

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
HONORABLE DAVID O. CARTER, JUDGE PRESIDING

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ECHOSTAR SATELLITE CORP., et)	
al.,)	
)	
Plaintiffs,)	
)	
vs.)	No. SACV 03-950 DOC
)	Day 16, Volume II
NDS GROUP PLC, et al.,)	
)	
Defendants.)	
_____)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Jury Trial

Santa Ana, California

Tuesday, May 6, 2008

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Federal Official Court Reporter
United States District Court
411 West 4th Street, Room 1-053
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EchoStar 2008-05-06 D16V2

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I N D E X

WITNESSES	DIRECT	CROSS	REDIRECT	RE CROSS
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KUDELSKI, Andre				
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By Mr. Stone		4		
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By Mr. Hagan			47	
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By Mr. Stone				48
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PELED, Abraham				
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By Mr. Welch	52			
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EXHIBITS

EXHIBIT NO.	IDENTIFICATION	IN EVIDENCE
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2060	Form F-1	87
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2505	8/20/2000 e-mail from	37
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	Alan Guggenheim	
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1 SANTA ANA, CALIFORNIA, TUESDAY, MAY 6, 2008

2 Day 16, Volume II

3 (9:01 a.m.)

4 (Live reporter switch.)

5 (Previous proceedings reported by Jane Rule
6 in Volume I.)

7 PLAINTIFF'S REBUTTAL (Continued)

8 ANDRE KUDELSKI, PLAINTIFF'S REBUTTAL WITNESS, PREVIOUSLY

9 SWORN

10 CURRENTLY ON THE STAND

11 CROSS-EXAMINATION (Continued)

12 BY MR. STONE:

13 Q. And you testified last night that you've never analyzed
14 those postings, correct?

15 A. That's right.

16 Q. And you've never even seen those postings, correct?

17 A. I have not seen them before yesterday.

18 Q. And you weren't even aware of the buffer overflow
19 vulnerability until this lawsuit and this trial, correct?

20 A. That's correct.

21 Q. In discussions with Mr. Nicolas during the trial
22 process, correct?

23 A. Yes.

24 Q. And you weren't even aware of the patch or ECM until
25 you talked to Mr. Nicolas in the last few days, correct?

1 A. I was aware that some ECM and countermeasure were done,
2 but I was not knowing the details.

3 Q. Now, who provided you the Headend Report to review on
4 your flight over?

5 A. That's Rick Manion.

6 Q. Is that a lawyer?

7 A. Yes.

8 Q. Did any of the lawyers give you Exhibit 391 to look at?

9 A. I don't know what is this -- what is -- how to say --
10 exhibit you are referring to.

11 THE COURT: He may not know what 391 is by number,
12 Counsel.

13 BY MR. STONE:

14 Q. Sure. 391 was a proprietary document between DirecTV
15 and NDS discussing the P3 card technology?

16 A. I have no knowledge about such a document.

17 Q. Nagra is 50 percent owed by the Kudelski group of
18 companies, correct?

19 A. Yes.

20 Q. And Mr. Guggenheim reported to you and Mr. Ergen in the
21 2005/2006 time frame?

22 A. That's correct.

23 Q. Were you aware that NagraStar possessed a document that
24 was an internal NDS DirecTV document that explained ways to
25 attack the P3 card?

1 A. No.

2 Q. Were you aware that NagraStar possessed a document that
3 outlined the vulnerabilities and weaknesses in the P3 card?

4 A. No.

5 Q. Were you are aware that NagraStar possessed an NDS
6 document that outlined the technical features of the
7 P3 card?

8 A. No.

9 Q. Were you aware that NagraStar possessed a document that
10 had details about the P3 technology that could not be
11 discovered through reverse engineering?

12 A. No, I was not even aware that such exist.

13 Q. Do you know who Ron Ereiser is?

14 A. I have heard the name.

15 Q. Do you know -- did you understand that Mr. Ereiser had
16 a history of satellite piracy?

17 A. I have no idea.

18 Q. Do you have any understanding whether he had any
19 history of piracy against NDS?

20 A. I've seen and heard this name, but I don't remember
21 specific element. I have read a book describing whole
22 history of such kind of thing, but I don't remember more
23 precise elements.

24 Q. Did Mr. Guggenheim ever give you copies of documents he
25 obtained from Mr. Ereiser?

1 A. Never.

2 Q. And so if Mr. Guggenheim testified he gave you copies
3 in Switzerland, he was just mistaken?

4 MR. HAGAN: Misstates the testimony, Your Honor.

5 THE COURT: I'm not sure if it does or not. The
6 jury will recall. I don't remember specifically, Counsel.

7 Is that the statement?

8 MR. STONE: Correct.

9 BY MR. STONE:

10 Q. Have you ever discussed with Mr. Guggenheim documents
11 he obtained from Mr. Ereiser?

12 A. The only thing I discussed was that some documents were
13 obtained through discussion with Canal+ Technology, and I
14 have given release order to give, if any documents, to
15 lawyers to avoid any potential problems.

16 Q. Because they were hot documents; is that a fair
17 statement?

18 A. Because we were not knowing what was inside these
19 documents.

20 Q. Let's back up and talk a little bit more about this
21 reverse-engineering project that your counsel asked you some
22 brief questions about.

23 The goal of that project, which was called the BBCO
24 project, was ultimately to take some market share away from
25 Motorola, correct?

1 A. That's not the way I understand it.

2 The way I understand it was to open set-top box market
3 in the U.S. cable. As a result, it may take some market
4 share of Motorola, but basically it's saying that rather
5 than having a duopoly in terms of supplying the set-top box,
6 we come in a situation where you have other supplier of
7 set-top box.

8 Q. Weren't you partnering with a company called UEC that
9 made set-top boxes?

10 A. We have had contact with this company.

11 Q. And just so the jury is clear, you didn't have
12 Motorola's permission to engage in this reverse engineering,
13 correct?

14 A. We have not ask it.

15 Q. And you didn't inform them before you engaged in this
16 reverse engineering, correct?

17 A. That's correct.

18 Q. Didn't you testify last night that one of the goals of
19 this project was to take some market share in the U.S. cable
20 market from Motorola and Scientific Atlanta?

21 A. I don't think that that was my exact wording.

22 MR. STONE: Well, Your Honor, if I could show the
23 witness his deposition from last night, Page 34, Line 15,
24 through Page 35, Line 4.

25 THE COURT: One moment, please.

1 MR. STONE: Your Honor, I should probably start at
2 Line 8 on Page 34, to Line 4 on Page 35.

3 THE WITNESS: Sorry. May you repeat that?

4 THE COURT: Just a moment, sir. Why don't you
5 read that to yourself, please.

6 (Witness complies.)

7 THE COURT: You may.

8 MR. STONE: Thank you, Your Honor.

9 BY MR. STONE:

10 Q. Again, Mr. Kudelski, this is from your deposition we
11 took last night. And you were asked these questions and
12 gave these answers:

13 "QUESTION: Now, going back to the BBCO project, is it
14 fair to say that one of the goals of the project was to
15 ultimately take some market share away from Motorola and the
16 cable industry?

17 "ANSWER: It was basically to come from a duopoly
18 market into an open. And it was done with specific contacts
19 with cable operators and with cable labs.

20 "QUESTION: Right. But it would ultimately take some
21 market share away from Motorola or Scientific Atlanta?

22 "ANSWER: That is possible.

23 "QUESTION: That was the duopoly, correct?

24 "ANSWER: Right.

25 "QUESTION: Wasn't that the goal?

1 "ANSWER: It was basically to take some market share in
2 the U.S. cable.

3 "QUESTION: And the only two who had market share at
4 the time was either Motorola or Scientific Atlanta, correct?

5 "ANSWER: It was 99 percent of the market, yeah.

6 "QUESTION: So you were trying to take away market
7 share from both Motorola and Scientific Atlanta, correct?

8 "ANSWER: Yes."

9 And so Motorola would have been a competitor or
10 potential competitor, correct?

11 A. Not in the set-top box business, because we are not in
12 the set-top box business.

13 Q. In the conditional access services for digital cable,
14 they would have been a competitor --

15 A. Yes.

16 Q. -- in the United States, correct?

17 A. Yes.

18 Q. And you approved this project to engage in reverse
19 engineering of the Motorola set-top boxes, correct?

20 A. I approved the project, yes.

21 Q. And part of the project included reverse-engineering
22 the hardware component in the Motorola set-top box, correct?

23 A. Some hardware elements.

24 Q. The "element" meaning a chip, right?

25 A. I don't know what was precisely inside, sir, Motorola's

1 set-top box.

2 Q. Didn't anyone give you reports of the
3 reverse-engineering project?

4 A. Not in a detailed way, just overall project.

5 Q. There were no written reports whatsoever of this
6 project?

7 A. There were few presentations that were done to me from
8 time to time.

9 Q. How many millions of U.S. dollars were spent on this
10 reverse-engineering project?

11 A. It was just a very small part of this overall project.
12 We are speaking about few hundred thousand dollars.

13 Q. The project was 7 million?

14 A. About, yes.

15 Q. And that was the BBCO project, correct?

16 A. Yes.

17 Q. And the head of that project was Mr. Markey?

18 A. That's correct.

19 Q. And what was Mr. Marquis' position at the time?

20 A. He was originally chief marketing officer, but after
21 it, he was really concentrating on this project.

22 Q. Who did he report to?

23 A. To me.

24 Q. Directly to you, correct?

25 A. Yes.

1 Q. And how many consultants were hired for this
2 reverse-engineering project?

3 A. I have no idea. I just know the costs, but I have not
4 looked into details.

5 Q. And this project existed for two years, from 2000 to
6 2002, correct?

7 A. That's my understanding.

8 Q. And it's your testimony that no reports were generated
9 about the reverse engineering of the Motorola chip during
10 that entire two-year period?

11 A. Not from what I knew.

12 Q. And were you the person who canceled this project?

13 A. Yes.

14 Q. And --

15 A. It was a board -- with a board -- basically, it was a
16 board decision, to be fair.

17 Q. Didn't you first testify at your deposition last night
18 that none of the companies affiliated with the
19 Kudelski Group ever reverse-engineered any component of a
20 competitor's conditional access system?

21 A. I think it's still correct.

22 Q. Well, you did do reverse engineering, right?

23 A. Yes.

24 Q. You were trying to take market share away from
25 Motorola, correct?

1 A. But we were not speaking about reverse engineering or
2 conditional access system.

3 Q. So if I said "reverse-engineered a component of a
4 competitor's system," a scrambling system, would it be
5 correct?

6 A. Yes.

7 Q. So when you answered that last night, you were making a
8 distinction between conditional access system and the
9 encryption part of the --

10 A. No. There are three different elements. You have
11 conditional access, you have scrambling/descrambling, and
12 you have transport. And you have, how do you say,
13 standardization like DVB. The transport stream, the
14 scrambling/descrambling, are standard, something completely
15 open. So conditional access system is a way competition is
16 differentiating.

17 Q. Now, when the folks under your direction
18 reverse-engineered the chip in the Motorola set-top box,
19 they used a focused ion beam, didn't they?

20 A. I don't have any idea about that.

21 Q. They used acid to de-layer the chip, didn't they?

22 A. I don't know.

23 Q. They used a scanning electron microscope to analyze the
24 code from the chip, didn't they?

25 A. I don't know.

1 Q. They used IDA Pro to disassemble the code from the
2 Motorola chip, didn't they?

3 A. I don't know this.

4 Q. Did Mr. Markey report all of that to you?

5 A. No.

6 Q. When you were approving the budget for this project,
7 didn't you see line item entries for use of a focused ion
8 beam?

9 A. Not from what I knew.

10 Q. Was one of the gentleman who worked on this project a
11 gentleman named Dan DeHaan?

12 A. What's the question?

13 Q. Was one of your employees who worked on this
14 reverse-engineering project named Dan DeHaan?

15 A. The name is familiar to me, but I cannot know more than
16 that about him.

17 Q. How many engineers worked on the reverse-engineering
18 project?

19 A. I have no idea.

20 Q. How many consultants worked on the project?

21 A. I have no idea.

22 Q. Did a laboratory called Analytical Solutions work on
23 the reverse-engineering of the Motorola chip?

24 A. I have no idea. I just think I knew that we have
25 started from my knowledge to work with Analytical Solution

1 since 2005 to check the security of our own Smart Cards.

2 Q. And nobody told you that a focused ion beam was used in
3 this project, correct?

4 A. I have never heard that.

5 Q. And no one told you that fuming nitric acid was used in
6 this project?

7 A. I'm not familiar with this name.

8 Q. And nobody sent you any reports, written reports, about
9 this project at any time, correct?

10 A. Not from what I knew. I got reports through slides.

11 Q. Now, you made some opinions earlier about the
12 Headend Report, and I want to talk to you about some things
13 your company has done.

14 Can you explain why your company has analyzed devices
15 used for piracy of the NDS DirecTV system?

16 A. For different reason. First reason, you never knew a
17 pirate device if it's just used for one system or both
18 system or another system, and we really need to know which
19 technology are using the pirates to try to defeat our
20 technology.

21 Q. So that's a legitimate reason, right?

22 A. That's my opinion.

23 Q. Can you explain why your company analyzed dumps of the
24 ROM code from NDS DirecTV cards?

25 A. I'm not aware of that.

1 Q. Can you think of any reason --

2 A. But I can imagine that it's not obvious to know what a
3 dump is. That's not obvious before you analyze it.

4 Q. What if the e-mail that accompanies the file says,
5 "Here are dumps of the DirecTV card"? Would it then be
6 obvious?

7 A. I would be more surprised.

8 Q. Can you think of a legitimate reason for your company
9 to then analyze dumps that have been identified as coming
10 from the NDS DirecTV cards?

11 A. I don't see specific reason, but I have not thought
12 about it.

13 Q. And neither Mr. Nicolas nor Mr. Conus ever told you
14 that they had analyzed six dumps of ROM code from NDS
15 DirecTV cards?

16 A. I have never been informed of that.

17 Q. Do you know why your company analyzes electronic
18 countermeasures developed by NDS for the DirecTV system?

19 A. I may imagine it is to see how the pirates will react.

20 Q. Can you explain why NagraStar set up a lab in Denver to
21 analyze devices that were used to pirate DirecTV?

22 A. I may imagine that it was a lab established to analyze
23 pirate device on EchoStar element. That was not always
24 possible to know which signal it will pirate.

25 Q. And so it's for a legitimate reason; is that your

1 testimony?

2 A. That's what I may understand.

3 Q. And would it also be for a legitimate reason to create
4 schematics and circuit diagrams of devices used to pirate
5 DirecTV and NDS?

6 A. Can you just rephrase it?

7 Q. Would it be legitimate for the laboratory in Denver to
8 create schematics and circuit diagrams of devices used to
9 pirate the DirecTV NDS system?

10 MR. HAGAN: Objection, Your Honor. Misstates and
11 mischaracterizes the testimony.

12 THE COURT: Overruled. You can answer the
13 question.

14 THE WITNESS: I must just say that it's important
15 to understand how pirates are constructing safe device to
16 see what are the weak point in such devices.

17 BY MR. STONE:

18 Q. And that would include weak points that would be used
19 to attack DirecTV, right?

20 A. That is not my understanding.

21 Q. Did you ever talk to anyone about the lab in Denver?

22 A. No.

23 Q. Were you even aware it existed?

24 A. I have not asked.

25 Q. Well, my question is, were you aware it existed?

1 A. I was not aware.

2 Q. Can you explain why NagraStar's chief investigator,
3 J.J. Gee, paid \$5,000 for stolen documents related to the
4 NDS DirectTV P4 technology?

5 A. I'm just surprised of such an allegation.

6 Q. Did anyone share those documents with you?

7 A. I don't think so.

8 Q. Can you explain why NagraStar's chief investigator,
9 J.J. Gee, purchased unmodified P4 cards from satansplayhouse
10 in 2002?

11 A. I was certainly not aware of it.

12 Q. Do you know what happened to those P4 cards?

13 A. Absolutely not.

14 Q. Now, let's talk about the P4 technology.

15 For quite a while, Nagra used off-the-shelf chips in
16 its system, correct?

17 A. Yes.

18 Q. These were not custom chips, right?

19 A. That's correct.

20 Q. And then after all this stuff we've been talking about,
21 with the P4 cards from satansplayhouse and all that stuff,
22 you folks started to develop what's called an ASIC, right?

23 A. That's not the first time we have developed an ASIC,
24 but it was the second time that we have developed ASIC.
25 That is correct.

1 Q. Tell the folks what year that was?

2 A. ASIC is basically --

3 Q. No, no. What year? I'm sorry, sir?

4 A. Sorry?

5 Q. What year was that you began developing the ASIC --

6 A. The first ASIC we have developed was in 1989 for the
7 analog system.

8 Q. Focusing on the digital --

9 A. Digital was in early 2004, late 2003.

10 Q. Now, the NDS DirecTV system had used an ASIC for a
11 number of years going back to the P2 card, correct?

12 A. I don't know.

13 Q. And the P4 card has an ASIC in it, correct?

14 A. Maybe.

15 Q. Well, haven't you hired folks who worked on the P4
16 project with NDS and DirecTV?

17 A. I have hired people that were former employee of
18 DirecTV and people that were involved in projects with
19 DirecTV.

20 Q. Well, not just projects. You've hired people who were
21 specifically involved in the P4 development, right?

22 A. People involved in developing secure solution for
23 DirecTV.

24 Q. Including the P4 technology, right?

25 A. That may be.

1 Q. Well, it's not maybe. You hired or acquired the
2 EmbedICs Company, right?

3 A. Correct, yes.

4 Q. And Chris Kearn (phonetic) is one of the members of
5 EmbedICs, correct?

6 A. That's correct.

7 Q. Chris Kearn was one of the lead engineers at DirecTV
8 working with NDS on the P4 card, correct?

9 A. Working on different cards, yes. Precisely which one,
10 that's not something that he has disclosed.

11 Q. And you hired Mr. Kochi (phonetic), who was an engineer
12 from DirecTV who worked on the P4 development, correct?

13 A. I have not hired such. We have contracted with SMI,
14 who is employing Mr. Kochi.

15 Q. So you contracted with a company that employed --

16 A. Just to be precise.

17 Q. Okay. I'll try to be very precise here.

18 You also hired a gentleman named Mr. Flaherty through
19 this company that you just mentioned, right?

20 A. Absolutely.

21 Q. And Mr. Flaherty worked on the P4 development with NDS
22 as well?

23 A. He worked on securing DirecTV, but I think he was
24 working on many, many things, and I don't know all the
25 details.

1 Q. Well, you knew he worked on the P4. You knew at least
2 that much, right?

3 A. That was my guess.

4 Q. And you also hired a gentleman call Paul Kocher,
5 correct?

6 A. That's correct.

7 Q. And he was recommended to you by Mr. Kochi and
8 Mr. Flaherty?

9 A. And Mr. Flaherty.

10 Q. And Mr. Kocher had worked on the P4 development as
11 well, correct?

12 A. He has never disclosed any element that he has done for
13 other company with the exception of the Blu-ray device.

14 Q. Well, you assumed that he had worked on the P4 based on
15 the recommendation of Mr. Flaherty, right?

16 A. That was probable.

17 Q. "Probable" meaning you assume that, right?

18 A. That was my guess.

19 Q. Now, let's talk a little bit about the DirecTV
20 situation.

21 A. But if I may just add some elements for the explanation
22 to say that we have started late 2003, early 2004 to have a
23 full solution -- even two family of solution -- with a
24 built-in ASIC, and we have taken that as a continuity of
25 developments that has been initiated by MediaGuard, a

1 company that we acquired. That was one part of
2 Canal+ Technology, and it's basically how we got knowledge
3 for our ASIC built in within the Smart Card.

4 We have initiated later on another solution with
5 people, SMI, to have one card family here that was able to
6 resist at different type of attack.

7 So our philosophy is not to have one single family, but
8 three different families with three different ASIC in the
9 way that we segment the risk between our different client
10 base.

11 Q. And one of the reasons you go to an ASIC is so that
12 you're not using an off-the-shelf chip for every customer
13 across the globe, correct?

14 A. That's one of the reason.

15 Q. And the problem when you use an off-the-shelf chip
16 across the world is that pirates attack it across the globe,
17 correct?

18 A. I would say that in a different way.

19 To use off-the-shellfish -- sorry -- off-the-shelf chip
20 is making a system vulnerable to professional hacker that
21 have important mean to investigate the chip. Once you have
22 an ASIC, you make this experience much more difficult
23 because a number of informations that you need to pass from
24 the reverse engineering to the pirate community is so large
25 that it give really trace. And that is basically a way to

1 protect ourselves also against pirates that are competitors.

2 Q. And the ROM 3 card was hacked and pirated in Europe,
3 wasn't it?

4 A. From my knowledge, yes.

5 Q. It was hacked in Poland, wasn't it?

6 A. I don't think it was hacked in Poland. It's -- we have
7 seen hacked card in Poland, but I don't know where its
8 attack was coming from.

9 Q. And wasn't the ROM 3 card first compromised in Spain?

10 A. I don't know.

11 Q. And the system you have in Germany has been hacked,
12 correct?

13 A. We are not speaking about the same generation here.

14 Q. Is the system that you have in Germany currently
15 hacked?

16 A. Yes.

17 Q. And you agree that as soon as you come out with any
18 conditional access system, the pirates begin attacking it
19 across the globe, right?

20 A. Not automatically. That's some elements we have seen
21 pirate coming from different part of the globe. For some,
22 that was not the case.

23 Q. And did you ever learn that there were national
24 laboratories in Sofia, Bulgaria that were used to attack
25 your cards?

1 A. No.

2 Q. Mr. Nicolas never informed you of that fact?

3 A. Not specifically.

4 Q. Did he generally tell you that was occurring?

5 A. He was confirming map where the piracy was coming from,
6 but I don't remember specific details.

7 Q. You said a map?

8 A. Map.

9 Q. M-A-P?

10 A. M-A-P.

11 Q. So there's some kind of map that exists?

12 A. There was some presentation done to show what was
13 status.

14 Q. Now let's talk a little bit about DirecTV.

15 Last night when I asked you who told you security was
16 an important consideration, your answer was, you didn't
17 remember who at DirecTV said that. Do you recall that?

18 A. Yes.

19 Q. And I asked you, "Can you recall a name?" And you said
20 you didn't recall a single name of who might have said that.
21 Do you recall that?

22 A. I said that our people have been in contact with
23 DirecTV, including people like Dennis Flaherty, Greg Gagnon.

24 Q. Well, last night you couldn't identify the name of a
25 single person who made that statement, correct?

1 A. I said not -- so that was basically the people we were
2 in touch with. And that can be very well, very fine. I
3 think they are some protocol at DirecTV about people that
4 have attended to these meetings.

5 Q. I'm not asking you who attended. You don't recall who
6 made that statement of --

7 A. Not precise -- not precisely.

8 Q. And you testified last night that a request for
9 information is an offer with no commitment to place an order
10 afterwards.

11 A. Absolutely.

12 Q. And in 1998, you were responding to a request for
13 information from DirecTV, correct?

14 A. Absolutely.

15 Q. And that in April 1999 your company entered into a
16 study contract with DirecTV, right?

17 A. That's correct.

18 Q. And you testified you don't know whether DirecTV
19 entered into study contracts with other providers?

20 A. No. I said that my understanding, from what I have
21 been told by people of DirecTV, that we was only one.

22 Q. But you don't recall who said that either, do you, sir?

23 A. Sorry?

24 Q. You don't recall who said that either?

25 A. There were different people that were in contact,

1 including Greg Gagnon.

2 Q. Now, the study contract was only seven pages long,
3 correct?

4 A. It was a short contract.

5 Q. And under the contract, Kudelski was simply obligated
6 to deliver a white paper, an informational paper, correct?

7 A. That's correct.

8 Q. And under the study contract, it was terminated once
9 that informational study was provided, correct?

10 A. That is correct.

11 Q. And your company delivered the white paper in
12 November 1999, correct?

13 A. That's what I suppose.

14 Q. And the contract terminated when the paper was
15 delivered in 1999, correct?

16 A. That's my understanding.

17 Q. And you never received any request for proposal from
18 DirecTV in 1998 or 1999, correct?

19 A. That's correct.

20 Q. And, in fact, in October of 1999, before the study
21 paper was finalized, you got a letter from DirecTV informing
22 you that they were not seeking any request for proposals,
23 right?

24 A. That's correct.

25 Q. And you believe that letter went out to all the

1 providers who had responded to DirecTV, right?

2 A. That's my understanding.

3 Q. And you knew at the time you got that letter that
4 DirecTV had already made the decision to stay with NDS,
5 correct?

6 A. That was my understanding.

7 Q. And, in your words, NDS was experiencing terrible
8 piracy at the time DirecTV renewed, correct?

9 A. That's correct.

10 Q. And you told DirecTV about the piracy problems you were
11 experiencing, correct?

12 A. That's correct.

13 Q. You didn't hold anything back, right?

14 A. That was not our intention.

15 Q. And you told 'em that you were able to keep piracy
16 under control, correct?

17 A. That's correct.

18 Q. At the time of these discussions, EchoStar was not a
19 conditional access provider, right?

20 A. No.

21 Q. And EchoStar wasn't involved in these discussions with
22 DirecTV, right?

23 A. No.

24 Q. And you also testified last night that NagraStar was
25 not directly involved in these --

1 A. Not directly.

2 Q. Please wait for me to finish my question, sir.

3 A. Okay.

4 THE COURT: Reask it.

5 BY MR. STONE:

6 Q. You testified last night that NagraStar was not
7 directly involved in these negotiations either, correct?

8 A. Correct.

9 Q. And, in fact, you testified that DirecTV was not even
10 ready to consider NagraStar's involvement with its
11 conditional access system at the time, right?

12 A. At the time being.

13 Q. You said it was premature, right?

14 A. Exactly.

15 Q. And you said it was premature because EchoStar, who
16 owned 50 percent of NagraStar, was a competitor of DirecTV,
17 right?

18 A. No. It was because the relation between EchoStar and
19 DirecTV was not ready for such a situation.

20 Q. Because they were competitors, correct?

21 A. That's not a reason enough.

22 Q. And you said the time might be possible two years
23 later, right?

24 A. Absolutely.

25 Q. And you testified that it might be possible if EchoStar

1 acquired DirectTV, right?

2 A. That was one of the option, but it was another option
3 if somebody else in News Corp would have acquired DirectTV.

4 Q. And it's your testimony that if News Corp acquired
5 DirectTV, then NagraStar would not become the conditional
6 access provider, right?

7 A. That would not be likely.

8 Q. Once News Corp acquired DirectTV, you knew there was no
9 chance of a deal, right?

10 A. Let's say reduced -- we have the contra example of
11 Premier, where we still are the supplier.

12 Q. Didn't you testify that you would only have an
13 opportunity for that deal if someone other than News Corp
14 acquired DirectTV?

15 A. As NagraStar.

16 Q. Pardon?

17 A. As NagraStar. We are speaking about two different
18 things.

19 Q. As NagraStar the plaintiff, you mean?

20 A. Yes.

21 Q. Got it.

22 Now, you learned in the last few days that the
23 developer of the ROM 3 code failed to check the
24 communications buffer for overflow, right?

25 A. Yes, but I think your question is not correct.

1 That was a good reason to not check this buffer
2 overflow.

3 Q. Well, you only learned the developer didn't check
4 during the process of this trial, correct?

5 A. Yes, and so I forgot the complete explanation.

6 Q. Only during this trial, right?

7 A. Yes.

8 Q. So this never came to your attention during this trial;
9 isn't that correct?

10 A. That's right.

11 Q. In fact, you only learned in the last few weeks --

12 A. That's correct.

13 Q. -- that your company was claiming the buffer overflow
14 was related to some problem with the STMicro chip, correct?

15 A. Yes.

16 Q. And that's called memory aliasing, right?

17 A. That's what you called memory aliasing.

18 Q. And Mr. Nicolas never told you about a meeting with
19 STMicro in early 2000 where they discussed memory aliasing?

20 A. No.

21 Q. Pardon?

22 A. No.

23 Q. And you've never looked at the comments to the ROM 3
24 code, correct?

25 A. That's not my job, so the response is no.

1 Q. And you're not aware if the registers in the ROM 3 card
2 were set to detect glitching, are you?

3 A. I have no idea.

4 Q. And you don't know whether the glitching sensors were
5 deemed to be too sensitive to be used, do you?

6 A. I don't have knowledge.

7 Q. Do you know who configured the memory access control
8 matrix in the ROM 3 card?

9 A. I may imagine that it's part of my team.

10 Q. But you don't know how the memory access control matrix
11 was configured for the ROM 3 card, correct?

12 A. No.

13 Q. You don't know why the communications buffer was placed
14 at the end of memory in the ROM 3 card, do you?

15 A. No.

16 Q. And you don't recall receiving any written reports
17 about the status of ROM 3 cards in either 2001 or 2002,
18 correct?

19 A. That's correct.

20 Q. And so you've never seen any e-mails from Mr. Conus
21 categorizing the ROM 3 as secure during that period, right?

22 A. That's right.

23 Q. And you've never seen e-mail reports from Mr. Conus
24 deeming the ROM 3 hole closed during that time frame,
25 correct?

1 A. It's correct, before the last few days.

2 Q. And Mr. Osen was one of the primary developers of the
3 ROM 3 card, correct?

4 A. That's my understanding.

5 Q. And you've never spoken to Mr. Osen about how pirates
6 were able to hack the ROM 3 card, correct?

7 A. That's correct.

8 Q. But you did testify that during the development, a test
9 was conducted on the chip used in the ROM 3 card for memory
10 aliasing. Do you recall that testimony?

11 A. Yes.

12 Q. And the test was run by Mr. Osen and his team, right?

13 A. Yes.

14 Q. And Mr. Osen had significant experience developing code
15 for Smart Cards, right?

16 A. That's absolutely correct. And a track record of ten
17 years, zero piracy with analog Smart Card.

18 Q. And you testified he used an emulator to run a test for
19 memory aliasing. Do you recall that?

20 A. That's correct.

21 Q. And do you know if a test was run where Mr. Osen gave
22 inputs to the ROM 3 card that exceeded the length of the
23 communications buffer?

24 A. I have no idea.

25 Q. Do you understand what test protocols he used to test

1 for memory aliasing?

2 A. I understand that he is somebody very methodic, and I
3 have never seen him making a significant error.

4 Q. Not a mistake, in other words?

5 A. So basically I have been impressed by Karl Osen by the
6 quality of the product he delivered. Take an analog -- it's
7 a ROM code developed, has been delivered in 1990 that has
8 been untouched for years. Just zero bugs. So he has a very
9 good track record within our organization.

10 Q. For not making inadvertent errors, correct?

11 A. That's not his style.

12 Q. Now, the ROM 10 card was developed in 1999, correct?

13 A. That's what I understand.

14 Q. And do you know whether or not a decision was made to
15 check the communications buffer for overflow in the ROM 10
16 card?

17 A. I have no idea.

18 Q. Now, are you aware that NagraVision acquired and
19 analyzed a black box pirate device in the fall of 2000?

20 A. No.

21 Q. Are you aware that the black box device used a buffer
22 overflow attack on the ROM 3 card?

23 A. No.

24 Q. Were you aware that the black box worked on
25 ROM 2 cards?

1 A. No.

2 Q. In fact, the first time you heard about the black box
3 was at your deposition last night?

4 A. Yes.

5 Q. Have you ever heard of somebody named Anthony
6 Maldonado?

7 A. The name is absolutely not familiar to me.

8 Q. Have you heard of Jim Waters from Barrie, Ontario?

9 A. No.

10 Q. Have you ever heard of anyone named Mike Manieri?

11 A. No.

12 Q. Did anyone ever tell you about a pirate group operating
13 in Barrie, Ontario, called "the Barrie group"?

14 A. No.

15 Q. Did anyone ever provide you a written report of an
16 analysis of a black box device?

17 A. No.

18 Q. Do you know what actions your company took after
19 analyzing the black box device?

20 A. No.

21 Q. Now, am I correct that in 2001 the stock price of your
22 company declined because of rumors of News Corp.'s potential
23 acquisition of DirecTV?

24 A. Decline, yes. I think that was more than rumors.

25 Q. So your stock price declined when --

1 A. Yes --

2 Q. Let me finish, please.

3 A. Sorry.

4 Q. Your stock price declined when the market thought News
5 Corp. was, in fact, going to acquire DirecTV, right?

6 A. That's correct.

7 THE COURT: Counsel, can we also find out what
8 market? Is he on the NASDAQ, publicly traded, et cetera? I
9 know it's clear to all of us. I don't think it's clear to
10 the jury.

11 MR. STONE: Thank you, Your Honor.

12 BY MR. STONE:

13 Q. What market do the shares of the Kudelski Group trade?

14 A. That was on the Swiss stock exchange, blue chips. It
15 was traded in London.

16 Q. And then in 2002 you supported the bid by EchoStar to
17 acquire DirecTV, right?

18 A. That's correct.

19 Q. And you put up some debt to finance that acquisition?

20 A. That's correct.

21 Q. And am I correct that the stock price took a hit as a
22 result of that?

23 A. A small hit, yes.

24 Q. Did it take a bigger hit when EchoStar lost the bid for
25 DirecTV?

1 A. That's correct.

2 Q. And it took an even bigger hit when it turned out
3 News Corp. acquired DirecTV?

4 A. I think the two were combined.

5 Q. And that was the most significant hit in the year 2002
6 that your company had taken, correct?

7 A. No, it's not correct. The most significant hit was the
8 slowdown in the digital TV industry mainly in Europe that
9 has led to breakup of the vertically integrated operators in
10 Europe.

11 Q. Okay. What I'd like to do now is show you an exhibit,
12 2505, if I could, please.

13 Now, looking at the first page of 2505, this is an
14 e-mail from Alan Guggenheim up at the top?

15 A. That's what I understand.

16 THE COURT: Counsel, it's been awhile. Certainly
17 all of us know, but just remind the jury of his position.

18 BY MR. STONE:

19 Q. Right. At this point in time -- the e-mail is dated
20 August 20, 2000 -- Mr. Guggenheim was a consultant to the
21 Kudelski/Nagra companies, correct?

22 A. I don't think that's exactly correct. Alan Guggenheim
23 was paid through a consulting agreement but was acting as
24 executive of the company.

25 Q. Right. So he was both an executive of one of the

1 Kudelski companies and also a consultant?

2 A. Absolutely.

3 Q. And he had a company called CIS?

4 A. That's my understanding.

5 Q. And that's the e-mail address for this document?

6 A. That's what I see.

7 MR. STONE: Your Honor, at this time I would move
8 2505.

9 THE COURT: Any objection?

10 MR. HAGAN: I think the document contains hearsay,
11 but no objections to the underlying e-mail.

12 THE COURT: Received.

13 (Exhibit No. 2505 received in evidence.)

14 (Document displayed.)

15 THE WITNESS: I'm sorry, I have lost --

16 THE COURT: There's no question yet.

17 THE WITNESS: Okay. Sorry.

18 BY MR. STONE:

19 Q. What I understand Mr. Guggenheim has done is attached
20 to his e-mail some postings from Internet piracy forums.

21 And what I'd like you to do is go to -- I believe it's
22 page 4 of the document. It has the number 856 at the
23 bottom.

24 A. Sorry, can you just repeat?

25 THE COURT: He's going to help you find that page.

1 THE WITNESS: Okay.

2 Okay. Thank you.

3 BY MR. STONE:

4 Q. And right about middle of the page there's a posting
5 from A. Kudelski Newbie. Do you see that?

6 A. I see that.

7 Q. And your name, of course, is Andre Kudelski, correct?

8 A. That's correct.

9 Q. And this posting purports to have information about the
10 Kudelski conditional access system, correct?

11 A. That's what it looks like.

12 Q. And it says your company is planning on releasing a new
13 Smart Card later that year, correct? It's the second
14 paragraph of the posting.

15 A. That is what I read.

16 Q. But it's your testimony you didn't make this posting,
17 correct?

18 A. Not only I have not made it, but it seems really
19 ridiculous.

20 Q. So someone was posting Andre Kudelski on the Internet,
21 correct?

22 A. That's my conclusion. But I would say that that's a
23 guess that the A is for Andre, but -- I think it's a guess
24 that is reasonable.

25 Q. And it's your testimony that nothing in this posting is

1 true, correct?

2 A. It seems to be completely ridiculous.

3 Q. And there's a lot of false information on the Internet,
4 isn't there?

5 A. That's something that may happen.

6 Q. Well, this is all false information by somebody
7 pretending to be A. Kudelski, correct?

8 A. That's my understanding.

9 Q. And there's only one A. Kudelski that is in the
10 conditional access system industry?

11 A. There is two A. Kudelski in Switzerland.

12 Q. Only two in all of Switzerland?

13 A. Yes.

14 Q. Now, you testified last night that EchoStar did not
15 make a request for a card swap before 2001. Do you recall
16 that?

17 A. That's right.

18 MR. STONE: And if you could show the witness
19 Exhibit 828, please.

20 (Document displayed.)

21 BY MR. STONE:

22 Q. Now, this is in evidence. You testified last night you
23 did receive a copy of this letter in July of 1999, correct?

24 A. That's correct.

25 Q. And in the second paragraph it states: "Kudelski

1 NagraStar and EchoStar have also discussed a fix involving
2 the swap-out of Smart Cards to be completed in the next six
3 months, the fix, of which the Smart Card swap-out is only
4 one piece, is extremely important and must be accomplished
5 as soon as possible."

6 Did I read that correctly?

7 A. You read that correctly.

8 Q. And then the third paragraph refers to the Smart Card
9 purchase agreement, correct?

10 A. That's correct.

11 Q. And it refers to a warranty provision of the Smart Card
12 purchase agreement, right?

13 A. That's right.

14 Q. And this letter came from EchoStar's corporate counsel,
15 Mr. Sayeedi?

16 A. That's my understanding.

17 Q. And in the letter of July of 1999, it states that "the
18 correct warranty price was the direct marginal cost of
19 manufacturing the Smart Cards, exclusive of all overhead
20 costs," right?

21 A. That's correct.

22 Q. And do you know what an emulation device is?

23 A. My understanding is a device that is not a Smart Card
24 being able to simulate the Smart Card.

25 Q. So you don't even need a Smart Card. It sort of fakes

1 what a Smart Card does?

2 A. That's my understanding.

3 Q. And did you become aware that instructions were posted
4 on the Internet in early 1999 to allow people to do that?

5 A. My understanding was that it was a very small community
6 of pirates that were able to do that.

7 Q. And it's your testimony that this letter is not a real
8 request for a card swap, right?

9 A. That's absolutely correct.

10 Q. You claim the purpose of this letter was just a safety
11 bell, I think.

12 A. That's right because basically EchoStar was not a
13 conditional access expert, and they were watching how we
14 will be able to fight piracy through countermeasure; and
15 basically, countermeasure has shown that all the elements
16 that have come to the hacking -- how to say -- domain before
17 end of 2000 have been strictly under control.

18 Q. So even though this is a letter from EchoStar's
19 corporate counsel, it's sent pursuant to the Smart Card
20 warranty agreement, it's not a real request for a card swap,
21 right?

22 A. There has been discussion before this letter, after
23 this letter. And this letter was notice that any lawyer
24 within a company will do just to save its own rights.

25 Q. And so even though it was a letter from a lawyer, it

1 was done pursuant to the warranty agreement, it's your
2 testimony this was not a real request for a card swap,
3 right?

4 A. It was shown to not be a real request.

5 Q. And it was your testimony it's not a real request for a
6 card swap because EchoStar didn't have a team in place to
7 manage the card swap, right?

8 A. Not only that, but basically, to perform the card swap,
9 you need to integrate the former decoders with a new Smart
10 Card, so develop specific piece of software for the set-top
11 boxes. And that was not an effort that has been put in
12 place during this period.

13 Q. Now, you testified last night that the ROM 10 and
14 ROM 11 cards were available at this time and could have been
15 used for a swap?

16 A. That's correct.

17 Q. You also admitted that the ROM 10 and ROM 11 cards were
18 compatible with the existing set-top box boxes, right?

19 A. That's correct.

20 Q. But it was your claim that EchoStar never requested a
21 swap, so the ROM 10 and ROM 11 cards were not used in a swap
22 in 1999, correct?

23 A. That's correct.

24 Q. And you know that the ROM 10 and ROM 11 cards are not
25 vulnerable to buffer overflow, correct?

1 A. That's my understanding.

2 Q. So if EchoStar had swapped the ROM 10 and 11 cards that
3 were available, the December 2000 postings would have been
4 meaningless; isn't that right?

5 A. Can you just rephrase, please, your question.

6 Q. If EchoStar had swapped for the available ROM 10 and
7 11 cards which were not subject to buffer overflow, then the
8 December 2000 postings would have been meaningless; isn't
9 that right?

10 A. The problem is not the Smart Cards that are new but the
11 installed base. So basically you would have had to replace
12 all the existing cards that were not ROM 10 or 11 by these
13 new cards.

14 Q. And those new cards would have solved the problem of
15 the posting that occurred in early 1999 as well, correct?

16 A. That's my understanding.

17 Q. And EchoStar chose not to do the swap; isn't that
18 right?

19 A. That's right, because at the time before December 2000,
20 there was no need to do such a swap.

21 Q. Well, you're not aware of any letter from EchoStar that
22 rescinded this request that was made in Exhibit 828, are
23 you?

24 A. I'm not aware of it.

25 Q. You're also not aware of any letter from EchoStar that

1 demanded a card swap after the December 2000 postings,
2 right?

3 A. That were no letter, but were discussion ongoing, and
4 we have made an agreement on that.

5 Q. So if I understand your testimony correctly, the
6 July 1999 card swap request, which was sent by a lawyer
7 under the warranty agreement, was not a real request, right?

8 A. That's my understanding.

9 Q. But you claim a real request was made for a swap
10 following the December 2000 postings?

11 A. That's correct.

12 Q. But there's no documentation of the real request for a
13 card swap, right?

14 A. There has been an agreement, and the agreement has
15 agreed on the price, on what the technology should be
16 delivered, and also element of warranty.

17 Q. Well, tell the ladies and gentlemen how many letters
18 you got following the December 2000 postings demanding a
19 card swap from EchoStar.

20 A. I have not received a letter from anyone.

21 Q. Nothing from a lawyer or nothing from the business
22 people, correct?

23 A. That's correct.

24 Q. And there's no documentation of the card swap that was
25 done following the December 2000 postings?

1 A. That were some projects on, how to say, weekly basis,
2 and that is the way we collaborate. Don't forget that we
3 have NagraStar that is a joint venture, and so most of the
4 elements are done on a daily base between the team.

5 Q. Well, didn't you testify last night that the agreement
6 that you reached was not pursuant to the Smart Card warranty
7 for the swap that was done?

8 A. Just -- can you just repeat? Sorry.

9 Q. Yeah. You testified last night that the agreement to
10 swap cards was not done under the Smart Card warranty?

11 A. Yes.

12 Q. In fact, that was an oral gentlemen's agreement you
13 reached with Mr. Ergen, right?

14 A. That's right.

15 Q. And that agreement was never put in writing, correct?

16 A. It was put in writing on the P.O., purchase orders.

17 Q. You never had a written contract, like the Smart Card
18 warranty, with Mr. Ergen for the card swap?

19 A. The written contract were the purchase orders that,
20 accepted by us, have taken the form of contract.

21 Q. And you didn't follow the Smart Card warranty when you
22 had your gentlemen's agreement with Mr. Ergen; isn't that
23 right?

24 A. That's my understanding.

25 Q. And the Smart Card warranty applies if there is a

1 breach or compromise of the system due to piracy, right?

2 A. That was original agreement, but take into account that
3 there were some extra requirements to do the swap, to make
4 it feasible in a way that was logistically possible.

5 Q. Well, the swap that was done was not done pursuant to
6 the agreement that covers the situation where piracy
7 requires a swap; isn't that true, sir?

8 A. That's correct.

9 Q. And how long was the -- the new cards in the field
10 before they were hacked?

11 A. They have been introduced in mid-2002, and the first
12 hack appear in late 2005.

13 MR. STONE: Thank you. No further questions.

14 THE COURT: Redirect.

15 MR. HAGAN: Thank you, Your Honor.

16 (Discussion off the record.)

17 THE COURT: Counsel, we'll take a break.

18 You're admonished not to discuss this matter
19 amongst yourselves nor to form or express any opinion
20 concerning the case.

21 See you in about 20 minutes.

22 (Recess held at 9:54 a.m.)

23 THE COURT: Thank you. The jury is once again in
24 session. All counsel, the witness.

25 Mr. Kudelski, if you would please be seated.

1 This is redirect examination by Mr. Hagan on
2 behalf of EchoStar.

3 MR. HAGAN: Thank you, Your Honor.

4 REDIRECT EXAMINATION

5 BY MR. HAGAN:

6 Q. Now, Mr. Kudelski, at any point in time did you provide
7 the defendants or Chris Tarnovsky any authority to post the
8 hack recipe developed in their Headend Project on
9 Mr. Menard's website?

10 MR. STONE: Objection. Assumes facts not in
11 evidence.

12 THE COURT: Overruled.

13 You may answer the question.

14 THE WITNESS: Never.

15 THE COURT: And that's a fact you'll later
16 determine, but counsel's asking to make certain that no
17 authority was granted.

18 BY MR. HAGAN:

19 Q. And did you provide the defendants any authority to
20 give or to show Chris Tarnovsky portions of the Headend
21 Report?

22 A. No.

23 MR. HAGAN: No further questions.

24 THE COURT: Recross.

25 MR. STONE: Thank you, Your Honor.

1 Very briefly.

2 REXCROSS-EXAMINATION

3 BY MR. STONE:

4 Q. Mr. Kudelski, if I understand it, in this gentlemen's
5 agreement you reached with Mr. Ergen, there was a new
6 guarantee for the cards that were swapped that would provide
7 those cards for free if they were compromised after the
8 swap, correct?

9 MR. HAGAN: Objection. Beyond the scope.

10 THE WITNESS: That's incomplete.

11 THE COURT: Counsel, it is beyond the scope, but
12 I'll let you reopen if you'd like to. But I'll give the
13 plaintiffs one more opportunity also, then.

14 So you can answer, sir.

15 THE WITNESS: Sorry. It was incomplete because it
16 was saying if the hack is happening before four years.

17 BY MR. STONE:

18 Q. And there's a -- I'm sorry, I didn't mean to cut you
19 off.

20 A. And if you modify this question like that, the response
21 is yes.

22 Q. Fair enough. Fair enough. And there is a card swap
23 occurring in 2008, which is within the four-year period,
24 correct?

25 A. It's not completely correct. It's correct that there

1 are some plan to have a swap starting in 2008, but to say
2 it's within the four years, that's not something that is
3 proved.

4 Q. Are some of the cards within the four years?

5 A. Yes.

6 Q. Are those being provided for free?

7 A. In such an exchange, that's what agreement says.

8 Q. And are they, in fact, going to be provided for free?

9 A. That's not something that has been discussed now.

10 Q. Are there negotiations going on?

11 A. We expect to have negotiation.

12 Q. Okay. So the gentlemen's agreement said they'd be
13 provided for free, but now there are some negotiations going
14 on, right?

15 A. That's correct.

16 Q. And are those negotiations awaiting the outcome of this
17 lawsuit?

18 A. That's not the idea.

19 MR. STONE: Nothing further. Thank you.

20 THE COURT: Counsel, do you have additional
21 questions?

22 MR. HAGAN: No, Your Honor.

23 THE COURT: Counsel?

24 MR. WELCH: Your Honor, at this time we'd like to
25 call --

1 THE COURT: Well, just a moment.

2 I believe that the testimonial portion of the
3 lawsuit will conclude today. I can't imagine why you'd be
4 called back to court.

5 But I want to make certain that the lawsuit, as
6 far as evidence, has truly concluded today. And I'm going
7 to ask you if you'd remain available until 12:00 o'clock
8 noon, at noon.

9 THE WITNESS: No problem.

10 THE COURT: At that time I think I'm going to be
11 in a position to excuse you and all of the other witnesses
12 from returning to the court. I just want to be very
13 cautious because people are flying from so far away.

14 THE WITNESS: Just, Your Honor, should I stay
15 here, or should I return to the hotel?

16 THE COURT: Oh, I'd go back to the hotel. And if
17 you're needed -- I'd start your packing. If you're needed,
18 we'll call you.

19 THE WITNESS: Thank you, Your Honor.

20 THE COURT: Thank you very much, sir. You may
21 step down.

22 (Witness steps down subject to recall.)

23 THE COURT: Now, Counsel, we had a few other
24 matters concerning the other gentleman. Are you in a
25 position to proceed at this time, or would you like the jury

1 to be excused for a moment?

2 MR. HAGAN: We believe that we can reach an
3 agreement, but we should probably do it outside the presence
4 of the jury, Your Honor.

5 THE COURT: Well, I don't know what that means.
6 Why don't you step over to the other side for a moment.
7 While they're visiting reaching whatever this agreement is,
8 we'll wait.

9 MR. WELCH: Your Honor, we've reached an
10 agreement, which is pretty much to accede to the tentative,
11 which is the first four topics will not be...

12 THE COURT: Counsel, thank you very much. Call
13 your next witness, please.

14 MR. WELCH: We call Abe Peled, Your Honor.

15 THE COURT: All right. Thank you.

16 Thank you, sir. Would you be kind enough to stop
17 at that location. Would you raise your right hand, please.
18 Kristee, who is the clerk, will administer the oath to you.

19 ABRAHAM PELED, PLAINTIFF'S REBUTTAL WITNESS, SWORN

20 THE WITNESS: I do.

21 THE COURT: Thank you, sir. Would you please be
22 kind enough to be seated in the witness box to my left.

23 After you're comfortably seated, would you state
24 your full name for the jury.

25 THE WITNESS: Abraham Peled.

1 THE COURT: Would you spell your last name for the
2 jury.

3 THE WITNESS: P, like Paul, E-L-E-D.

4 THE COURT: Is it E-D?

5 THE WITNESS: D like in David.

6 THE COURT: Thank you very much.

7 Counsel, this is direct examination on behalf of
8 the plaintiffs.

9 MR. WELCH: By Wade Welch, Your Honor.

10 THE COURT: Mr. Welch.

11 DIRECT EXAMINATION

12 BY MR. WELCH:

13 Q. Mr. Peled, could you tell us what you do for a living?

14 A. I'm the chairman and chief executive of NDS Group PLC.

15 Q. What does it mean to be the CEO of NDS?

16 A. Well, I'm responsible for setting the strategy, the
17 business strategy for the company. I'm responsible for the
18 execution of that strategy, monitoring, hiring the right
19 people, and establishing an environment that fosters the
20 creativity that the high technology company needs, and
21 anything else that needs to be done.

22 Q. I want to take you back for a minute. You began to
23 work for NDS as the CEO beginning in 1995, correct?

24 A. Yes.

25 Q. And prior to that time, you had no conditional access

1 experience in the subscription television area, correct?

2 A. That is correct.

3 Q. Now, at the time that you went to work for NDS in 1995,
4 NDS did not have -- well, let's back up for a second.

5 NDS was originally known as newsdata.com, correct?

6 A. Yes.

7 Q. And it subsequently changed its name to NDS, which is
8 the defendants that we have here today, correct?

9 A. Yes.

10 Q. Now, when you came to work for NDS in 1995, you were
11 recruited by News Corporation, correct?

12 A. Yes.

13 Q. And when you came to work for NDS, since you had no
14 conditional access experience, one of the first things that
15 you did, sir, was you made yourself familiar with the
16 competitive landscape; is that fair?

17 A. Yes, among other things.

18 Q. And what you did is you learned that Nagra was a
19 competitor of NDS?

20 A. Yes.

21 Q. You also learned that Canal+ was a competitor of NDS,
22 correct?

23 A. Yes.

24 Q. And at the time that you learned this, this was
25 approximately 1995, early '96, correct?

1 A. Yes.

2 Q. Now, I want to back up and I want to talk about NDS's
3 experience in the conditional access business up to that
4 point in time.

5 You had -- your largest system was a system called
6 British Sky Broadcasting in the UK, correct?

7 A. Yes.

8 Q. And that system was owned largely, in part, by your
9 parent company, News Corporation, correct?

10 A. News Corp. was a large shareholder.

11 Q. And if we talk about the track record of NDS and BSkyB
12 for a minute, BSkyB launched in 1990, correct?

13 A. Yes.

14 Q. And if we cover the period up through 1996, that would
15 be through your P10 card, correct?

16 A. I believe P10 launched in '96.

17 Q. And if we talk about this period of six years, isn't it
18 true, sir, that you went through five failed cards?

19 A. Well, I don't know the exact number, but approximately.

20 Q. And if we do the math, none of your cards lasted more
21 than a year, correct?

22 A. Yes.

23 Q. Now, I want to focus on '96. I want to really hone in
24 on Canal+ and Nagra.

25 In '96, while NDS was hacked, the Nagra digital system

1 had not suffered any compromise, had it?

2 A. Well, it just came out and had very limited number of
3 people using it, which typically doesn't attract piracy yet.

4 Q. The analog system hadn't been hacked, had it?

5 A. Had been.

6 Q. It's your testimony the Nagra analog system had been
7 hacked?

8 A. The one for Canal+ in France.

9 Q. But the digital system had not been?

10 A. As I said, the digital system just came out and had a
11 very limited number of people using it. At that point, I
12 believe, on EchoStar there were about 200,000 subscribers.

13 Q. Okay. Now, you launched in the digital arena in '94
14 with DirecTV, correct?

15 A. Yes.

16 Q. And that is the Period 1 card?

17 A. Yes.

18 Q. And the Period 1 card met with failure within a year
19 and a half, didn't it, sir?

20 A. Approximately.

21 Q. Okay. So that brings us to the end of '96. Now, let's
22 talk about the events of 1996.

23 You know a man by the name of Oliver Kommerling, don't
24 you, sir?

25 A. Yes.

1 Q. And Oliver Kommerling was pretty much a world-famous
2 hacker and pirate at that point in time, wasn't he?

3 A. Well, he was a well-known hacker when we found him in
4 Germany, and the rest of them, with the police, of course.

5 Q. And, in fact, it's your testimony, sir -- because I
6 took your deposition the other evening -- and he was one of
7 the best in the world at attacking Smart Cards, correct?

8 A. I was told that he was a brilliant man and very good at
9 attacking Smart Cards.

10 Q. And so one of the things that you did when you first
11 began to work for NDS in the '96 time period, you decided
12 that you were going to start a reverse engineering group,
13 correct?

14 A. Correct.

15 Q. And what you did is you hired this world-renowned
16 hacker, Mr. Oliver Kommerling, correct?

17 A. Yes.

18 Q. Okay. And Mr. Kommerling designed this special lab for
19 you, didn't he?

20 A. Well, I wouldn't say he designed it, but he certainly
21 helped in establishing laboratory to understand the methods
22 of attack on Smart Cards.

23 I should say that, you know, when I came, I clearly
24 identified that the key weakness in the conditional access
25 system was the chip which was used in the Smart Card.

1 Having used the standard chip was the Achilles heel, and it
2 was easily attacked.

3 And I decided to embark on a different strategy of
4 custom silicone, which would make it much more difficult to
5 attack. And to be able to design custom silicone like that,
6 I felt that not only did we need engineers that would know
7 how to design custom silicone, but we also had to understand
8 the attack methods. And the attack methods coming from
9 people like Oliver Kommerling --

10 MR. WELCH: Your Honor, I'm going to object as
11 nonresponsive. My question was simply, Mr. Kommerling --
12 did he task Mr. Kommerling was to come and design the lab.
13 So I'm going to move to strike that as nonresponsive.

14 THE COURT: I'm not sure which portion. So just
15 reask the question.

16 BY MR. WELCH:

17 Q. Okay. One of the things you did when you hired
18 Mr. Kommerling was you tasked him to help design this Haifa
19 lab, correct?

20 A. That is correct.

21 Q. And in addition to helping design and construct the
22 lab, Mr. Kommerling also was instrumental in helping you
23 figure out who to hire, correct?

24 A. No.

25 Q. Okay. Now, at the time that you built this lab -- I

1 believe you testified the other day that you believed that
2 the NagraCard and the Canal+ card were inferior in all
3 respects to your card. Correct?

4 A. I believe I testified that the system approach was
5 inferior. I did not talk about the card.

6 Q. And you thought your system and your approach was
7 superior in all respects to the Nagra and the Canal+ system,
8 correct?

9 A. That is correct.

10 Q. Okay. Now let's talk about this lab for a minute.

11 I believe it was -- you started construction on this in
12 late '96?

13 A. Sometime in the summer of '96.

14 Q. Okay. Up to that point in time, you were a wholly
15 owned corporation, wholly owned by News Corporation,
16 correct?

17 A. Correct.

18 Q. And you reported directly to News Corporation, correct?

19 A. Correct.

20 Q. And you reported to Mr. Greg Clark, who was the chief
21 technical officer of News Corporation, correct?

22 A. Correct.

23 Q. Now, is it fair to say -- well, strike that.

24 Who was funding the NDS operations up through '96? It
25 was News Corporation, wasn't it?

1 A. Well, NDS was a standalone company.

2 Q. Who was providing the money? Was News Corporation
3 providing you with money to fund your operation, sir?

4 A. In '95 when I arrived, NDS was roughly breaking even.

5 Q. Was News Corporation providing you with financing, sir?

6 A. The original funding for NDS came from News
7 Corporation.

8 Q. And now, it's true, sir, if we go all the way up
9 through '99, News Corporation had funded over \$200 million
10 for the operation of NDS, correct? -- because you had a loan
11 with them?

12 A. Yes.

13 Q. Thank you.

14 Now, part of that \$200 million was used to develop this
15 state-of-the-art lab, wasn't it?

16 A. Yes.

17 Q. And part of that \$200 million that News Corporation
18 provided to you was to fund the operations of the lab,
19 including the employees of the lab, Mr. Mordinson and
20 Mr. Shkedy, correct?

21 A. NDS at that point was already a profitable company.

22 Q. Was NDS continuing to provide it with funds through
23 '99?

24 A. You mean News Corp.

25 Q. Or was News Corporation? Yes, sir.

1 A. We did have a standing loan from News Corp.

2 Q. Thank you. So now let's talk about the lab for a
3 minute.

4 Did the lab -- did you oversee the actual operation of
5 the lab?

6 A. No.

7 Q. Okay. You left that to somebody else, didn't you?

8 A. Correct.

9 Q. Now, I want to talk about the employees. There was
10 only six or seven employees in this lab, correct?

11 A. Yes.

12 Q. And the only names that you can recall are
13 Mr. Mordinson and Mr. Shkedy?

14 A. Well, I should point out that at that point, NDS had
15 about 600 employees, of which about 450 were engineers. So
16 I don't think I could recall everybody's name.

17 Q. But when we talked in your deposition, I asked you how
18 many people were working in the lab, and you said
19 approximately six to seven, correct?

20 A. Yes.

21 Q. Okay. And the only names you could recall, even as of
22 Wednesday, even though that lab had been there since late
23 '96, were David Mordinson and Svi Shkedy, correct?

24 A. Well, because there was obviously a lot more talk about
25 them subsequently.

1 Q. Okay. So if it hadn't been for this lawsuit, you
2 wouldn't know who they were?

3 A. Well, probably not. I don't know if I would remember.

4 Q. Now, Mr. Shkedy was your chief hardware engineer in
5 this lab, wasn't he?

6 A. Well, this was a group of six or seven people. I don't
7 believe there are titles like that.

8 Q. He was your best hardware engineer that you were aware
9 of?

10 A. He was a hardware engineer.

11 Q. He was the best one, wasn't he, that you were aware of?

12 A. As far as I know, yes.

13 Q. And the same with Mr. Mordinson. He was the best
14 software engineer you had, as far as you know?

15 A. I think he was the only one.

16 Q. Okay. So we've got your best hardware engineer and
17 your only software engineer, Mr. Mordinson and Mr. Shkedy,
18 correct?

19 A. Yes.

20 Q. Okay. And you're aware that your two best engineers
21 were put on this project. Did you know that at the time?

22 A. I just want to point out --

23 Q. Do you know that, sir?

24 A. No. But you asked me were they --

25 Q. Okay.

1 A. -- the best engineers in that group.

2 Q. Okay.

3 A. And I said yes. We had 450 other engineers, many of
4 which were probably much better.

5 MR. WELCH: I'm going to move to strike it.

6 THE COURT: Overruled. That answers the question.

7 BY MR. WELCH:

8 Q. Okay. Were you aware that Mordinson and Shkedy were
9 put on this project to reverse-engineer the EchoStar card?

10 A. I did not know which particular project they worked on.

11 Q. Did you know there was a project to reverse-engineer or
12 hack the EchoStar card?

13 A. I knew that they were working on projects to
14 reverse-engineer our own Smart Cards as well as competitor
15 cards.

16 Q. Now, I'm going to have you take a look at what's been
17 marked as Exhibit 98.

18 Sir, have you seen this document before?

19 A. Only as part of the litigation.

20 (Document displayed.)

21 BY MR. WELCH:

22 Q. Have you read this document before?

23 A. No.

24 Q. So we're here in this multimillion-dollar lawsuit, and
25 you are aware, sir, that one of the central pieces of

1 evidence is this Project Headend Report?

2 A. Yes. I don't believe that there is any dispute that we
3 did reverse-engineer the card.

4 Q. And you haven't concerned yourself enough with this to
5 sit down and read it like the jury's going to?

6 A. Well, I mean, I glanced at it, and it's a very detailed
7 engineering report.

8 Q. Now, sir, when we talked about this report the other
9 day, I directed you to page 16, which is a section entitled
10 "3M Hack in Practice."

11 A. Yes.

12 Q. Now, you were not aware that that section was in this
13 report and the way it was worded prior to you seeing it for
14 the first time in approximately 2003, were you, sir?

15 A. That's correct.

16 Q. And if you had known -- you would have wanted to
17 know -- if there was a report generated by your employees
18 that talked about how to exploit a hack of somebody in the
19 subscription television business, you would have wanted to
20 know that, wouldn't you, sir?

21 A. Well, I knew they were working on reverse engineering
22 and I knew they wrote reports. I don't think I particularly
23 needed to know, see this report or any other report which I
24 did not get.

25 MR. WELCH: Could you show him page 70, lines 10

1 through 16.

2 Your Honor, may I read it?

3 THE COURT: I don't think it's impeaching at this
4 point, Counsel. No. You may ask questions in this area,
5 but I'm not sure what the answer is yet.

6 BY MR. WELCH:

7 Q. If the report talked about a hack in practice of the
8 DISH Network system, would that have been something that you
9 would have wanted to know? Yes or no.

10 A. As I -- well, can I explain?

11 Q. I'd just like a yes or no right now.

12 A. Yes.

13 Q. Thank you. Now, the first time you heard about this
14 report was after the original litigation was filed in the
15 Canal+ lawsuit in September of 2002, correct?

16 A. Yes.

17 Q. And this report, even though it was four years old,
18 came to your attention for the first time?

19 A. Yes.

20 Q. And you did not ask anybody to give you a copy of that
21 report so you could read it, did you?

22 A. I looked at it and I saw the detailed level of the
23 report and I did not read it in any detail. I understood.

24 And as I said, we did engage in reverse engineering to
25 determine what are the attack methods possible on that chip.

1 In that sense, there was nothing surprising about it,
2 including the fact it was a practical attack rather than an
3 esoteric attack.

4 Q. Now, you saw the report for the first time in 2000 or
5 2003, and you're aware that this litigation was filed in
6 2003, correct?

7 A. Yes.

8 Q. Do you know of any reason why we weren't shown this
9 report until 2007?

10 A. I don't know.

11 Q. Now, I want to talk about your history with DirectTV.

12 We started talking about that briefly, and that was
13 that you rolled out with the P1 card in June of '94,
14 correct?

15 A. Yes.

16 Q. And you rolled out with the P2 card the end of '96,
17 correct?

18 A. Correct.

19 Q. And the P2 card was hacked fairly quickly, wasn't it?

20 A. It was in a few months, probably five, six months.

21 Q. And that was a digital card?

22 A. Yes.

23 Q. So your first digital card lasted 18 months or less?

24 A. Yes.

25 Q. Your second digital card lasted three months or less?

1 A. I believe I said five or six months, but that is why I
2 felt that we need to improve these security for chips and
3 move to custom chips.

4 Q. Now, let's talk about your P3 card.

5 Your P3 card rolls out in February '99, correct?

6 A. Correct.

7 Q. And your P3 card was hacked by the summer of '99,
8 correct?

9 A. I believe in that time frame.

10 Q. And that is a digital card as well?

11 A. Yes.

12 Q. Did you ever hear about something called an
13 Operation Johnny Walker where Mr. Tarnovsky received cash in
14 relation to DirectTV piracy?

15 A. No.

16 Q. That was something, sir, that we talked about in your
17 deposition, correct?

18 A. Yes.

19 Q. And it was your testimony that you would have wanted to
20 know if Mr. Tarnovsky was receiving cash in that type of
21 operation, correct?

22 A. Correct.

23 Q. Now, let's talk about some mailboxes for a second.

24 There's been testimony in this case about a mailbox in
25 Manassas, Virginia which NDS was paying for. You're not

1 aware of whether or not NDS was paying for it, are you, sir?

2 A. Correct.

3 Q. But if they were, and Mr. Tarnovsky was receiving cash
4 payments, that is something that you would have wanted to
5 know, wasn't it?

6 A. Clearly, if they were, something that was illegal.

7 Q. Okay. Now, let's talk about cash payments in San
8 Marcos, Texas.

9 You're aware that there is a mailbox that was being
10 used by Mr. Tarnovsky in San Marcos, Texas, aren't you?

11 A. Yes.

12 Q. And you're aware that he was receiving cash at that
13 mailbox, aren't you, sir?

14 A. I know that there was one that was intercepted.

15 Q. There was at least two that were intercepted, sir,
16 right? To the tune of about 40,000 bucks?

17 A. Yes.

18 Q. Okay. And are you aware that NDS was paying for that
19 mailbox as well?

20 MR. SNYDER: Objection. Misstates the record.

21 THE WITNESS: I don't know.

22 THE COURT: Well, I don't recall if there was
23 evidence about who paid for that mailbox.

24 I'm going to sustain the objection.

25

1 BY MR. WELCH:

2 Q. If NDS was paying for that mailbox, sir, would you have
3 wanted to know that?

4 A. Well, clearly anything that would involve legal
5 activity by any NDS employee, including Chris Tarnovsky,
6 would be something that I would like to know about.

7 Q. If we talk about Mr. Tarnovsky for a minute, you're
8 aware that he began his employment with NDS in '97, correct?

9 A. Yes.

10 Q. And at the time he began his employment, you knew that
11 Mr. Tarnovsky was a pretty smart pirate, correct?

12 A. Correct. A reformed one.

13 Q. You knew he was a pirate, and he'd been a pirate for a
14 while, correct?

15 A. Correct.

16 Q. And you knew that he might continue his pirate ways,
17 correct?

18 A. No. We were -- first of all, that was the condition of
19 employing any of these people that had a piracy record. We
20 made it very clear to them that they're now turning over to
21 the good side and are expected to contribute to fighting
22 piracy rather than continuing to engage in piracy.

23 Q. Did you think that it was a potential, that
24 Mr. Tarnovsky could continue to engage in hacking and
25 piracy?

1 A. We have trusted Mr. Tarnovsky and instructed him
2 clearly not to do so.

3 Q. Did you think it was a risk, sir?

4 A. Well, obviously there is a theoretical risk.

5 Q. Okay. Did you provide anybody at NDS with specific
6 instructions on how to monitor, supervise, or train
7 Mr. Tarnovsky?

8 I'm just asking you if you personally did that.

9 A. No. I have relied on Mr. Hasak.

10 Q. When was the first time you ever became aware that
11 there was a hack of the Nagra digital system?

12 A. I don't remember specifically when I became aware of
13 it.

14 Q. It was some time after '98, though, correct?

15 A. Probably.

16 Q. So your best information is, it was secure at all times
17 up to the project Headend Report?

18 A. I don't know.

19 Q. As somebody -- one of the things we talked about, one
20 of the things that you like to do is keep your finger on the
21 pulse of piracy so you can see what's going on in the
22 marketplace, correct?

23 A. Well, it's one of the background reports that I get.

24 Q. And you -- I think you just testified that you aren't
25 aware when Nagra became hacked, so there wasn't just floods

1 of reports coming to you in the '98/'99 time period saying
2 that your competitor was hacked, correct?

3 A. I just said that I don't remember when I became aware
4 of it.

5 Q. Let's talk a little bit more about Mr. Tarnovsky.
6 We'll go ahead and get right into the meat of it.

7 Mr. Kommerling, this world-renowned pirate that you
8 hired to help design this lab in '96, he was either a
9 consultant or an employee of NDS for the period '96 through
10 2000, correct?

11 A. Yes.

12 Q. And then in 2000/2001 time period, NDS entered into a
13 joint venture arrangement with Mr. Kommerling, correct?

14 A. In the summer of 2000, I believe.

15 Q. Okay. And that lasted until approximately April of
16 2002?

17 A. Yes.

18 Q. Okay. Now, I want to talk to you about some meetings
19 that you had with Mr. Kommerling where you discussed NDS
20 business. Okay?

21 First thing we're going to talk about is a dinner you
22 had in July of 2001. Okay?

23 A. Yes.

24 Q. Do you recall that dinner?

25 A. Yes.

1 Q. And at that dinner, you and Mr. Kommerling were
2 discussing ADSR business, correct?

3 A. Yes, I was concerned with the lack of progress in ADSR.

4 Q. And one of the things that you learned from
5 Mr. Kommerling was that Mr. Tarnovsky had admitted to
6 Mr. Kommerling that Mr. Tarnovsky was involved in piracy of
7 the Canal+ system.

8 That's correct, isn't it? Yes or no?

9 A. Well, no. He told me something different, which I'm
10 prepared to explain.

11 Q. Do you recall telling me in your deposition that
12 Mr. Kommerling told you that not only that Mr. Tarnovsky was
13 involved in Canal+ piracy, that he posted the code on the
14 Internet for Canal+?

15 A. What Mr. Kommerling told me is that Tarnovsky posted
16 the code of Canal+ on dr7.

17 Q. So he was even specific. He posted it on Al Menard's
18 website, dr7, the Canal+ code?

19 A. That's what he said.

20 Q. Okay. Let's go forward.

21 Mr. Ray Adams telephoned you in approximately August of
22 2001, correct?

23 A. Yes.

24 Q. And could you tell us who Mr. Adams is?

25 A. Ray Adams was the head of operational security in the

1 United Kingdom and Europe, reporting to Reuven Hasak.

2 Q. And Mr. Adams worked with Mr. Kommerling, didn't he?

3 A. Well, he was his supervisor.

4 Q. Okay. Now, Mr. Adams called you -- I think you were on
5 vacation in Scotland or Ireland, I think is what you told
6 me -- and he told you to call Mr. Kommerling, correct?

7 A. Yes.

8 Q. And he told you that you needed to call Mr. Kommerling
9 right away, correct?

10 A. Yes.

11 Q. And you called Mr. Kommerling right away, didn't you?

12 A. Yes.

13 Q. And Mr. Kommerling again told you that
14 Christopher Tarnovsky was involved in the piracy of the
15 Canal+ system as well as posting the Canal+ codes on the
16 Internet. He told you that again, didn't he?

17 A. No. What he told me in that conversation was that
18 Canal+ now know that it is Christopher Tarnovsky that posted
19 the code on the Internet, and they're looking for him, and I
20 should hide him.

21 Q. Okay.

22 A. To which I replied, "That's a completely preposterous
23 suggestion. We have nothing to hide."

24 And it simply confirmed our suspicion that something
25 was going on between them and Canal+.

1 Q. Now, Mr. Kommerling also told you at some point in time
2 between the dinner meeting and this telephone conversation
3 that he believed that Mr. Tarnovsky was untrustworthy,
4 correct?

5 A. Yes. They had a big fight at the meeting, and
6 incidentally, he told me that --

7 Q. Sir?

8 A. -- Mr. Tarnovsky told him --

9 Q. I just wanted to know if Mr. Kommerling told you that
10 he believed Mr. Tarnovsky was untrustworthy.

11 Is that a "yes" or a "no"?

12 A. He told me that they had a big fight, and they were
13 both extremely drunk when they had that conversation.

14 Q. Did Mr. Kommerling tell you that he believed
15 Christopher Tarnovsky was untrustworthy in the summer of
16 2001?

17 A. No. Ray Adams told me that.

18 Q. Okay. So your own employee in 2001 told you that
19 Mr. Tarnovsky was untrustworthy?

20 A. That is correct.

21 Q. Okay. I've got it straight now.

22 Let's go forward to the next dinner meeting that you
23 had, and this was in September 2001, I believe, at Trader
24 Vic's in London, correct?

25 A. Correct.

1 Q. And you again were having dinner with Mr. Kommerling to
2 talk about Smart Card business, correct?

3 A. No. The dinner was about his concern that Canal+ want
4 to buy NDS, destroy NDS, and what will happen to our joint
5 venture.

6 Q. So --

7 A. That was the subject of the dinner.

8 THE COURT: Just a moment, Counsel.

9 All right. Thank you, Counsel.

10 BY MR. WELCH:

11 Q. I want to focus on the September 2001 dinner, okay?

12 THE COURT: Let's find out who was at that dinner,
13 again.

14 BY MR. WELCH:

15 Q. That dinner was with Mr. Kommerling, correct?

16 A. Yes.

17 Q. And one of the things that you were discussing was ADSR
18 business, correct?

19 A. Correct.

20 Q. And ADSR was the joint venture between Mr. Kommerling
21 and NDS, correct?

22 A. Yes.

23 Q. And during that dinner, Mr. Kommerling told you that
24 Christopher Tarnovsky had admitted that he was -- that
25 Christopher Tarnovsky was involved in EchoStar piracy and

1 had also posted EchoStar code on the Internet.

2 He told you that, didn't he, sir? Yes or no?

3 A. He told me that Chris Tarnovsky posted EchoStar code as
4 well.

5 Q. As well as the Canal+ --

6 A. Nothing more than piracy.

7 THE COURT: We couldn't get that because you spoke
8 over the top.

9 MR. WELCH: Sorry about that, Your Honor.

10 THE COURT: So you're going to reask the question.

11 BY MR. WELCH:

12 Q. Mr. Kommerling told you that Christopher Tarnovsky had
13 told him that Christopher Tarnovsky had posted the EchoStar
14 code on the Internet, correct?

15 A. Yes.

16 Q. And that was in September 2001 when you learned of
17 that?

18 A. Correct.

19 Q. Now, I want to talk about Ray Adams for a minute.

20 Did there come a point in time where you became
21 dissatisfied with Mr. Adams?

22 A. Yes, starting in the summer of 2001, his behavior
23 started appearing somewhat concerning.

24 Q. Okay. And you were concerned that Mr. Adams and
25 Mr. Kommerling were involved in illegal activities related

1 to piracy, correct?

2 A. No.

3 Q. Tell us what your concern was, sir.

4 A. My concern was that there was something going on
5 between them and Canal+ in relation to a plan to -- for
6 Canal+ to either buy NDS or merge with NDS.

7 Roughly at the same period, we started getting
8 approached by bankers about the possibility of a merger
9 between Canal+ Technologies and NDS.

10 Q. Now, you were unhappy with Mr. Adams because he had
11 concealed from you that Mr. Kommerling was involved in
12 satellite piracy related to Canal+, correct?

13 A. Well, first of all, I learned that in April of 2002.
14 And it wasn't involvement in piracy. It was involvement --
15 there was an indication that Oliver Kommerling offered Seca
16 code to a well-known pirate at that time.

17 Q. And what happened, sir, is, Mr. Kommerling had offered
18 the Canal+ code to a man by the name of Peter Tarmey,
19 correct?

20 A. Yes.

21 Q. And you were concerned that Mr. Adams was covering up
22 that activity, correct?

23 A. In April of 2002 when I learned about it, which was
24 after the Canal+ lawsuit, I clearly was very concerned about
25 these revelations that came out.

1 Q. And you were concerned that Mr. Adams was covering up
2 Mr. Tarnovsky -- or not Mr. Tarnovsky -- Mr. Kommerling's
3 illegal activities, correct? This offering of this code?

4 A. Yes.

5 Q. Okay. And you're aware, sir, that Mr. Kommerling --
6 let's talk about the Canal+ lawsuit.

7 You're aware that Mr. Kommerling signed a declaration,
8 a statement under oath to a federal court, in connection
9 with the Canal+ lawsuit, correct?

10 A. Yes.

11 Q. And at the time he signed that statement, sir, he was
12 working for this ADSR joint venture, correct?

13 A. Yes.

14 Q. And shortly after you found out that he had signed that
15 declaration -- well, let's talk about that declaration.
16 Talks about piracy related to Canal+, doesn't it?

17 A. Yes.

18 Q. And shortly after you found out that Mr. Kommerling had
19 signed this declaration, that declaration was not beneficial
20 to NDS, was it?

21 A. Clearly not.

22 Q. And right after he signed that, you locked him out of
23 the business, didn't you?

24 A. Actually, Ray Adams locked him out.

25 Q. Okay. But an NDS employee locked Mr. Kommerling out of

1 the business after he signed that declaration that was not
2 beneficial to you?

3 A. There was concern about disclosure of confidential
4 information that came out of that declaration.

5 Q. Sir, is my statement correct?

6 When you found out about the declaration, you locked
7 him out of his business -- or Ray Adams did.

8 Is that a "yes" or a "no"?

9 A. Ray Adams locked him out of his NDS premises, not ADSR
10 premises.

11 Q. Okay. Now, let's focus on Mr. Adams for a minute.
12 You're aware that there is a claim in this litigation made
13 by NDS that certain documents were misappropriated, correct?

14 A. Yes.

15 Q. And these were documents that supposedly came from
16 Mr. Adams' hard drive, correct?

17 A. Yes.

18 Q. Okay. And Mr. Adams left the employment of NDS in May
19 of 2002, correct?

20 A. Yes.

21 Q. Now, would you agree with me that when Mr. Adams left
22 in 2002, you were displeased with him?

23 A. Yes.

24 Q. And he was displeased with you or NDS?

25 A. Well, he offered to retire.

1 Q. Sir, he was displeased with NDS. You had a little
2 dispute going, didn't you?

3 A. After we accepted his retirement, he tried to retract
4 it.

5 Q. Sir, was he happy with you or not happy with you?

6 A. It appeared that he was not happy.

7 Q. Okay. Now, when he left his employment with NDS, he
8 did not turn in -- oh, he turned in his equipment, didn't
9 he? He turned in his laptop?

10 A. I believe so, yes.

11 Q. And what you determined when he turned in this laptop
12 was he had replaced the hard drive in it, correct?

13 A. Well, of course, NDS determined, yes.

14 Q. NDS confirmed it when they got the laptop from
15 Mr. Adams. They checked the hard drive and determined that
16 the hard drive was not the original one for the computer,
17 correct?

18 A. Correct.

19 Q. So you had Mr. Len Withall make an appointment to go
20 see Mr. Adams, correct?

21 A. Len was going to retrieve the hard drive from
22 Mr. Adams. He said that, yes, he needed it, and he will
23 give it back to him.

24 Q. So he actually showed up at Mr. Adams' house, correct?

25 A. Yes.

1 Q. And you saw a report of this meeting, didn't you?

2 A. Yeah, I saw a report that talked about the fact that --
3 about that incident.

4 Q. Okay. And if we talk about the time period between
5 when Mr. Withall -- let me back up.

6 If we talk about the time period where he turns in the
7 laptop up through the time that Mr. Withall goes to his
8 house, Mr. Adams told NDS that Mr. Adams was still in
9 possession of the hard drive, correct?

10 A. I believe that's what he told them.

11 Q. And so Mr. Withall goes to Mr. Adams' house to retrieve
12 the hard drive, correct?

13 A. Yes.

14 Q. And could you tell the jury what Mr. Withall reported?

15 A. Mr. Withall reported that when he came to Ray Adams'
16 car, the car -- he told him that unfortunately the hard disc
17 was in the car, and the window was broken, and the hard disc
18 was stolen.

19 Q. And you didn't believe that, did you, sir?

20 And you didn't believe it because I think, as you put
21 it, it spoke volumes that the wife's cheaper car was the one
22 that was broken into.

23 A. Well, I recall that in Mr. Withall's report there was a
24 parentheses that said it was the cheaper car rather than the
25 Jeep.

1 Q. And it was your view, I think you said, "Well, that
2 pretty much says it all," correct?

3 A. Yeah. I mean, knowing Mr. Withall and his typical
4 English cynicism, it sounded to me like he did not believe
5 Mr. Adams.

6 Q. So it was basically NDS's belief that Mr. Adams still
7 had the hard drive, and he just tried to make it look like
8 somebody stole it. That was basically the way you came away
9 from it, correct?

10 A. I think we suspected that.

11 Q. Okay. Now, how much did this Haifa lab cost to build?
12 It was like over \$20 million, wasn't it?

13 A. No.

14 Q. No? If you include all the equipment and everything?

15 A. Including all the equipment, I think it was on the
16 order of initially probably a million and a half, two.

17 Q. Was it one of the best labs in the world that you were
18 aware of at that point in time?

19 A. Definitely not.

20 Q. So you built a substandard lab?

21 A. We built a lab that was sufficient for what we needed
22 to do.

23 Q. Now, I want to talk to you about DirecTV for a minute.

24 We know they were hacked at the end of '95, and they
25 had a contract that was set to expire in July of '98,

1 correct?

2 A. Yes.

3 Q. And they began to voice their concerns about their
4 hacked system in '96, didn't they?

5 A. I am just trying to be precise. I don't believe it was
6 hacked at the end of '95, but in '96 definitely there were
7 discussions after P1 was compromised.

8 Q. And we went through -- in your deposition we talked
9 about '96, '97, and '98. And you agreed with me, sir, that
10 DirecTV's concerns continued to escalate during that period,
11 correct?

12 A. Yes.

13 Q. Right?

14 A. The original contract was, DirecTV envisioned a card
15 replacement every 18 to 24 months. But as we progressed
16 into it, clearly the fact that they did have to replace the
17 card was not something they liked. The contract changed in
18 that period, so towards P.3 it did not include any more
19 replacement cards as part of the monthly fee, which we got
20 from DirecTV.

21 Q. Sir, my question was simply, did DirecTV's concerns
22 about your hacked security system -- they continued to
23 escalate between '96, '97, and '98, didn't they?

24 A. That's correct.

25 Q. Okay.

1 A. As did mine, incidentally.

2 Q. So in 1998, we're coming up for contract renewal,
3 correct?

4 A. Yes.

5 Q. And NDS at that point in time wanted DirecTV to execute
6 a long-term deal like a five- or a six-year deal, correct?

7 A. We were working on a renewal of a five-year contract.

8 Q. Okay. And one of the largest concerns that DirecTV had
9 as it was entering into these negotiations with you was that
10 they were concerned about this continued piracy of their
11 system.

12 A. Correct.

13 Q. And DirecTV did not want to enter into a long-term deal
14 with you in the summer of '98, did they?

15 A. No. We entered into a one-year extension to allow us
16 time to negotiate the deal.

17 Q. Sir, are you aware that in late '98, after the project
18 Headend Report came out, that somebody posted a portion of
19 the EchoStar ROM code on the Internet?

20 Are you aware of that -- during these negotiations?

21 MR. SNYDER: Misstates the record, Your Honor.

22 THE WITNESS: No.

23 THE COURT: Was it the ROM code, Counsel?

24 MR. WELCH: A portion of the EchoStar code.

25 Sorry, Your Honor.

1 THE COURT: I'm going to sustain the objection.
2 Just reask the question.

3 BY MR. WELCH:

4 Q. Sir, are you aware that while you're going through
5 these negotiations, that somebody posted -- after the
6 project Headend Report, somebody posted a portion of the
7 EchoStar code on the Internet. Are you aware of that?

8 A. I'm not aware of that.

9 Q. Okay. But you subsequently became aware of it?

10 A. As part of the litigation.

11 Q. Okay. So you're continuing through this '98 -- summer
12 '98 through summer '99 time period -- you're continuing to
13 negotiate with DirecTV, correct?

14 A. Yes.

15 Q. And you're trying to get them to enter into this
16 long-term contract with you, correct?

17 A. Yes.

18 Q. And what you had on the horizon in late '99 was, you
19 had something called an Initial Public Offering, correct?

20 A. Well, our plan for the Initial Public Offering, we
21 first planned to go public in '96, and subsequently that did
22 not happen. And we were planning to go public in some time
23 in '99.

24 Q. Okay. And going public isn't something you do
25 overnight, correct? It takes planning.

1 A. Takes long time.

2 Q. And so we know you went public in November of '99,
3 correct?

4 A. Yes.

5 Q. And you were able to enter into the four-year DirecTV
6 CALS agreement, the C-A-L-S agreement. You were successful
7 in having that agreement executed in August of '99, correct?

8 A. Yes.

9 Q. And you agree with me that it was beneficial. It was
10 one of the biggest recent developments that you had. It was
11 beneficial for your initial public offering, wasn't it, sir?

12 A. Well, clearly DirecTV was an important contract for us.

13 Q. And isn't it true, sir, that one of the things that you
14 do is not only conditional access, but you use conditional
15 access as a springboard into other types of products that
16 you can offer to subscription television companies, correct?

17 A. Well, the strategy I embarked on in 1995 was to become
18 a full-solution provider and to be able to develop
19 additional products that we offer our pay-TV operators.

20 Q. So if I understand this correctly, if you have a pay-TV
21 operator like DirecTV, and they're using your conditional
22 access product -- you with me so far?

23 A. Yes.

24 Q. -- you're able to get them to purchase additional
25 products that complement your conditional access system,

1 correct?

2 A. We were certainly hoping for that with all of our
3 customers.

4 Q. And that actually happened with DirecTV, didn't it?

5 A. It happened with DirecTV only in 2004.

6 Q. Okay. And now we'll focus on the IPO here in a little
7 bit.

8 But you agree with me that NDS offers products and
9 services that compete with EchoStar, don't they? It's in
10 your IPO.

11 A. With EchoStar?

12 Q. Yes.

13 A. I don't believe we are in the pay-TV business.

14 Q. Well, the business that NDS is in, it offers products
15 and services that compete directly with products and
16 services offered by the EchoStar group of companies, doesn't
17 it? Yes or no?

18 A. Eh, no. Unless EchoStar group of companies include
19 NagraStar.

20 THE COURT: Counsel, you mean NagraStar or
21 EchoStar?

22 MR. WELCH: EchoStar.

23 Could you hand him the November '99 IPO, which I
24 believe is 2060.

25

1 BY MR. WELCH:

2 Q. First of all, could you tell us what that is?

3 A. Well, it's our F-1 registration statement for NDS
4 Group, PLC, filed with the Securities and Exchange
5 Commission prior to our IPO.

6 Q. And this is basically a document you file with the SEC
7 that describes your business because you're gonna try and
8 raise money, correct?

9 A. Correct.

10 MR. WELCH: Your Honor, at this time we'd like to
11 move for the admission of Exhibit 2060.

12 THE COURT: Any objection?

13 MR. SNYDER: No objection.

14 THE COURT: Received.

15 (Exhibit No. 2060 received in evidence.)

16 (Document displayed.)

17 BY MR. WELCH:

18 Q. I'd like you to turn to Page 57 of that document. And
19 I want to you focus on the question that you just denied,
20 which was that you said you didn't compete with EchoStar.

21 Could you go down -- you see where the bullet points
22 are? Now, I want you to look at the paragraph that's --
23 three paragraphs down. It starts with "in the area."

24 And I'm going to short-circuit so I don't have to list
25 everything.

1 It says: "In the area of general broadcast system
2 integration, we compete with other broadcasting
3 infrastructure companies such as -- and you go to the very
4 end -- you got it -- EchoStar, right?

5 A. EchoStar Communications is the one that provided
6 set-top boxes and integration services.

7 Q. So my statement was correct that NDS does compete with
8 EchoStar Communications Corporation, the plaintiff in this
9 lawsuit, correct?

10 A. Well, I understood EchoStar to mean the DISH Network
11 provider of systems, not the set-top box business.

12 Q. The bottom line is, NDS competes with the plaintiffs,
13 doesn't it?

14 A. In a very small part of our business.

15 Q. Okay. Now, when you talk about conditional access
16 systems, it's hard to get a little bit pregnant, isn't it?
17 Once you start -- once a satellite --

18 THE COURT: Strike the pregnancy, Counsel.

19 MR. WELCH: Okay. I'll strike that.

20 THE WITNESS: I'm not an expert on the subject.

21 BY MR. WELCH:

22 Q. Once you get a satellite operator to use a conditional
23 access service provided by you, the longer they use that
24 service, the harder it is for them to switch, correct?

25 A. I think that the conditional access is a deeply

1 embedded technology that has a reasonable cost of switching.

2 Q. And the longer that you can get somebody to utilize
3 your system, the harder it is for them to switch, correct?

4 A. I'm not sure that it has anything to do with the length
5 of the time.

6 Q. Well, would you agree with me that DirecTV has grown in
7 number of subscribers in a significant way?

8 A. Of course.

9 Q. And as it continues to grow in a significant way, it
10 makes it harder and harder for a satellite operator such as
11 DirecTV to switch from the NDS system and to utilize a
12 competitor's system, correct?

13 A. I think it makes it -- simply the cost benefit would be
14 proportional to the benefit that would be acquired.

15 Q. So if you can have your products and services deployed
16 in a large system, that system operator would have to switch
17 out, potentially, boxes, Headend equipment, compression
18 equipment. It would have to switch out its entire
19 end-to-end system if it wanted to go with a competitor such
20 as Nagra, correct?

21 A. I disagree.

22 Q. Would it have to incur costs or can it merely switch
23 out cards?

24 A. It has to incur costs, although it doesn't have to
25 replace all the things that you have said that need to be

1 thrown out.

2 Q. Would you agree with me it costs -- it would cost at
3 this point in time for DirecTV to switch tens, if not
4 hundreds of millions of dollars?

5 A. I haven't assessed the costs, so I can't tell you.

6 Q. As the CEO of the world's larger conditional access
7 system, can you give us your best estimate? Would it be in
8 the million-dollar range?

9 A. It's more than a million dollars.

10 Q. It's more than 10 million, isn't it?

11 A. Probably, yes.

12 Q. It starts to approach the hundreds of millions, doesn't
13 it?

14 A. I don't think that it's hundreds of millions.

15 Q. Okay. Now, what's the market cap of NDS right now?

16 A. Approximately 2.95 billion.

17 Q. What was the market cap of NDS when it went public?

18 A. One billion.

19 Q. So as a result -- and would you agree with me that the
20 largest component of your revenues and one of the things
21 that made NDS so successful was being able to retain the
22 DirecTV business?

23 A. Well, obviously retaining the DirecTV business was
24 important, but we now have 50 pay-TV operators all around
25 the world and have been very successful all around the

1 world.

2 Q. DirectTV is your largest digital platform, is it not,
3 sir?

4 A. DirectTV is our largest digital platform.

5 Q. Now, one of the things that you do is, you have a
6 marketing group, correct?

7 A. Correct.

8 Q. And your marketing group goes out to subscription
9 television platforms, correct? -- such as DirectTV or
10 EchoStar or cable companies?

11 A. The marketing group doesn't itself typically go out.
12 They provide support and information to salespeople or
13 account managers.

14 Q. So they provide written materials?

15 A. They provide supporting information, the reports,
16 presentations, information.

17 Q. And one of the things they do is, they compare
18 themselves to the competitors in the conditional access
19 system -- in the conditional access industry, correct?

20 A. Of course. Competitive analysis is one of the
21 functions of a marketing group.

22 Q. And one of the things -- and let me find it in the
23 deposition here --

24 We'll come back to it. We can find it if you change
25 your testimony.

1 One of the things that you told us --

2 THE COURT: Counsel, we're going to strike that.

3 MR. WELCH: Okay.

4 THE COURT: And we're going to stop the pregnancy
5 now, and the change in testimony. That's the first and last
6 warning.

7 All right. Next question.

8 BY MR. WELCH:

9 Q. Do your marketing people provide information to the
10 customers of NDS about the piracy or the security status of
11 your competitors? They do that, don't they?

12 A. As I say, the marketing group provides information to
13 our sales and account management, and in some cases these
14 people will respond on questions of piracy, obviously.

15 Q. And one of the things that they do is, they let these
16 potential customers, or the incumbent customers, know about
17 the state of piracy of NDS's competitors, correct?

18 A. The only thing we share with customers is public
19 information gathered from the Internet by our Internet
20 research group.

21 Q. So if somebody posted something on the Internet, that
22 would be something that you would potentially share with a
23 competitor, correct? Or share with a platform operator?

24 A. We don't share particular postings, if that's your
25 question.

1 Q. Do you point 'em that way?

2 A. We share -- we simply point to the information about
3 the state of piracy and to the sources of that information.

4 Q. So if something is posted on the Internet related to
5 piracy, your marketing group -- one of the things that they
6 can do is go to that platform operator and say, "Hey, look
7 what's on the Internet." That's one of the things that they
8 can do, right?

9 A. I believe that they provide information on the state of
10 piracy and cite the sources of it.

11 Q. Now, I want to talk to you for a little bit about ECMs,
12 patches, things of this nature. Okay?

13 You will agree with me, sir, that once a system is
14 pirated, you don't automatically rush out and swap out all
15 your cards, do you?

16 A. Correct.

17 Q. In fact, piracy generally starts out -- what we talked
18 about was intellectual curiosity or hobbyist level, correct?

19 A. I said that the piracy has many forms. And the initial
20 forms may not be particularly practical for widespread
21 distribution.

22 Q. So if you have this hobbyist or intellectual curiosity
23 piracy, it is not a significant problem at that point, is
24 it?

25 A. It's not a commercial threat, but it obviously is an

1 opening.

2 Q. And what you try to do is, you try to combat that with
3 patches and ECMs and things like that, correct?

4 A. Well, the individual strategy, obviously, depends on
5 the particular threat.

6 Q. And one of the things that you do is, you have
7 conversations with the satellite operators. When there's
8 piracy, you -- NDS, the conditional access provider -- have
9 a conversation with the satellite operator, correct?

10 A. Correct.

11 Q. And y'all try and come up with a business strategy on
12 how to deal with piracy, correct?

13 A. Well, the operator comes up with the business strategy.
14 We provide our best technological advice as well as share
15 from our experience from around the world.

16 Q. Is it from your experience with DirectTV what satellite
17 operators do is, they don't want to go out and automatically
18 engage in all these costs of swapping a card when they can
19 do things like patches and ECMs, correct?

20 A. Yes.

21 Q. And they do that as long as it's feasible in a business
22 way, correct?

23 A. I think the philosophy depends on individual operators.
24 Different ones have different philosophies. But they all
25 look at it from a business point of view.

1 Q. Okay. Because they want to keep their costs down, and
2 card swaps are costly, correct?

3 A. Well, as I indicated, in many of our contracts the cost
4 of the card replacement is included in the fee that NDS gets
5 and therefore, you know, would have no cost to the operator.

6 Q. If we talk about DirecTV in the '99 agreement, was it
7 having to pay for cards?

8 A. As I said, in -- I believe in '98 -- DirecTV changed
9 the nature of our original contract, the one in which they
10 would pay for the replacement cards in return for a lower
11 monthly fee.

12 Q. Let's talk about a situation where you have a satellite
13 operator that is paying for cards. Okay? You with me?

14 A. Yes.

15 Q. Now, would you agree with me that if the satellite
16 operator is having to pay for a card swap, that it would
17 want to delay that card swap to see if there were ways to
18 effectively combat that piracy? Correct?

19 A. Yes.

20 Q. And you would agree with me that one of the reasons it
21 does that is because it causes significant business
22 interruption and harm to the satellite operator to go
23 through a card swap, correct?

24 A. I disagree. I don't think it causes significant
25 business interruption or harm. It costs money, obviously.

1 Q. Okay. Well, let's not -- let's not mince words about
2 significant. It harms -- piracy harms a satellite operator,
3 doesn't it?

4 A. Piracy is an issue for an operator for many reasons.

5 Q. And it causes business interruption, correct? -- piracy
6 does.

7 A. Well, I'm not sure what you mean by business
8 interruptions. If you mean that when an electronic
9 countermeasure goes wrong and screens go black, that
10 obviously is something that an operator does not like.

11 Q. Okay. Let's -- we'll go through your IPO.

12 Can it cause delayed or lost revenue due to adverse
13 customer reaction?

14 A. What is the question?

15 Q. Can piracy cause delayed or lost revenue due to adverse
16 customer reaction?

17 A. Yes.

18 Q. Can it cause impaired ability of customers to bill
19 their subscribers for services?

20 A. Yes.

21 Q. Can it cause negative publicity --

22 A. Yes.

23 Q. -- towards -- okay.

24 And it can cause substantial damages, correct?

25 A. Piracy when unchecked, clearly.

1 Q. And if we talk about going from hobbyist level or
2 intellectual curiosity, if there's a significant increase
3 from just hobbyist or intellectual curiosity, you would
4 agree with me that that significant increase could require
5 accelerated replacement of a broadcaster's Smart Cards
6 sooner than otherwise planned, correct?

7 A. Correct.

8 Q. And now, your business model was something in the order
9 of let's replace cards every two years, correct?

10 A. The original concept of the Smart Card actually was
11 replacing cards even more frequently. Over time, clearly,
12 as we have perfected the chip in the Smart Card, we've been
13 able to extend that period significantly.

14 Q. So if you have a good product, even though you have a
15 projected swap-out in, say, three to four years -- but if
16 you have a good product, you can continue to leave that
17 product in the field, and you don't have to swap it out just
18 because that was a projected time, correct?

19 A. Unless there are functionality improvements that come
20 in the new generation card. And we have done a number of
21 replacements in cases where there was no piracy, simply for
22 functionality improvements.

23 Q. If you have a projected card swap -- let's use yours,
24 18 to 24 months, and your card is secure and there is no
25 requirement for increased functionality -- are you with me

1 so far?

2 A. Yes.

3 Q. The satellite operator's not gonna run out and start
4 swapping cards, are they?

5 A. Correct.

6 Q. Now, if you have piracy, even though you've assumed
7 that you're gonna swap cards out every couple of years --
8 and let's say you've got a pirate that comes along and he
9 hacks your system and posts it on the Internet. Just
10 because you're gonna swap out cards or just because your
11 satellite operator wants increased functionality does not
12 mean the person that hacked the system and posted it gets to
13 go free, does it?

14 A. Of course. It's an illegal act. They should be
15 prosecuted. And I think we have a pretty strong record of
16 prosecuting pirates.

17 Q. And you prosecute 'em regardless of whether or not your
18 card was ready for a swap?

19 A. We have often prosecuted them even if it wasn't our
20 card.

21 Q. And --

22 A. It was a competitor's card.

23 Q. For your cards you have sued individuals and companies
24 for tens, if not hundreds, of millions of dollars,
25 correct? -- for the harm that they've done, for pirating

1 your system?

2 A. We have filed suit typically in conjunction with an
3 operator against the people that have engaged in piracy.

4 Q. Now, I want to talk about News Corporation a little
5 bit, and I'm going to go back to the damages issue.

6 You reported -- let's talk about your role. You're the
7 CEO, and you're also on the board of directors of NDS,
8 correct?

9 A. Yes.

10 Q. And you are also -- and you have been on what is called
11 the News Corp. executive management committee, correct?

12 A. Correct.

13 Q. And some of the other individuals on that committee are
14 a man by the name of Chase Carey?

15 A. Yes.

16 Q. And a man by the name of Dave DeVoe?

17 A. Yes.

18 Q. A man by the name of Arthur Siskin?

19 A. Yes.

20 Q. And a gentleman by the name of Rupert Murdoch?

21 A. Yes.

22 Q. And Mr. Murdoch is where the buck stops. He's the top
23 of the chain, isn't he?

24 A. In News Corp.?

25 Q. Yes.

1 A. He's the chairman and chief executive.

2 Q. Okay. And as of '99, your IPO, it's fair to say that
3 News Corporation financed your operations and controlled
4 your activities, correct, sir?

5 A. As I said, in '99 we became a public company. We did
6 owe still News Corp. \$200 million after our IPO.

7 Q. They --

8 A. News Corp. controlled about 82 percent of the equity or
9 97 percent of the votes.

10 Q. Let's go ahead and look at page 10.

11 A. Page 10 of?

12 Q. The IPO, which is 2060.

13 (Document displayed.)

14 BY MR. WELCH:

15 Q. Do you see the section that's in bold? It says, "We
16 are controlled by and dependent upon our relationship with
17 News Corporation."

18 (Document displayed.)

19 A. On page -- which page?

20 Q. Page 10.

21 A. 10, sorry.

22 Q. You can look on the screen if you want. It's
23 highlighted up there.

24 THE COURT: Counsel, you can help.

25 THE WITNESS: Yes, I can see it.

1 BY MR. WELCH:

2 Q. It says you're control -- as of the IPO in '99, that
3 you were controlled by News Corporation, correct? That's
4 what it says?

5 A. Yes. We are still today.

6 Q. And if we go down and we look at the next paragraph --
7 I want to read it to you. It says, "By virtue of shares of
8 News Corporation owned by Mr. K. Rupert Murdoch and certain
9 corporations and Mr. Murdoch's position as chairman and
10 chief executive of News Corporation, Mr. Murdoch may be
11 deemed to control the operations of News Corporation."

12 Do you see that?

13 A. Yes.

14 Q. That's what you told the public, correct?

15 A. Yes. It's true.

16 Q. So between '95, when you began working for NDS, and
17 '98, you reported to Mr. Greg Clark of News Corporation,
18 correct?

19 A. Yes.

20 Q. And from '98 through 2000 -- the end of 2001, you
21 reported to Mr. Chase Carey of News Corporation, correct?

22 A. Well, from '98 till we went public, I reported to
23 Mr. Chase Carey in his role of co-chief operating officer of
24 News Corp.

25 From '99 onwards I reported to the NDS board, which

1 included Mr. Carey on it as the main business executive; and
2 therefore I continue to report to him.

3 Q. And Mr. Carey was in charge of satellite operations for
4 News Corporation, correct?

5 A. He was co-chief operating officer.

6 Q. For satellite operations?

7 A. Among his other responsibilities, included satellite
8 operations, but not just satellite operations.

9 Q. And if we talk about Mr. Arthur Siskin, he was on the
10 executive management committee. And you had discussions
11 with Mr. Siskin about conditional access, correct? You got
12 business advice from Mr. Siskin?

13 A. Mr. Siskin was on my board. And in that capacity I
14 had, obviously, discussions as part of our board meetings
15 with him on business operations.

16 Mr. Siskin was also chief legal counsel for News Corp.
17 and also served as the legal counsel for our board meetings.

18 Q. Now, you're not on the board and you're not an officer
19 of HarperCollins, are you?

20 A. No.

21 Q. And you're aware that Mr. Tarnovsky in the year 2000
22 was being paid by HarperCollins, correct?

23 A. I've learned that.

24 Q. Okay. But we all know he was an employee of NDS
25 Americas, correct?

1 A. I think he started out as a consultant.

2 Q. But for NDS Americas, correct?

3 A. Yes.

4 Q. And if we talk about separate companies, you've got --
5 HarperCollins is a separate company, correct?

6 A. Yes.

7 Q. It's separate and apart from NDS Americas?

8 A. Yes.

9 Q. Which is separate and apart from NDS Israel, correct?

10 A. Well, NDS Americas and NDS Israel are both owned by NDS
11 Group.

12 Q. Okay. And NDS Group is its own separate company,
13 correct?

14 A. Correct.

15 Q. And those entities, those separate companies all
16 function independently of each other. They all have their
17 own individual businesses, correct?

18 HarperCollins is in the book publishing business?

19 A. Yes.

20 Q. Mr. Tarnovsky doesn't write books except maybe for
21 hacking, correct?

22 A. I don't believe he writes books, not that I know of.

23 Q. And HarperCollins is not involved in the conditional
24 access business, is it?

25 A. No.

1 Q. Now, are you aware that in 2000, Mr. Tarnovsky was
2 getting paid approximately \$128,000 by HarperCollins?

3 A. Well, he was being paid through HarperCollins.

4 Q. Okay. Are you aware that in the year 2000, that there
5 was a posting related to the plaintiffs' conditional access
6 system, what we've come to learn as the Nipper post?

7 A. Yes, I've learned that.

8 Q. And that was in December 2000, correct?

9 A. Correct.

10 Q. And you're aware that Mr. Tarnovsky worked closely with
11 the NDS engineers in Israel, correct?

12 A. He worked with NDS engineers in Israel. I don't know
13 how closely.

14 Q. Are you aware that in the year 2000, when we had the
15 Nipper post, that NDS Israel paid Mr. Tarnovsky a \$5000
16 bonus?

17 A. I've learned it as part of this litigation.

18 Q. And the reason that NDS Israel would have paid him a
19 bonus was, I believe, to use your words, "because he did
20 something good for us"?

21 A. He must have made a very good technical contribution.
22 I believe it was on --

23 Q. Thank you, sir.

24 A. -- ECM's for P3, electronic countermeasures for P3.

25 Q. When we go back to talk about damages, we talk about a

1 satellite platform, a satellite operator's decision whether
2 to engage in patches or ECM's or perform a card swap. Are
3 you with me?

4 A. Yes.

5 Q. It's your belief that the satellite platform
6 operator -- it's their final call, correct?

7 A. Yes. It's actually in our contracts, but it's their
8 decision.

9 Q. So they get to make the business decision. It's in
10 their best interest on when and where and how to swap out
11 cards, correct?

12 A. Correct.

13 Q. And you're not in the position to second-guess that
14 satellite operator's business decision, are you?

15 A. We don't second-guess their business decision.

16 Q. And you can't second-guess EchoStar's business
17 decision, can you?

18 A. I'm not familiar with EchoStar's business decisions.

19 Q. But you're not in the position and you would not --

20 A. Obviously, not.

21 Q. -- second-guess their business decision, would you?

22 A. Sorry. Obviously not.

23 Q. Thank you. Now, one of the things that you know about
24 the Nagra system is that it takes up band width to use
25 patches and ECM's, correct?

1 A. I know that it takes considerably more band width for
2 entitlements. I don't know about ECM's.

3 Q. But you're aware that you can only put so many patches
4 or so many ECM's in the broadcast stream before it gets
5 full, correct?

6 A. I'm not familiar with the details of how Nagra does
7 ECM's. As I said, I'm only familiar with the system concept
8 point of view.

9 They require a lot more band width for entitlements,
10 which are the normal messages that tell viewers what they
11 can watch. And that band width is proportional, actually,
12 to the number of set-top boxes, instead of being fixed,
13 which is the case of NDS. And small, I might add.

14 Q. Now, when you had your initial public offering, you
15 raised in excess of a hundred million dollars, didn't you?

16 A. I'm sorry?

17 Q. You raised in excess of a hundred million dollars. You
18 raised approximately 200 million, correct?

19 A. Yes.

20 Q. And you had \$200 million due and owing to News
21 Corporation, didn't you?

22 A. I'm sorry?

23 Q. You had about 200 million due and owing to News
24 Corporation, didn't you?

25 A. Yes.

1 Q. And what you did with this IPO -- we know the DirectTV
2 contract helped the IPO, correct? That's a given.

3 A. Obviously, it was an important contract.

4 Q. And so you were able to raise this \$200 million,
5 correct?

6 A. Yes.

7 Q. And you took over half of that money and you paid it to
8 News Corporation, didn't you?

9 A. What do you mean, "half of that money"?

10 Q. Well, did you pay 'em a hundred million dollars or did
11 you pay 'em more?

12 A. We returned the loan of 200 million.

13 Q. Okay. So NDS benefits from the DirectTV contract. You
14 make \$200 million, and you pay that \$200 million to
15 News Corp. Did I get that right?

16 A. I just want to point out that NDS did not go public
17 simply on one contract. We went public on our record of
18 starting to win a lot of contracts, offering new
19 technologies and interactive applications and so on.

20 Q. I'm just trying to get my timing right here.

21 August '99, you have the DirectTV contract for four
22 years, correct?

23 A. Yes.

24 Q. That's significant because it's your largest digital
25 platform, correct?

1 A. It was actually the second-largest contract when we
2 went public. They were only 22 percent of revenue. BSkyB
3 at that point was 26 percent of revenue.

4 Q. How about today? Is DirecTV the biggest?

5 A. Today DirecTV is the largest, but it includes not just
6 conditional access; it includes middle-ware and DVR
7 technologies.

8 Q. Some of the things that you compete against EchoStar
9 about, correct?

10 A. I don't believe we compete with EchoStar on
11 middle-ware.

12 Q. But how about DVR's?

13 A. We sell DVR technology only to our pay-TV operators.

14 Q. Okay. So we have the August '99 contract. It's
15 important for the IPO. As a result of the IPO, you raise
16 \$200 million, and that \$200 million ends up in News Corp.
17 pockets, correct?

18 A. Yes. I believe they sold shares.

19 Q. Now, would you agree with me that the loss of a major
20 customer such as DirecTV could significantly affect your
21 market cap?

22 A. Yes.

23 Q. And you wanted to retain the DirecTV business after the
24 IPO, correct?

25 A. Yes.

1 Q. Okay. Now, are you aware that DirecTV, after it
2 entered into this four-year contract, was having
3 conversations with other conditional access providers so
4 that it could potentially simulcast?

5 A. No.

6 Q. You're not aware that under the contract -- do you know
7 who Mr. Ray Kahn is?

8 A. Yes.

9 Q. Mr. Ray Kahn works for DirecTV, correct?

10 A. Yes.

11 Q. Now, if Mr. Kahn told us that for the first two years
12 of this CALS agreement, starting in August of '99, that
13 DirecTV retained the right to itself, to look at potentially
14 having another conditional access provider on board, are you
15 aware of that?

16 A. DirecTV had the right to look for a successor
17 contractor starting in a certain period. They also had the
18 right to become their own successor contractor. And that's
19 what most of the discussions and negotiations for the '99
20 contract involved and were about. And that's what their
21 focus was, on becoming their own conditional access
22 supplier.

23 Q. Would you agree with me that if they had an additional
24 conditional access provider such as the plaintiffs and --
25 let's back up for a minute.

1 What does it mean to simulcast?

2 A. I believe you must mean simulcrypt.

3 Q. Simulcrypt, there we go. Let me see if I can
4 short-circuit it.

5 If you simulcrypt, can you use two conditional access
6 systems at the same time?

7 A. Right.

8 Q. So DirecTV could be using your NDS system and it could
9 at the same time be using the NagraStar system, correct?

10 A. Correct.

11 Q. And that's called simulcrypting?

12 A. Correct.

13 Q. Okay. And one of the things that DirecTV had the right
14 to do was to look into possibly simulcrypting so that it
15 could make the decision later, if it wanted, to go ahead and
16 shut off the NDS stream and proceed with either somebody
17 else or its own system. That's correct, isn't it?

18 A. Well, I don't believe the details -- I don't remember
19 the details in which time period. I know they had the right
20 to go out for an RFI at a certain point.

21 And I don't remember anything in detail about
22 simulcrypt.

23 Q. But if they could simulcrypt, that could pose a threat
24 to your continued incumbency with DirecTV, couldn't it?
25 They might like somebody else better and leave?

1 A. Well, obviously we like DirecTV to like us.

2 Q. Okay. And you do what it takes to keep 'em, don't you?

3 A. As long as it's legal or moral, as I told you in my
4 deposition.

5 Q. Now, would you agree with me, if DirecTV was
6 simulcrypting and there was fair competition, it could
7 result in you having to sell your services for less,
8 couldn't it, because there could be competition within
9 DirecTV?

10 A. It's pretty compound speculation.

11 Q. You don't think that it would be wise for DirecTV to
12 say, "Wait a minute, I've got Nagra over here and I'm
13 simulcrypting, and wait a minute, NDS, you're hacked and
14 you're too expensive"?

15 A. The record of -- we work with 50 pay-TV operators
16 around the world, and there are a lot of other pay-TV
17 operators that I'm aware of. Except for now Premiere in
18 Germany, that will simulcrypt for three years, I'm not aware
19 of anybody doing simulcrypt by choice.

20 Q. DirecTV, that was one of the options they were looking
21 at, though, correct?

22 A. I don't know.

23 Q. Okay. Let's talk about your record. You were hacked
24 in '96, right?

25 A. Yes.

1 Q. You were hacked in '97?

2 A. Yes.

3 Q. You were hacked in '98?

4 A. Yes.

5 Q. And you were hacked in '99?

6 A. Yes.

7 Q. And you were hacked in 2000?

8 A. Yes.

9 Q. You were hacked in 2001?

10 A. You're referring to DirecTV now?

11 Q. Yes.

12 A. Because there were, you know, probably 20 other systems
13 in which we were not hacked at that period.

14 Q. Let's talk about where we are. 2001, DirecTV, using
15 the NDS system, was hacked?

16 A. Correct.

17 Q. 2002, they were hacked?

18 A. Well, in April of 2002 we introduced the P4 card.

19 Q. But they were still continuing to broadcast under the
20 P3, which was hacked?

21 A. Correct. That was their choice.

22 Q. 2003, DirecTV was hacked?

23 A. Correct.

24 Q. And in 2003 News Corporation purchased the controlling
25 interest in DirecTV, and I think that transaction closed in

1 December of 2003?

2 A. You are correct.

3 Q. And March, April 2004, DirecTV went secure, correct?

4 A. I think it was April or May 2004.

5 Q. Okay. And DirecTV's been secure ever since? Yes or
6 no?

7 A. Yes.

8 Q. Now, we've talked about set-top boxes. Set-top box is
9 the thing the card goes in, right?

10 A. Yes.

11 Q. And you make money on selling the card and the
12 conditional access service to the satellite operators,
13 correct?

14 A. Well, as well as other parts that go into the set-top
15 box now.

16 Q. Do you also get royalties from the set-top box
17 manufacturers?

18 A. In many cases. Depends on the contract.

19 Q. In DirecTV do you get royalties?

20 A. Today?

21 Q. Did you back then?

22 A. Which period are we now talking about?

23 Q. Prior to 2004.

24 A. Prior to 2004 we did get royalty, yes.

25 Q. Even on boxes that you didn't manufacture?

1 A. We don't manufacture boxes.

2 Q. Okay. So if I understand it correctly, you're selling
3 'em cards, you're selling 'em conditional access services
4 and you're making money in that hand, correct?

5 A. Correct.

6 Q. And then you've got somebody else building boxes for
7 them, correct?

8 A. Correct.

9 Q. And you make royalties off those boxes that somebody
10 else manufactures?

11 A. Well, we have software in those boxes and intellectual
12 property. We test those boxes, and we get the royalties in
13 return for that software and certification for those set-top
14 boxes.

15 Q. So the more subscribers you get, you get more money on
16 the conditional access side, correct?

17 A. Yes.

18 Q. And the more boxes you can sell, because you've got
19 more subscribers 'cause DirecTV's growing, you're making
20 money in that hand also, correct?

21 A. Our business is predicated on the growth of the digital
22 pay-TV business.

23 Q. Could you go to page 47 of your IPO.

24 I can short-circuit it. We probably don't need to
25 bring it up. I'm going to list off some of the revenues

1 that you get from maintaining large customers.

2 THE COURT: Just a moment.

3 Page 47?

4 MR. WELCH: 47, Your Honor, of 2060.

5 THE COURT: I don't see it. I don't see it.

6 Counsel? Mr. Hagan, did you disappear? Come
7 here. Come here. Is that it?

8 MR. HAGAN: (Complies.)

9 THE COURT: Thank you very much. I've got it.

10 (Document displayed.)

11 BY MR. WELCH:

12 Q. You get revenues from license and ongoing maintenance
13 fees, correct?

14 A. Yes.

15 Q. You get fees from broadcasters for the design and
16 adaptation of your conditional access systems, correct?

17 A. Correct.

18 Q. You get money from the sale of the Smart Cards?

19 A. Correct.

20 Q. And if we talk about the original DirecTV contract from
21 '92 through '98, you were selling them Smart Cards, correct?

22 A. Correct.

23 Q. Now, the more times a card is swapped, the more Smart
24 Cards you get to sell them, correct?

25 A. Well, in the original --

1 Q. Is that --

2 A. -- contract the monthly fee that we received included
3 the cost of the replacement card. So, for example, they did
4 not have to pay for P2 cards that replaced the P1 cards.

5 Q. Did they have to pay for P3 cards?

6 A. Because their contract changed and the monthly fee was
7 reduced, they preferred to move to a system in which they
8 pay for the replacement cards.

9 THE COURT: Who is "they," Counsel, the subscriber
10 or the --

11 THE WITNESS: DirecTV.

12 THE COURT: DirecTV, all right.

13 BY MR. WELCH:

14 Q. Now, another thing you make money on is upfront
15 integration fees from the set-top box manufacturers --

16 THE COURT: Just a moment. Is that then passed on
17 to the subscriber?

18 MR. WELCH: That's a good question.

19 THE COURT: I'm not asking. I'm just confused
20 about who "they" are.

21 MR. WELCH: DirecTV.

22 THE WITNESS: Your Honor, the pay-TV operator pays
23 for conditional access services. They represent typically
24 1 1/2 -- 1 to 1 1/2 percent of the revenues that the pay-TV
25 operator has.

1 THE COURT: And then after DirecTV is paid, I
2 assume that that's passed on to the subscriber, that
3 increased cost?

4 THE WITNESS: Well, that's part of the costs of
5 DirecTV. As I said, they're typically 1 to 1 1/2 percent of
6 the revenues of the pay-TV operator.

7 THE COURT: Thank you.

8 BY MR. WELCH:

9 Q. Would you agree with me that piracy not only harms the
10 satellite operator, it also trickles down and it ultimately
11 harms the consumers, correct? Because you have increased
12 costs, and ultimately the consumer has to bear those costs,
13 correct?

14 A. The cost of the security of the system is obviously
15 part of the overall costs of the pay-TV operator.

16 Q. And those costs, how it's able to recover those costs,
17 are the prices that it charges to consumers?

18 A. The price that an operator charges to the consumer is,
19 I believe, primarily determined by their competitive
20 situation in the market, the packages that they offer and so
21 on.

22 As I indicated, the cost of conditional access is so
23 small, on the order of 1 1/2 percent, that it really is not
24 a consideration in the cost or the price to the consumer.

25 Q. Is it your testimony that piracy has no effect on the

1 prices that consumers pay for subscription television?

2 A. That was not my testimony.

3 Q. So your testimony is that piracy does affect the costs
4 that consumers pay for subscription television, correct?

5 A. My testimony explained the various costs that go in and
6 also the fact that the price is primarily determined by the
7 competitive situation in a particular market.

8 Q. Let me ask a clean question.

9 Piracy, if it's significant, does it affect the price a
10 consumer pays for subscription television that is protected
11 by a conditional access system?

12 A. The increased cost of security, if they're passed on,
13 obviously yes. But as I said, typically the price consumer
14 pays is dictated by many other factors; and given that the
15 total cost is on the order of 1 1/2 percent, I would say
16 that it's an insignificant consideration.

17 Q. Would you agree with me that piracy of the DirecTV
18 system has cost DirecTV hundreds of millions of dollars, if
19 not billions?

20 A. No, I don't agree.

21 Q. You agree it costs 'em in the millions?

22 A. In terms of replacement cards? Or what is your
23 question?

24 Q. All these things that we talked about earlier -- lost
25 revenues, lost profits, damage to their reputation, business

1 interruption -- those are some pretty significant things,
2 aren't they?

3 A. Well, first of all, I pointed out that I don't know
4 about business interruptions. I believe that obviously the
5 cost of replacing a card is a cost to the operator.

6 Q. And it -- they have to ramp up to do card swaps, don't
7 they?

8 A. They have -- yes. There's logistics in doing a card
9 swap.

10 Q. Okay. And would you agree with me -- let's talk about
11 the NDS business for a second.

12 Let's say you've got a Smart Card and it costs you --
13 I'm just going to throw some numbers out there. Let's say
14 five bucks. Okay. And it costs you \$5 to manufacture that
15 card.

16 A. We wouldn't be in business if it cost us \$5.

17 Q. Okay. But what does it cost you to make a Smart Card?

18 A. Since you've studied our annual reports and our IPO
19 filings, our average cost is on the order of 2 and a half
20 dollars.

21 Q. Two and a half dollars.

22 Now, if you have to simulcrypt or simulcast -- let's
23 say you've got the P1 card and the P2 card. Do you have to
24 do things to your P2 card to make it to where you can
25 simulcast the P1 and the P2?

1 A. Of course, they have to operate in parallel.

2 Q. So that requires you to perform extra software
3 functionality or have the card perform extra software
4 functionality, correct?

5 A. Well, it's part of the standard functionality of the
6 Smart Card to be able to operate with another card in the
7 field.

8 Q. Okay. But if you're going to do a card swap, do you
9 have to do some special things sometimes for the replacement
10 card?

11 A. No. The standard functionality of a Smart Card is to
12 be able to operate concurrently with multiple generation
13 cards in the field.

14 MR. WELCH: I think I'm almost done, Your Honor.

15 Chad, could you hand him -- Mr. Hagan, could you
16 hand him 2059.

17 BY MR. WELCH:

18 Q. Sir, could you tell us what 2059 is?

19 A. Well, when I got here, I wrote to myself a timeline of
20 relevant dates to refresh my memory on things that happened
21 a long time ago. And I've asked counsel to fact-check the
22 dates.

23 Q. So this was a document that you prepared to rely upon
24 for your testimony, correct?

25 A. To refresh my memory in preparation for my testimony.

1 Q. And it actually did refresh your recollection, didn't
2 it?

3 A. Well, I spent couple of days thinking about it.

4 Q. And this was a document that you prepared in
5 conjunction with your attorneys over here, correct?

6 A. The attorneys fact-checked it --

7 Q. Okay.

8 A. -- for the dates.

9 This, by the way, is not -- I had handwritten
10 corrections on it.

11 Q. Okay. We can -- we didn't get that document
12 originally, although we had requested it. Your attorneys
13 just gave us this one.

14 A. I believe --

15 MR. SNYDER: I object, Your Honor. That's not
16 true. We produced --

17 MR. WELCH: Originally, I said.

18 MR. SNYDER: -- the version from Mr. Peled with
19 his handwritten notes.

20 THE COURT: And we don't know about all that.
21 Apparently they've been trading documents out of our
22 presence. I'm just kidding the jury. That was probably
23 posturing on both sides for you.

24 Counsel.

25 MR. WELCH: Your Honor, at this time we would like

1 to have 2059 admitted in evidence.

2 MR. SNYDER: I object. It's hearsay, Your Honor.

3 THE COURT: It's hearsay. Sustained.

4 BY MR. WELCH:

5 Q. Let's go and talk about some of the events that are on
6 here.

7 If you look at the second page, does that -- if you
8 look at the top box, does that refresh your recollection of
9 when the Canal+ code was posted on the dr7 website?

10 A. Yes. It says that I thought it was 3-21, but the
11 material says 3-26.

12 Q. So the Canal+ code was posted on dr7 on March 26 of
13 '99?

14 A. Yes.

15 Q. Have you ever heard that Mr. Tarnovsky sent to Mr. Ron
16 Ereiser the EchoStar code or a portion of the EchoStar code
17 in approximately March of '99 as well?

18 A. No.

19 MR. SNYDER: Objection. Lacks foundation.
20 Misstates the testimony.

21 THE COURT: Your answer is no?

22 THE WITNESS: No.

23 THE COURT: Overruled. The answer's no.

24 BY MR. WELCH:

25 Q. Now, does this document refresh your recollection of

1 whether or not Mr. Hasak performed a security review to look
2 into a possible leak of material from the Haifa lab onto the
3 Internet at some point in time?

4 A. Yes.

5 Q. And when did Mr. Hasak perform an investigation to look
6 into the leak of materials from the Haifa lab onto the
7 Internet?

8 A. In the summer of '99.

9 Q. Now, if we talk about the Canal+ lawsuit and those
10 allegations, was there a point in time when News
11 Corporation -- I mean, that was a lawsuit against NDS,
12 correct?

13 A. Correct.

14 Q. Was News Corporation a part of that lawsuit?

15 A. No.

16 Q. Was there a point in time when News Corporation got
17 involved in that litigation?

18 A. I don't understand the question.

19 Q. Could you go to page 4 of that document.

20 A. They're not numbered. Which is page 4?

21 Q. If you count in, the fourth page.

22 MR. HAGAN: It's going to be actually the fifth
23 page.

24 THE WITNESS: What are you referring to?
25

1 BY MR. WELCH:

2 Q. If you could go to the third box.

3 THE COURT: What's the date, Counsel?

4 MR. WELCH: December 12th, 2001.

5 THE WITNESS: Yes.

6 THE COURT: Okay.

7 BY MR. WELCH:

8 Q. Does that refresh your recollection that News
9 Corporation got involved in the dispute between NDS and
10 Canal+?

11 A. Oh, yeah. Well, News Corp. lawyers were briefed on the
12 Mr. Carayol's allegations.

13 Q. Did they get involved in the discussions,
14 News Corporation?

15 A. Subsequently with Vivendi, which was the ultimate owner
16 of Canal+.

17 Q. Now --

18 A. Incidentally, the reason they got involved in the
19 discussions is that the discussion with Mr. Carayol's was
20 about a merger between NDS and Canal+ Technologies. So,
21 obviously, this would have to be something that News Corp.
22 would agree with, with Vivendi. It's not something that I
23 or NDS on its own can agree to or decide.

24 Q. Was News Corporation involved in the ultimate
25 resolution of the claims brought by Canal+?

1 A. There was -- News Corporation had been in ongoing
2 discussions about the combination of two pay-TV platforms in
3 Italy. One was Stream, that was owned by News Corp. and
4 Telecom Italia. And the other was Telepiu that was owned by
5 Canal+ Vivendi.

6 THE WITNESS: And I don't know if you want me to
7 go through the whole chain of events, Your Honor.

8 MR. WELCH: Your Honor, would this be a good time
9 for a lunch break?

10 THE COURT: Okay. You're admonished not to
11 discuss this matter amongst yourselves nor to form any kind
12 of opinion concerning the case.

13 (Jury recesses.)

14 THE COURT: Okay. Let me see informally the two
15 counsel arguing the matter.

16 Okay. Counsel, have a nice lunch.

17 (Lunch recess held at 12:02 p.m.)

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2
3 CERTIFICATE

4
5 I hereby certify that pursuant to Section 753,
6 Title 28, United States Code, the foregoing is a true and
7 correct transcript of the stenographically reported
8 proceedings held in the above-entitled matter and that the
9 transcript page format is in conformance with the
10 regulations of the Judicial Conference of the United States.

11
12 Date: May 7, 2008

13
14
15 _____
16 DEBBIE GALE, U.S. COURT REPORTER

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Abe 51:14	22:1 29:1,3,4,8	108:19 109:23	24:16 47:13	22:22
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able 22:5 27:15	36:3 89:14	118:17,20,21	122:21	17:24 24:15,19
32:6 40:24 41:6	acquisition 34:23	119:10 124:22	answered 13:7	60:17 61:24
41:14 57:5 85:5	35:19	124:23	answers 9:12 62:6	120:21
85:18,24 90:21	act 98:14	agreed 44:15 82:9	answer's 122:23	asking 25:5 47:16
97:13 107:4	acting 36:23	agreement 36:23	Anthony 34:5	69:8 116:19
117:16 120:6,12	actions 34:18	40:9,12 41:20	anybody 64:20	assessed 90:5
above-entitled	activities 75:25	42:1 44:4,7,14	69:5 111:19	ASSOCIATES
126:8	77:3 100:4	44:14 45:5,9,12	apart 103:7,9	2:4
Abraham 3:8	activity 68:5	45:15,22 46:2,6	Apparently	assume 21:17
51:19,25	76:22	48:5 49:7,12	121:21	117:2
absolutely 18:13	actual 60:4	51:3,7,10 85:6,6	appear 46:12	assumed 21:14
20:20 25:11,14	Adams 71:21,24	85:7 95:6	APPEARANCES	98:6
28:24 32:16	71:25 72:2,4	109:12	2:1	Assumes 47:10
34:7 37:2 41:9	73:17 75:19,21	ahead 70:6	appeared 79:6	Atlanta 8:20 9:21
accede 51:10	75:24 76:10,21	100:10 110:15	appearing 75:23	10:4,7
accelerated 97:5	77:1,24 78:7,9	al 1:5,8 2:3,11	applications	attached 37:19
accepted 45:20	78:11,16,18,21	71:17	107:19	attack 5:25 17:19
79:3	79:15,20,22,24	Alan 3:14 36:14	applies 45:25	22:6,16 23:8,24
access 10:13	80:8,8,11,15	36:22	appointment	33:22 56:22
12:20 13:2,8,11	81:5,6	aliasing 30:16,17	79:19	57:5,8,8 64:25
13:15 23:18	adaptation	30:19 32:10,19	approach 58:4,6	65:2,3
27:19 28:11	115:16	33:1	90:12	attacked 57:2
29:6 31:7,10	add 21:21 106:13	allegation 18:5	approached 76:8	attacking 23:18
38:10 39:10	addition 57:21	allegations	approved 10:18	56:7,9
41:13 52:25	additional 49:20	123:10 124:12	10:20	attended 25:4,5
53:14 54:3	85:19,24 109:23	allow 41:4 83:15	approving 14:6	attention 30:8
56:24 85:14,15	address 37:5	Americas 102:25	approximately	64:18
85:22,25 88:15	administer 51:18	103:2,7,10	53:25 54:19	attorneys 2:7,14
88:23,25 90:6	admission 87:11	Ana 1:16,23 4:1	55:20 60:19	2:19 121:5,6,12
91:18,19 94:8	admitted 42:17	analog 19:7 32:17	63:14 70:15	attract 55:3
102:11 103:24	71:5 74:24	33:6 55:4,6	71:21 90:16	August 36:20
104:5 108:6	122:1	analysis 34:16	104:2 106:18	71:21 85:7
109:3,14,21,24	admonished	91:20	122:17	107:21 108:14
110:5 113:12	46:18 125:10	Analytical 14:22	April 25:15 70:15	109:12
114:3,16 115:16	ADSR 71:2,3	14:25	76:13,23 112:18	authority 47:7,17
116:23 117:22	74:17,20 77:12	analyze 13:23	113:3,4	47:19
118:11	78:9	16:3,9,21,22	area 53:1 64:4	automatically
accompanies 16:4	adverse 96:12,15	analyzed 4:13	87:23 88:1	23:20 93:14
accomplished	advice 94:14	15:14,23 16:14	arena 55:13	94:17
40:4	102:12	33:19	arguing 125:15	available 42:14
account 46:2	affect 108:20	analyzes 16:17	arrangement	43:3,6 50:7
91:13 92:13	118:3,9	analyzing 34:19	70:13	Avenue 2:20
Achilles 57:1	affiliated 12:18	Andre 3:4 4:8	arrived 59:4	average 119:19
acid 13:21 15:5	ago 120:21	38:7,20,23	Arthur 99:18	avoid 7:15
acquire 35:5,17	agree 23:17 78:21	Angeles 2:21	102:9	awaiting 49:16
acquired 20:1	85:9 86:8 89:6	annual 119:18	ASIC 18:22,23,24	aware 4:18,24 5:1
	90:2,19 93:13	answer 9:17,22,24	19:2,5,6,10,13	5:23 6:2,5,9,12
	95:15,20 97:4	10:1,5,8 17:12	21:24 22:3,8,11	15:25 17:23,25

18:1,11 31:1 33:18,21,24 41:3 43:21,24 43:25 61:8,11 61:20 62:8,25 63:12 65:5 67:1 67:9,12,18 68:8 69:10,12,25 70:3 77:5,7 78:12 81:18 83:17,20 84:4,7 84:8,9 102:21 104:1,4,10,14 106:3 109:1,6 109:15 111:17 111:18 awhile 36:16 a.m 4:3 46:22	56:11 68:8,10 82:3 101:16 beginning 52:23 behalf 47:2 52:7 behavior 75:22 belief 81:6 105:5 believe 26:25 37:21 50:2 51:2 54:16 55:12 58:1,4,11 61:7 63:2 66:1,9 70:14 73:23 79:10 80:10,19 80:20 81:4 82:5 86:13,24 93:9 95:8 103:22 104:19,22 108:10,18 110:2 110:18 117:19 119:4 121:14 believed 58:1 73:3 73:10,14 bell 41:11 beneficial 77:19 78:2 85:9,11 benefit 89:13,14 benefits 107:13 best 56:7 61:8,11 61:13,16,20 62:1 69:16 81:17 90:7 94:14 105:10 better 62:4 110:25 beyond 48:9,11 bid 35:16,24 big 73:5,12 bigger 35:24 36:2 biggest 85:10 108:4 bill 96:18 billion 90:16,18 billions 118:19 bit 7:20 21:19 24:14 70:5 86:7 88:16 93:11 99:5 black 33:19,21,24 34:2,16,19 96:9 blue 35:14	Blu-ray 21:13 board 12:15,15,16 99:7 101:25 102:13,14,17,18 109:14 bold 100:15 bonus 104:16,19 book 6:21 103:18 books 103:20,22 bottom 37:23 88:12 box 8:2,5,7 10:11 10:12,22 11:1 13:18 33:19,21 33:24 34:2,16 34:19 42:18 51:22 88:11 113:8,15,16 116:15 122:8 124:2 boxes 8:9 10:19 42:11,18 88:6 89:17 106:12 113:8,25 114:1 114:6,9,11,12 114:14,18 breach 46:1 break 46:17 125:9 breaking 59:4 breakup 36:9 brief 7:22 briefed 124:11 briefly 48:1 65:12 brilliant 56:8 bring 114:25 brings 55:21 British 54:6 broadcast 88:1 106:4 112:19 broadcasters 115:15 broadcaster's 97:5 broadcasting 54:6 88:2 broken 80:17,22 brought 124:25 BSkyB 54:11,12 108:2 buck 99:22	bucks 67:16 119:14 budget 14:6 buffer 4:18 29:24 30:1,13 31:13 32:23 33:15,21 42:25 43:7 bugs 33:8 build 81:11 building 114:6 built 22:3 57:25 81:20,21 built-in 21:24 Bulgaria 23:24 bullet 87:21 business 10:11,12 44:21 52:17 54:3 63:19 70:20 71:2 74:2 74:18 77:23 78:1,7 86:13,14 87:7 88:11,14 90:22,23 94:11 94:13,21,25 95:21,25 96:5,7 97:8 102:1,12 102:15 103:18 103:24 105:9,14 105:15,16,18,21 108:23 114:21 114:22 118:25 119:4,11,16 businesses 103:17 buy 74:4 76:6	110:11 CALS 85:6 109:12 Canal 7:13 22:2 53:21 54:24 55:8 58:2,7 64:15 71:7,13 71:14,16,18 72:15,15,18,25 74:3 75:5 76:5,6 76:9,12,18,24 77:6,9,16 122:9 122:12 123:9 124:10,16,20,25 125:5 canceled 12:12 cap 90:15,17 108:21 capacity 102:13 car 80:16,16,17 80:21,24 Carayol's 124:12 124:19 card 5:15,25 6:3,7 16:5 19:11,13 20:8 22:3,5 23:2 23:7,9 31:1,8,11 31:14 32:3,6,9 32:17,22 33:12 33:16,22 38:13 39:15 40:3,8,11 40:23,24,25 41:1,8,19,20 42:2,6,7,8,10 44:1,6,13,19,24 45:6,10,17,18 45:21,25 48:22 54:15 55:16,18 56:25 58:2,3,5 62:9,12 63:3 65:13,16,19,21 65:23,25 66:4,5 66:7,10 74:2 82:14,17 94:18 95:2,4,16,17,23 97:10,12,20,23 97:24 98:18,20 98:22 105:2 112:18 113:9,11 115:23 116:3
B				
back 7:20 9:13 19:11 27:13 50:4,16 52:22 53:4 54:2 79:23 80:5 91:24 99:5 104:25 109:25 113:21 background 69:23 band 105:24 106:1,9,11 bankers 76:8 Barrie 34:8,13,13 base 22:10 43:11 45:4 based 21:14 basically 8:4 9:17 10:1 12:15 19:2 22:2,25 25:1 33:5 41:12,15 42:8 43:11 81:6 81:8 87:6 basis 45:1 BBCO 7:23 9:13 11:15 beam 13:19 14:8 15:2 bear 117:12 becoming 109:21 began 19:5 52:22				
			C	
			cable 8:3,19 9:16 9:19,19 10:2,13 91:10 California 1:2,16 1:23 2:15,21 4:1 call 21:4 49:25 50:18 51:12,14 72:6,8 105:6 called 7:23 8:8 14:22 18:22 30:16,17 34:13 37:3 50:4 54:5 66:12 72:4,11 84:19 99:10	

119:5,6,8,12,15 119:17,23,23,24 120:3,6,6,8,10 120:11 cards 15:1,24 16:10,15 18:9 18:12,21 20:9 23:25 31:17 32:15 33:25 40:2,19 42:14 42:17,21,24 43:2,7,10,12,13 43:14 45:10 46:9 48:6,7 49:4 54:18,20 56:7,9 56:22 62:14,15 82:19 89:23 93:15 95:7,10 95:13 97:5,9,11 98:4,7,10,23 105:11 114:3 115:18,21,24 116:4,4,5,8 118:22 120:13 Carey 99:14 101:21,23 102:1 102:3 CARTER 1:3 case 23:22 46:20 66:24 106:13 125:12 cases 92:13 97:21 113:18 cash 66:13,20 67:3,7,12 categorizing 31:21 cause 96:12,15,18 96:21,24 114:19 causes 95:21,24 96:5 cautious 50:13 Center 2:14 central 1:2 62:25 CEO 52:15,23 90:6 99:7 certain 47:16 50:5 78:13 101:8 109:17 110:20 certainly 18:11	36:16 56:20 86:2 CERTIFICATE 126:3 certification 114:13 certify 126:5 cetera 35:8 Chad 2:5 120:15 chain 99:23 125:7 chairman 52:14 100:1 101:9 chance 29:9 change 91:24 92:5 changed 53:7 82:17 95:8 116:6 charge 102:3 charges 117:17,18 Chase 99:14 101:21,23 cheaper 80:21,24 check 15:1 29:23 30:1,3 33:15 checked 79:15 chief 11:20 18:2,8 52:14 58:20 61:4 100:1 101:10 102:16 chip 10:24 12:9 13:18,21,24 14:2,23 22:12 22:15,19,21 30:14 32:9 56:25 57:1 64:25 97:12 chips 18:15,18 35:14 66:2,3 choice 111:19 112:21 chose 43:17 Chris 20:4,7 47:7 47:20 68:5 75:3 CHRISTINE 2:5 Christopher 72:14,18 73:15 74:24,25 75:12 75:13 circuit 17:4,8 CIS 37:3	cite 93:10 claim 41:10 42:20 44:9 78:12 claiming 30:13 claims 124:25 Clark 58:20 101:17 clean 118:8 clear 8:11 35:9,9 68:20 clearly 56:23 67:6 68:4 69:2 76:24 77:21 82:16 85:12 96:25 97:11 clerk 51:18 client 22:9 closed 31:24 112:25 closely 104:10,13 code 13:24 14:1 15:24 16:14 29:23 30:24 32:14 33:7 71:13,16,18 72:19 75:1,3,14 76:16,18 77:3 83:19,23,24 84:7 122:9,12 122:16,16 126:6 codes 72:15 collaborate 45:2 combat 94:2 95:18 combination 125:2 combined 36:4 come 8:6 9:17 23:17 41:16 57:12 75:20 91:24 94:11 97:19 104:6 115:6,7 comes 94:13 98:8 comfortably 51:23 coming 16:9 23:8 23:21 24:5 57:8 70:1 83:2 comments 30:23	commercial 93:25 Commission 87:5 commitment 25:9 committee 99:11 99:13 102:10 communications 29:24 31:13 32:23 33:15 88:5,8 community 22:24 41:5 companies 5:18 12:18 36:21 37:1 85:16 86:16,18 88:3 91:10 98:23 103:4,15 company 8:8,10 15:13,14,23 16:8,17 20:2,15 20:19 21:13 22:1 25:15 26:11 30:13 34:18,22 36:6 36:24 37:3 38:12 41:24 52:17,20 54:9 59:1,21 100:5 103:5,12 compare 91:17 compatible 42:18 compete 86:9,15 87:20 88:2,7 108:8,10 competes 88:12 competition 13:15 111:6,8 competitive 53:16 91:20 117:19 118:7 competitor 10:9 10:10,14 28:16 53:19,21 62:14 70:2 89:19 92:23 competitors 23:1 28:20 91:18 92:11,17 competitor's 12:20 13:4	89:12 98:22 complement 85:25 complete 30:5 completed 40:2 completely 13:14 39:2 48:25 72:22 complies 9:6 115:8 component 10:22 12:19 13:3 90:20 compound 111:10 compression 89:17 compromise 46:1 55:1 compromised 23:9 48:7 82:7 computer 79:16 concealed 76:11 concentrating 11:21 concept 97:10 106:7 concern 74:3 76:3 76:4 78:3 concerned 63:4 71:3 75:24 76:21,24 77:1 83:10 concerning 46:20 50:24 75:23 125:12 concerns 82:3,10 82:21 83:8 conclude 50:3 concluded 50:6 conclusion 38:22 concurrently 120:12 condition 68:18 conditional 10:13 12:20 13:2,8,11 13:15 23:18 27:19 28:11 29:5 38:10 39:10 41:13 52:25 53:14
--	--	---	---	--

54:3 56:24 85:14,14,21,25 88:15,22,25 90:6 91:18,19 94:8 102:11 103:23 104:5 108:6 109:3,14 109:21,24 110:5 113:12 114:3,16 115:16 116:23 117:22 118:11 conducted 32:9 Conference 126:10 confidential 78:3 configured 31:7 31:11 confirmed 72:24 79:14 confirming 24:5 conformance 126:9 confused 116:19 conjunction 99:2 121:5 connection 77:8 consider 28:10 considerably 106:1 consideration 24:16 117:24 118:16 construct 57:21 constructing 17:15 construction 58:11 consultant 36:20 37:1 70:9 103:1 consultants 12:1 14:20 consulting 36:23 consumer 117:12 117:18,24 118:10,13 consumers 117:11,17 118:1 118:4 contact 8:10 24:22 25:25	contacts 9:18 contains 37:10 continue 68:16,24 97:16 102:2 continued 4:7,11 82:10,22 83:10 110:24 continues 89:9 continuing 59:22 68:22 84:11,12 112:19 continuity 21:24 contra 29:10 contract 25:16 26:2,4,5,8,14 45:17,19,20 81:25 82:14,17 83:2,7 84:16 85:12 95:9 107:2,3,13,17 107:21 108:1,14 109:2,6,20 113:18 115:20 116:2,6 contracted 20:13 20:15 contractor 109:17 109:18 contracts 25:19 95:3 105:7 107:18 contribute 68:21 contribution 104:21 control 27:16 31:7,10 41:17 101:2,11 controlled 100:3 100:8,16 101:3 controlling 112:24 Conus 16:13 31:20,23 conversation 72:17 73:2,13 94:9 conversations 94:7 109:3 copies 6:24 7:2 copy 39:23 64:20	Corp 1:5 29:3,4,8 29:13 34:22 35:5 36:3 54:10 59:24 60:1 99:11,24 100:6 100:8 101:24 102:16 107:15 108:16 124:11 124:21 125:3 corporate 40:14 41:19 corporation 2:3 53:11 54:9 58:15,15,18,21 58:25 59:2,5,7,9 59:17,25 88:8 99:4 100:3,17 101:3,8,10,11 101:17,21 102:4 106:21,24 107:8 112:24 123:11 123:14,16 124:9 124:14,24 125:1 corporations 101:9 correct 4:14,16 4:19,20,22,25 5:18,22 7:8,25 8:13,16,17 9:23 10:4,7,10,16,19 10:22 11:15,18 11:24 12:6,21 12:25 13:5 15:3 15:9 18:16,19 18:25 19:11,13 20:3,5,6,8,12 21:5,6,11 22:13 22:17 23:12 24:25 25:13,17 26:3,6,7,9,10,12 26:15,18,19,24 27:5,8,9,11,12 27:16,17 28:7,8 28:20 29:25 30:4,9,12,14,24 31:11,18,19,25 32:1,3,6,7,16,20 33:10,12 34:21 35:6,18,20,21 36:1,6,7,21,22	38:7,8,10,13,17 38:21 39:1,7,23 39:24 40:9,10 40:18,21 41:9 42:16,19,22,23 42:25 43:15 44:11,22,23 45:15 46:8 48:8 48:24,25,25 49:15 52:23 53:1,2,5,8,11,22 53:25 54:6,9,12 54:15,21 55:14 56:7,13,14,16 57:19,20,23 58:3,8,9,16,17 58:18,19,21,22 59:10,20 60:8 60:10,19,23 61:18 63:15 64:15 65:6,14 65:17,18 66:5,6 66:8,17,21,22 67:2 68:8,11,12 68:14,15,17 69:14,22 70:2 70:10,13 71:2,8 71:22 72:6,9 73:4,20,24,25 74:2,15,18,19 74:21 75:14,18 76:1,12,19,22 77:3,9,12 78:5 78:13,16,19 79:12,17,18,20 79:24 80:9,12 81:2,9 82:1,11 82:24 83:3,6,12 84:13,16,19,25 85:3,7,16 86:1 87:8,9 88:7,9,24 89:3,12,20 91:6 91:7,9,19 92:17 92:23 93:16,18 94:3,9,10,12,19 94:22 95:2,18 95:23 96:5,24 97:6,7,9,18 98:5 98:25 99:8,11 99:12 100:4	101:3,14,18,21 102:4,11,22,25 103:2,5,9,13,14 103:17,21 104:8 104:9,11 105:6 105:11,12,25 106:5,18 107:2 107:5,22,25 108:9,17,24 109:9 110:9,10 110:12,17 111:21 112:16 112:21,23 113:2 113:3,13 114:4 114:5,7,8,16,20 115:13,16,17,19 115:21,22,24 117:11,13 118:4 120:4,24 121:5 123:12,13 126:7 corrections 121:10 correctly 40:6,7 44:5 85:20 114:2 cost 40:18 81:11 89:1,13 90:2 95:3,5 116:3 117:3,14,22,24 118:12,15,18 119:5,5,16,17 119:19 costly 95:2 costs 12:3 40:20 89:22,24 90:2,5 94:18 95:1,25 117:4,12,12,15 117:16,16 118:3 118:5,21 119:12 119:14 counsel 5:12 7:6 7:21 35:7 36:16 40:14 41:19 46:17,24 48:11 49:20,23 50:23 51:12 52:7 64:4 74:8,9 83:23 86:20 88:18 92:2 100:24 102:16,17 115:6
--	---	--	---	---

116:9 120:21 121:24 124:3 125:15,16 counsel's 47:16 count 123:21 countermeasure 5:1 41:14,15 96:9 countermeasures 16:18 104:24 couple 98:7 121:3 course 38:7 56:4 79:13 89:8 91:20 98:14 120:1 court 1:1,21,22 5:11 7:5 8:25 9:4,7 17:12 28:4 35:7 36:16 37:9 37:12,16,25 46:14,17,23 47:12,15,24 48:11 49:20,23 50:1,4,10,12,16 50:20,23 51:5 51:12,15,21 52:1,4,6,10 57:14 62:6 64:3 67:22 74:8,12 75:7,10 77:8 83:23 84:1 86:20 87:12,14 88:18 92:2,4 100:24 115:2,5 115:9 116:9,12 116:16,19 117:1 117:7 121:20 122:3,21,23 124:3,6 125:10 125:14 126:15 cover 54:14 covering 76:21 77:1 covers 46:6 co-chief 101:23 102:5 create 17:3,8 creativity 52:20 CROSS 3:3 CROSS-EXAM...	4:11 CSR 1:21 126:16 curiosity 93:18,22 97:2,3 currently 4:10 23:14 custom 18:18 57:4,5,7 66:3 customer 22:12 96:13,16 108:20 customers 86:3 92:10,16,16,18 96:18 115:1 cut 48:18 cynicism 81:4 C-A-L-S 85:6 <hr/> D D 2:5,19 3:1 52:5 daily 45:4 damage 118:25 damages 96:24 99:5 104:25 Dan 14:11,14 DARIN 2:13 date 124:3 126:12 dated 36:19 dates 120:20,22 121:8 Dave 99:16 David 1:3 2:6,13 2:24 52:5 60:23 day 1:8 4:2 58:1 63:9 days 4:25 29:22 32:1 121:3 deal 29:9,13 83:6 83:6,13,16 94:12 Debbie 1:21 126:15 debt 35:19 December 43:3,8 43:19 44:1,10 44:18,25 104:8 113:1 124:4 decide 124:23 decided 56:11 57:3 decision 12:16	27:4 33:14 105:1,8,9,14,15 105:17,21 110:15 decisions 105:18 declaration 77:7 77:15,15,19,19 78:1,4,6 Decline 34:24 declined 34:22,25 35:4 decoders 42:9 deemed 31:5 101:11 deeming 31:24 deeply 88:25 defeat 15:19 DEFENDANT 2:11 defendants 1:9 47:7,19 53:8 definitely 81:19 82:6 DeHaan 14:11,14 delay 95:17 delayed 96:12,15 deliver 26:6 delivered 26:11 26:15 33:6,7 44:16 demand 44:1 demanding 44:18 denied 87:19 Dennis 24:23 Denver 16:20 17:7,21 dependent 100:16 depends 94:4,23 113:18 deployed 89:15 deposition 8:23 9:10 12:17 34:3 56:6 60:17 66:17 71:11 82:8 91:23 111:4 describes 87:7 describing 6:21 design 57:5,7,12 57:18,21 70:8	115:15 designed 56:18,20 destroy 74:4 detail 64:23 110:21 detailed 11:4 63:6 64:22 details 5:2 6:10 12:4 20:25 24:6 106:6 110:18,19 detect 31:2 determine 47:16 64:25 determined 79:11 79:13,15 117:19 118:6 develop 18:22 42:10 59:14 85:18 developed 16:18 18:23,24 19:6 33:7,12 47:8 developer 29:23 30:3 developers 32:2 developing 19:5 19:22 32:14 development 19:21 20:12,21 21:10 32:8 developments 21:25 85:10 device 15:17 16:23 17:15 21:13 33:19,21 34:16,19 40:22 40:23 devices 15:14 16:21 17:4,8,16 DeVoe 99:16 de-layer 13:21 diagrams 17:4,8 dictated 118:14 different 13:10 15:16 20:9 22:6 22:8,8,9,18 23:21 25:25 29:17 57:3 71:9 94:24,24 differentiating	13:16 difficult 22:22 57:4 digital 10:13 19:8 19:9 36:8 54:25 55:9,10,13 65:21,23,25 66:10 69:11 91:2,4 107:24 114:21 dinner 70:21,24 71:1 73:2,22 74:1,3,7,11,12 74:15,23 direct 3:3 40:18 52:7,11 directed 63:9 direction 13:17 directly 11:24 27:25 28:1,7 58:18 86:15 directors 99:7 DirectTV 5:14,24 15:15,24 16:5 16:10,15,18,21 17:5,9,19 18:4 19:10,16,18,19 19:23 20:7,12 20:23 21:19 24:14,17,23 25:3,13,16,18 25:21 26:18,21 27:1,4,8,10,22 28:9,16,19 29:1 29:3,5,8,14 34:23 35:5,17 35:25 36:3 55:14 65:11 66:14 81:23 82:14,20 83:5,8 83:13 84:13 85:5,12,21 86:4 86:5 89:6,11 90:3,22,23 91:2 91:4,9 94:16 95:6,8 107:1,13 107:21 108:4,5 108:20,23 109:1 109:9,13,16 110:8,13,24
---	--	---	--	--

111:1,5,9,11,20 112:10,14,22,25 113:3,19 115:20 116:11,12,21 117:1,5 118:17 118:18 DirecTV's 82:10 82:21 113:5 114:19 disagree 89:21 95:24 disappear 115:6 disassemble 14:1 disc 80:16,17 disclosed 20:10 21:12 disclosure 78:3 discovered 6:11 discuss 46:18 125:11 discussed 7:10,12 30:19 40:1 49:9 70:19 discussing 5:15 71:2 74:17 discussion 7:13 41:22 44:3 46:16 124:19 discussions 4:21 27:18,21 82:7 102:10,14 109:19 124:13 124:19 125:2 DISH 64:8 88:10 displayed 37:14 39:20 62:20 87:16 100:13,18 115:10 displeased 78:22 78:24 79:1 dispute 63:2 79:2 124:9 dissatisfied 75:21 distinction 13:8 distribution 93:21 District 1:1,2,22 DOC 1:7 document 5:14,16 5:23,24 6:2,6,9	37:5,10,14,22 39:20 62:18,20 62:22 87:6,16 87:18 100:13,18 115:10 120:23 121:4,11 122:25 123:19 documentation 44:12,24 documents 6:24 7:10,12,14,16 7:19 18:3,6 78:13,15 121:21 doing 111:19 119:8 dollars 11:9,12 90:4,9 98:24 106:15,17 107:10 118:18 119:20,21 domain 41:16 Dov 2:24 drive 78:16 79:12 79:15,16,21 80:9,12 81:7 drunk 73:13 dr7 71:16,18 122:9,12 due 46:1 96:12,15 106:20,23 dump 16:3 dumps 15:23 16:5 16:9,14 duopoly 8:5 9:17 9:23 DVB 13:13 DVR 108:6,13 DVR's 108:12 D16V2 1:25	EchoStar 1:5,25 2:3 16:23 27:18 27:21 28:15,18 28:25 35:16,24 39:14 40:1 41:12 42:6,20 43:2,6,17,21,25 44:19 47:2 55:12 62:9,12 74:25 75:1,3,13 83:19,24 84:7 86:9,11,16,18 86:21,22 87:20 88:4,5,8,10 91:10 108:8,10 122:16,16 EchoStar's 40:14 41:18 105:16,18 ECM 4:24 5:1 ECMs 93:11 94:3 94:19 ECM's 104:24 105:2,25 106:2 106:4,7 effect 117:25 effectively 95:18 effort 42:11 Eh 86:18 either 10:4 25:22 25:24 28:7 31:17 70:8 76:6 110:16 electron 13:23 electronic 16:17 96:8 104:24 element 6:21 10:24 16:23 21:12 44:16 elements 6:23 10:23 13:10 21:21 23:20 41:15 45:4 em 27:15 93:1 98:17 107:10,11 111:2 114:3,3 118:21 Embarcadero 2:14 embark 57:3 embarked 85:17	embedded 89:1 EmbedICs 20:2,5 employed 20:15 employee 19:17 68:5 70:9 73:18 77:25 102:24 employees 14:13 59:19 60:9,10 60:15 63:17 employing 20:14 68:19 employment 68:8 68:10 78:18 79:7 emulation 40:22 emulator 32:18 encryption 13:9 ends 108:16 end-to-end 89:19 engage 8:12 10:18 64:24 68:22,24 94:18 105:2 engaged 8:15 99:3 engineer 20:11 61:4,8,10,14,16 61:17 engineering 6:11 8:12,16 10:19 12:9,22 13:1 22:24 56:12 63:7,21 64:24 engineers 14:17 20:7 57:6 60:15 61:20 62:1,3 104:11,12 English 81:4 enter 83:13 84:15 85:5 entered 25:15,19 70:12 83:15 109:2 entering 83:9 entire 12:10 89:18 entities 103:15 entitled 63:9 entitlements 106:2,9 entries 14:7 environment 52:19	envisioned 82:14 equipment 79:8 81:14,15 89:17 89:18 equity 100:8 Ereiser 6:13,15 6:25 7:11 122:16 Ergen 5:20 45:13 45:18,22 48:5 error 33:3 errors 33:10 escalate 82:10,23 esoteric 65:3 established 16:22 establishing 52:19 56:21 estimate 90:7 et 1:5,8 2:3,11 35:8 Europe 23:2 36:8 36:10 72:1 evening 56:6 events 55:22 122:5 125:7 everybody's 60:16 evidence 3:12 37:13 39:22 47:11 50:6 63:1 67:23 87:15 122:1 exact 8:21 54:19 exactly 28:14 36:22 examination 47:1 47:4 52:7,11 example 29:10 116:3 exceeded 32:22 exception 21:13 excess 106:15,17 exchange 35:14 49:7 87:4 exclusive 40:19 excuse 50:11 excused 51:1 execute 83:5 executed 85:7 execution 52:18
	E			
	E 3:1 earlier 15:11 118:24 early 19:9 21:22 30:19 41:4 43:15 53:25 easily 57:2 EBERHART 2:13			

executive 36:24 36:25 52:14 99:11 100:1 101:10 102:1,10	28:9 30:11 34:2 35:5 45:12 47:15 49:8 56:5 65:2 80:2 82:16 93:17 118:6	final 105:6 finalized 26:21 finance 35:19 financed 100:3 financing 59:5 find 35:7 37:25 74:12 91:22,24	forms 93:19,20 forums 37:20 forward 71:20 73:22 fosters 52:19 found 56:3 77:14 77:18 78:6 foundation 122:19 Fountainview 2:7 four 48:16 49:2,4 51:11 64:17 97:15 107:21 fourth 123:21 four-year 48:23 85:5 109:2 frame 5:21 31:24 66:9 France 55:8 Francisco 2:15 free 48:7 49:6,8 49:13 98:13 frequently 97:11 full 21:23 51:24 106:5 full-solution 85:18 fuming 15:5 function 103:16 functionality 97:19,22,25 98:11 120:3,4,5 120:11 functions 91:21 fund 59:3,18 funded 59:9 funding 58:24 59:6 funds 59:22 further 46:13 47:23 49:19 F-1 3:13 87:3	generally 24:4 93:17 generated 12:8 63:17 generation 23:13 97:20 120:12 gentleman 14:10 14:11 20:18 21:4 50:24 99:20 gentlemen 44:17 gentlemen's 45:12,22 48:4 49:12 Germany 23:11 23:14 56:4 111:18 getting 76:7 104:2 give 5:8 6:24 7:14 11:2 22:25 47:20 48:12 64:20 79:23 90:7 given 7:14 107:2 118:14 glanced 63:6 glitching 31:2,4 globe 22:13,16 23:19,21 go 22:11 37:21 50:16 59:8 70:6 71:20 73:22 79:19 84:21,22 87:21 88:3 89:19 91:11 93:6 94:17 95:22 96:9,11 98:13 99:5 100:10 101:6 104:25 107:16 110:3,15,20 113:14 114:23 118:5 122:5 123:19 124:2 125:7 goal 7:23 9:25 goals 8:18 9:14 goes 80:7,11 91:8 96:9 113:9 going 9:13 19:11
exhibit 3:12 5:8 5:10 36:11 37:13 39:19 43:22 62:17 87:11,15 EXHIBITS 3:11 exist 6:12 existed 12:5 17:23 17:25 existing 42:18 43:12 exists 24:11 expect 49:11 expected 68:21 expensive 111:14 experience 22:22 32:14 53:1,14 54:3 94:15,16 experiencing 27:7 27:11 expert 41:13 88:20 expire 81:25 explain 15:14,23 16:20 18:2,8 64:10 71:10 explained 5:24 118:5 explanation 21:21 30:5 exploit 63:18 express 46:19 extend 97:13 extension 83:15 extra 46:3 120:2,3 extremely 40:4 73:13 E-D 52:4 E-L-E-D 52:3 e-mail 3:14 16:4 31:23 36:14,19 37:5,11,20 e-mails 31:20	factors 118:14 facts 47:10 fact-check 120:21 fact-checked 121:6 failed 29:23 54:18 failure 55:18 fair 7:16 9:14 12:16 48:22,22 53:16 58:23 100:2 111:6 fairly 65:19 fakes 40:25 fall 33:19 false 39:3,6 familiar 14:15 15:7 34:7 53:15 105:18 106:6,7 families 22:8 family 21:23 22:5 22:7 far 50:6,13 61:12 61:14 85:22 98:1 feasible 46:4 94:21 features 6:6 February 66:5 federal 1:21 77:8 fee 82:19 95:4,11 116:2,6 fees 115:13,15 116:15 felt 57:6 66:2 field 46:9 97:17 120:7,13 fifth 123:22 fight 41:14 73:5 73:12 fighting 68:21 figure 57:23 file 16:4 87:6 filed 64:14 65:5 87:4 99:2 filings 119:19	five 54:18 65:20 66:1 83:6 119:14 five-year 83:7 fix 40:1,3 fixed 106:12 Flaherty 20:18,21 21:8,9,15 24:23 flight 5:4 floods 69:25 flying 50:13 focus 54:23 74:11 78:11 86:6 87:19 109:21 focused 13:19 14:7 15:2 Focusing 19:8 folks 13:17 18:22 19:1,15 follow 45:21 following 44:10 44:18,25 foregoing 126:6 forget 45:2 forgot 30:5 form 3:13 45:20 46:19 125:11 format 126:9 former 19:17 42:9	forms 93:19,20 forums 37:20 forward 71:20 73:22 fosters 52:19 found 56:3 77:14 77:18 78:6 foundation 122:19 Fountainview 2:7 four 48:16 49:2,4 51:11 64:17 97:15 107:21 fourth 123:21 four-year 48:23 85:5 109:2 frame 5:21 31:24 66:9 France 55:8 Francisco 2:15 free 48:7 49:6,8 49:13 98:13 frequently 97:11 full 21:23 51:24 106:5 full-solution 85:18 fuming 15:5 function 103:16 functionality 97:19,22,25 98:11 120:3,4,5 120:11 functions 91:21 fund 59:3,18 funded 59:9 funding 58:24 59:6 funds 59:22 further 46:13 47:23 49:19 F-1 3:13 87:3	
<hr/> F <hr/> fact 24:2 26:20			<hr/> G <hr/> Gagnon 24:23 26:1 Gale 1:21 126:15 gathered 92:19 Gee 18:3,9 general 88:1	

35:5 37:25 49:8 49:10,13 50:6 50:10 56:12 57:10,13 62:5 62:16 63:5 67:24 69:21 70:21 72:25 75:10 76:4 79:2 79:21 84:1,4,24 87:24 92:2,4 97:1 99:5 114:25 119:13 120:8 123:22 gonna 87:7 98:3,7 98:10 good 30:1 33:9 56:8 68:21 97:14,16 104:20 104:21 116:18 125:8 granted 47:17 Greg 24:23 26:1 58:20 101:17 group 1:8 2:11 5:17 12:19 34:12,13 35:13 52:14 56:12 61:6 62:1 86:16 86:18 87:4 91:6 91:8,11,21 92:12,20 93:5 103:11,12 grow 89:9 growing 114:19 grown 89:6 growth 114:21 guarantee 48:6 guess 21:3,18 38:23,23 Guggenheim 3:14 5:20 6:24 7:2,10 36:14,20,22 37:19	23:11,15 46:10 54:25 55:4,7 65:19 66:7 69:25 70:2 81:24 82:4,6,22 98:12 111:13,23 112:1,3,5,7,9,13 112:15,17,20,22 hacker 22:20 56:2 56:3,16 hacking 41:16 68:24 103:21 hacks 98:9 Hagan 2:5 3:5 7:4 17:10 37:10 46:15 47:1,3,5 47:18,23 48:9 49:22 51:2 115:6,8 120:15 123:22 Haifa 57:18 81:11 123:2,6 half 55:19 81:16 107:7,9 119:19 119:21 hand 51:17 86:23 114:4,20 120:15 120:16 handwritten 121:9,19 happen 39:5 74:4 84:22 happened 18:12 76:17 86:4,5 120:20 happening 48:16 happy 79:5,5,6 hard 78:16 79:12 79:15,16,21 80:9,12,16,17 81:7 88:16 harder 88:24 89:3 89:10,10 hardware 10:22 10:23 61:4,8,10 61:16 harm 95:22,25 98:25 harms 96:2,2 117:9,11	HarperCollins 102:19,22 103:5 103:18,23 104:2 104:3 HARTSON 2:18 Hasak 69:9 72:1 123:1,5 head 11:17 71:25 Headend 5:3 15:12 47:8,20 63:1 69:17 83:18 84:6 89:17 hear 66:12 heard 6:14,20 15:4 34:2,5,8,10 64:13 122:15 hearsay 37:10 122:2,3 heel 57:1 held 46:22 125:17 126:8 help 37:25 57:18 70:8 100:24 helped 56:21 107:2 helping 57:21,22 Hey 93:6 hide 72:20,23 high 52:20 highlighted 100:23 hire 57:23 hired 12:1 19:15 19:17,20 20:1 20:11,13,18 21:4 56:15 57:17 70:8 hiring 52:18 history 6:16,19,22 65:11 hit 35:21,23,24 36:2,5,7 hobbyist 93:18,22 97:1,3 HOGAN 2:18 hold 27:13 hole 31:24 hone 54:23 Honor 7:4 8:22	9:1,8 17:10 35:11 37:7 46:15 47:3,25 49:22,24 50:14 50:19 51:4,9,14 52:9 57:10 64:2 75:9 83:21,25 87:10 115:4 116:22 120:14 121:15,25 122:2 125:7,8 HONORABLE 1:3 hoping 86:2 horizon 84:18 hot 7:16 hotel 50:15,16 house 79:24 80:8 80:11 Houston 2:8 hundred 11:12 106:15,17 107:10 hundreds 90:4,12 90:14 98:24 118:18	108:15 impressed 33:5 improve 66:2 improvements 97:19,22 inadvertent 33:10 incident 80:3 incidentally 73:6 83:1 124:18 include 17:18 81:14 82:18 86:18 included 10:21 95:4 102:1,7 116:2 includes 108:5,6 including 19:24 24:23 26:1 59:19 65:2 68:5 81:15 incomplete 48:10 48:15 increase 97:2,4 increased 97:25 98:11 117:3,11 118:12 incumbency 110:24 incumbent 92:16 incur 89:22,24 independently 103:16 indicated 95:3 117:22 indication 76:15 individual 94:4 94:23 103:17 individuals 98:23 99:13 industry 9:16 36:8 39:10 91:19 inferior 58:2,5 inform 8:15 informally 125:14 information 25:9 25:13 38:9 39:3 39:6 69:16 78:4 91:12,15,16 92:9,12,19 93:2	
<hr/> H <hr/> hack 32:6 46:12 47:8 48:16 62:12 63:10,18 64:7 69:11 hacked 23:2,5,6,7					
			<hr/> I <hr/> IDA 14:1 idea 6:17 12:3 13:20 14:19,21 14:24 31:3 32:24 33:17 49:18 IDENTIFICAT... 3:12 identified 16:9 56:24 identify 24:24 II 1:8 4:2 illegal 67:6 75:25 77:3 98:14 imagine 16:2,19 16:22 31:9 50:3 impaired 96:18 impeaching 64:3 important 17:14 22:21 24:16 40:4 85:12 90:24 107:3		

93:3,9 informational 26:6,9 informations 22:23 informed 16:16 24:2 informing 26:21 infrastructure 88:3 initial 84:19,20 85:11 93:19 106:14 initially 81:16 initiated 21:25 22:4 inputs 32:22 inside 7:18 10:25 insignificant 118:16 installed 43:11 instructed 69:1 instructions 41:3 69:6 instrumental 57:22 integrate 42:9 integrated 36:9 integration 88:2,6 116:15 intellectual 93:18 93:22 97:2,3 114:11 intention 27:14 interactive 107:19 intercepted 67:14 67:15 interest 105:10 112:25 internal 5:24 Internet 37:20 38:20 39:3 41:4 71:14 72:16,19 75:1,14 83:19 84:7 92:19,19 92:21 93:4,7 98:9 123:3,7 interruption 95:22,25 96:5	119:1 interruptions 96:8 119:4 introduced 46:11 112:18 investigate 22:21 investigation 123:5 investigator 18:2 18:8 involve 68:4 involved 19:18,21 19:22 27:21,25 28:7 71:6,13 72:14 74:25 75:25 76:11 103:23 109:20 123:17 124:9,13 124:18,24 involvement 28:10 76:14,14 involving 40:1 ion 13:19 14:7 15:2 IPO 86:6,10,23 87:5 96:11 100:2,6,12 101:2 107:1,2 108:15,15,24 114:23 119:18 Ireland 72:5 Israel 103:9,10 104:11,12,15,18 issue 96:4 99:5 Italia 125:4 Italy 125:3 item 14:7 <hr/> J <hr/> Jane 4:5 Jeep 80:25 Jim 34:8 job 30:25 Johnny 66:13 joint 45:3 70:13 74:4,20 77:12 JUDGE 1:3 Judicial 126:10 July 39:23 40:17 44:6 70:22	81:25 June 65:13 jury 1:15 7:6 8:11 35:10 36:17 46:23 50:25 51:4,24 52:2 80:14 121:22 125:13 jury's 63:5 J.J 18:3,9 <hr/> K <hr/> K 101:8 Kahn 109:7,9,11 Karl 33:5 Kearn 20:4,7 keep 27:15 69:20 95:1 111:2 KENNETH 2:19 key 56:24 kidding 121:22 kind 6:22 24:11 51:16,22 125:11 Kingdom 72:1 KLEIN 2:19 knew 12:11 14:9 14:24 15:10,16 21:1,1 27:3 29:8 62:13 63:21,22 68:10,13,16 know 5:9,11 6:13 6:15 10:25 12:3 13:22,25 14:3 14:15 15:18 16:2,17,24 18:12 19:12 20:24 23:7,10 25:18 31:4,7,10 31:13 32:21 33:14 34:18 35:9 36:17 40:22 42:24 51:5 54:19 55:23 56:23 57:6 61:2,3,12 61:14,21,23 62:10,11 63:17 63:20,23 64:9 65:8,10 66:20 67:5,14,21 68:3	68:6 69:18 72:18 73:9 81:24 85:2 92:16 95:5 102:24 103:22 104:12 105:23 106:1,2 107:1 109:6 110:19 111:22 112:12 119:3 121:20 125:6 knowing 5:2 7:18 81:3 knowledge 5:16 14:25 22:2 23:4 31:6 known 53:5 63:16 Kocher 21:4,10 Kochi 20:11,14 21:7 Kommerling 55:23 56:1,16 56:18 57:9,11 57:12,18,22 70:7,13,19 71:1 71:5,6,12,15 72:2,6,8,11,13 73:1,9,14 74:1 74:15,20,23 75:12,25 76:11 76:15,17 77:5,7 77:18,25 Kommerling's 77:2 Kristee 51:18 Kudelski 3:4 4:8 5:17 9:10 12:19 26:5 35:13 37:1 38:5,7,10,20 39:7,9,11,25 46:25 47:6 48:4 Kudelski/Nagra 36:21 <hr/> L <hr/> L 2:18 lab 16:20,22 17:21 56:18 57:12,19,22,25 58:10 59:15,18	59:19 60:2,4,5 60:10,18,22 61:5 70:8 81:11 81:20,21 123:2 123:6 laboratories 23:24 laboratory 14:22 17:7 56:21 labs 9:19 81:17 lack 71:3 Lacks 122:19 ladies 44:17 landscape 53:16 laptop 79:9,11,14 80:7 large 22:24 54:10 89:16 115:1 largely 54:8 larger 90:6 largest 54:5 83:8 90:20 91:2,4 107:24 108:5 lasted 54:20 65:23 65:25 70:15 late 19:9 21:22 46:12 58:12 60:22 83:17 84:18 launched 54:12 54:16 55:13 Law 2:7,14,19 lawsuit 4:19 49:17 50:3,5 61:1 62:24 64:15 76:24 77:6,9 88:9 123:9,11,14 lawyer 5:6 41:23 41:25 44:6,21 lawyers 5:8 7:15 124:11 lead 20:7 leak 123:2,6 learn 23:23 104:6 learned 29:22 30:3,11 53:18 53:21,24 71:4 75:16 76:13,23 102:23 104:7,17
---	---	--	---	--

leave 97:16 110:25	Live 4:4	major 108:19	matrix 31:8,10	106:18,20,23
led 36:9	living 52:13	making 13:7	matter 46:18	107:4,10,12,14
left 51:22 60:7 78:18,21 79:7	loan 59:10 60:1 107:12	22:20 33:3,10 114:4,19	125:11,15 126:8	107:14 108:16
legal 68:4 102:16 102:17 111:3	location 51:17	Maldonado 34:6	matters 50:24	108:16
legitimate 15:21 16:8,25 17:3,7	locked 77:22,24 77:25 78:6,9	man 55:23 56:8 76:18 99:14,16 99:18	mean 22:21 29:19 48:18 52:15 59:24 63:6 81:3 86:20 88:10 96:7,8 98:12 107:9 110:1,2 123:11	millions 11:9 90:4 90:12,14 98:24 118:18,21
Len 79:19,21	logistically 46:4	manage 42:7	meaning 10:24 21:17	million-dollar 90:8
length 32:22 89:4	logistics 119:8	management 92:13 99:11 102:10	meaningless 43:4 43:8	mince 96:1
letter 26:21,25 27:3 39:23 40:14,17 41:7 41:10,18,22,23 41:23,25 43:21 43:25 44:3,20	London 35:15 73:24	managers 91:13	means 51:5	mine 83:1
letters 44:17	long 26:2 46:9 85:1 94:21 111:3 120:21	Manassas 66:25	meat 70:6	minute 52:22 54:12 58:10 60:3 68:7 75:19 78:11 81:23 109:25 111:12 111:13
let's 7:20 18:14 21:19 24:14 29:10 53:4 55:21 58:10 60:2 66:4,23 67:7 70:5 71:20 73:22 74:12 77:6,15 78:11 95:12 96:1,1,11 97:9,23 98:8 99:6 100:10 109:25 111:23 112:14 119:10 119:12,13,22 122:5	long-term 83:6,13 84:16	Manieri 34:10	MediaGuard 21:25	minutes 46:21
level 64:22 93:18 97:1	look 5:8 62:16 81:7 87:22 93:6 94:25 100:10,22 101:6 109:13,16 110:14 122:7,8 123:1,5	Manion 5:5	meeting 30:18 73:2,5,22 80:1	misappropriated 78:13
license 115:12	looking 12:4 30:23 64:22	manufacture 113:25 114:1 119:14	meetings 25:4 70:18 102:14,17	mischaracterizes 17:11
liked 82:17	looks 36:13 72:19 111:20	manufacturers 113:17 116:15	members 20:4	Misstates 7:4 17:10 67:20 83:21 122:20
limited 55:2,11	Los 2:21	manufactures 114:10	memory 30:16,17 30:19 31:7,10 31:14 32:9,19 33:1 120:20,25	mistake 33:4
line 8:23,24 9:2,2 14:7 88:12	loss 108:19	manufacturing 40:19	Menard's 47:9 71:17	mistaken 7:3
lines 63:25	lost 35:24 37:15 96:12,15 118:24 118:25	map 24:5,7,8,11	mentioned 20:19	model 97:8
list 87:24 114:25	lot 39:3 60:24 106:9 107:18 111:16	March 113:3 122:12,17	merely 89:22	modify 48:20
litigation 62:19 64:14 65:5 78:12 84:10 104:17 123:17	lower 95:10	Marcos 67:8,10	merge 76:6	moment 8:25 9:4 50:1 51:1,6 74:8 115:2 116:16
little 7:20 21:19 24:14 70:5 79:1 86:6 88:16 93:11 99:4	lunch 125:9,16,17	marginal 40:18	merger 76:8 124:20	money 59:2,3 87:8 95:25 107:7,9 113:11 114:4,15,20 115:18 116:14
	M	marked 62:17	messages 106:10	monitor 69:6
	M 2:5	market 7:24 8:2,3 8:19,20 9:15,18 9:21 10:1,3,5,6 12:24 35:4,8,13 90:15,17 108:21 117:20 118:7	met 55:18	monitoring 52:18
	mailbox 66:24 67:9,13,19,23 68:2	marketplace 69:22	methodic 33:2	monthly 82:19 95:11 116:2,6
	mailboxes 66:23	Markey 11:17 14:4	methods 56:21 57:8,8 64:25	months 40:3 65:20,20,23,25 66:1 82:15 97:24
	main 102:1	Marquis 11:19	microscope 13:23	moral 111:3
	maintaining 115:1	material 122:11 123:2	middle 38:4	Mordinson 59:19 60:13,23 61:13 61:17 62:8
	maintenance 115:12	materials 91:14 123:6	middle-ware 108:6,11	Moskowitz 2:24
		math 54:20	mid-2002 46:11	
			Mike 34:10	
			million 11:13 59:9 59:14,17 81:12 81:16 90:9,10 100:6 106:15,17	

Motorola 7:25 8:4 8:20 9:15,21 10:4,7,9,19,22 12:9,25 13:18 14:2,23	nature 93:12 95:9 NDS 1:8 2:11 5:15 5:24 6:5,19 15:15,24 16:10 16:14,18 17:5,9 18:4 19:10,16 20:8,21 27:4,7 52:14,15,23 53:3,4,5,7,10,13 53:19,21 54:11 54:25 56:11 58:24 59:1,4,6 59:10,21,22 60:14 66:25 67:1,18 68:2,5,8 69:5 70:9,12,19 74:4,4,21 76:6,6 76:9 77:20,25 78:9,13,18,24 79:1,7,13,14 80:8 83:5 86:8 86:14 87:3 88:7 88:12 89:11 90:15,17,21 92:10 94:8 95:4 99:7 101:16,25 102:24 103:2,7 103:9,10,10,10 103:12 104:11 104:12,15,18 106:13 107:13 107:16 110:8,16 111:13 112:15 119:11 123:11 124:9,20,23	49:10,13,16 83:9,20 84:5 109:19 neither 16:13 Network 64:8 88:10 never 4:13,16 7:1 15:4,16 16:16 21:12 24:2 26:17 30:8,18 30:23 31:20,23 32:5 33:3 42:20 45:15,17 47:14 new 38:12 42:9 43:10,13,14 46:9 48:5 97:20 107:18 Newbie 38:5 News 29:3,4,8,13 34:22 35:4 36:3 53:11 54:9,10 58:15,18,21,25 59:2,5,6,9,17,24 59:25 60:1 99:4 99:11,24 100:3 100:6,8,17 101:3,8,10,11 101:17,21,24 102:4,16 106:20 106:23 107:8,15 108:16 112:24 123:10,14,16 124:8,11,14,21 124:24 125:1,3	57:11,13 noon 50:8,8 normal 106:10 notes 121:19 notice 41:23 November 26:12 85:2 86:23 number 5:11 19:11 22:23 37:22 54:19 55:2,11 89:7 97:20 106:12 numbered 123:20 numbers 119:13	officer 11:20 58:21 101:23 102:5,18 Official 1:21 off-the-shelf 18:15 22:12,15 22:19 off-the-shellfish 22:19 oh 50:16 79:8 124:11 okay 20:17 28:3 36:11 37:17 38:1,2 49:12 55:13,21 56:18 57:17,25 58:10 58:14 60:7,21 61:1,16,20,25 62:2,8 67:7,18 69:5 70:15,18 70:20,22 71:20 72:4,21 73:18 73:21 74:11 75:24 77:5,25 78:11,18 79:7 80:4 81:11 82:25 83:8 84:9 84:11,24 86:6 88:15,19 90:15 92:3 93:12 95:1 95:13 96:1,11 96:23 100:2 102:24 103:12 104:4 107:13 108:14 109:1 110:13 111:2,23 113:5 114:2 119:10,14,17 120:8 121:7,11 124:6 125:10,14 125:16
<hr/> N <hr/>			<hr/> O <hr/>	
N 3:1 Nagra 5:17 18:15 53:18 54:24,25 55:6 58:7 69:11 69:25 89:20 105:24 106:6 111:12 NagraCard 58:2 NagraStar 5:23 6:2,5,9 16:20 27:24 28:6,16 29:5,15,17,19 40:1 45:3 86:19 86:20 110:9 NagraStar's 18:2 18:8 28:10 NagraVision 33:18 name 6:14,20 14:15 15:7 24:19,20,24 34:7 38:7 51:24 52:1 53:7 55:23 60:16 76:18 99:14,16,18,20 named 14:11,14 20:18 34:5,10 names 60:12,21 NASDAQ 35:8 national 23:23	NDS's 54:2 81:6 92:17 need 15:18 22:23 40:25 42:9 43:20 57:6 66:2 89:25 114:24 needed 50:17,17 63:23 72:8 79:22 81:21 needs 52:20,21 negative 96:21 negotiate 83:16 84:13 negotiation 49:11 negotiations 28:7	newsdata.com 53:5 nice 125:16 Nicolas 4:21,25 16:13 24:2 30:18 night 4:13 8:18,23 9:11 12:17 13:7 24:15,24 25:8 27:24 28:6 34:3 39:14,22 42:13 45:5,9 Nipper 104:6,15 nitric 15:5 NOLL 2:6 nonresponsive	O 1:3 oath 51:18 77:8 object 57:10 121:15 122:2 objection 17:10 37:9 47:10 48:9 67:20,24 84:1 87:12,13 122:19 objections 37:11 obligated 26:5 obtained 6:25 7:11,13 obvious 16:2,3,6 obviously 60:24 69:4 90:23 92:14 93:25 94:4 95:25 96:10 102:14 105:20,22 107:3 111:1 117:14 118:13 119:4 124:21 occurred 43:15 occurring 24:4 48:23 October 26:20 offer 25:9 85:16 85:19 117:20 offered 76:15,17 78:25 86:16 offering 77:3 84:19,20 85:11 106:14 107:18 offers 86:8,14	old 64:17 Oliver 55:23 56:1 56:16 57:9 76:15 once 22:21 26:8 29:8 46:23 88:17,17,22 93:13 ones 94:24

one-year 83:15	orders 45:16,19	67:23 102:22	108:13 111:15	46:1,6 55:3
ongoing 44:3	organization 33:9	104:2,3,15,18	111:16 114:22	66:14 68:19,22
115:12 125:1	original 46:2 59:6	107:7 117:1	116:22,24 117:6	68:22,25 69:21
Ontario 34:8,13	64:14 79:16	paper 26:6,6,11	117:15 125:2	71:6,13 72:14
onwards 101:25	82:14 95:9	26:14,21	Peled 3:8 51:14	74:25 75:6 76:1
oOo 125:18 126:1	97:10 115:20,25	paragraph 38:14	51:19,25 52:13	76:12,14 77:16
open 8:2 9:18	originally 11:20	39:25 40:8	121:18	83:10 92:10,14
13:15	53:5 121:12,17	87:22 101:6	people 19:17,18	92:17 93:3,5,10
opening 94:1	Osen 32:2,5,12,14	paragraphs 87:23	19:20,22 22:5	93:17,19,23
operate 120:1,6	32:21 33:5	parallel 120:1	24:22,23 25:1,3	94:8,12 95:18
120:12	outcome 49:16	Pardon 29:16	25:21,25 41:4	96:2,4,5,15,25
operating 34:12	outlined 6:3,6	30:21	44:22 50:13	97:21 98:6 99:3
101:23 102:5	outside 51:3	parent 54:9	52:19 55:3,11	117:9,25 118:3
operation 59:3,10	overall 11:4,11	parentheses	57:9 60:18 61:6	118:9,17
60:4 66:13,21	117:15	80:24	68:19 92:9,14	pirate 15:17
operational 71:25	overflow 4:18	part 10:21 11:11	99:3	16:21,23,24
operations 58:24	29:24 30:2,13	13:9 22:1 23:21	percent 5:17 10:5	17:4,9 22:24
59:18 100:3	33:15,22 42:25	31:9 54:8 59:14	28:16 100:8,9	23:21 33:19
101:11 102:3,6	43:7	59:17 62:19	108:2,3 116:24	34:12 56:2
102:8,8,15	overhead 40:19	82:19 84:10	117:5,23 118:15	68:11,13,13,16
operator 85:21	overnight 84:25	88:14 102:14	perfected 97:12	70:7 76:16 98:8
88:22 89:10,16	Overruled 17:12	104:17 117:4,15	perform 42:8	pirated 23:2
92:23 93:6 94:9	47:12 62:6	120:5 123:14	105:2 120:2,3	93:14
94:13 95:5,13	122:23	particular 62:10	123:5	pirates 15:19
95:16,22 96:2,4	oversee 60:4	92:24 94:5	performed 123:1	16:19 17:15
96:10 98:11	owe 100:6	118:7	period 12:10	22:16 23:1,18
99:3 105:6	owed 5:17	particularly	31:21 42:12	32:5 41:6 98:16
116:22,25 117:6	owing 106:20,23	63:22 93:20	48:23 54:14,17	pirating 98:25
117:10,15,18	owned 28:16 54:8	partnering 8:8	55:16,18 56:11	place 25:9 42:6,12
119:5	58:15,15 101:8	parts 113:14	70:1,9,12 76:7	placed 31:13
operators 9:19	103:10 125:3,4	pass 22:23	80:4,6 82:10,18	plaintiff 2:3 29:19
36:9 85:19	owner 124:15	passed 116:16	84:12 97:13	88:8
90:24 94:7,17	o'clock 50:7	117:2 118:12	109:17 110:19	plaintiffs 1:6
94:23 108:13	O'MELVENY	patch 4:24	112:13 113:22	48:13 52:8
111:15,17	2:12	patches 93:12	permission 8:12	88:12 104:5
113:12		94:3,19 105:2	person 12:12	109:24
operator's 98:3	P	105:25 106:3	24:25 98:12	PLAINTIFF'S
105:1,14	P 52:3	Paul 21:4 52:3	personally 69:8	4:7,8 51:19
opinion 15:22	packages 117:20	pay 95:7,10,16	Peter 76:18	plan 49:1 76:5
46:19 125:12	packing 50:17	107:10,11,14	philosophies	84:20
opinions 15:11	page 8:23,24 9:2,2	116:4,5,8 118:1	94:24	planned 84:21
opportunity	36:13 37:22,25	118:4	philosophy 22:7	97:6
29:13 48:13	38:4 63:9,25	paying 66:25 67:1	94:23	planning 38:12
option 29:2,2	87:18 100:10,11	67:18 68:2	phonetic 20:4,11	84:22,25
options 111:20	100:19,19,20	95:13	piece 40:4 42:10	platform 91:2,4
oral 45:12	114:23 115:3	payments 67:4,7	pieces 62:25	92:23 93:6
order 7:14 25:9	122:7 123:19,20	pays 116:22	piracy 6:16,19	105:1,5 107:25
81:16 97:8	123:21,23 126:9	118:10,14	15:15 24:5 27:8	platforms 91:9
117:23 118:15	pages 26:2	pay-TV 85:19,20	27:10,15 32:17	125:2
119:19	paid 18:3 36:23	86:13 90:24	37:20 41:14	PLC 1:8 2:11

52:14 87:4 please 8:25 9:5 28:2 35:2 36:12 39:19 43:5 46:25 51:13,17 51:21 pockets 108:17 point 17:16 36:19 47:6 54:4 55:11 56:2 58:14 59:21 60:14,14 61:22 64:4 73:1 75:20 81:18 83:5 90:3 93:1,2 93:23 94:25 106:8 107:16 108:3 110:20 123:3,10,16 pointed 119:3 points 17:18 87:21 Poland 23:5,6,7 police 56:4 portion 50:2 57:14 83:18,24 84:6 122:16 portions 47:20 pose 110:23 position 11:19 36:17 50:11,25 101:9 105:13,19 possessed 5:23 6:2,5,9 possession 80:9 possibility 76:8 possible 9:22 16:24 28:22,25 40:5 46:4 64:25 123:2 possibly 110:14 post 47:7 104:6 104:15 posted 41:3 71:13 71:15,17 72:18 75:1,3,13 83:18 84:5,6 92:21 93:4 98:12 122:9,12 posting 38:4,9,14 38:16,20,25	43:15 72:15 104:5 postings 4:14,16 37:20 43:3,8 44:1,10,18,25 92:24 posts 98:9 posturing 121:23 potential 7:15 10:10 34:22 68:23 92:16 potentially 89:17 92:22 109:4,13 practical 65:2 93:20 practice 63:10 64:7 precise 6:23 20:16 20:17 25:7 82:5 precisely 10:25 20:9 25:7 predicated 114:21 preferred 116:7 pregnancy 88:18 92:4 pregnant 88:16 premature 28:13 28:15 Premier 29:11 Premiere 111:17 premises 78:9,10 preparation 120:25 prepared 71:10 120:23 121:4 preposterous 72:22 presence 51:3 121:22 PRESENT 2:23 presentation 24:12 presentations 11:7 91:16 PRESIDING 1:3 pretending 39:7 pretty 51:10 56:1 68:11 81:2 98:15 111:10	119:1 Previous 4:5 PREVIOUSLY 4:8 price 34:21,25 35:4,21 40:18 44:15 117:18,24 118:6,9,13 prices 117:17 118:1 primarily 117:19 118:6 primary 32:2 prior 52:25 63:13 87:5 113:23,24 Pro 14:1 probable 21:16 21:17 probably 9:1 51:3 61:3 62:4 65:20 69:15 81:16 90:11 112:12 114:24 121:22 problem 22:15 30:14 43:10,14 50:9 93:23 problems 7:15 27:10 proceed 50:25 110:16 proceedings 1:14 4:5 126:8 process 4:22 30:4 produced 121:16 product 33:6 85:22 97:14,16 97:17 products 85:15,19 85:25 86:8,14 86:15 89:15 professional 22:20 profitable 59:21 profits 118:25 progress 71:3 progressed 82:15 project 7:21,23 7:24 8:19 9:13 9:14 10:18,20 10:21 11:3,4,6	11:10,11,13,15 11:17,21 12:2,5 12:12 14:6,10 14:14,18,20 15:3,6,9 19:16 47:8 61:21 62:9 62:10,11 63:1 69:17 83:17 84:6 projected 97:15 97:18,23 projects 19:18,20 45:1 62:13 property 114:12 proportional 89:14 106:11 proposal 26:17 proposals 26:22 proprietary 5:14 prosecute 98:17 prosecuted 98:15 98:19 prosecuting 98:16 protect 23:1 protected 118:10 protocol 25:3 protocols 32:25 proved 49:3 provide 34:15 47:6,19 48:6 59:22 69:5 91:12,14,15 92:9 93:9 94:14 provided 5:3 26:9 49:6,8,13 59:18 88:5,23 provider 27:19 29:6 85:18 88:11 94:8 109:14,24 providers 25:19 27:1 109:3 provides 92:12 providing 59:2,3 59:5 provision 40:11 public 84:19,20 84:21,22,24 85:2,11 90:17 92:18 100:5	101:14,22 106:14 107:16 107:17 108:2 publicity 96:21 publicly 35:8 publishing 103:18 pulse 69:21 purchase 40:9,12 45:16,19 85:24 purchased 18:9 112:24 purports 38:9 purpose 41:10 pursuant 41:19 42:1 45:6 46:5 126:5 put 35:19 42:11 45:15,16 61:21 62:9 80:20 106:3 p.m 125:17 P.O 45:16 P.3 82:18 P1 65:13 82:7 116:4 119:23,25 P10 54:15,16 P2 19:11 65:16,19 116:4 119:23,24 119:25 P3 5:15,25 6:3,7 6:10 66:4,5,7 104:24,24 112:20 116:5 P4 18:4,9,12,14 18:21 19:13,15 19:21,24 20:8 20:12,21 21:1 21:10,14 112:18
Q				
quality 33:6 question 9:13,20 9:23,25 10:3,6 14:12 17:13,25 28:2 29:25 37:16 43:5 47:13 48:20 57:11,15 62:6 75:10 82:21 84:2 87:19 92:7				

92:25 96:14 116:18 118:8,23 123:18 questions 7:22 9:11 46:13 47:23 49:21 64:4 92:14 quickly 65:19 quite 18:15	95:20 96:4 REBUTTAL 4:7 4:8 51:19 recall 7:6 24:17 24:19,20,21 25:5,22,24 31:16 32:10,19 39:15 50:22 60:12,16,21 67:22 70:24 71:11 80:23 receive 39:23 received 26:17 37:12,13 44:20 66:13 87:14,15 116:2 receiving 31:16 66:20 67:3,12 recess 46:22 125:17 recesses 125:13 recipe 47:8 recollection 121:1 122:8,25 124:8 recommendation 21:15 recommended 21:7 record 32:16 33:9 46:16 54:11 67:20 68:19 83:21 98:15 107:17 111:15 111:23 recover 117:16 Recross 3:3 47:24 RECROSS-EX... 48:2 recruited 53:11 redirect 3:3 46:14 47:1,4 reduced 29:10 116:7 referring 5:10 112:10 123:24 refers 40:8,11 reformed 68:12 refresh 120:20,25 121:1 122:8,25 124:8	regardless 98:17 registers 31:1 registration 87:3 regulations 126:10 related 18:3 30:14 75:25 76:12 77:16 93:4 104:5 relation 28:18 66:14 76:5 relationship 100:16 release 7:14 releasing 38:12 relevant 120:20 relied 69:9 rely 120:23 remain 50:7 remember 6:20 6:22 7:6 24:6,17 61:3 69:12 70:3 110:18,21 remind 36:17 renewal 83:2,7 renewed 27:8 reopen 48:12 repeat 9:3 37:24 45:8 rephrase 17:6 43:5 replace 43:11 82:16 89:25 97:9 replaced 79:12 116:4 replacement 82:15,19 95:4 95:10 97:5 116:3,8 118:22 120:9 replacements 97:21 replacing 97:11 119:5 replied 72:22 report 5:3 11:22 14:4 15:12 34:15 47:21 63:1,7,8,13,17	63:23,23 64:7 64:14,17,21,23 65:4,9 69:17 80:1,2,23 83:18 84:6 102:2 reported 4:5 5:20 58:18,20 80:14 80:15 99:6 101:17,21,22,25 126:7 reporter 1:21 4:4 126:15 REPORTER'S 1:14 reporting 72:1 reports 11:2,5 12:8 15:8,8,10 31:16,23 63:22 69:23 70:1 91:15 119:18 represent 116:23 reputation 118:25 request 25:8,12 26:17,22 39:15 41:8,20 42:2,4,5 43:22 44:6,7,9 44:12 requested 42:20 121:12 require 97:4 106:9 requirement 97:25 requirements 46:3 requires 46:7 120:2 rescinded 43:22 research 92:20 resist 22:6 resolution 124:25 respects 58:3,7 respond 92:14 responded 27:1 responding 25:12 response 30:25 48:20 responsibilities 102:7 responsible 52:16	52:17 rest 56:4 result 8:3 35:22 90:19 108:15 111:7 retain 90:21 108:23 retained 109:13 retaining 90:23 retire 78:25 retirement 79:3 retract 79:3 retrieve 79:21 80:11 return 50:15 95:10 114:13 returned 107:12 returning 50:12 Reuven 72:1 revelations 76:25 revenue 96:12,15 108:2,3 revenues 90:20 114:25 115:12 116:24 117:6 118:25 reverse 6:11 8:12 8:16 10:18 12:9 12:22 13:1 22:24 56:12 63:21 64:24 reverse-engineer 62:9,11,14 63:3 reverse-enginee... 12:19 13:3,18 reverse-enginee... 7:21 10:21 11:3 11:10 12:2 14:14,17,23 review 5:3 123:1 RFI 110:20 RICHARD 2:18 Rick 5:5 ridiculous 38:19 39:2 right 4:15 9:20,24 10:24 12:22 15:21 17:19 18:18,22 19:21 19:24 20:2,19
R				
R 2:13 raise 51:17 87:8 107:4 108:15 raised 106:15,17 106:18 ramp 119:6 range 90:8 Ray 71:21,25 73:17 75:19 77:24 78:7,9 80:15 109:7,9 reach 51:2 reached 45:6,13 48:5 51:9 reaching 51:7 react 16:19 reaction 96:13,16 read 6:21 9:5 38:15 40:6,7 62:22 63:5 64:2 64:21,23 101:7 ready 28:10,19 98:18 real 41:7,20 42:2 42:4,5 44:7,9,12 really 11:21 15:18 22:25 38:18 54:23 117:23 reask 28:4 57:15 75:10 84:2 reason 15:16,16 15:21 16:1,8,11 16:25 17:3 22:14 28:21 30:1 65:8 104:18 124:18 reasonable 38:24 89:1 reasons 22:11				

21:2,15,17 23:19 25:16 26:23 27:1,13 27:19,22 28:11 28:13,17,23 29:1,6,9,24 30:6 30:10,16 31:21 31:22 32:12,15 35:5,17 36:19 36:25 38:4 39:17 40:12,13 40:20 41:8,12 41:21 42:3,7,18 43:4,9,18,19 44:2,7,13 45:13 45:14,23 46:1 49:14 51:15,17 52:18 64:11 67:16 70:6 72:9 72:11 74:9 77:22 82:13 88:4 90:15 92:7 93:8 107:15,20 109:13,16,18 110:7,13,19 111:24 113:9 116:12 rights 41:24 risk 22:9 69:3,4 role 99:6 101:23 rolled 65:13,16 rolls 66:5 ROM 15:24 16:14 23:2,9 29:23 30:23 31:1,8,11 31:14,17,21,24 32:3,6,9,22 33:7 33:12,15,22,25 42:13,14,17,17 42:21,21,24,24 43:2,6,12 83:19 83:23 Ron 6:13 122:15 Room 1:22 roughly 59:4 76:7 royalties 113:16 113:19 114:9,12 royalty 113:24 RPR 1:21 126:16 Rubin 2:24	Rule 4:5 rumors 34:22,24 run 32:12,18,21 98:3 Rupert 99:20 101:8 rush 93:14 <hr/> S <hr/> s 34:22 SACV 1:7 safe 17:15 safety 41:10 sale 115:18 sales 92:13 salespeople 91:12 San 2:15 67:7,10 Santa 1:16,23 4:1 satansplayhouse 18:9,21 satellite 1:5 2:3 6:16 76:12 88:17,22 89:10 94:7,9,16 95:12 95:15,22 96:2 98:3,11 102:3,6 102:7,8 105:1,1 105:5,14 113:12 117:10 save 41:24 saw 64:22 65:4 80:1,2 Sayeedi 40:15 saying 8:4 48:16 70:1 says 16:4 38:12 49:7 81:2 88:1 100:15 101:2,4 101:7 122:10,11 scanning 13:23 schematics 17:4,8 Scientific 8:20 9:21 10:4,7 scope 48:9,11 Scotland 72:5 scrambling 13:4 scrambling/des... 13:11,14 screen 100:22 screens 96:9	seated 46:25 51:22,23 SEC 87:6 Seca 76:15 second 18:24 38:13 39:25 53:4 65:25 66:23 119:11 122:7 second-guess 105:13,15,16,21 second-largest 108:1 section 63:9,12 100:15 126:5 secure 19:22 31:21 69:16 97:24 113:3,5 securing 20:23 Securities 87:4 security 15:1 24:15 66:2 71:25 82:22 92:10 117:14 118:12 123:1 see 14:7 16:11,19 17:16 37:6 38:5 38:6 46:21 63:23 69:21 79:20 87:21 95:17 100:15,25 101:12 110:3 115:5,5 125:14 seeing 63:13 seeking 26:22 seen 4:16,17 6:20 23:7,20 31:20 31:23 33:3 62:18 segment 22:9 sell 108:13 111:7 114:18 115:24 selling 113:11 114:2,3 115:21 sense 65:1 sensitive 31:5 sensors 31:4 sent 15:8 41:19 44:6 122:15 separate 103:4,5	103:7,9,12,15 September 64:15 73:23 74:11 75:16 served 102:17 service 88:23,24 113:12 services 10:13 86:9,15,16 88:6 89:15 96:19 111:7 114:3 116:23 session 46:24 set 16:20 31:2 81:25 setting 52:16 set-top 8:2,5,7,9 10:11,12,19,22 11:1 13:18 42:10,18 88:6 88:11 106:12 113:8,8,14,16 114:13 116:15 seven 26:2 60:10 60:19 61:6 share 7:24 8:4,19 9:15,21 10:1,3,7 12:24 18:6 92:18,22,23,24 93:2 94:14 shareholder 54:10 shares 35:13 101:7 108:18 Shkedy 59:20 60:13,23 61:4 61:17 62:8 short 26:4 shortly 77:14,18 short-circuit 87:24 110:4 114:24 show 8:22 24:12 36:11 39:18 47:20 63:25 showed 79:24 shown 41:15 42:4 65:8 shut 110:16 side 51:6 68:21	114:16 sides 121:23 signal 16:24 signed 77:7,11,14 77:19,22 78:1 significant 32:14 33:3 36:5,7 89:7 89:9 93:23 95:21,24 96:2 97:2,4 107:24 118:9 119:1 significantly 97:13 108:20 silicone 57:4,5,7 simply 26:5 57:11 72:24 82:21 89:13 93:2 97:21 107:17 simulate 40:24 simulcast 109:4 110:1 119:22,25 simulcrypt 110:2 110:3,5,22,23 111:18,19 119:22 simulcrypting 110:11,14 111:6 111:13 single 22:7 24:20 24:25 sir 9:4 10:25 19:3 25:22 28:2 46:7 48:14 50:20 51:16,21 53:15 54:18 55:19,24 56:5 59:3,5,8,25 61:23 62:18,25 63:8,14,20 66:16 67:1,13 67:15 68:2 69:3 73:7 75:2 76:3 76:17 77:5,11 78:5 79:1,5 80:19 82:9,21 83:17 84:4 85:11,13 91:3 93:13 100:4 104:23 120:18 Siskin 99:18 102:9,11,12,13
--	--	--	---	--

102:16 sit 63:5 situation 8:6 21:20 28:19 46:6 95:12 117:20 118:7 six 16:14 40:2 54:17 60:10,19 61:6 65:20 66:1 six-year 83:6 Sky 54:6 slides 15:10 slowdown 36:8 small 11:11 35:23 41:5 88:14 106:13 117:23 smart 15:1 22:3 32:15,17 38:13 40:2,3,8,11,19 40:23,24,25 41:1,19 42:9 43:10 45:6,10 45:17,21,25 56:7,9,22,25 62:14 68:11 74:2 97:5,10,12 115:18,21,23 119:12,17 120:6 120:11 SMI 20:13 22:5 SNYDER 2:13 67:20 83:21 87:13 121:15,18 122:2,19 Sofia 23:24 software 42:10 61:14,17 114:11 114:13 120:2,3 sold 108:18 solution 14:25 19:22 21:23,23 22:4 Solutions 14:22 solved 43:14 somebody 29:3 33:2 34:5 39:6 60:7 63:18 69:19 81:8 83:18 84:5,6 89:2 92:21	110:16,25 114:6 114:9 somewhat 75:23 soon 23:17 40:5 sooner 97:6 sorry 9:3 19:3,4 22:19 25:23 35:3 37:15,17 37:24 45:8 48:15,18 75:9 83:25 100:21 105:22 106:16 106:22 sort 40:25 sounded 81:4 sources 93:3,10 Spain 23:9 speaking 11:12 13:1 23:13 29:17 special 56:18 120:9 specific 6:21 9:18 16:11 24:6 42:10 69:5 71:17 specifically 7:6 19:21 24:3 69:12 speculation 111:10 spell 52:1 spent 11:9 121:3 spoke 75:7 80:21 spoken 32:5 springboard 85:15 STAND 4:10 standalone 59:1 standard 13:14 57:1 120:5,11 standardization 13:13 standing 60:1 Stars 2:20 start 9:1 50:17 56:12 88:17 98:3 started 14:25 18:22 21:22	58:11 65:12 75:23 76:7 103:1 starting 49:1 75:22 107:18 109:12,17 starts 87:23 90:12 93:17 state 51:23 92:17 93:3,9 statement 7:7,17 24:25 25:6 77:8 77:11 78:5 87:3 88:7 states 1:1,22 10:16 39:25 40:17 126:6,10 state-of-the-art 59:15 status 24:13 31:17 92:10 stay 27:4 50:14 stenographically 126:7 step 50:21 51:6 steps 50:22 STMicro 30:14 30:19 stock 34:21,25 35:4,14,21 stole 81:8 stolen 18:3 80:18 Stone 2:18 3:4,6 4:12 5:13 7:8,9 8:22 9:1,8,9 17:17 28:5 35:11,12 36:18 37:7,18 38:3 39:18,21 46:13 47:10,25 48:3 48:17 49:19 stop 51:16 92:4 stops 99:22 straight 73:21 strategy 52:16,17 52:18 57:3 85:17 94:4,11 94:13 stream 13:13 106:4 110:16	125:3 Street 1:22 strictly 41:17 strike 57:13 58:23 62:5 88:18,19 92:2 strong 98:15 studied 119:18 study 25:16,19 26:2,8,9,20 stuff 18:20,21 style 33:11 subject 43:7 50:22 74:7 88:20 subscriber 116:9 116:17 117:2 subscribers 55:12 89:7 96:19 114:15,19 subscription 53:1 63:19 85:16 91:8 118:1,4,10 subsequently 53:7 60:25 84:9 84:21 124:15 substandard 81:20 substantial 96:24 successful 85:6 90:21,25 successor 109:16 109:18 sued 98:23 suffered 55:1 sufficient 81:21 suggestion 72:23 suit 99:2 Suite 2:8,15,20 summer 58:13 66:7 70:14 73:15 75:22 83:14 84:11,12 123:8 superior 58:7 supervise 69:6 supervisor 72:3 supplier 8:6 29:11 109:22 supplying 8:5	support 91:12 supported 35:16 supporting 91:15 suppose 26:13 supposedly 78:15 sure 5:14 7:5 57:14 64:5 89:4 96:7 surprised 16:7 18:5 surprising 65:1 suspected 81:10 suspicion 72:24 sustain 67:24 84:1 Sustained 122:3 Svi 60:23 swap 39:15 41:8 41:20 42:2,6,7,8 42:15,21,21 43:17,20 44:1,6 44:9,13,19,24 45:7,10,18 46:3 46:5,7 48:8,22 49:1 93:14 95:16,17,23 97:17,23 98:7 98:10,18 105:2 105:10 119:9 120:8 swapped 43:2,6 48:6 115:23 swapping 94:18 98:4 swaps 95:2 119:6 swap-out 40:2,3 97:15 Swiss 35:14 switch 4:4 88:24 89:3,11,16,18 89:22 90:3 switching 89:1 Switzerland 7:3 39:11,12 SWORN 4:9 51:19 system 12:20 13:2 13:4,4,8,15 15:15,17,18,18 16:18 17:9 18:16 19:7,10
--	---	--	---	---

22:20 23:11,14 23:18 28:11 38:10 39:10 46:1 54:5,5,8,25 55:4,6,9,10 56:25 58:4,6,7 64:8 69:11 71:7 72:15 82:4,22 83:11 85:25 88:1 89:3,11,12 89:16,16,19 90:7 91:19 93:13 98:9,12 99:1 104:6 105:24 106:7 110:8,9,17 112:15 116:7 117:14 118:11 118:18 systems 88:11,16 110:6 112:12 115:16	111:23 112:14 115:20 119:10 122:5 123:9 talked 4:25 60:17 63:8,18 64:7 66:16 69:19 80:2 82:8 93:17 113:8 118:24 talking 18:20 65:12 113:22 Talks 77:16 Tarmey 76:18 Tarnovsky 47:7 47:20 66:13,20 67:3,10 68:5,7 68:11,24 69:1,7 70:5 71:5,6,12 71:15 72:14,18 73:3,8,10,15,19 74:24,25 75:3 75:12,13 77:2,2 102:21 103:20 104:1,10,15 122:15 task 57:12 tasked 57:18 team 31:9 32:12 42:6 45:4 technical 6:6 58:21 104:21 technological 94:14 technologies 76:9 107:19 108:7 124:20 technology 5:15 6:10 7:13 15:19 15:20 18:4,14 19:24 22:2 44:15 52:20 89:1 108:13 Telecom 125:4 telephone 73:2 telephoned 71:21 Telepiu 125:4 television 53:1 63:19 85:16 91:9 118:1,4,10 tell 19:1 24:4 34:12 44:17	52:13 71:24 73:14 76:3 80:14 87:2 90:5 106:10 120:18 telling 71:11 ten 32:16 tens 90:3 98:24 tentative 51:10 terminated 26:8 26:14 terms 8:5 118:22 terrible 27:7 test 32:8,12,18,21 32:25,25 114:12 testified 4:13 7:2 25:8,18 27:24 28:6,9,25 32:18 39:14,22 42:13 45:9 58:1,4 69:24 testify 8:18 12:17 29:12 32:8 45:5 testimonial 50:2 testimony 7:4 12:8 17:1,11 29:4 32:10 38:16,25 41:7 42:2,5 44:5 55:6 56:5 66:19,24 91:25 92:5 117:25 118:2,3 118:5 120:24,25 122:20 Texas 2:8 67:8,10 thank 9:8 35:11 38:2 46:13,15 46:23 47:3,25 49:19 50:19,20 51:12,15,16,21 52:6 59:13 60:2 64:13 74:9 104:23 105:23 115:9 117:7 theoretical 69:4 they'd 49:12 thing 6:22 7:12 70:21 92:18 113:9 116:14 things 15:12 20:24 29:18	53:14,17 56:10 57:17 69:19,20 71:4 74:17 85:13 89:25 90:20 91:5,17 91:22 92:1,15 93:5,7,12 94:3,6 94:19 105:23 108:8 110:13 118:24 119:1,24 120:9,20 think 8:21 12:21 14:24 16:1,8 18:7 20:23 23:6 25:3 29:25 34:24 35:9 36:4 36:22 37:10 38:23 41:11 50:10 60:16 61:15 63:22 64:3 68:23 69:3 69:24 72:4,5 80:20 81:1,10 81:15 88:25 89:13 90:14 94:23 95:24 98:15 103:1 111:11 112:25 113:4 120:14 thinking 121:3 third 40:8 124:2 thought 16:11 35:4 58:6 122:10 thousand 11:12 threat 93:25 94:5 110:23 three 13:10 22:8,8 65:25 87:23 97:15 111:18 throw 119:13 thrown 90:1 till 101:22 time 5:21 10:4 11:8,8,19 15:9 18:23,24 27:3,8 27:18 28:11,12 28:22 31:24 34:2 36:19 37:7 42:14 43:19	47:6 49:24 50:10,25 52:25 53:3,24 54:4 56:2,11 57:25 58:14 61:21 63:14 64:13,18 65:4 66:9 68:10 69:10,14 70:1 70:12 73:1 75:20 76:16 77:11 80:4,6,7 81:18 83:5,16 84:12,22 85:1 87:10 89:5 90:3 97:11,18 110:6 110:9,19 120:21 121:25 123:3,10 123:16 125:8 timeline 120:19 times 69:16 115:23 timing 107:20 Title 126:6 titles 61:7 today 50:3,6 53:8 101:5 108:4,5 113:20 told 15:2,5 16:13 24:15 25:21 27:10,15 30:18 56:8 71:9,12,15 72:5,6,8,13,16 72:17 73:1,6,8,9 73:12,17,18 74:23 75:2,3,12 75:13 80:8,10 80:16 92:1 101:14 109:11 111:3 top 36:14 75:8 99:22 122:8 topics 51:11 total 118:15 touch 25:2 trace 22:25 track 32:16 33:9 54:11 trade 35:13 traded 35:8,15 Trader 73:23
T				
T 2:4 take 7:24 8:3,19 9:15,20 10:1,6 12:24 33:6 35:24 46:2,17 52:22 62:16 taken 21:24 36:6 45:20 takes 84:25 85:1 105:24 106:1 111:2 talk 7:20 15:12 17:21 18:14 21:19 24:14 54:2,11,17 55:22 58:5,10 60:2,9,24 65:11 66:4,23 67:7 68:7 70:5,18,21 74:2 75:19 77:6 77:15 80:4,6 81:23 88:15 93:11 95:6,12 97:1 99:4,6 102:9 103:4 104:25,25				

trading 121:21	UK 54:6	vertically 36:9	45:25	113:3
train 69:6	ultimate 124:15	Vic's 73:24	wasn't 9:25 23:3,5	weren't 4:18,24
transaction	124:24	view 81:1 94:25	23:9 27:21 56:2	8:8 65:8
112:25	ultimately 7:24	106:8	58:25 59:15	West 1:22 2:14
transcript 1:14	9:15,20 117:10	viewers 106:10	61:5,11 65:19	we'll 46:17 50:18
126:7,9	117:12	Virginia 66:25	67:5 69:25	51:8 70:6 86:6
transport 13:12	unchecked 96:25	virtue 101:7	76:14 81:12	91:24 96:11
13:13	underlying 37:11	visiting 51:7	85:11 98:19	we're 62:24 70:21
trial 1:15 4:19,21	understand 6:15	Vivendi 124:15	watch 106:11	83:2 92:2,4
30:4,6,8	8:1,2 17:2,15	124:22 125:5	watching 41:13	we've 18:20 51:9
trickles 117:10	32:25 33:2,13	voice 82:3	Waters 34:8	61:16 97:12
tried 79:3 81:7	36:15 37:19	Volume 1:8 4:2,6	way 8:1,2 11:4	104:6 113:8
true 39:1 46:7	44:5 48:4 56:21	volumes 80:21	13:15 22:9,18	whatsoever 11:5
54:18 59:8	57:7 85:20	votes 100:9	22:25 45:2 46:4	white 26:6,11
85:13 101:15	114:2 123:18	vs 1:7	59:8 63:13 81:8	wholly 58:14,15
121:16 126:6	understanding	vulnerabilities	89:7,9 93:1	widespread 93:20
truly 50:6	6:18 12:7 17:20	6:3	94:22 121:9	width 105:24
trusted 69:1	25:20 26:16	vulnerability 4:19	ways 5:24 68:16	106:1,9,11
try 15:19 20:17	27:2,6 32:4 37:4	vulnerable 22:20	95:17	wife's 80:21
87:7 94:2,2,11	39:8 40:16,23	42:25	weak 17:16,18	WILLETTS 2:5
trying 10:6 12:24	41:2,5 43:1,16		weakness 56:24	win 107:18
82:5 84:15	44:8 45:24	W	weaknesses 6:3	window 80:17
107:20	understood 64:23	W 2:13	website 47:9	wise 111:11
Tuesday 1:17 4:1	88:10	Wade 2:4,6 52:9	71:18 122:9	Withall 79:19
tune 67:16	unfortunately	wait 28:2 51:8	Wednesday 60:22	80:5,7,11,14,15
turn 79:8 87:18	80:16	111:12,13	weekly 45:1	81:3
turned 36:2 79:8	unhappy 76:10	Walker 66:13	weeks 30:11	Withall's 80:23
79:9,11	United 1:1,22	want 15:12 50:5	Welch 2:4,6 3:9	witness 4:8 8:23
turning 68:20	10:16 72:1	50:12 52:22	49:24 51:9,14	9:3,6 17:14
turns 80:6	126:6,10	54:2,2,23,23	52:9,9,10,12	37:15,17 38:1
TV 36:8	unmodified 18:9	60:9 61:22	57:10,16 62:5,7	39:18 46:24
two 10:3 12:5	untouched 33:8	65:11 70:18	62:21 63:25	47:14 48:10,15
21:23 28:22	untrustworthy	74:3,11 75:19	64:6 68:1 74:10	50:9,14,19,22
29:17 36:4	73:3,10,15,19	81:23 83:13	74:14 75:9,11	51:13,19,20,22
39:11,12 61:20	upfront 116:14	87:19,22 93:11	83:24 84:3	51:25 52:3,5
67:15 81:16	use 14:7 22:15,19	94:17 95:1,17	86:22 87:1,10	67:21 83:22
97:9 109:11	85:14 88:22,23	99:4 100:22	87:17 88:19,21	88:20 100:25
110:5 119:21	97:23 104:19	101:7 107:16	92:3,8 100:14	116:11,22 117:4
125:2,14	105:24 110:5	125:6	101:1 115:4,11	122:22 123:24
two-year 12:10	utilize 89:2,11	wanted 63:16,19	116:13,18,21	124:5 125:6
type 22:6 66:20	U.S 8:3,19 10:2	64:9 66:19 67:4	117:8 120:14,17	witnesses 3:3
types 85:15	11:9 126:15	68:3 73:9 83:5	121:17,25 122:4	50:11
typical 81:3	V	89:19 108:23	122:24 124:1,4	worded 63:13
typically 55:3	vacation 72:5	110:15	124:7 125:8	wording 8:21
91:11 99:2	various 118:5	wants 98:11	well-known 56:3	words 27:7 33:4
116:23 117:5	venture 45:3	warning 92:6	76:16	96:1 104:19
118:13	70:13 74:5,20	warranty 40:11	went 26:25 53:3	work 14:22,25
U	77:12	40:18 41:20	54:18 82:8 85:2	52:23 53:3,10
UEC 8:8	version 121:18	42:1 44:7,16	90:17 101:22	53:13 56:11
		45:6,10,18,21	107:17 108:2	111:15

<p>worked 14:10,13 14:17,20 19:15 20:12,21,23 21:1,10,14 33:24 62:10 72:2 104:10,12 working 20:8,9,24 60:18 62:13 63:21 77:12 83:7 101:16 works 109:9 world 22:16 56:7 81:17 90:25 91:1 94:15 111:16 world's 90:6 world-famous 56:1 world-renowned 56:15 70:7 wouldn't 56:20 61:2 63:20 119:16 write 103:20 writes 103:22 writing 45:15,16 written 11:5 15:8 31:16 34:15 45:17,19 91:14 wrong 96:9 wrote 63:22 120:19</p> <hr/> <p style="text-align: center;">X</p> <p>X 3:1</p> <hr/> <p style="text-align: center;">Y</p> <p>yeah 10:5 45:9 80:2 81:3 124:11 year 19:1,3,5 36:5 38:13 54:21 55:18 102:21 104:4,14 years 12:5 19:11 28:22 32:17 33:8 48:16 49:2 49:4 54:17 64:17 97:9,15 98:7 107:22</p>	<p>109:11 111:18 yesterday 4:17 y'all 94:11</p> <hr/> <p style="text-align: center;">Z</p> <p>zero 32:17 33:8</p> <hr/> <p style="text-align: center;">\$</p> <p>\$128,000 104:2 \$20 81:12 \$200 59:9,14,17 100:6 106:20 107:4,14,14 108:16,16 \$5 119:14,16 \$5,000 18:3 \$5000 104:15</p> <hr/> <p style="text-align: center;">0</p> <p>03-950 1:7</p> <hr/> <p style="text-align: center;">1</p> <p>1 55:16,18 116:24 116:24,24 117:5 117:5,23 118:15 1-053 1:22 1/2 116:24,24 117:5,23 118:15 10 33:12,15 42:13 42:17,21,24 43:2,6,12 63:25 90:10 100:10,11 100:20,21 11 42:14,17,21,24 43:2,7,12 12th 124:4 12:00 50:7 12:02 125:17 1400 2:20 15 8:23 16 1:8 4:2 63:9 64:1 18 65:23 82:15 97:24 1989 19:6 1990 33:7 54:12 1995 52:23 53:3 53:10,25 85:17 1996 54:14 55:22 1998 25:12 26:18</p>	<p>83:2 1999 2:20 25:15 26:12,15,18,20 33:12 39:23 40:17 41:4 42:22 43:15 44:6</p> <hr/> <p style="text-align: center;">2</p> <p>2 33:25 119:19 2.95 90:16 20 36:20 46:21 112:12 200 106:18,23 107:12 200,000 55:12 2000 12:5 30:19 33:19 36:20 41:17 43:3,8,19 44:1,10,18,25 65:4 70:10,14 101:20 102:21 104:1,4,8,14 112:7 2000/2001 70:12 2001 31:17 34:21 39:15 70:22 71:22 73:16,18 73:23 74:11 75:16,22 101:20 112:9,14 124:4 2002 12:6 18:10 31:17 35:16 36:5 64:15 70:16 76:13,23 78:19,22 112:17 112:18 2003 19:9 21:22 63:14 65:5,6 112:22,24 113:1 2004 19:9 21:22 86:5 113:3,4,23 113:24 2005 15:1 46:12 2005/2006 5:21 2007 65:9 2008 1:17 4:1 48:23 49:1 126:12 2008-05-06 1:25</p>	<p>2059 120:16,18 122:1 2060 3:13 86:24 87:11,15 100:12 115:4 22 108:2 24 82:15 97:24 2401 2:7 2505 3:14 36:12 36:13 37:8,13 26 108:3 122:12 2600 2:15 275 2:14 28 126:6</p> <hr/> <p style="text-align: center;">3</p> <p>3 23:2,9 29:23 30:23 31:1,8,11 31:14,17,21,24 32:3,6,9,22 33:22 3M 63:10 3-21 122:10 3-26 122:11 310 2:21 34 8:23 9:2 35 8:24 9:2 37 3:14 391 5:8,11,14</p> <hr/> <p style="text-align: center;">4</p> <p>4 3:4 8:24 9:2 37:22 123:19,20 4th 1:22 40,000 67:16 411 1:22 415 2:16 450 60:15 62:3 47 3:5 114:23 115:3,4 48 3:6</p> <hr/> <p style="text-align: center;">5</p> <p>50 5:17 28:16 90:24 111:15 52 3:9 558-8141 1:23 57 87:18</p> <hr/> <p style="text-align: center;">6</p>	<p>6 1:17 4:1 600 60:15</p> <hr/> <p style="text-align: center;">7</p> <p>7 11:13 126:12 70 63:25 700 2:8 713 2:9 714 1:23 753 126:5 77057 2:8 785-4600 2:21</p> <hr/> <p style="text-align: center;">8</p> <p>8 9:2 8/20/2000 3:14 82 100:8 828 39:19 43:22 856 37:22 87 3:13</p> <hr/> <p style="text-align: center;">9</p> <p>9:01 4:3 9:54 46:22 90067 2:21 92 115:21 92701 1:23 94 55:13 65:13 94111 2:15 9472 1:21 126:16 95 59:4 81:24 82:6 101:16 952-4334 2:9 96 53:25 54:16,23 54:25 55:21 56:11 58:12,13 58:24 60:23 65:16 70:8,9 82:4,6,9,23 84:21 111:24 97 68:8 82:9,23 100:9 112:1 98 62:17 69:14 70:1 81:25 82:9 82:23 83:14,17 84:11,12 95:8 101:17,20,22 112:3 115:21 984-8700 2:16 99 10:5 59:9,23</p>
--	---	---	--	---

66:5,7 70:1
84:12,18,23
85:2,7 86:23
95:6 100:2,5
101:2,25 107:21
108:14 109:12
109:19 112:5
122:13,17 123:8