the email 15:18:21
from Mr. Behal, he is reporting on what he has 15:18:23
been told and he says, "Stefan, this does not 15:18:32
make sense to me and I believe Brigham 15:18:35
either" -- it is missing not -- "when this 15:18:37
came up a few months ago... 15:18:40
"However, Delphi is given that 15:18:41
requirement by their OEM's (Chrysler) and it 15:18:43
appears Fiat is wanting the same thing. They 15:18:46
somehow believe with carplay on one of the 15:18:50
Break Out Box's ports that they can still have 15:18:54
access data connectivity to the other Break 15:18:57
Out Box's ports." {Sic} 15:19:03
So this is saying Delphi has been 15:19:04
given the requirement by their customer, that 15:19:07
their customers want to have this persistent 15:19:10
USB solution; right? 15:19:14

A. Yes. 15:19:17

Q. And if you go down a little bit, a 15:19:18

couple paragraphs down, there's a paragraph 15:19:21

that begins, "It appears to me," four 15:19:25

paragraphs down. 15:19:29

A. Okay. I found it. Yep. 15:19:30

Q. And he says, "It appears to me that 15:19:33

the OEM's do not have good understanding of 15:19:37

what is possible with Carplay... all they know 15:19:41

is they want Carplay AND they want additional 15:19:43

connectivity to head unit to other devices. 15:19:47

"How is that possible without an 15:19:51

Iphone allowing it? I have no idea. Is it 15:19:54

possible they know something about Carplay we 15:19:57

don't? I don't think so but I can't figure 15:19:59

out why they want this either..." 15:20:01

Now, at this point in time, 15:20:07

Microchip was telling its customers that this 15:20:09

solution wouldn't work; right? 15:20:12

A. Potentially, yes. 15:20:15

Q. Okay. 15:20:16

Mr. Behal is wondering how it 15:20:17

could be possible to have persistent 15:20:20

connectivity on downstream devices without the 15:20:22

1 iPhone allowing it; right? He says he has no 15:20:25
2 idea? 15:20:28
3 A. Yeah. He didn't, yes. 15:20:29
4 Q. Okay. 15:20:30
5 MS. DURIE: Let's go to 15:20:35
6 Exhibit 58. 15:20:37
7 (Whereupon, Trial Exhibit 58 was 15:20:37
8 introduced.) 15:20:40
9 THE WITNESS: Are we done with 15:20:41
10 this one? 15:20:42
11 MS. DURIE: We are. 15:20:43
12 Exhibit 58 is another email chain. 15:20:55
13 This time, Brigham Steele and Mark Orlosky 15:21:00
14 copying Chris Behal in some of it from the 15:21:04
15 June 2014 timeframe. 15:21:07
16 BY MS. DURIE: 15:21:09
17 Q. Do you see that? 15:21:10
18 A. Yes, I do. 15:21:10
19 MS. DURIE: We offer it. 15:21:11
20 MR. SLAYDEN: I have no objection, 15:21:12
21 Your Honor. 15:21:13
22 THE COURT: All right. It is 15:21:13
23 received. 15:21:14
24 BY MS. DURIE: 15:21:15

Q. Now, Brigham Steele is another 15:21:15
Microchip engineer; right? 15:21:18
A. Yes, he is an applications engineer. 15:21:19
Q. Right. 15:21:21
And he is talking to Mark Orlosky; 15:21:22
right? 15:21:28
A. Yes. 15:21:28
Q. And Mark Orlosky was at Delphi; 15:21:28
right? Actually the email at the very top, 15:21:32
but that's fine. 15:21:34
A. Hang on. 15:21:36
Q. And Delphi was one of Microchip's 15:21:36
customers at this time; right? 15:21:39
A. Yes, they were. 15:21:40
Q. This is before -- this is before 15:21:41
Delphi bought Unwired; right? 15:21:44
A. Yeah. In June of 2014, yes. 15:21:48
Q. Right. 15:21:50
And if we look at the email that 15:21:51
appears from Mr. Orlosky on the second page, 15:21:53
it is the email in the middle of the page, and 15:22:02
Mr. Orlosky writes, "Hi Brigham. Just ended a 15:22:04
multiparty meeting with Chrysler and Harman." 15:22:10
Do you see where I am? 15:22:13

A. I found it, yes. 15:22:14
Q. Sorry. 15:22:15
"You were at Chrysler on the 18th 15:22:16
for a demo. Dave Diovardi does not want to 15:22:18
lose data capability on other ports not tied 15:22:21
to the Apple device. Is this an Apple CarPlay 15:22:24
spec requirement?" 15:22:27
Now, Dave Diovardi was from 15:22:29
Chrysler; right? 15:22:33
A. Yes. 15:22:34
Q. And if we turn to the response to 15:22:34
this from Mr. Steele at Microchip, it begins 15:22:36
on the first page; right? 15:22:39
A. Hang on. From who? 15:22:42
Q. Go to the first page of the document. 15:22:45
There is an email that begins in the middle of 15:22:47
the page, so we're going up, forward in time. 15:22:50
A. Okay. 15:22:53
Q. So there is a response from Brigham 15:22:53
Steele, June 18th, 2014, at 2:33 p.m.; right? 15:22:56
A. Okay. Yep. 15:23:01
Q. And he says, "Mark" -- so this is 15:23:02
back to Mark at Delphi -- "Just to be clear, 15:23:05
we need to make sure that the message is 15:23:07

1 consistent to Dave" -- at Chrysler -- "from 15:23:09
2 his vendors. Dave likes to look at the big 15:23:12
3 picture, so I love his ideas, but some items 15:23:15
4 may be physically outside the capabilities of 15:23:18
5 ANY USB system, and I think he needs to 15:23:21
6 understand the capabilities of USB and some of 15:23:25
7 the low level details. This is how I would 15:23:28
8 break it down, let me know if you disagree 15:23:30
9 with my analysis or if you have other 15:23:33
10 questions." 15:23:35
11 And then he has a series of 15:23:36
12 numbered paragraphs in which he is, in 15:23:38
13 substance, explaining why this won't work; 15:23:41
14 right? 15:23:46
15 A. I have not read this before, so I 15:23:47
16 don't remember. 15:23:52
17 Q. Sure. 15:23:52
18 Let's take a look at it together. 15:23:52
19 No. 1, "With USB, you are only allowed 1 Host 15:23:55
20 and multiple devices on a bus. This message 15:23:57
21 is critical, so we need to make sure Dave 15:24:01
22 understands this fact." 15:24:03
23 A. Okay. 15:24:05
24 Q. That's No. 1. 15:24:05

1 No. 2, "CarPlay passes the Host 15:24:06
2 role from the head unit to the Phone itself." 15:24:09
3 {Sic} 15:24:09
4 "3. Once the head unit has given 15:24:11
5 up the Host role, it will not see any other 15:24:14
6 ports. If the iPhone doesn't want to see the 15:24:16
7 other ports, it will ignore them." {Sic} 15:24:19
8 And then it goes on to talk about 15:24:21
9 the initial development that had been going on 15:24:23
10 at Microchip; right? 15:24:26
11 A. Hang on. Where is that? 15:24:28
12 Q. A, "In our initial development we 15:24:30
13 would plug in USB speakers and thumb drives 15:24:33
14 into the other Hub ports. The iPhone would 15:24:36
15 display a message that the speakers and thumb 15:24:39
16 drive were not authenticated devices, so it 15:24:42
17 would not support them. 15:24:45
18 "To avoid these annoying messages 15:24:46
19 displayed on the phone, the head unit can 15:24:48
20 disable those ports when entering Carplay." 15:24:51
21 {Sic} 15:24:54
22 So Microchip had identified this 15:24:54
23 issue in development, and its solution to the 15:24:56
24 annoying messages that came up was to disable 15:25:00

1 those other ports; right? 15:25:03
2 A. That was one possible solution, yes. 15:25:04
3 Q. Okay. 15:25:07
4 So at this point in time, 15:25:09
5 Microchip was telling its customers this one 15:25:20
6 lane persistent USB thing isn't going to work 15:25:24
7 and you should go with the FlexConnect 15:25:28
8 solution instead? 15:25:30
9 A. That's about right. 15:25:32
10 Q. Okay. 15:25:33
11 Let's fast forward to 15:25:35
12 December 2014, and let me mark for 15:25:37
13 identification Exhibit 260 -- actually, it's 15:25:49
14 261, I believe, is in evidence. I apologize. 15:25:51
15 You know what, it may not be. 15:25:55
16 THE COURT: I don't think so. 15:25:58
17 MS. DURIE: No, you know what, 15:25:58
18 it's Exhibit 66. We have a couple of emails 15:25:59
19 that are duplicates of each other. I 15:26:03
20 apologize. 15:26:05
21 Let's take a look at Exhibit 66 15:26:06
22 which has been handed out. 15:26:08
23 BY MS. DURIE: 15:26:10
24 Q. Now, if we go to the second page of 15:26:11

1 this exhibit, the top of the second page -- 15:26:15
2 actually, I take it back. The bottom -- there 15:26:26
3 we go. The middle of the second page -- I'm 15:26:28
4 sorry, go back. The second page is on the 15:26:31
5 left. 15:26:36
6 In the middle of the second page 15:26:36
7 towards the top, it says, "It appears that 15:26:38
8 Chrysler is committed to the Unwired solution 15:26:40
9 and Microchip Flex Connect solution is no 15:26:44
10 longer being considered." {Sic} 15:26:46
11 This is from December of 2014; 15:26:48
12 right? 15:26:52
13 A. Yes. 15:26:53
14 Q. Now, at this point in time, Tecvox 15:26:53
15 was one of Microchip's customers; right? 15:26:57
16 A. Yes. 15:27:00
17 Q. And Microchip had been selling Tecvox 15:27:01
18 on the FlexConnect; right? 15:27:04
19 A. Yes. 15:27:06
20 Q. And Tecvox was then trying to sell 15:27:07
21 Chrysler on a module that incorporated that 15:27:10
22 FlexConnect; right? 15:27:15
23 A. Yes, that's correct. 15:27:17
24 Q. And they were not successful in 15:27:17

1 convincing Chrysler to use that solution; 15:27:19
2 right? 15:27:23
3 A. Yes, that's correct. 15:27:25
4 Q. And then if we take a look at the 15:27:27
5 response to that up at the top of the first 15:27:31
6 page, if we go to page 1, it says -- actually 15:27:36
7 at the bottom, it says at the bottom there, 15:27:45
8 from Mr. Sroka, "When persistent USB is a 15:27:48
9 requirement we have definitely run into a 15:27:52
10 wall." 15:27:56
11 Now, you said in your direct 15:27:57
12 testimony that the wall that had been run into 15:27:59
13 was just a marketing wall, not a technical 15:28:04
14 wall; is that sort of the gist of it? 15:28:08
15 A. Well, I think in this context of this 15:28:12
16 message right from a marketer, it was a 15:28:14
17 marketing wall. The chips we had to sell 15:28:16
18 couldn't do it. 15:28:19
19 Q. Right. You had run into a wall when 15:28:20
20 it came to supplying a chip that was single 15:28:22
21 lane and that had persistent USB? 15:28:26
22 A. Yes. 15:28:28
23 Q. Okay. 15:28:29
24 And right around the same time, 15:28:30

1 December of 2014, is when Mr. Sroka asked Mr. 15:28:33
2 Bohm for a copy of his patent; right? 15:28:39
3 A. I don't remember the timeline, but 15:28:43
4 yes, I believe that could be true. Yes. 15:28:45
5 Q. Okay. 15:28:47
6 THE COURT: Ms. Durie, before you 15:28:49
7 move on to something new, can I give you a 15:28:51
8 five-minute warning? 15:28:54
9 MS. DURIE: This is a perfect time 15:28:56
10 to break. This would be a nice place. 15:28:57
11 THE COURT: All right. Then why 15:28:59
12 don't we break for the day now. So as we 15:28:59
13 break for the evening, I'm just going to 15:29:02
14 repeat the caution I've given you about the 15:29:05
15 testimony. You should not be conversing or 15:29:07
16 talking about it among yourselves. 15:29:11
17 Second, I know it's tempting to go 15:29:13
18 home and tell the people at home what you're 15:29:15
19 listening to in court. I'm going to caution 15:29:17
20 you not to do that because it will inevitably 15:29:19
21 invite their responses and their thoughts to 15:29:22
22 weigh in, and that is not what is going on in 15:29:24
23 court. 15:29:28
24 And third, I'll repeat the caution 15:29:28

1 again. Don't go home and start looking things 15:29:30
2 up. Google is not your friend in this 15:29:32
3 context. Okay? You need to constrain what 15:29:35
4 you know to what you hear in court. 15:29:39
5 So with that, I'll let you go. Is 15:29:41
6 9 o'clock good again for everybody tomorrow 15:29:44
7 morning? Okay. Great. Let's plan to start 15:29:46
8 at 9 tomorrow. We will have a full day 15:29:48
9 tomorrow, and with that, we can let you step 15:29:51
10 out and have a good night. Be safe with the 15:30:00
11 weather. Okay. 15:30:06
12 (Whereupon, the jury was excused 15:30:07
13 from the courtroom.) 15:30:09
14 THE COURT: Mr. Obolsky, you can 15:30:20
15 step down. I am just going to caution you 15:30:23
16 that you are still under oath and in the 15:30:25
17 middle of cross-examination. You should not 15:30:26
18 be discussing your testimony with anyone over 15:30:28
19 the course of the evening. 15:30:30
20 THE WITNESS: I will go somewhere 15:30:32
21 else. 15:30:33
22 THE COURT: Okay. All right. So 15:30:33
23 you can step down. I don't know if there's 15:30:35
24 any particular housekeeping? 15:30:37

1 MS. DURIE: I have one trivial 15:30:40
2 one. This probably doesn't require Your 15:30:41
3 Honor's attention. We have some physical 15:30:43
4 devices that were admitted into evidence and I 15:30:45
5 just want to make sure that we tender them for 15:30:46
6 safekeeping. 15:30:49
7 THE COURT: That's fine. Mr. 15:30:50
8 Koehler, can you take those and hang on to 15:30:52
9 them? 15:30:54
10 THE COURT CLERK: Sure. 15:30:55
11 THE COURT: Okay. Anything else 15:30:59
12 from the plaintiffs' side? 15:31:01
13 MR. RUSSELL: Your Honor, we did 15:31:03
14 have one regarding particular 15:31:04
15 exhibits...(inaudible). 15:31:12
16 THE COURT: That's fine. As long 15:31:12
17 as there are no objections, that's fine. I 15:31:12
18 mean even at the beginning of the examination, 15:31:15
19 if you know you are going to use it, just let 15:31:17
20 me know and I'll admit it then so you don't 15:31:19
21 have to deal with that. I will just say give 15:31:21
22 some thought to how you want to deal with 15:31:24
23 those in terms of handing them amongst the 15:31:25
24 jury when we submit the evidence. I don't 15:31:30

1 know whether you want to submit everything 15:31:32
2 electronically or whether you plan to send 15:31:33
3 back paper copies with them. If it's the 15:31:36
4 latter, then there's no problem. Okay. All 15:31:38
5 right. 15:31:40
6 So with that, again, if there are 15:31:41
7 issues that I am going to need to take up 15:31:44
8 tomorrow for conditional relevance kind of 15:31:45
9 determinations, I would appreciate an email by 15:31:47
10 about 9 o'clock to my chambers email and, you 15:31:50
11 know, I certainly would appreciate the revised 15:31:53
12 amended jury instructions tonight as well. 15:31:58
13 Again, if you can email them, fine, just email 15:32:01
14 them to chambers. That's fine, too. But I 15:32:04
15 just want to be able to look at them and 15:32:07
16 incorporate them into what I get you by the 15:32:09
17 end of the day tomorrow. 15:32:12
18 MS. DURIE: Thank you. 15:32:14
19 THE COURT: All right. With that, 15:32:15
20 we will stand in recess until tomorrow. I 15:32:16
21 will see everyone here a few minutes before 9 15:32:18
22 in case there are any issues we need to take 15:32:21
23 up. 15:32:23
24 MS. DURIE: Thank you, Your Honor. 15:32:23

THE COURT: All right. Everybody 15:32:24
have a good night. 15:32:26
(Whereupon, the Court adjourned 15:32:27
proceedings at 3:33 p.m.) 15:32:31

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 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 by hand and official seal this 7th day of April, 2022.

Notary Public

Job No. 5162168

08:17:24

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

- - -

MICROCHIP TECHNOLOGY INCORPORATED, : C.A. No. 17-1194

Plaintiff,

vs.

APTIV SERVICES US, LLC,

Defendant.

- - -

TRANSCRIPT OF PROCEEDINGS

TESTIMONY

VOLUME 3

- - -

Date: Friday, April 8, 2022

Time: 9 o'clock 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

- - -

VERITEXT LEGAL SOLUTIONS
MID-ATLANTIC REGION
1801 Market Street, Suite 1800

1 (Whereupon, the Court commenced 08:19:09
2 proceedings at 9 o'clock a.m.) 08:19:13
3 THE COURT CLERK: All rise. The 08:19:17
4 Honorable Joshua D. Wolson presiding. 08:19:21
5 THE COURT: All right. Good 08:19:26
6 morning, everybody. 08:57:07
7 MR. SLAYDEN: Good morning. 08:57:09
8 MS. DURIE: Good morning. 08:57:10
9 THE COURT: Have a seat, please. 08:57:11
10 All right. 08:57:14
11 We got the jury instructions that 08:57:16
12 everybody sent last night. Thank you. We are 08:57:17
13 working through the changes you saw. I will 08:57:20
14 try to incorporate them into our draft and I 08:57:24
15 will get you something by the end of the day 08:57:28
16 so you can look at them over the weekend. 08:57:31
17 MS. DURIE: And I just want to be 08:57:33
18 clear that there is a dispute between the 08:57:34
19 parties about the changes. 08:57:36
20 THE COURT: Yes, I saw that there 08:57:37
21 was a draft. 08:57:38
22 MS. DURIE: Perfect. 08:57:39
23 THE COURT: And then I guess you 08:57:40
24 accepted -- one side made changes, the other 08:57:42

1 side didn't accept all the changes and made 08:57:46
2 their own changes. I didn't think that meant 08:57:48
3 you had agreed to their changes. 08:57:50
4 MS. DURIE: Perfect. We just 08:57:51
5 wanted to get it in because we knew you were 08:57:52
6 waiting for it. 08:57:55
7 THE COURT: Understood. I think 08:57:56
8 we understand the state of play. 08:57:57
9 MS. DURIE: Perfect. 08:57:59
10 THE COURT: You know, you'll see 08:58:00
11 what we give you, and obviously to the extent 08:58:01
12 of what we issue. I don't think it will be 08:58:05
13 amongst the confusion, but if it is, you'll 08:58:08
14 let us know. 08:58:10
15 MS. DURIE: Yes. Thank you. 08:58:11
16 Very, very much appreciate it, getting the 08:58:11
17 heads-up. 08:58:15
18 THE COURT: Yes. Okay. All 08:58:15
19 right. I think that's it. I didn't hear 08:58:20
20 anything else in terms of issues we need to 08:58:23
21 take up; right? 08:58:25
22 MR. SLAYDEN: No, Your Honor. 08:58:26
23 THE COURT: All right. Let's 08:58:27
24 bring the jury in and we'll get Mr. Obolsky 08:58:28

1 back up here. 08:58:31
2 (Whereupon, the jury entered the 08:58:33
3 courtroom.) 08:58:35
4 THE COURT: All right. 08:58:59
5 Good morning, everybody. I am 08:58:59
6 impressed with your promptness. I appreciate 08:59:03
7 it. It's not always the case with juries, so 08:59:05
8 you are in good standing. 08:59:08
9 All right. So we're going to 08:59:09
10 resume this morning with Mr. Obolsky. I'm 08:59:11
11 sorry, you can all be seated. You can resume 08:59:14
12 Mr. Obolsky's cross-examination, so Mr. 08:59:17
13 Obolsky, if you will step up. 08:59:20
14 You understand you're still under 08:59:37
15 oath? 08:59:38
16 THE WITNESS: Yes, I do. 08:59:39
17 THE COURT: All right. 08:59:40
18 Ms. Durie, you may proceed. 08:59:41
19 MS. DURIE: Thank you. 08:59:43
20 - - - 08:59:43
21 CROSS-EXAMINATION, CONTINUED 08:59:43
22 - - - 08:59:43
23 BY MS. DURIE: 08:59:43
24 Q. Mr. Obolsky, good morning. 08:59:44

1 A. Good morning. 08:59:46
2 Q. Now, yesterday we left off in 08:59:46
3 December of 2014, and we were talking about 08:59:48
4 Chrysler. And just by way of a refresher, 08:59:52
5 Tecvox was one of Microchip's customers; 08:59:57
6 right? 09:00:00
7 A. Yes, it was. 09:00:00
8 Q. An Tecvox had been pitching the 09:00:03
9 Chrysler business with a Microchip chip; 09:00:06
10 right? 09:00:09
11 A. Yes, it was. 09:00:10
12 Q. Okay. 09:00:12
13 That was the FlexConnect chip that 09:00:12
14 did not have persistent USB; right? 09:00:14
15 A. Yes. 09:00:18
16 Q. And Tecvox had learned that it was 09:00:18
17 losing the Chrysler business; right? 09:00:22
18 A. Yes. 09:00:24
19 Q. Okay. 09:00:25
20 MS. DURIE: Let me mark for 09:00:27
21 identification TX-262. 09:00:31
22 (Whereupon, Trial Exhibit 262 was 09:00:36
23 introduced.) 09:00:40
24 BY MS. DURIE: 09:00:47

1 Q. Exhibit 262 is an email amongst a 09:00:47
2 number of individuals at Microchip regarding a 09:00:50
3 Thursday Chrysler meeting; correct? 09:00:56
4 A. Let me look at it. 09:01:00
5 Q. Sure. 09:01:01
6 A. Yes. 09:01:04
7 MS. DURIE: We offer it. 09:01:06
8 MR. SLAYDEN: No objection. 09:01:07
9 THE COURT: Okay. So received. 09:01:07
10 MS. DURIE: And, Mr. Glass, if we 09:01:11
11 can put up page 1, and start at the -- that's 09:01:13
12 perfect. 09:01:18
13 BY MS. DURIE: 09:01:19
14 Q. Now, this is an email, we see, from 09:01:19
15 Sal Canu; correct? 09:01:27
16 A. Yes, it is. 09:01:29
17 Q. And can you remind us who he is? 09:01:30
18 A. He is a salesman and applications 09:01:31
19 engineer inside of Microchip. 09:01:33
20 Q. Perfect. 09:01:35
21 Let's take a look -- let's start 09:01:36
22 at "Short-term" in the middle of the page. He 09:01:38
23 is discussing Microchip's short-term position; 09:01:41
24 right? 09:01:43

1 A. Yeah, where are we looking? 09:01:48
2 Q. Right there where it says, 09:01:51
3 "Short-term." 09:01:53
4 A. Okay. I got it. 09:01:53
5 Q. And if the monitor in front of you 09:01:54
6 is -- 09:01:56
7 A. Easier up here. 09:01:56
8 Q. Completely understand. 09:01:57
9 And he says, "We looked at 09:02:00
10 developing a solution for 1 upstream lane, 09:02:02
11 persistent USB data and we don't have a 09:02:06
12 solution. We wish we could provide a solution 09:02:08
13 but we don't have it." 09:02:10
14 That was true; right? 09:02:12
15 A. Yes. 09:02:13
16 Q. And then if we go a little bit 09:02:13
17 further down, he says, "We still think our 09:02:17
18 USB84604 solution is the best solution." 09:02:23
19 That was the FlexConnect solution; 09:02:28
20 right? 09:02:30
21 A. Yes. 09:02:30
22 Q. Okay. 09:02:31
23 Now, let's go up -- actually, I 09:02:32
24 take it back. 09:02:35

1 MS. DURIE: Let's go down, take 09:02:39
2 that down and go to "Long-term" underneath 09:02:40
3 there, if we can blow that up. Perfect. 09:02:43
4 That's what we need. That's great. 09:02:47
5 BY MS. DURIE: 09:02:49
6 Q. So he says, "Long-term: We have 09:02:49
7 Sparta in the product pipeline and will 09:02:53
8 continue on that path. This is the solution 09:02:55
9 that works with 2 upstream lanes." 09:02:58
10 So that's not a one-lane solution, 09:03:02
11 that's a two-lane solution; right? 09:03:04
12 A. That's what it says, yes. 09:03:07
13 Q. Okay. 09:03:08
14 And then he says, "We will 09:03:10
15 consider a solution for 1 upstream lane with 09:03:12
16 persistent USB data but do not have a 09:03:15
17 commitment for that now." 09:03:18
18 So 1 upstream lane with persistent 09:03:21
19 USB data, that's what Chrysler was asking for? 09:03:24
20 A. Yes. 09:03:26
21 Q. That's what Tecvox didn't have? 09:03:27
22 A. Yes. 09:03:29
23 Q. Right? 09:03:29
24 And Dave Diovardi, who is he? 09:03:31

1 A. Dave Diovardi is a program manager at 09:03:34
2 Chrysler. 09:03:39
3 Q. Okay. 09:03:39
4 MS. DURIE: Now, if we can go up, 09:03:40
5 Mr. Glass, to the top of the email. It says, 09:03:42
6 "Our position: Upper Management involvement." 09:03:48
7 Actually, can we go back down to 09:03:52
8 "Long-term," I apologize. 09:03:55
9 BY MS. DURIE: 09:03:56
10 Q. It says, "(We can ask Dave Diovardi 09:03:56
11 here - Is the Unwired solution certified with 09:03:59
12 Apple?) Certification of this system would 09:04:01
13 help make the case to Upper Management to put 09:04:03
14 this solution in the pipeline." 09:04:06
15 So some of the folks at Microchip 09:04:08
16 were trying to make the case with upper 09:04:11
17 management about this 1 upstream lane with 09:04:13
18 persistent USB data saying hey, guys, we need 09:04:15
19 to do this; right? 09:04:19
20 A. Yes. It appears so. 09:04:20
21 Q. And one of the road blocks was that 09:04:22
22 Microchip was worried that Apple wasn't 09:04:24
23 ultimately going to certify this? 09:04:26
24 A. Yes. 09:04:29

1 Q. Okay. 09:04:29
2 And so now, let's go up to the 09:04:30
3 top. "Our position: Upper Management 09:04:33
4 involvement." 09:04:37
5 Now, upper management, that's you; 09:04:39
6 right? You're part of upper management? 09:04:41
7 A. Yes. 09:04:43
8 Q. Okay. 09:04:44
9 "Upper Management is aware of the 09:04:45
10 market, the requirements, and all solutions 09:04:47
11 proposed. More information is needed for them 09:04:49
12 to make any directional changes and this will 09:04:51
13 take time. A business case providing revenue 09:04:54
14 commitments/estimates would have to justify 09:04:56
15 investment." 09:04:59
16 Now, sir, you said yesterday in 09:05:01
17 your direct examination that Microchip always 09:05:02
18 does what its customers want; right? 09:05:05
19 A. Eventually, yes. 09:05:08
20 Q. Yeah, eventually. 09:05:10
21 You knew that this was something 09:05:12
22 that Tecvox wanted; right? 09:05:13
23 A. Yes. We became aware, yes. 09:05:16
24 Q. Yeah. And your response wasn't 09:05:19

1 absolutely, we'll get right on it; your 09:05:21
2 response was yeah, we'll think about it and 09:05:23
3 see if that's something we want to do? 09:05:25
4 A. That's the response here. 09:05:28
5 Q. Right. 09:05:30
6 A. I'm not copied on this message. 09:05:31
7 Q. Okay. 09:05:33
8 So the wall that Microchip ran 09:05:33
9 into in this timeframe is that they didn't 09:05:35
10 have a solution to be able, both, to have 09:05:39
11 music at the same time as CarPlay in a single 09:05:43
12 lane format, and you weren't sure it was worth 09:05:45
13 the investment to come up with one? 09:05:47
14 A. At this point, we weren't sure we 09:05:51
15 should do this chip, yes. 09:05:53
16 Q. Right. 09:05:56
17 MS. DURIE: Mr. Glass, if we could 09:05:57
18 put up TX-36 in evidence. 09:05:59
19 BY MS. DURIE: 09:06:04
20 Q. TX-36 is an email exchange with you 09:06:06
21 and Steve Sanghi. 09:06:10
22 So who is Steve Sanghi? 09:06:14
23 A. Steve Sanghi, at the time, was the 09:06:15
24 CEO of Microchip. 09:06:17

1 Q. And there is a copy there to Ganesh 09:06:18
2 Moorthy. Who was he? 09:06:23
3 A. Ganesh was my boss immediately and 09:06:24
4 eventually has now become the CEO. 09:06:28
5 Q. Right. 09:06:30
6 So fair to say this is about as 09:06:31
7 upper management as it gets; right? 09:06:32
8 A. That's fair. 09:06:34
9 Q. Okay. 09:06:35
10 Now, if we can start at the email 09:06:37
11 that you sent, it's on the second page, and 09:06:41
12 blow up this. 09:06:48
13 So you said -- this is part of 09:06:51
14 what you wrote; right? 09:06:52
15 A. Yeah. 09:06:56
16 Q. And you're talking about a meeting 09:06:56
17 that's going to happen with Tecvox; right? 09:06:58
18 And if we go down, there is a 09:07:05
19 discussion here about Don Perkins. Who is 09:07:07
20 Don? 09:07:09
21 A. Don was one of the marketing managers 09:07:10
22 at the time. 09:07:14
23 Q. Okay. 09:07:14
24 MS. DURIE: And so let's go down, 09:07:14

1 the next page following up on your email, we 09:07:16
2 can go to page 3. There we go. 09:07:21
3 BY MS. DURIE: 09:07:21
4 Q. And so in your summary of this, you 09:07:25
5 say, "In my last meeting with Raj, he stated 09:07:28
6 that he blames Microchip for his failure at 09:07:31
7 Chrysler." 09:07:34
8 So this is the Tecvox guy saying 09:07:36
9 he thinks it's Microchip's fault that he lost 09:07:37
10 the Chrysler business; right? 09:07:39
11 A. That's what -- that is what he 09:07:42
12 thought, I guess. 09:07:43
13 Q. Yeah. 09:07:44
14 And you say, "He was trying to 09:07:45
15 make me feel guilty, and be more agreeable to 09:07:48
16 supporting them. The reality is the market is 09:07:51
17 evolving quickly. Our current solution is 09:07:54
18 good, but does not solve all problems. We are 09:07:56
19 planning to develop a next generation 09:07:58
20 solution, in part based on Tecvox's feedback. 09:08:00
21 In part in response to the Unwired solution, 09:08:03
22 which we had dismissed when they were a small 09:08:05
23 standalone company." 09:08:07
24 And that's true; right? 09:08:09

1 A. That is true. Unwired was struggling 09:08:14
2 quite a bit at the time. 09:08:17
3 Q. Yeah. They were a small stand-alone 09:08:18
4 company and so you dismissed their solution? 09:08:20
5 A. Yes. 09:08:24
6 Q. Okay. 09:08:26
7 MS. DURIE: Let's go to the first 09:08:34
8 page. Great. And actually, can you just go 09:08:29
9 back to the whole document for a second so we 09:08:36
10 can see where we're going. 09:08:39
11 BY MS. DURIE: 09:08:41
12 Q. So at the top, this is your email to 09:08:41
13 your CEO, to the guy who is going to become 09:08:43
14 your CEO, and you are responding to this email 09:08:46
15 thread; right? 09:08:48
16 A. Can you repeat your question? I was 09:08:51
17 not quite following. 09:08:54
18 Q. Sure. 09:08:55
19 This email that you wrote at the 09:08:56
20 top, you're reporting to your CEO and to the 09:08:57
21 guy who is going to become your CEO about this 09:09:00
22 email thread underneath that we were just 09:09:02
23 looking at; right? 09:09:04
24 A. Yes. 09:09:06

1 Q. Okay. 09:09:06
2 And you say, "We left with actions 09:09:07
3 relating to pricing and technology," and then 09:09:10
4 let's look at the second one. "We have been 09:09:13
5 working on the business case and technical 09:09:16
6 details to provide a single connection 09:09:18
7 solution similar to Unwired. We are still not 09:09:20
8 sure the ROI" -- that's return on investment; 09:09:24
9 right? 09:09:28
10 A. Yes. 09:09:28
11 Q. "We are still not sure the return on 09:09:29
12 investment justifies this project, but are 09:09:31
13 much more confident than when it was first 09:09:34
14 proposed. This development would be about 1.5 09:09:37
15 to $2 million." And then you go on to say, 09:09:40
16 "With limited resources." 09:09:45
17 Limited resources; I think I heard 09:09:48
18 in opening that Microchip's R & D budget is 09:09:50
19 $1.2 billion; is that right? 09:09:55
20 A. It is today, yes. 09:09:57
21 Q. Yeah. 09:09:58
22 A. It was not at this time. 09:09:59
23 Q. Right. 09:10:01
24 But if it is -- if it's 09:10:02

1 $1.2 billion today, presumably it was several 09:10:04
2 hundred million dollars back then; right? 09:10:07
3 A. That's a fair estimate. 09:10:08
4 Q. Okay. 09:10:09
5 So "with limited resources, this 09:10:10
6 project needs to return 15 to $20 million or 09:10:13
7 will not be funded." 09:10:17
8 So at this point in time, 09:10:19
9 January 6, 2015, Microchip had not yet made a 09:10:21
10 decision whether it was willing to make an 09:10:23
11 investment in order to come out with a 09:10:25
12 one-lane persistent USB solution; fair? 09:10:28
13 A. Yes, that was the Sandia chip we have 09:10:30
14 been talking about that was being analyzed, 09:10:33
15 the business plan was being worked. 09:10:35
16 Q. Okay. 09:10:37
17 Now, at this point in time, 09:10:38
18 combatting the Unwired threat was a key goal 09:10:41
19 of your business unit; right? 09:10:44
20 A. In this context, I think it was a key 09:10:49
21 to what Tecvox needed and responded to 09:10:51
22 Chrysler. 09:10:58
23 MS. DURIE: Okay. Let me mark for 09:10:58
24 identification Exhibit 272. 09:11:00

1 (Whereupon, Trial Exhibit 272 was 09:11:05
2 introduced.) 09:11:08
3 BY MS. DURIE: 09:11:14
4 Q. Okay. 09:11:15
5 Exhibit 272 is an email from you 09:11:15
6 to a number of individuals, including Mark 09:11:19
7 Bohm, January 12th, 2015; right? 09:11:21
8 A. Hang on one second. 09:11:26
9 Q. Sure. 09:11:27
10 A. Yes. 09:11:28
11 MS. DURIE: We offer it. 09:11:30
12 MR. SLAYDEN: No objection. 09:11:30
13 THE COURT: All right. It will 09:11:32
14 come in. 09:11:33
15 MS. DURIE: And we can start at 09:11:34
16 the top of the first page. 09:11:39
17 BY MS. DURIE: 09:11:41
18 Q. There's an email from you, 09:11:41
19 January 12th, 2015, "Updated Goals," and 09:11:43
20 underneath that you say, "One bonus goal 09:11:49
21 related to Unwired that was already in our 09:11:52
22 plans. In yellow." 09:11:55
23 So these are corporate goals; 09:11:57
24 right? 09:11:59

1 A. Hang on. 09:12:00
2 Yeah, these are division goals, 09:12:05
3 yes. 09:12:09
4 Q. Now, is it right that the way 09:12:10
5 Microchip worked, bonuses for employees in a 09:12:12
6 particular group or division are tied to goals 09:12:15
7 for that division or group for some period of 09:12:19
8 time? 09:12:21
9 A. No, they are not. 09:12:21
10 Q. Okay. 09:12:22
11 So bonuses are completely 09:12:22
12 unrelated to corporate performance? 09:12:24
13 A. Well, bonus is only a function of 09:12:26
14 corporate high-line revenue and growth, 09:12:28
15 period. 09:12:31
16 Q. Okay. Fair enough. 09:12:31
17 Now, let's take a look at the 09:12:33
18 goals. I take it even if you don't have 09:12:36
19 bonuses tied to them, you still care about 09:12:38
20 meeting them? 09:12:43
21 A. We set a plan and we hope to meet 09:12:43
22 that plan. 09:12:45
23 Q. Great. 09:12:46
24 MS. DURIE: Let's take a look at 09:12:46

1 the third page, Mr. Glass, and let's take a 09:12:49
2 look at what the goals were. 09:12:52
3 BY MS. DURIE: 09:12:55
4 Q. So Q4, fiscal year 2015, January to 09:12:55
5 March of 2015, Objectives and Key Results. 09:13:00
6 So this is a list of goals, and 09:13:04
7 then you're highlighting the status of 09:13:06
8 performance against those goals; right? 09:13:09
9 A. Yes. 09:13:12
10 Q. Okay. 09:13:12
11 And so green means complete, 09:13:13
12 yellow means at risk, red means likely miss, 09:13:17
13 blue is on track. 1(c) goal, initiate 09:13:21
14 business and technical actions to combat the 09:13:25
15 Unwired threat, and the status of that 09:13:27
16 particular goal is yellow, which means it was 09:13:30
17 seen as being at risk; right? 09:13:32
18 A. Yeah. It was being completed by the 09:13:35
19 end of March. 09:13:37
20 Q. There was a risk that you would not 09:13:38
21 succeed in your business and technical actions 09:13:41
22 to combat the Unwired threat by the end of the 09:13:43
23 quarter? 09:13:49
24 A. I'm sorry, by? 09:13:49

1 Q. The end of the quarter. 09:13:50
2 A. Yes. And that's what it's measuring. 09:13:51
3 Q. Right. So keep this date in mind. 09:13:54
4 Let's go back to the first page. 09:13:57
5 January 12th, 2015; did anything 09:13:59
6 else happen on January 12th, 2015, relevant to 09:14:09
7 this case? 09:14:12
8 A. I'm sorry? 09:14:13
9 Q. Did anything else happen on 09:14:14
10 January 12th, 2015, that is relevant to this 09:14:16
11 case? 09:14:19
12 A. I don't specifically remember, but... 09:14:20
13 Q. All right. Let's take a look. 09:14:23
14 MS. DURIE: TX-9 in evidence, 09:14:25
15 please. 09:14:28
16 BY MS. DURIE: 09:14:28
17 Q. January 12th, 2015, "Dear Mr. Voto," 09:14:29
18 here are our concerns. 09:14:38
19 A. Yes. 09:14:41
20 Q. So you sent the notice letter to 09:14:41
21 Delphi the same day that you sent around 09:14:44
22 internally that your goal of initiating 09:14:46
23 business and technical actions to combat the 09:14:48
24 Unwired threat was at risk; right? 09:14:51

1 A. It would appear so, yes. 09:14:56
2 Q. All right. 09:14:58
3 Now, Delphi responded to that 09:14:58
4 letter promptly; right? 09:15:00
5 A. I guess, as I understand it. 09:15:03
6 MS. DURIE: Let's take a look. 09:15:09
7 Mark for identification Exhibit 269. 09:15:11
8 (Whereupon, Trial Exhibit 269 was 09:15:13
9 introduced.) 09:15:16
10 BY MS. DURIE: 09:15:28
11 Q. Exhibit 269 is a fax, which is kind 09:15:28
12 of charming. It is a fax from 2015, and if we 09:15:31
13 take a look at the thing that was faxed, it's 09:15:36
14 a letter from Delphi to Microchip Technology 09:15:38
15 Incorporated responding to the January 12th 09:15:43
16 letter that we were just looking at; right? 09:15:45
17 A. Yes, it appears to be. 09:15:49
18 MS. DURIE: We offer 269. 09:15:50
19 MR. SLAYDEN: It's got a 09:15:57
20 limitation to it. 09:15:59
21 THE COURT: I'm sorry? 09:16:01
22 MR. SLAYDEN: Subject to a 09:16:02
23 limitation, I'll represent, giving the letter 09:16:02
24 to attorneys. 09:16:08

1 THE COURT: Okay. I'll receive 09:16:09
2 it. And, ladies and gentlemen, you'll see the 09:16:13
3 exhibit. You should not draw any inferences, 09:16:17
4 one way or another, from the fact that there 09:16:19
5 were also attorneys who received a copy of it, 09:16:22
6 which you'll see on the letter. 09:16:23
7 MS. DURIE: Terrific. 09:16:25
8 Mr. Glass, if we could see 269, 09:16:27
9 please, page 2. 09:16:31
10 BY MS. DURIE: 09:16:32
11 Q. This is the letter that Delphi faxed 09:16:33
12 back dated January 30th, 2015, responding to 09:16:35
13 the letter, and if we can go down, saying we 09:16:41
14 don't intend to use any of your intellectual 09:16:44
15 properties, we value our business 09:16:47
16 relationship, et cetera; right? 09:16:48
17 A. Yes, that appears so. 09:16:52
18 Q. Okay. 09:16:53
19 And Microchip didn't respond to 09:16:53
20 this letter from Delphi; right? 09:16:57
21 A. I don't know. I don't know what 09:16:59
22 happened next. 09:17:01
23 Q. You don't know what happened next. 09:17:02
24 All right. Well, let's take a look. 09:17:05

1 MS. DURIE: 275. 09:17:10
2 (Whereupon, Trial Exhibit 275 was 09:17:13
3 introduced.) 09:17:16
4 BY MS. DURIE: 09:17:16
5 Q. Exhibit 275, email from Mitch Obolsky 09:17:29
6 to Steve Sanghi, CEO, Ganesh Moorthy, 09:17:33
7 CEO-to-be, initial proposal for Tecvox; right? 09:17:38
8 A. Hang on. Yes. 09:17:41
9 Q. January 26, 2015? 09:17:45
10 A. Yes. 09:17:46
11 MS. DURIE: We offer 275. 09:17:47
12 MR. SLAYDEN: No objection, Your 09:17:49
13 Honor. 09:17:51
14 THE COURT: All right. It's 09:17:51
15 admitted. 09:17:52
16 MS. DURIE: Okay. So Exhibit 275, 09:17:55
17 page 1, if you can blow that up. Perfect. 09:17:57
18 Thank you. All right. 09:18:01
19 BY MS. DURIE: 09:18:03
20 Q. So this is an email from you, "The 09:18:03
21 attached slides are the heart of the 09:18:05
22 discussion with Tecvox. There have been about 09:18:07
23 20 hours of internal Microchip meetings in the 09:18:12
24 last two weeks, and many more are needed to 09:18:14

1 complete the product definition." 09:18:17
2 And then it goes on to say, "We 09:18:22
3 now believe it is technically feasible to 09:18:25
4 develop a solution that competes with 09:18:28
5 Unwired's and also can serve the European car 09:18:30
6 manufacturers whose needs differ slightly." 09:18:33
7 So now you had concluded that this 09:18:38
8 one-lane persistent USB solution was 09:18:44
9 technically feasible? 09:18:48
10 A. That's what it says. That is 09:18:51
11 correct. 09:18:54
12 Q. That, indeed, is what it says. 09:18:54
13 Now, you let your CEO know -- if 09:18:57
14 we can scroll down a little bit -- you got a 09:19:01
15 preliminary set of features, you've got a 09:19:06
16 development timeline, you've got product 09:19:09
17 costs. 09:19:11
18 Developing a chip takes a lot; 09:19:11
19 right? 09:19:13
20 A. Yes, it does. 09:19:14
21 Q. Yeah. 09:19:15
22 And you say, "It will likely take 09:19:15
23 until the end of March to fully define the 09:19:17
24 product and timeline," so you're not even 09:19:20

1 going to have a plan until the end of March, 09:19:23
2 and likely two years or more to reach 09:19:25
3 production if the business plan says we should 09:19:27
4 proceed with this project. 09:19:29
5 That's what you told your CEO at 09:19:31
6 the time; right? 09:19:34
7 A. Yes. That's what it says. 09:19:35
8 Q. Okay. 09:19:36
9 And ultimately you decided, at 09:19:40
10 this point in time, to call the thing that you 09:19:43
11 were developing a multi-host device 09:19:46
12 controller; right? 09:19:52
13 A. I guess so. I don't -- I don't know 09:19:54
14 that. 09:19:56
15 Q. Yeah. 09:19:57
16 A. I assume. 09:19:58
17 Q. It is after you've sent the notice 09:19:59
18 letter to Aptiv/Delphi; right? Right? 09:20:01
19 A. Hang on one second. You said this is 09:20:09
20 after? What's the date? I'm sorry. 09:20:11
21 Q. Yeah, this is after. January 26th; 09:20:13
22 right? 09:20:15
23 A. Yes, yes. Sorry. 09:20:16
24 Q. You're thinking about how to counter 09:20:17

1 the threat posed by the Unwired/Delphi 09:20:20
2 solution at this point in time; right? 09:20:24
3 A. Yes. 09:20:26
4 Q. And so you picked, for the product 09:20:27
5 that you were starting to develop, the name 09:20:31
6 that was in the patent that you had sent to 09:20:33
7 Delphi; right? 09:20:37
8 A. If that's true, yes. 09:20:40
9 MS. DURIE: Let's take a look. 09:20:43
10 Identification, Exhibit 273. 09:20:48
11 (Whereupon, Trial Exhibit 273 was 09:20:52
12 offered.) 09:20:55
13 BY MS. DURIE: 09:21:03
14 Q. Exhibit 273, an email from David 09:21:05
15 Sroka to Mark Bohm, among others, dated 09:21:09
16 January 12th, 2015; right? 09:21:12
17 A. Yes. 09:21:17
18 MS. DURIE: We offer it. 09:21:17
19 MR. SLAYDEN: No objection, Your 09:21:19
20 Honor. 09:21:20
21 THE COURT: All right. It is 09:21:20
22 admitted. 09:21:21
23 MS. DURIE: And, Mr. Glass, if we 09:21:23
24 can take a look at Exhibit 273, second full 09:21:25

1 paragraph, from Mr. Sroka. 09:21:29
2 BY MS. DURIE: 09:21:31
3 Q. Now, just to be clear -- 09:21:31
4 MS. DURIE: And if you can blow 09:21:33
5 that up, too. 09:21:35
6 BY MS. DURIE: 09:21:35
7 Q. So Mr. Sroka is the one we saw 09:21:37
8 yesterday who is, both, a marketing guy, but 09:21:39
9 also an engineer who was working on that 09:21:41
10 PowerPoint product definition set of slides 09:21:43
11 for the chip that Microchip was working on; 09:21:45
12 right? 09:21:47
13 A. Can you repeat that? I'm sorry, I 09:21:48
14 didn't follow the whole thing. 09:21:51
15 Q. Sure. 09:21:52
16 Yesterday we saw a PowerPoint 09:21:53
17 presentation, it had Mr. Sroka's name on it, 09:21:54
18 relating to the development of the Sandia 09:21:57
19 chip; right? That's the one-lane persistent 09:21:59
20 USB? 09:22:01
21 A. Yes, I think so. 09:22:02
22 Q. Okay. 09:22:04
23 And I think we confirmed, he is, 09:22:04
24 both, a marketing guy, but also an engineer; 09:22:07

1 right? 09:22:09
2 A. Yes. 09:22:09
3 Q. Okay. 09:22:09
4 And so Mr. Sroka, as the person 09:22:10
5 responsible for this project, says, "First we 09:22:14
6 are well positioned with USB84604," so 09:22:18
7 Microchip is still trying to sell that old 09:22:22
8 FlexConnect solution; right? 09:22:25
9 A. I don't know about old. It was brand 09:22:27
10 new at that time. 09:22:30
11 Q. All right. Fine. 09:22:30
12 Microchip was still trying to sell 09:22:31
13 the FlexConnect solution that it had already 09:22:33
14 developed; right? 09:22:36
15 A. Yes. 09:22:37
16 Q. Okay. 09:22:37
17 And he says, "but we lost against 09:22:39
18 Unwired at Chrysler, Ford, and GM. Chrysler 09:22:42
19 came to us very aggressively to look at doing 09:22:47
20 a spoofed device," and this spoofed device, 09:22:49
21 that's the Unwired solution? 09:22:53
22 A. Well, I mean, Unwired has a solution. 09:22:54
23 Q. Right. 09:22:56
24 A. Chrysler asked us for a solution. 09:22:57

1 Q. Right. 09:22:59
2 And then if we keep going, it 09:22:59
3 says, "This really kept us in the game and by 09:23:02
4 showing our experience in the area (product 09:23:05
5 brief) and legitimized our inputs and concerns 09:23:09
6 for both Sparta and MHDC," multi-host device 09:23:12
7 controller... "we use this name as it relates 09:23:15
8 to our patents"; right? 09:23:18
9 A. Yes, that's what it says. 09:23:21
10 Q. Now, in the event, Microchip didn't 09:23:23
11 actually use that name for very long, did it? 09:23:25
12 A. I'm sorry? 09:23:28
13 Q. In the event, Microchip did not use 09:23:29
14 that name for very long? 09:23:33
15 A. I'm not sure what that means, "in the 09:23:34
16 event." 09:23:36
17 Q. Sure. Let's take a look. 09:23:36
18 A. I'm not sure what those words mean. 09:23:38
19 MS. DURIE: Fair enough. I think 09:23:42
20 I can help to clarify that for you. 09:23:43
21 Exhibit 236 for identification. 09:23:46
22 (Whereupon, Trial Exhibit 236 was 09:23:48
23 introduced.) 09:23:50
24 BY MS. DURIE: 09:24:00

1 Q. So Exhibit 236 is a copy of a 09:24:00
2 Microchip specification for USB4916. That's 09:24:04
3 the Sandia chip; right? 09:24:09
4 A. Yes. That's one of the variants, 09:24:12
5 yes. 09:24:14
6 MS. DURIE: We offer 236. 09:24:14
7 MR. SLAYDEN: No objection, Your 09:24:16
8 Honor. 09:24:16
9 THE COURT: All right. It will be 09:24:18
10 received. 09:24:18
11 MS. DURIE: Okay. 09:24:19
12 BY MS. DURIE: 09:24:21
13 Q. So now, before we were looking at a 09:24:22
14 document back in 2015 when you were talking 09:24:23
15 about calling the chip the multi-host device 09:24:29
16 controller. Now we have the product spec 09:24:33
17 sheet. 09:24:35
18 MS. DURIE: Actually, if you can 09:24:36
19 go all the way to the bottom, Mr. Glass. Go 09:24:37
20 all the way to the bottom. 09:24:39
21 BY MS. DURIE: 09:24:39
22 Q. And we see 2017; right? 09:24:42
23 A. Yeah, that looks like the date on 09:24:47
24 this document. 09:24:48

1 Q. Right. 09:24:50
2 And if we go up to the top, we see 09:24:50
3 that it is now called the USB 2.0 Hi-Speed 09:24:52
4 Multi-Host Endpoint Reflector; right? 09:24:57
5 A. I guess. That's what it says, yeah. 09:25:03
6 Q. So you changed the name; right? 09:25:04
7 A. I don't know. 09:25:06
8 Q. Okay. 09:25:07
9 Fast forward to October of 2015. 09:25:08
10 So we're now roughly 10 months after that 09:25:12
11 letter that we saw notifying Delphi/Aptiv 09:25:16
12 about the patents; okay? 09:25:21
13 MS. DURIE: Mark for 09:25:24
14 identification Exhibit 270. 09:25:26
15 (Whereupon, Trial Exhibit 270 was 09:25:28
16 introduced.) 09:25:31
17 MS. DURIE: And let me also mark 09:25:45
18 271. 09:25:46
19 (Whereupon, Trial Exhibit 271 was 09:25:49
20 introduced.) 09:25:52
21 MS. DURIE: Okay. 09:26:05
22 BY MS. DURIE: 09:26:05
23 Q. So Exhibit 270, email from Keith 09:26:06
24 Barber at Microchip to you, copying some of 09:26:11

1 the other folks whose names we have seen, 09:26:15
2 attaching what is referred to as the DDC 09:26:17
3 minutes. 09:26:21
4 And 271, which is the attachment 09:26:23
5 and the minutes of that meeting. 09:26:27
6 Do you see that? 09:26:30
7 A. Yes, I do. 09:26:33
8 MS. DURIE: We offer 270 and 271. 09:26:34
9 MR. SLAYDEN: No objection, Your 09:26:37
10 Honor. 09:26:38
11 THE COURT: All right. They're 09:26:38
12 received. 09:26:39
13 MS. DURIE: Mr. Glass, if we could 09:26:40
14 go to 270, that's right, that's 270, and if we 09:26:42
15 could then put up 271. So just leave it like 09:26:47
16 that for the moment. That's perfect. 09:26:52
17 BY MS. DURIE: 09:26:54
18 Q. So this is reporting on a meeting 09:26:55
19 that took place between Microchip and Delphi; 09:26:56
20 right? 09:26:59
21 A. Yes, it appears to be. 09:27:01
22 Q. And this is a meeting that took place 09:27:03
23 in October of 2015; right? 09:27:06
24 A. Yes, that's the date on there. 09:27:11

1 Q. It took place at Delphi, Auburn 09:27:13
2 Hills, Michigan, near Detroit; right? 09:27:22
3 A. Yeah, at Delphi. I don't know the 09:27:23
4 location at all. 09:27:25
5 Q. Okay. 09:27:26
6 And you were there; right? 09:27:26
7 A. Yes. I just don't know where. 09:27:26
8 Q. Totally fair. 09:27:30
9 So folks from Delphi, including 09:27:31
10 Rob Voto, Mike Dreon; right? You recognize 09:27:33
11 Mr. Dreon? 09:27:39
12 A. I think so. 09:27:39
13 Q. Do you remember he was at the 09:27:42
14 meeting, too? 09:27:43
15 A. I wouldn't remember, but I believe 09:27:43
16 you, yes. 09:27:46
17 Q. All right. 09:27:46
18 And so you were there along with 09:27:47
19 some of the other folks from Microchip; right? 09:27:49
20 A. Yes. 09:27:51
21 Q. And Microchip took notes of what the 09:27:52
22 Delphi folks said and what the Microchip folks 09:27:56
23 said; right? 09:27:59
24 A. Do we know that those are Microchip 09:28:00

1 notes? I don't know who took the notes. I 09:28:02
2 can see that they were taken, but I don't know 09:28:04
3 who took the notes. 09:28:09
4 Q. All right. 09:28:10
5 Well, notes were taken of the 09:28:11
6 meeting in the form of minutes that were then 09:28:13
7 attached to an email and circulated internally 09:28:18
8 at Microchip? 09:28:18
9 A. Yes, they were forwarded. 09:28:18
10 Q. Sure. 09:28:20
11 You are not aware of any email 09:28:20
12 within Microchip where anyone said hey, wait a 09:28:23
13 minute, that's not what we talked about; 09:28:25
14 right? 09:28:27
15 A. I don't know. 09:28:28
16 Q. I'm sure if there is one, we'll see 09:28:28
17 it. 09:28:28
18 So let's take a look at the 09:28:31
19 minutes of the meeting. Start at the top 09:28:32
20 there. And that's actually perfect. We can 09:28:34
21 just have it there, yeah. 09:28:36
22 "Rob does not consider" -- that's 09:28:38
23 Rob Voto from Delphi; right? 09:28:39
24 A. Yes. 09:28:41

1 Q. Okay. 09:28:41
2 "Rob does not consider Delphi" -- 09:28:42
3 DDC, that's Delphi; right? 09:28:45
4 A. Yes, Delphi, Delphi, yes. 09:28:47
5 Q. Okay. 09:28:50
6 "Rob does not consider DDC as a 09:28:51
7 competent competitor to Microchip because 09:28:53
8 they're not trying to sell ASIC to the open 09:28:56
9 market." 09:28:59
10 So what Rob Voto from Delphi is 09:28:59
11 saying here is, we're not competing with you, 09:29:02
12 we're not trying to sell these chips to anyone 09:29:04
13 else; right? 09:29:07
14 A. Yeah. That was Rob's view, but I 09:29:08
15 disagree. 09:29:10
16 Q. Right. Fair enough. We're going to 09:29:11
17 get to your perspective in just a minute. 09:29:13
18 And Mr. Voto said, the next box, 09:29:15
19 "Microchip did not have a solution for the 09:29:21
20 single upstream lane that The Big 3 OEMs, 09:29:23
21 Ford, Chrysler, GM, wanted"; right? 09:29:27
22 A. Yes, that's correct. 09:29:32
23 Q. And that was true? 09:29:34
24 A. Yes. 09:29:37

1 Q. Okay. 09:29:38
2 It says in the notes, "Mitch 09:29:40
3 acknowledged that USB84604 was not adopted by 09:29:41
4 The Big 3." 09:29:46
5 That's that FlexConnect solution; 09:29:47
6 right? 09:29:49
7 A. Yeah. These are not things I said. 09:29:50
8 These are somebody else -- something people 09:29:53
9 wrote down. These are not things that I said. 09:29:55
10 Q. Well, it says, "Mitch acknowledged 09:29:57
11 that 84604, FlexConnect, was not adopted by 09:30:00
12 The Big 3." 09:30:05
13 Do you deny that you said that? 09:30:05
14 A. No, I don't deny I said that. 09:30:07
15 Q. Okay. Great. Let's go to the next 09:30:08
16 one. 09:30:11
17 MS. DURIE: No. 3 in that list, if 09:30:12
18 we can blow that up. There we go. Perfect. 09:30:14
19 BY MS. DURIE: 09:30:16
20 Q. "Rob," Rob Voto, Delphi, "said he 09:30:17
21 does not want to be a silicon developer" -- 09:30:20
22 that means making chips; right? 09:30:22
23 A. Yes. 09:30:24
24 Q. "Rob said he does not want to be a 09:30:25

1 silicon developer if he does not have to. If 09:30:27
2 Microchip has an IC" -- that's a chip; right? 09:30:30
3 A. Yes. 09:30:32
4 Q. Okay. 09:30:33
5 -- "that he can use, he would 09:30:33
6 rather use a Microchip chip. He wants to sell 09:30:35
7 modules." 09:30:38
8 And that is, in fact, what Mr. 09:30:39
9 Voto explained was his position at the 09:30:42
10 meeting; right? 09:30:44
11 A. Yes. 09:30:44
12 Q. Okay. 09:30:46
13 MS. DURIE: Let us go on to the 09:30:53
14 next page. 09:30:55
15 BY MS. DURIE: 09:30:57
16 Q. Now, this was the first time that you 09:31:00
17 had talked with the folks at Microchip about 09:31:04
18 that patent letter since they had responded to 09:31:08
19 you at the end of January; right? 09:31:12
20 A. You mean they spoke to Delphi? 09:31:14
21 Q. I'm sorry, yes, spoke to Delphi. 09:31:17
22 A. Yes. 09:31:20
23 Q. And so that patent letter came up in 09:31:20
24 this conversation; right? 09:31:23

1 A. Yes, it probably did. 09:31:25
2 Q. Okay. 09:31:28
3 And Rob, Rob Voto from Delphi, 09:31:28
4 said he "received/reviewed/responded to the 09:31:31
5 letter sent by Microchip legal in January 2015 09:31:35
6 regarding our patents." 09:31:38
7 Now, you said you weren't sure who 09:31:40
8 took those notes. The fact that it says, "our 09:31:42
9 patents," is probably a clue that these were 09:31:44
10 notes that were taken by Microchip; right? 09:31:46
11 A. I don't know. Let me read it. 09:31:51
12 Potentially, yes. 09:31:59
13 Q. Yeah. 09:32:00
14 His statement was that Delphi 09:32:01
15 believes it is not infringing. And that is, 09:32:04
16 in fact, what Mr. Voto told you; right? 09:32:07
17 A. I believe that's correct. 09:32:12
18 Q. Okay. 09:32:13
19 And it says, "Mitch," that's you, 09:32:14
20 "noted that the DDC ASIC may be infringing on 09:32:19
21 our patents. We will get a hub and test." 09:32:25
22 And that is, in fact, what you 09:32:29
23 told Mr. Voto; right? 09:32:31
24 A. Again, I don't know that to be true. 09:32:34

1 That's someone else's notes. 09:32:37
2 Q. Someone else at Microchip? 09:32:39
3 A. I guess now, yes, possibly. Yes. 09:32:41
4 Q. Do you deny that you said that? 09:32:45
5 A. I don't remember saying that, but I 09:32:47
6 don't know. Yeah, I think -- I think 09:32:51
7 certainly we were going to -- you know, we 09:32:54
8 didn't have a product, and at one point, we 09:32:57
9 would get a product and definitively prove 09:32:59
10 they were infringing, but we didn't have one 09:33:02
11 yet. 09:33:05
12 Q. So you told Mr. Voto -- he said we 09:33:05
13 don't infringe and you said we think you may 09:33:09
14 be infringing, we're going to check? 09:33:12
15 A. I think that's a matter of politeness 09:33:15
16 in a meeting face-to-face with somebody. I'm 09:33:17
17 not sure about the word "may" or what was said 09:33:19
18 exactly, but I'm sure I was polite at the 09:33:21
19 time. 09:33:24
20 Q. Did you make an effort to be polite 09:33:24
21 in the original notice letter that you sent as 09:33:26
22 well? 09:33:30
23 A. I think the letter needed to be 09:33:30
24 factual. It's a legal type letter to say, you 09:33:32

1 know, at that point, we've looked at the data 09:33:34
2 and it is actually being explained to us that 09:33:38
3 it appears to be infringing our patents, also. 09:33:40
4 Q. Okay. 09:33:45
5 Now, let's look at what happened 09:33:46
6 after this October meeting. 09:33:47
7 MS. DURIE: Let's have Exhibit 41 09:33:52
8 in evidence. 09:33:54
9 BY MS. DURIE: 09:34:01
10 Q. This is an email exchange among you 09:34:02
11 and Ganesh Moorthy; right? 09:34:04
12 A. Yes. 09:34:08
13 Q. And we are on October 18th of 2015; 09:34:10
14 right? 09:34:16
15 MS. DURIE: You can take it down. 09:34:21
16 We don't need a particular -- that should be 09:34:23
17 fine. I take it back. We can do that. 09:34:26
18 BY MS. DURIE: 09:34:28
19 Q. So in the middle of the page there, 09:34:29
20 there is an email from Mr. Moorthy; right? 09:34:30
21 A. Yes. 09:34:34
22 Q. And one of his questions to you was, 09:34:34
23 "How long does it make sense for Unwired to 09:34:38
24 not see what they are doing as competitive to 09:34:41

1 you"; right? 09:34:46
2 A. Yes. When they win, we lose. That's 09:34:48
3 the definition of a competitor. 09:34:51
4 Q. Let's take a look at your response. 09:35:03
5 Second paragraph, actually the top, you're 09:35:14
6 changing your flight plans, et cetera, and 09:35:17
7 then you say, "Unwired sees themselves as a 09:35:19
8 module maker that was forced to do a chip 09:35:22
9 because no one else would. They showed a 09:35:25
10 willingness to use our chip, especially if it 09:35:30
11 is required by each of The Big 3." 09:35:34
12 So that was your report to 09:35:36
13 Microchip's CEO-to-be of what had transpired 09:35:38
14 at that meeting; right? 09:35:43
15 A. Yes. 09:35:44
16 Q. Okay. 09:35:45
17 And then you go on and you say, 09:35:46
18 "Bottom line we missed it." First Christian, 09:35:51
19 then the crossover marketer, then Don, then 09:35:55
20 Jesse; lots of other people's fault? 09:36:00
21 A. I'm sorry? 09:36:02
22 Q. Lots of other people's fault. 09:36:04
23 A. Well, we missed it. I didn't say 09:36:09
24 they missed it. 09:36:15

1 Q. Fair enough. Fair enough. 09:36:16
2 You would include yourself in one 09:36:17
3 of the people who missed it? 09:36:18
4 A. Yes. We did not see the market 09:36:19
5 accepting a non-standard solution. 09:36:22
6 Q. You didn't say anything here about 09:36:24
7 patents, did you? 09:36:27
8 A. I'm sorry? 09:36:28
9 Q. You didn't say anything here about 09:36:29
10 patents? 09:36:32
11 A. No. We don't mention the patents in 09:36:34
12 every letter. 09:36:37
13 Q. Now, Mr. Moorthy, to whom you sent 09:36:43
14 this, he was very concerned about competition 09:36:46
15 from Delphi; right? 09:36:52
16 A. I don't know about very concerned, 09:36:55
17 but certainly concerned about, you know, 09:36:57
18 somebody winning against us. They were the 09:37:01
19 competition. 09:37:06
20 Q. Competition. 09:37:06
21 Microchip doesn't usually face 09:37:07
22 competition; right? 09:37:09
23 A. We face competition all day every 09:37:10
24 day, yeah. 09:37:12

1 Q. Really? 09:37:12
2 A. Yeah. 09:37:13
3 Q. In the automotive chip business? 09:37:14
4 A. Certainly. We're like the 8th 09:37:16
5 largest or 9th largest automotive chip 09:37:19
6 manufacturer. 09:37:22
7 Q. How about in the market area where 09:37:24
8 you're a monopolist? 09:37:27
9 A. You used the word "monopolist." I 09:37:27
10 mean, I told you before, there are many, many 09:37:29
11 hub manufacturers. We just chose to do the 09:37:31
12 automotive hub variants that others chose not 09:37:33
13 to do, but other companies could do this 09:37:36
14 easily; they just choose not to. 09:37:38
15 Q. Right. 09:37:39
16 Now, you said I chose the 09:37:39
17 word monopolist. That was actually your word 09:37:42
18 yesterday; right? 09:37:43
19 A. Well, I responded that you could use 09:37:43
20 that word, and I said possibly. 09:37:45
21 Q. Yes, right. 09:37:45
22 And you said other people could 09:37:47
23 compete with you potentially, but as a general 09:37:49
24 proposition, they don't; right? 09:37:53

1 A. Well, they have not. 09:37:54
2 Q. Okay. 09:37:55
3 MS. DURIE: Let's take a look at 09:37:55
4 Exhibit 42 for identification. 09:37:57
5 (Whereupon, Trial Exhibit 42 was 09:37:59
6 introduced.) 09:38:01
7 BY MS. DURIE: 09:38:13
8 Q. TX-42 is an email exchange among Dave 09:38:14
9 Carpenter, Ganesh Moorthy and yourself, plus a 09:38:18
10 couple of other folks, November 2015, about 09:38:23
11 Delphi; correct? 09:38:27
12 A. Say it again. 09:38:31
13 Q. Sure. 09:38:32
14 Exhibit 42 is an email exchange 09:38:33
15 among Dave Carpenter, Ganesh Moorthy, Mitch 09:38:37
16 Obolsky, and a couple of other people from 09:38:40
17 November of 2015 about Delphi? 09:38:44
18 A. Yes. 09:38:48
19 MS. DURIE: We offer it. 09:38:50
20 MR. SLAYDEN: Your Honor, that's 09:38:51
21 subject to a limiting instruction. 09:38:52
22 THE COURT: All right. So it will 09:38:54
23 be received and, ladies and gentlemen, in this 09:38:56
24 exhibit when you see it, there are some 09:38:59

1 comments that are either reported or made by 09:39:03
2 people who do not work at Microchip. And you 09:39:07
3 can consider those statements for the fact 09:39:10
4 that they were said and the impact they had on 09:39:12
5 Microchip, but you should not treat them as 09:39:15
6 true or consider them for the truth. Those 09:39:17
7 are statements made by non-Microchip 09:39:22
8 employees. You should consider them not to be 09:39:25
9 the truth of what they say. Okay? 09:39:26
10 All right. You can proceed. 09:39:28
11 MS. DURIE: Thank you. If we can 09:39:30
12 have up the last exhibit, 42. And I actually 09:39:31
13 want to start at the beginning of time in the 09:39:35
14 email exchange, but at the end of the 09:39:38
15 document. So I want to start at the bottom of 09:39:41
16 page 6, which is the first email in the 09:39:43
17 thread. 09:39:48
18 BY MS. DURIE: 09:39:48
19 Q. And we have here an email from Keith 09:39:48
20 Barber to you. 09:39:51
21 Now, who is Mr. Barber? 09:39:53
22 A. Hang on. Let me just -- 09:39:55
23 Q. Sure. Take your time. 09:39:56
24 A. Let me see where you are. 09:39:59

1 Q. No, that's fine. 09:40:00
2 A. Okay. Keith Barber is a salesman in 09:40:01
3 Detroit. 09:40:05
4 Q. Perfect. 09:40:05
5 And so let's take a look at what 09:40:06
6 he wrote, bottom of page 6. Okay. 09:40:08
7 So "Items for consideration:" 09:40:15
8 Now, above here, he's talking 09:40:19
9 about a price proposal that's being made to 09:40:21
10 Delphi; right? 09:40:25
11 A. Let me read it. 09:40:27
12 Q. Sure. 09:40:28
13 A. Where are we? 09:40:28
14 Q. "Mitch" -- 09:40:30
15 A. Hang on a minute. 09:40:32
16 Q. Take a look. 09:40:34
17 (Whereupon, the witness reviews 09:40:40
18 the exhibit.) 09:40:41
19 THE WITNESS: Okay. Yes. 09:40:42
20 MS. DURIE: Right. 09:40:44
21 BY MS. DURIE: 09:40:44
22 Q. He's talking about a price proposal 09:40:45
23 to Delphi, and he says at the bottom, "Items 09:40:47
24 for consideration: 09:40:50

1 "Unwired/Delphi developed an ASIC 09:40:51
2 to capture the model year 2016 to 2018 USB 09:40:53
3 single lane hub for Big 3 as the USB84604," 09:40:58
4 that's FlexConnect, "did not meet the single 09:41:02
5 USB lane requirement as communicated directly 09:41:05
6 to Microchip"; right? 09:41:08
7 MCHP, what does that stand for? 09:41:10
8 A. Microchip. 09:41:12
9 Q. Right. 09:41:13
10 -- "by The Big 3 engineering 09:41:14
11 teams"; true? 09:41:16
12 A. Yes, that's what it says. 09:41:17
13 Q. Okay. 09:41:18
14 MS. DURIE: Next page, one, two, 09:41:20
15 three, four, let's go to five. 09:41:25
16 BY MS. DURIE: 09:41:27
17 Q. "Rob Voto," from Delphi, "expressed 09:41:29
18 that if Microchip has a better solution, they 09:41:33
19 will entertain engaging with Microchip. He 09:41:35
20 wants to win module business and does not have 09:41:37
21 to divert -- does not have to divert 09:41:40
22 engineering resources and dollars on an ASIC. 09:41:42
23 The question is, how do we enable him to make 09:41:45
24 a decision to align with Microchip"; right? 09:41:47

1 What is UNG? 09:41:52
2 A. UNG was the name of the USB and 09:41:53
3 networking division that we've been talking 09:41:56
4 about. 09:41:58
5 Q. Okay. 09:41:59
6 Now, let's go down to the bottom 09:42:00
7 of page 7 continuing in the thread and look 09:42:02
8 what it says at the bottom, "Taking this 09:42:05
9 background into consideration." 09:42:08
10 So this is Keith Barber reporting 09:42:09
11 to you saying there is the background. Now, 09:42:12
12 here is what we want to propose to Delphi. 09:42:15
13 "Honor our 2016 LTA commitment of 09:42:18
14 2.6 million percent for all UNG products." 09:42:24
15 What does LTA mean? 09:42:28
16 A. That's long-term payment. 09:42:29
17 Q. Right. 09:42:31
18 Microchip and Delphi have a number 09:42:32
19 of long-term supply agreements; right? 09:42:34
20 A. Yes. 09:42:37
21 Q. Okay. 09:42:38
22 Some of those agreements, 09:42:39
23 Microchip is the sole source; right? 09:42:41
24 A. Almost every product we make is 09:42:44

1 proprietary, so many of our products -- well, 09:42:46
2 that product, we are the sole source. Nobody 09:42:50
3 has that product. 09:42:52
4 Q. Right. 09:42:53
5 That's why it's really important 09:42:53
6 to have these long-term supply agreements; 09:42:55
7 right? 09:42:58
8 A. I guess so, yes. As a reason, yes. 09:42:58
9 Q. Right. 09:43:03
10 From Delphi's perspective, it 09:43:03
11 would be a big problem if they've got a sole 09:43:06
12 source chip and suddenly they can't get it; 09:43:08
13 right? 09:43:10
14 A. Potentially, yes. 09:43:10
15 Q. So what Mr. Barber is proposing is 09:43:13
16 that Delphi honor its 2016 long-term agreement 09:43:17
17 commitment of 2.69 percent. 09:43:21
18 What does that mean? 09:43:23
19 A. I can guess what it means. I think 09:43:30
20 it means that they were expecting a reduction 09:43:31
21 of 2.69 percent if they hit the volumes they 09:43:34
22 had set. 09:43:38
23 Q. Right. 09:43:38
24 And that's pretty standard in 09:43:39

1 these long-term supply agreements; right? 09:43:41
2 A. To have a number that will go down, 09:43:43
3 yes. If they have a forecast that goes up, 09:43:45
4 sometimes it goes down. 09:43:48
5 Q. Right. 09:43:50
6 And if you look at what Mr. Barber 09:43:50
7 says a little further on here, he says, "We 09:43:52
8 want to create a symbiotic relationship and 09:43:54
9 the foundation is trust on both sides"; right? 09:43:57
10 A. Yes, that's what Mr. Barber says. 09:43:59
11 Yes. 09:44:01
12 Q. Okay. 09:44:02
13 MS. DURIE: Let's take a look at 09:44:04
14 your response. Page 3, middle of the page, 09:44:05
15 Mitch Obolsky, page 3, middle of the page, 09:44:15
16 part way down, further down, further down. 09:44:20
17 There we go. 09:44:23
18 BY MS. DURIE: 09:44:24
19 Q. From you, back to Keith Barber, 09:44:24
20 "After more thought and discussion, I think 09:44:26
21 the best answer is to tell Delphi there will 09:44:28
22 be no price reductions this year for those 09:44:30
23 products"; right? That's what you said? 09:44:32
24 A. Yes. 09:44:36

1 Q. Okay. 09:44:36
2 MS. DURIE: Now, let's look at 09:44:38
3 what Mr. Pennington says. He's one of the 09:44:39
4 individuals -- strike that. 09:44:41
5 BY MS. DURIE: 09:44:43
6 Q. Who is Mr. Pennington? 09:44:43
7 A. Mr. Pennington is a salesman who has 09:44:44
8 lived his whole life right there at Delphi. 09:44:48
9 Q. Okay. 09:44:50
10 He is a salesman that is working 09:44:51
11 for Microchip; right? 09:44:53
12 A. Yes, yes, yes. 09:44:54
13 Q. Okay. 09:44:55
14 Let's look at what he has to say. 09:44:55
15 MS. DURIE: Let's blow that up all 09:44:58
16 the way down to the bottom of the page. 09:44:59
17 Perfect. 09:45:01
18 BY MS. DURIE: 09:45:01
19 Q. "I'm not quite clear to what there 09:45:03
20 will be no price reductions this year for 09:45:05
21 those products. What does those products mean 09:45:07
22 exactly? Does this mean we will not honor our 09:45:11
23 CY 2016 committed price agreements with 09:45:14
24 Delphi? Is that the message, Mitch?" 09:45:18

1 And then he goes on in the middle 09:45:21
2 of the next paragraph, he says, "If that's the 09:45:23
3 message, I will support it and can carry it 09:45:26
4 back to customer." 09:45:28
5 A. Um-hmm. 09:45:30
6 Q. And then he says in the middle of 09:45:31
7 that paragraph, "There are going to be 09:45:33
8 questions; right? Questions will evolve 09:45:36
9 around when can they expect to get the 379,000 09:45:39
10 in savings that we promised them in our 09:45:42
11 long -- long term agreements." 09:45:47
12 And if we look at the very bottom, 09:45:49
13 he says, "My two cents." Last paragraph. "We 09:45:51
14 all need to realize that this decision 09:45:57
15 probably will have some type of impact on our 09:45:59
16 business going forward, not only for UNG 09:46:01
17 products but also for other divisions as well. 09:46:04
18 From Delphi's perspective it now becomes one 09:46:07
19 of supplier credibility. For me I am saddened 09:46:09
20 that it has come to this, credibility is built 09:46:13
21 over time and I am sure everyone will remember 09:46:15
22 the wild ride we have had with Delphi over the 09:46:20
23 last 25 years. Our reputation and integrity 09:46:24
24 is everything. We all know the story of 09:46:26

1 credibility and when it is lost..." 09:46:28
2 And then you responded -- 09:46:31
3 actually, I take it back. Mr. Moorthy 09:46:35
4 responded; right? Let's take a look at his 09:46:37
5 response. 09:46:44
6 MS. DURIE: Top of the second 09:46:49
7 page, if we can blow up the top of the second 09:46:46
8 page, starting at line 2. 09:46:51
9 BY MS. DURIE: 09:46:53
10 Q. "In fact, Unwired had been destroying 09:46:53
11 Microchip revenue and profits with what they 09:46:56
12 have done." 09:46:59
13 That was part of his concern; 09:46:59
14 right? 09:47:01
15 A. That's what it says, yes. 09:47:02
16 Q. And then the next bullet point, Mr. 09:47:03
17 Moorthy says, beginning in the middle of the 09:47:06
18 paragraph, "Ideally we want Delphi to cease 09:47:08
19 development of new products that continues to 09:47:12
20 destroy our business - that discussion takes 09:47:14
21 time and we need some negotiating leverage." 09:47:21
22 Do you see that? 09:47:25
23 A. Yes. 09:47:26
24 MS. DURIE: Let's go to the first 09:47:28

1 page. 09:47:29
2 BY MS. DURIE: 09:47:34
3 Q. Mr. Carpenter weighs in. Second 09:47:35
4 paragraph of his email beginning part way 09:47:38
5 down, talking about Delphi's reaction, and it 09:47:46
6 says, maybe about seven lines down, "They 09:47:49
7 still do not understand why we view them as a 09:47:52
8 competitor when we did not have a viable 09:47:55
9 solution to single lane CarPlay. They met 09:47:57
10 with us on numerous occasions before kicking 09:47:59
11 off their ASIC development to be sure they 09:48:02
12 exhausted all alternatives with us." 09:48:04
13 That was true? 09:48:09
14 A. This is -- this is Dave Carpenter's 09:48:12
15 view of their view, so yes, that is true. 09:48:14
16 That's their view, yes. 09:48:18
17 Q. It was their view and it was true? 09:48:19
18 A. I'm not sure; which part are you 09:48:23
19 asking was true? 09:48:25
20 Q. The part that's highlighted there in 09:48:26
21 yellow. 09:48:29
22 A. Yeah, that they didn't understand why 09:48:32
23 we were a competitor, yes. Well, they were 09:48:35
24 taking our business away. They are a 09:48:37

1 competitor. So yes, that was their view. 09:48:39
2 They didn't understand why taking business 09:48:43
3 from Microchip would make them a competitor. 09:48:46
4 MS. DURIE: Good. Let's go -- 09:48:51
5 BY MS. DURIE: 09:49:04
6 Q. You said in your direct testimony 09:49:05
7 yesterday that Aptiv continues to buy chips 09:49:07
8 from Microchip; right? 09:49:10
9 A. Yes. Yes. 09:49:12
10 Q. Okay. 09:49:13
11 And you would agree, though, that 09:49:14
12 in the relationship between Aptiv and 09:49:19
13 Microchip, Microchip has a fair bit of 09:49:21
14 negotiating leverage; right? 09:49:24
15 A. Well, we sell chips and they buy 09:49:28
16 chips. I'm not sure. 09:49:31
17 Q. Now, you said yesterday in your 09:49:33
18 direct testimony that Microchip was perfectly 09:49:34
19 happy to keep selling chips to Aptiv; right? 09:49:37
20 A. Yes. When we're not competing, yes. 09:49:40
21 Q. When you're not competing. 09:49:43
22 Now, Microchip and Aptiv, under 09:49:46
23 any definition of competing, are not competing 09:49:50
24 on Aptiv's safety business; right? 09:49:54

1 A. I'm sorry? 09:49:58
2 Q. Let me back up. 09:50:00
3 Aptiv makes a bunch of different 09:50:01
4 kinds of components; right? 09:50:03
5 A. Yes. 09:50:04
6 Q. It has a line of business that are 09:50:06
7 products for safety in automobiles; right? 09:50:09
8 A. Yes. I don't know that to be true, 09:50:12
9 but yes, that's fine. 09:50:13
10 Q. Okay. 09:50:14
11 And it buys chips from Microchip 09:50:16
12 on the safety side of its business; right? 09:50:20
13 A. Again, I don't know the names of the 09:50:22
14 business, but yes, they buy chips from 09:50:23
15 Microchip, yes. 09:50:26
16 Q. Okay. 09:50:26
17 And the safety side of the 09:50:27
18 business, whatever you call it, things like 09:50:29
19 the controllers that automatically brake the 09:50:31
20 car if you get too close to somebody else, you 09:50:34
21 would agree that's a different line of 09:50:37
22 business from what we're talking about in this 09:50:38
23 lawsuit? 09:50:41
24 A. Yes. 09:50:42

1 Q. Okay. 09:50:42
2 Now, you're under oath; you're a 09:50:43
3 senior vice president at Microchip. You are 09:50:48
4 an officer of the company; right? 09:50:50
5 A. Not -- I'm not -- 09:50:53
6 Q. You are an appointed officer of the 09:50:57
7 company? 09:50:59
8 A. Yes, I guess. 09:51:00
9 Q. Okay. 09:51:01
10 So let's be very clear. Will you 09:51:03
11 agree that Microchip will engage in business 09:51:07
12 as usual with Aptiv, regardless of patent 09:51:12
13 disputes between the companies, on the safety 09:51:16
14 side of the business? 09:51:19
15 A. As a general case, yeah. We are 09:51:21
16 still working with Aptiv on pretty much every 09:51:23
17 area. 09:51:26
18 Q. Okay. 09:51:26
19 I understand you're still working 09:51:27
20 with Aptiv. Will you repeat after me: 09:51:28
21 Microchip will engage in business as usual 09:51:33
22 with Aptiv, regardless of what happens in this 09:51:38
23 case? 09:51:42
24 A. Will engage with -- I'm not sure I 09:51:45

1 understand what you're saying. What is the 09:51:49
2 question? 09:51:51
3 Q. Will you agree, as an officer of 09:51:52
4 Microchip, that Microchip will engage in 09:51:58
5 business as usual with Aptiv on the unrelated 09:52:03
6 safety side of its business, regardless of 09:52:09
7 having disputes between the parties about the 09:52:14
8 dual role hub? 09:52:17
9 A. I'm not sure I understand it. It's a 09:52:19
10 very long, strange question to me, so maybe 09:52:23
11 piece it. 09:52:26
12 Q. What part of that is complicated? 09:52:26
13 A. Just, I'm trying to follow the 09:52:30
14 sequence of events directly. Yes, we will 09:52:32
15 work with Aptiv. 09:52:34
16 Q. That was not my question. Let me ask 09:52:35
17 it again. 09:52:37
18 A. I'm not sure I understand the 09:52:37
19 question. 09:52:39
20 Q. Let me ask you again. 09:52:39
21 A. Yes. 09:52:40
22 Q. Will Microchip commit to engage in 09:52:41
23 business as usual with Aptiv on the safety 09:52:47
24 side of its business where you are the sole 09:52:53

1 supplier, regardless of patent disputes about 09:52:56
2 the hub business at issue in this case? 09:53:04
3 A. I don't understand what "commit to 09:53:10
4 engage" means. 09:53:11
5 Q. You are an officer of the company. 09:53:13
6 A. Yes. 09:53:15
7 Q. That's what I mean by commit. 09:53:16
8 A. We are absolutely willing to work 09:53:20
9 with them on safety products together. 09:53:21
10 Q. Still not my question. 09:53:24
11 A. I don't understand the question. 09:53:25
12 That's the problem. I'm happy to answer. 09:53:26
13 Q. Are you willing to repeat these words 09:53:29
14 after me? 09:53:31
15 MR. SLAYDEN: Your Honor, object. 09:53:32
16 She's asking him just to repeat the words she 09:53:33
17 says? That's not a question. 09:53:37
18 THE COURT: Okay. I don't need 09:53:38
19 speaking objections. 09:53:41
20 MR. SLAYDEN: I'm sorry. 09:53:41
21 THE COURT: If you have an 09:53:42
22 objection, make an objection and if you need 09:53:44
23 to approach, approach. 09:53:46
24 The objection is sustained. 09:53:47

1 BY MS. DURIE: 09:53:53
2 Q. Let me ask the question then, Mr. 09:53:49
3 Obolsky, like this: 09:53:51
4 Are you willing to make a 09:53:53
5 commitment that Microchip will engage in 09:53:54
6 business as usual? Yes or no? 09:53:58
7 A. Yes. I guess we would do business as 09:54:02
8 usual with Aptiv. I don't really understand 09:54:06
9 the question, but yes, certainly. In our 09:54:09
10 view, we want to continue to work with them as 09:54:12
11 we always have. 09:54:14
12 Q. Business as usual? 09:54:15
13 A. Again, it's a very broad business as 09:54:19
14 usual, but yes. Yes. 09:54:22
15 Q. Good. 09:54:25
16 A. Business as usual, yes, I believe so. 09:54:26
17 MS. DURIE: Good. Thank you. No 09:54:28
18 further questions. 09:54:30
19 MR. SLAYDEN: Your Honor, we have 09:54:53
20 one housekeeping issue here. 09:54:58
21 THE COURT: Do you need to 09:55:00
22 approach? 09:55:01
23 MR. SLAYDEN: No, no, it's fine. 09:55:02
24 THE COURT: Okay. 09:55:03

1 MR. SLAYDEN: It is Exhibit 50; it 09:55:04
2 is a native document. There's no objection to 09:55:06
3 it. 09:55:09
4 THE COURT: Okay. 09:55:09
5 MR. SLAYDEN: So we move to admit 09:55:10
6 Exhibit 50, Your Honor. 09:55:12
7 THE COURT: Okay. 09:55:13
8 No objections; right? Per his 09:55:13
9 discussion, there is no objection, Ms. Durie? 09:55:16
10 MS. DURIE: No. 09:55:18
11 THE COURT: All right. So it will 09:55:19
12 be received. 09:55:21
13 (Whereupon, Trial Exhibit 50 was 09:55:21
14 introduced and admitted.) 09:55:25
15 MR. SLAYDEN: Mr. Ferrer, can you 09:55:28
16 bring up Exhibit -- no, hold on. Don't bring 09:55:32
17 it up. 09:55:35
18 May I approach? 09:55:36
19 THE COURT: Yes. 09:55:38
20 - - - 09:55:39
21 REDIRECT EXAMINATION 09:55:39
22 - - - 09:55:46
23 BY MR. SLAYDEN: 09:55:46
24 Q. Mr. Obolsky, can you identify 09:55:49

1 Exhibit 52 for us? 09:55:51
2 A. This one? 09:55:54
3 Q. 82, I'm sorry. 09:55:55
4 A. Yes. Yes. It appears to be an 09:55:57
5 internal document that I wrote. 09:55:59
6 (Whereupon, Trial Exhibit 82 was 09:55:59
7 introduced.) 09:56:03
8 MR. SLAYDEN: Okay. Move to admit 09:56:03
9 it. 09:56:05
10 MS. DURIE: No objection. 09:56:05
11 THE COURT: Okay. It is received. 09:56:06
12 (Whereupon, Trial Exhibit 47 was 09:56:06
13 introduced.) 09:56:16
14 BY MR. SLAYDEN: 09:56:16
15 Q. Mr. Obolsky, do you recognize the 09:56:36
16 document I gave you? 09:56:39
17 A. Yes. 09:56:43
18 Q. Exhibit 47? 09:56:43
19 A. Yes. 09:56:46
20 MR. SLAYDEN: Move to admit it. I 09:56:46
21 apologize for not having a copy. 09:56:48
22 MS. DURIE: No objection. 09:56:49
23 THE COURT: Okay. It is received. 09:56:51
24 Mr. Slayden, is that Exhibit 47, 09:57:01

1 the last one? 09:57:03
2 MR. SLAYDEN: Yes, sir. 09:57:04
3 THE COURT: Okay. 09:57:05
4 BY MR. SLAYDEN: 09:57:11
5 Q. Mr. Obolsky, do you recognize 09:57:12
6 Exhibit 42 that I have put in front of you? 09:57:14
7 A. Yes. This is a Microchip internal 09:57:17
8 document. 09:57:21
9 MR. SLAYDEN: Move to admit 09:57:22
10 Exhibit 42. 09:57:24
11 MS. DURIE: Sorry, 42? 09:57:27
12 MR. SLAYDEN: Yes. 09:57:29
13 THE COURT: 42, is that what you 09:57:30
14 said? 09:57:32
15 MR. SLAYDEN: 42, Your Honor. 09:57:32
16 THE COURT: Okay. 09:57:34
17 MS. DURIE: No objection. 09:57:34
18 THE COURT: Okay. It is received. 09:57:35
19 MR. SLAYDEN: I can take those 09:57:39
20 back. 09:57:40
21 (Brief pause.) 09:57:53
22 BY MR. SLAYDEN: 09:58:25
23 Q. Mr. Obolsky, yesterday you testified 09:58:26
24 concerning a period of time around 2014 when 09:58:28

1 Aptiv -- excuse me, Delphi contacted Microchip 09:58:34
2 concerning Unwired. 09:58:39
3 Do you remember that? 09:58:40
4 A. Yes, I do. 09:58:41
5 Q. And did Aptiv actually -- Delphi 09:58:42
6 actually contact Microchip and ask them to 09:58:46
7 investigate Unwired's one-lane solution? 09:58:49
8 A. Yes, they did. 09:58:51
9 MR. SLAYDEN: Mr. Ferrer, can you 09:58:57
10 bring up Exhibit 58. And can you go down 09:58:58
11 to... 09:59:20
12 BY MR. SLAYDEN: 09:59:20
13 Q. Do you have Exhibit 58 in your 09:59:21
14 notebook? 09:59:22
15 A. 58, I have -- I don't have it. 09:59:36
16 Q. That's okay. Can you see the screen? 09:59:42
17 Or I can bring you a copy. 09:59:45
18 A. Yes, I can. 09:59:46
19 MR. SLAYDEN: And, Mr. Ferrer, can 09:59:59
20 you bring up the last sentence of the first 10:00:00
21 full paragraph, please. 10:00:02
22 BY MR. SLAYDEN: 10:00:04
23 Q. And do you recognize this email? 10:00:13
24 A. Yes. 10:00:17

1 Q. And do you recognize Mr. Orlosky? 10:00:19
2 A. From the exhibit, yes. 10:00:24
3 Q. And he is a Delphi employee? 10:00:26
4 A. As I understand it, yes. 10:00:29
5 Q. And the last sentence, it says, this 10:00:32
6 is Delphi talking, "I started working on these 10:00:38
7 products a little over a year ago and am self 10:00:41
8 taught. No one existed in this position (a 10:00:44
9 guy quit and I was not engaged) and the 10:00:47
10 SMSC/Microchip guys have been outstanding in 10:00:51
11 helping me learn the technologies and make the 10:00:54
12 right product decisions. We will continue 10:00:56
13 down this road and I'm sure there will be no 10:00:59
14 further discussion." {Sic} 10:01:02
15 Isn't that Delphi giving Microchip 10:01:04
16 a compliment for helping them during this time 10:01:07
17 when Unwired starting competing with Delphi? 10:01:10
18 A. Yes. At that point, we were partners 10:01:12
19 hoping to win together, and yeah, they were -- 10:01:15
20 as I mentioned earlier, we put a lot of 10:01:17
21 technical support into any designs with our 10:01:19
22 customer. 10:01:23
23 Q. And can you please remind the jury 10:01:26
24 why Microchip raised prices on its four USB 10:01:31

1 hub products back in the timeframe of 2019? 10:01:35
2 A. It became obvious that all the prior 10:01:39
3 discussions about what the plans were were no 10:01:42
4 longer going to be true and the volumes would, 10:01:43
5 you know, start to drop dramatically as they 10:01:45
6 shifted over to an alternate solution. So the 10:01:48
7 volume was dropping and all the forecasts 10:01:51
8 didn't make any sense, so we said fine, time 10:01:53
9 to adjust, and then it all bared out, right? 10:01:56
10 We talked about it dropping from 16 million to 10:01:58
11 eight million to five million in consecutive 10:02:01
12 years, and that was not the original forecast. 10:02:04
13 Q. So Aptiv wasn't going to be this 10:02:06
14 long-term agreement commitment? 10:02:08
15 A. I'm sorry. No, Aptiv was going to 10:02:10
16 come nowhere near what they had forecast 10:02:13
17 prior. 10:02:15
18 Q. And did that turn out to be true? 10:02:15
19 A. Yes. As I just mentioned, the 10:02:17
20 revenue -- the revenue dropped dramatically 10:02:19
21 once they had their own different solution 10:02:23
22 that was no longer a partnership with the new 10:02:25
23 competing solution. 10:02:27
24 Q. And I think you testified yesterday 10:02:28

1 that Microchip supplies Aptiv over 100 other 10:02:29
2 products, approximately? 10:02:34
3 A. Yeah. 10:02:35
4 Q. To Aptiv? 10:02:36
5 A. Yes. Something just above 100, 10:02:37
6 giving broad numbers. 10:02:41
7 Q. Did Microchip raise the prices on 10:02:41
8 those products? 10:02:44
9 A. No, we did not. Only on the ones 10:02:44
10 where we were directly competing. 10:02:46
11 MR. SLAYDEN: No further 10:02:48
12 questions. 10:02:49
13 THE COURT: Ms. Durie? 10:02:51
14 MS. DURIE: Nothing further. 10:02:53
15 THE COURT: Mr. Obolsky, you can 10:02:54
16 step down. If your binder is there, why don't 10:02:56
17 you take it with you. 10:03:00
18 (Whereupon, the witness was 10:04:12
19 excused.) 10:04:14
20 (Brief pause.) 10:04:15
21 MR. FENTON: Good morning, Your 10:04:48
22 Honor. 10:04:49
23 THE COURT: Good morning. 10:04:49
24 MR. FENTON: My name is Truman 10:04:50

1 C E R T I F I C A T E

2

3 I do hereby certify that I am a
Notary Public in good standing, that the
4 aforesaid testimony was taken before me,
pursuant to notice, at the time and place
5 indicated; that said deponents were duly sworn
to tell the truth, the whole truth, and
6 nothing but the truth; that the testimony of
said deponents was correctly recorded in
7 machine shorthand by me and thereafter
transcribed under my supervision with
8 computer-aided transcription; that the
transcript is a true and correct record of the
9 testimony given by the witnesses; and that I
am neither of counsel nor kin to any party in
10 said action, nor interested in the outcome
thereof.
11
WITNESS by hand and official seal
12 this 8th day of April, 2022.

13 _____
Notary Public
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17 Job No. 5162169

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