UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

HONORABLE DAVID O. CARTER, JUDGE PRESIDING

- - - - - - -

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

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Jury Trial

Santa Ana, California

Tuesday, May 6, 2008

Debbie Gale, CSR 9472, RPR

Federal Official Court Reporter

United States District Court

411 West 4th Street, Room 1-053

Santa Ana, California 92701

(714) 558-8141

EchoStar 2008-05-06 D16V4

```
 1    APPEARANCES:

 2

 3    FOR PLAINTIFF ECHOSTAR SATELLITE CORPORATION, ET AL.:

 4
                 T. WADE WELCH & ASSOCIATES
 5               BY:  CHAD M. HAGAN
                     CHRISTINE D. WILLETTS
 6                   WADE WELCH
                     DAVID NOLL
 7                   Attorneys at Law
                 2401 Fountainview
 8               Suite 700
                 Houston,  Texas 77057
 9               (713) 952-4334

10

11
      FOR DEFENDANT NDS GROUP PLC, ET AL.:
12
                 O'MELVENY & MYERS
13               BY:  DARIN W. SNYDER
                     DAVID R. EBERHART
14                   Attorneys at Law
                 275 Embarcadero Center West
15               Suite 2600
                 San Francisco, California 94111
16               (415) 984-8700
17               -and-
18               HOGAN & HARTSON
                 BY:  RICHARD L. STONE
19                   KENNETH D. KLEIN
                     Attorneys at Law
20               1999 Avenue of the Stars
                 Suite 1400
21               Los Angeles, California 90067
                 (310) 785-4600
22

23    ALSO PRESENT:
24               David Moskowitz
                 Dov Rubin
25
```

```
1                         I N D E X

2   PROCEEDINGS                                      PAGE

3   Stipulation read into the record                 5

4   Plaintiffs rest rebuttal                         7

5   Testimony of Daniel DeHaan taken outside the presence of the

6   jury)

7   Defense Surrebuttal                              28

8   Defendants rest on surrebuttal                   65

9   Plaintiffs rest on surrebuttal                   66

10

11

12  WITNESSES               DIRECT  CROSS  REDIRECT  RECROSS

13  DeHAAN, Daniel
    By Mr. Eberhart                 28

14

    By Mr. Hagan                           45

15

    By Mr. Eberhart                                  57

16

17                         EXHIBITS

18  EXHIBIT NO.                     IDENTIFICATION  IN EVIDENCE

19

    29      (No identification                       65

20          available)

21    136-A   (No identification                     65

            available)

22

    141     (No identification                       65

23          available)

24    826     (No identification                     65

            available)

25
```

1   EXHIBITS (Continued)

2   EXHIBIT NO.   IDENTIFICATION   IN EVIDENCE

3   1510   Subscriber information   7

4   2600   Subscriber information   7

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1   SANTA ANA, CALIFORNIA, TUESDAY, MAY 6, 2008

2   Day 16, Volume IV

3   (2:59 p.m.)

4   (In the presence of the jury.)

5   THE COURT: All right. The jury's present. All

6   counsel are still present, and the parties.

7   Mr. Peled, if you would be seated.

8   Counsel, thank you for your courtesy.

9   This is redirect examination on behalf the

10   EchoStar and NagraStar.

11   MR. WELCH: Your Honor, we have no further

12   questions of Dr. Peled.

13   THE COURT: Okay. Counsel, anything further?

14   MR. SNYDER: Nothing further, Your Honor.

15   THE COURT: All right. Can I start releasing

16   witnesses so that they can return at this point? Do all

17   parties feel confident that I can release Dr. Peled and

18   Andre Kudelski?

19   MR. SNYDER: Yes, Your Honor.

20   MR. HAGAN: Yes, Your Honor.

21   THE COURT: Would you inform Andre Kudelski that

22   he can return to Switzerland.

23   Dr. Peled, you can return to England.

24   THE WITNESS: Thank you, Your Honor.

25   THE COURT: You may step down.

1   (Witness excused.)

2   THE COURT: Counsel, you have a final stipulation,

3   I believe, and then a witness.

4   MR. HAGAN: We have a final stipulation.

5   THE COURT: Go over and get the final stipulation.

6   (To the jury:) They're going to read a

7   stipulation to you.

8   All right. Now, Counsel, did you want to read the

9   stipulation into the record?

10   MR. HAGAN: Yes, Your Honor.

11   THE COURT: Do you have a copy of this, or is this

12   the only copy?

13   That's fine.

14   Kristee, this is our copy.

15   You must have another copy. You can read from

16   your copy.

17   That's ours. File it, please. Thank you.

18   STIPULATION

19   MR. HAGAN: Plaintiffs' EchoStar Communications

20   Corporation; EchoStar Satellite LLC, formally known as

21   EchoStar Satellite Corporation; EchoStar Technologies

22   Corporation; and NagraStar LLC; collectively EchoStar, and

23   defendants NDS Group PLC and NDS Americas, Inc.,

24   collectively NDS, hereby jointly stipulate as follows with

25   respect to Exhibits 1510 and 2600:

1   Number one, Exhibit 1510 represents all available

2   subscriber and access card information from EchoStar's

3   subscriber management database related to a specific

4   EchoStar access card bearing identification No. S0003804033.

5   Two, Exhibit 2600 represents all available

6   subscriber information from EchoStar's subscriber management

7   database related to the specific EchoStar satellite

8   television receiver bearing identification No. R0017942225

9   and R0019355010.

10   Exhibit 2600 also represents all available

11   subscriber information from EchoStar's subscriber management

12   database related to the specific EchoStar access cards

13   bearing identification Nos. S0000121761 and S0002017060.

14   That concludes the joint stipulation between the

15   parties. And at this time we would formally offer

16   Exhibit 2600 on behalf of EchoStar and Exhibit 1510 on

17   behalf of the defendants into evidence.

18   THE COURT: Any objection, Counsel?

19   MR. SNYDER: No objection.

20   THE COURT: Any objection, Counsel?

21   MR. HAGAN: No objection.

22   THE COURT: Both items are received, 1510, 2600.

23   The stipulations just read between counsel are a

24   binding agreement. Their stipulation before them is a piece

25   of evidence that we are to accept.

1   (Exhibit No. 1510 received in evidence.)

2   (Exhibit No. 2600 received in evidence.)

3   THE COURT: Counsel, is there anything further in

4   rebuttal on behalf of EchoStar and NagraStar?

5   MR. HAGAN: No, Your Honor.

6   THE COURT: Are you resting at this time?

7   MR. HAGAN: We are.

8   (Plaintiffs rest rebuttal.)

9   THE COURT: Now, Counsel, you have surrebuttal; is

10 that correct?

11   MR. SNYDER: Yes, Your Honor.

12   THE COURT: All right.

13   (To the jury:) Could you -- my apologies. We're

14 going to do this one by one until we're done today, I

15 promise you. If you would go back to the jury room for just

16 a moment. I'm sorry for the inconvenience. I want to speak

17 to counsel.

18   I think you'll be coming out shortly.

19   (Jury recesses.)

20   (Outside the presence of the jury.)

21   THE COURT: All right. Counsel, the jury's no

22 longer present.

23   On behalf of EchoStar you wanted to raise some

24 issue or problem concerning the next witness, whose name, in

25 surrebuttal, is?

1   MR. SNYDER: Dan DeHaan.

2   THE COURT: How do I spell his last name?

3   MR. EBERHART: D-E, H-A-A-N.

4   THE COURT: And what is the concern about the

5 gentleman? What is he testifying to?

6   MR. HAGAN: Your Honor, we were informed that the

7 defendants intended to call Mr. DeHaan this morning. They

8 also referenced it last night, that it may be a possibility

9 to rebut certain statements that may be offered by

10 Mr. Kudelski.

11   I deposed Mr. DeHaan. I also participated in the

12 direct examination of Mr. Kudelski and sat through the

13 cross-examination of Mr. Kudelski. And I did not see any

14 information from Mr. DeHaan's deposition testimony that

15 could any way rebut Mr. Kudelski's testimony.

16   So if the defendants can articulate what basis

17 they are calling Mr. DeHaan on, then I would be better able

18 to respond to the Court on that issue.

19   THE COURT: I'll do it the quick way. Go find

20 Mr. DeHaan, bring him into court. We'll have an

21 out-of-the-presence hearing right now and find out what

22 those questions are. It's rebuttal, surrebuttal, but it has

23 to make some sense.

24   Would you get the gentleman, please.

25   And that way I'll hear all of them, and we'll see

1   if it's truly surrebuttal.

2   Counsel, what is your offer of proof, while we're

3   waiting?

4   MR. EBERHART: Mr. DeHaan was directly employed in

5   Nagra's BBCO project that Andre Kudelski testified about.

6   Mr. DeHaan will testify that that project involved the use

7   of a FIB, scanning electron microscope, disassembly of ROM

8   code, extraction of ROM code, and that reports were prepared

9   of that work.

10   (The following testimony was taken outside

11   the presence of the jury:)

12   THE COURT: All right. Sir, thank you very much.

13   If you would step forward, please.

14   Would you raise your right-hand.

15   DANIEL DeHAAN, DEFENSE WITNESS, SWORN

16   THE WITNESS: I do.

17   THE COURT: Thank you, sir. If you would please

18   be seated.

19   Now, if this is going to take a long time, I'm

20   going to send the jury home until tomorrow.

21   MR. EBERHART: I expect it's 15 minutes of

22   testimony, Your Honor.

23   THE COURT: Let's hear your 15 minutes, then.

24

25

1   DIRECT EXAMINATION

2   BY MR. EBERHART:

3   Q.   Mr. DeHaan, where are you currently employed?

4   A.   NDS Americas in Costa Mesa.

5   Q.   And where were you employed immediately prior to your

6   employment at NDS?

7   A.   Nagra USA.

8   Q.   During what years were you employed by Nagra USA?

9   A.   2001 through 2003.

10 Q.   What did you do for Nagra USA during the course of your

11 employment?

12 A.   I was a system engineer for them.

13 Q.   Are you familiar with something called the "BBCO

14 project"?

15 A.   Yes, I am.

16 Q.   What is the BBCO project?

17 A.   The BBCO project was a project intended to produce a

18 forced simulcrypt system that was compatible with the

19 Motorola conditional access system.

20 Q.   And was the BBCO project the focus of your work for

21 Nagra USA?

22 A.   Yes, sir.

23 Q.   Was that true for the entirety of the two years you

24 worked for Nagra USA?

25 A.   Yes.

1   Q.   What do you mean by a forced simulcrypt?

2   THE COURT: Counsel, I know what that is. Why

3   don't you proceed.

4   BY MR. EBERHART:

5   Q.   Okay. Do you have any understanding as to whether this

6   project had been approved by the Kudelski Group in

7   Switzerland?

8   A.   Yes.

9   Q.   What was your understanding?

10   A.   My understanding is that the director of the project,

11   the chief marketing officer of NagraVision, received direct

12   authorization from Andre Kudelski.

13   THE COURT: What's the foundation of that? When

14   you say "my understanding," I have no idea really.

15   THE WITNESS: Dr. John Markey told us specifically

16   during the course of the project that he had authorization

17   from Mr. Kudelski.

18   THE COURT: Your out-of-town marketer?

19   THE WITNESS: No. Dr. John Markey, the chief

20   marketing officer of NagraVision.

21   THE COURT: Who is he?

22   THE WITNESS: The former chief marketing officer

23   of NagraVision.

24   THE COURT: Okay. Thank you.

25   Counsel.

1　BY MR. EBERHART:

2　Q.　Did the BBCO project involve any reverse-engineering

3　work?

4　A.　Yes.

5　Q.　What was the focus of that reverse-engineering work?

6　A.　The focus was to analyze the Motorola conditional

7　access, ASIC, the application-specific circuit, to

8　understand how a scrambling key could be extracted from it

9　and shared with the NagraVision conditional access system.

10　Q.　Did that Motorola ASIC have a name?

11　A.　It went by two different names, depending on the -- I

12　believe they changed the name from the original acronym,

13　called TSODA, and then they eventually called it the ACE

14　module.

15　Q.　And did I understand your testimony correctly that the

16　ACE module served both conditional access functions and

17　scrambling functions?

18　A.　That's correct.

19　Q.　Why did Nagra want to reverse-engineer the ACE module?

20　A.　Nagra was unsuccessful at attempting to achieve a

21　simulcrypt agreement with Motorola with any of the U.S.

22　cable operators that were implementing Motorola conditional

23　access.

24　　　Nagra wanted to sell conditional access services to

25　U.S. cable operators. And so they endeavored on a project

1 to figure out a way to allow their CA system to coexist with

2 the Motorola system.

3 Q.   And one of -- withdrawn.

4   Did Nagra -- if the project had succeeded, did Nagra

5 intend to sell set-top boxes that used the information that

6 was developed in the BBCO project?

7 A.   As I recall, NagraVision was not in the business of

8 selling set-top boxes. They sold conditional access. But

9 their partners would sell set-top boxes in cooperation with

10 Nagra, and those boxes would then be equipped with Nagra

11 Smart Cards.

12 Q.   Okay. And so Nagra Smart Cards would have been

13 included in set-top boxes to be sold under this forced

14 simulcrypt?

15 A.   Yes, sir.

16 Q.   And those set-top boxes to be sold under this forced

17 simulcrypt would have displaced set-top boxes that would

18 have been purchased -- rather, sold by Motorola; is that

19 correct?

20 A.   Yes, that's correct.

21 Q.   What was the budget for the BBCO project over its two

22 years?

23 A.   As I recall, the total project consumed about

24 $13 million, give or take.

25 Q.   How much of that $13 million was spent on reverse

1   engineering?

2   A.   About a quarter of it.

3   Q.   So approximately $3 million?

4   A.   Yes.

5   Q.   Okay. Let's talk more specifically about the

6   reverse-engineering methodology. Was acid used to

7   decapsulate the Motorola ACE module?

8   A.   Yes.

9   Q.   Who undertook that work?

10   A.   A firm called Analytical Systems.

11   Q.   And was -- what was Analytical Systems' relationship to

12   Nagra USA on the BBCO project?

13   A.   A hired vendor.

14   Q.   So is it fair to say that Analytical Systems was a

15   consultant to Nagra USA on this project?

16   A.   Correct.

17   Q.   Did Analytical Systems undertake any other steps to

18   reverse-engineer the Motorola ACE module?

19   A.   Their participation included decapsulating the chip,

20   attempting to -- well, extracting the microprocessor

21   firmware from the chip, taking scanning electron microscope

22   photographs of each layer of the chip, and attempting to

23   help create models to characterize each of the standard

24   cells within the chip.

25   Q.   Was a FIB ever used, or focused ion beam ever used

1 during the course of this reverse-engineering work?

2 A.   Yes.

3 Q.   How was a FIB used during the course of this

4 reverse-engineering work?

5 A.   An attempt was made to surgically replace, if you will,

6 the ROM code from which the microcontroller executed with an

7 external ROM that executed code designed to spill the

8 contents of the internal random-access memory, or RAM.

9   The FIB was used to grow external contacts to which an

10 external ROM could be attached.

11 Q.   Now, you've mentioned two types of memory that were in

12 the Motorola ACE module, the ROM and the RAM; is that

13 correct?

14 A.   That's correct.

15 Q.   Was the ROM of the Motorola ACE module ever

16 successfully extracted?

17 A.   I'm sorry, repeat the question.

18 Q.   Was the ROM of the Motorola ACE module ever

19 successfully extracted?

20 A.   Yes, sir.

21 Q.   How was that ROM content extracted?

22 A.   It was extracted using a scanning electron microscope

23 observation of each cell.

24 Q.   Did Nagra USA or one of its consultants disassemble

25 that ROM code?

1   A.   Yes.

2   Q.   How was that ROM code disassembled?

3   A.   There was an off-the-shelf software product called IDA,

4   IDA Pro, I believe.

5   Q.   And who was the individual who undertook that

6   disassembly of the Motorola ROM?

7   A.   It was a Nagra consultant, a gentleman named Stephen

8   Finnegan.

9   THE COURT: I'm sorry, who?

10   THE WITNESS: Stephen Finnegan.

11   THE COURT: How do I spell his last name?

12   THE WITNESS: Finnegan, F-I-N-N-E-G-A-N.

13   THE COURT: Thank you.

14   BY MR. EBERHART:

15   Q.   Did Mr. Finnegan work in the BBCO facilities?

16   A.   No. He actually worked out of his house.

17   Q.   And were the BBCO facilities located in Nagra USA's

18   offices in El Segundo, California?

19   A.   No. They were in a rented office suite in San Diego.

20   Q.   Did you or anyone else on the team that you know of

21   create documentation of the BBCO project?

22   A.   Yes.

23   Q.   What documentation was created?

24   A.   There were technical specs that were written. There

25   was a spec that was written that analyzed the behavior of

1 the Motorola firmware. There were specs that analyzed

2 the -- or that proposed the technical system solution for

3 how signaling and interfaces would work. There were any

4 number of PowerPoint presentations made to potential

5 customers and internally.

6 Q.   Were any of those documents provided to NagraVision in

7 Switzerland?

8 A.   Yes.

9 Q.   Did you ever meet with Kudelski employees in

10 Switzerland?

11 A.   Yes.

12 Q.   With whom did you meet?

13 A.   I specifically met with Philippe Stransky and

14 Christophe Nicolas.

15   THE COURT: And when you say "documents," what

16 documents? What type of documents?

17   THE WITNESS: There was a Word --

18   THE COURT: Technical solutions?

19   THE WITNESS: Technical specifications and

20 PowerPoint.

21   THE COURT: And PowerPoint?

22   THE WITNESS: Yes, sir.

23   THE COURT: Were they code?

24   THE WITNESS: No, sir, no.

25   THE COURT: Thank you.

1   Counsel.

2   BY MR. EBERHART:

3   Q.   Let's step back to the disassembly of the ROM code for

4   a minute.

5   Was an analysis of that disassembled ROM code prepared?

6   A.   Yes.

7   Q.   How long was that analysis?

8   A.   Oh, something on the order of 50 pages.

9   Q.   Okay. And at a general level, what did that analysis

10 describe about that ROM code?

11 A.   Well, the performance of each of the subroutines in the

12 code, the functional performance, what did it do, not how

13 did it do it, but what it actually accomplished -- the

14 inputs and outputs.

15 Q.   Okay. And was Nagra in Switzerland ever informed that

16 the BBCO project under Nagra USA had succeeded in extracting

17 the ROM code from the Motorola ACE module and disassembling

18 that ROM code?

19 A.   Sure. That was a milestone event.

20 Q.   Okay. You mentioned a meeting with Christophe Nicolas

21 in Switzerland. At that time what was Mr. Nicolas' role?

22 A.   As I recall, he was in charge of their Smart Cards.

23 Q.   And what was the subject matter of your meeting with

24 Mr. Nicolas?

25 A.   At the time, my discussion with Mr. Nicolas was

1   involving the application of Nagra Smart Cards in a

2   Motorola-compatible environment that rapidly changed keys,

3   far more rapidly than a typical Smart Card system could

4   handle.

5   Q.   And was that information that you had obtained from the

6   reverse-engineering project?

7   A.   Yes.

8   Q.   You also mentioned a meeting with Philippe Stransky.

9   Who was Philippe Stransky at that time?

10   A.   He was the chief technical officer of NagraVision.

11   Q.   And what was the subject matter of your meeting with

12   Mr. Stransky?

13   A.   Obtaining -- actually, to provide him with status of

14   the project and to discuss with him how I could obtain

15   technical resources within the NagraVision organization to

16   complete the job.

17   Q.   Did you provide him with any documents during that

18   meeting?

19   A.   I believe I had e-mailed him PowerPoints in advance of

20   the meeting.

21   Q.   Did you provide him any -- in addition to your

22   PowerPoints, did you provide him any technical or other type

23   of documents either during that meeting or in preparation

24   for it?

25   A.   I believe so. It was five years ago, but I believe I

1   did give him a system spec that defined the signaling.

2   Q.   Okay. And what do you mean by a "system spec"?

3   A.   Part of the goal of this project was to establish an

4   end-to-end functional system. So in addition to just the

5   reverse engineering, there was the interfaces and functions

6   required out of the NagraVision CA system. An end-to-end

7   system requirement that defined signaling, messaging,

8   timing, et cetera.

9   Q.   Was Motorola aware of the BBCO project when it began?

10   A.   No. Not to the best of my knowledge, anyway.

11   Q.   Did Motorola ever become aware of the BBCO project?

12   A.   Yes.

13   Q.   How?

14   A.   Dr. John Markey told them about it.

15   Q.   What did Dr. Markey tell them?

16   A.   According to John, he came back from a trade show

17   announcing to us that he had announced to Motorola that he

18   was whacking DigiCipher.

19   Q.   And what was DigiCipher?

20   A.   That's the trade name of the Motorola conditional

21   access system.

22   Q.   When did Dr. Markey tell you he had conveyed this

23   information to Motorola?

24   A.   It was after a trade show in the fall of 2002.

25   THE COURT: And once again I want to hear what

1   information do you believe was conveyed by Dr. Martin.

2   THE WITNESS: Markey.

3   THE COURT: Markey.

4   THE WITNESS: To the best of my knowledge, he

5   explained to Motorola that we were in the process of

6   reverse-engineering their technology for the sake of

7   creating simulcrypt with them.

8   THE COURT: Who did he convey that to?

9   THE WITNESS: A marketing executive of Motorola.

10   I do not know the gentleman's name.

11   BY MR. EBERHART:

12   Q.   And what were the words that Dr. Markey used in his

13   conversation with you?

14   A.   In his conversation with me, he claimed to have

15   informed Motorola that he was whacking DigiCipher.

16   Whacking, not hacking.

17   Q.   Did the BBCO project come to an end at some point?

18   A.   Yes. Shortly thereafter.

19   Q.   So that was shortly after Dr. Markey informed Motorola

20   that you were whacking DigiCipher?

21   A.   Yes.

22   Q.   Why did the project come to an end?

23   A.   I understand we lost funding approval from Cheseaux.

24   THE COURT: Who is Cheseaux?

25   THE WITNESS: Cheseaux is the NagraVision

1   corporate office.

2   THE COURT: Cheseaux, is it a place?

3   THE WITNESS: Cheseaux, Switzerland.

4   THE COURT: Thank you very much. Appreciate it.

5   BY MR. EBERHART:

6   Q.   Do you have any understanding as to whether Andre

7   Kudelski played any role in that decision?

8   A.   I can only speculate.

9   Q.   And do you have any -- were you involved in the

10 shutdown of the project after the decision was made to end

11 it?

12 A.   Yes.

13 Q.   What was your involvement?

14 A.   My job was to close down the office, dispose of or deal

15 with the remaining information -- the intellectual property,

16 all forms of storage medium equipment, et cetera.

17 Q.   What did you do with respect to printed documents that

18 had been generated during the course of the project?

19 A.   Any printed document that was considered confidential

20 was put in a box and shipped to Nagra's attorneys.

21 Q.   Who were those attorneys?

22 A.   Piper Marbury.

23 Q.   And what was done with paper documents that were not

24 considered confidential?

25 A.   Shredded.

1 Q.   What did you do with respect to electronic materials

2 that had been generated during the course of the project?

3 A.   Materials that were considered the most sensitive, that

4 is, anything having to do with technology -- I mean

5 engineering documents were all encrypted, placed on optical

6 media and placed into a storage locker.

7 Q.   And when you say they were encrypted, how were they

8 encrypted?

9 A.   Using PGP and a -- Nagra's PGP key.

10 Q.   So all of that material was encrypted to a Nagra PGP

11 key?

12 A.   Correct.

13 Q.   What was done with the hard drives that were being used

14 during the course of the project?

15 A.   All workstations and servers -- I physically removed

16 the hard drives and placed those also in the storage

17 location.

18 Q.   Okay. And did the BBCO project involve work on

19 Motorola hardware as part of the reverse engineering?

20 A.   Yes.

21 Q.   What was done with the Motorola hardware that had been

22 used in the reverse engineering?

23 A.   It was all placed in the storage locker.

24 Q.   Who instructed you to place all this material in the

25 storage locker?

1   A.   It was advice from Nagra counsel.

2   Q.   And did you lock the storage unit?

3   A.   I did.

4   Q.   And that was after you placed all this material in the

5   storage locker?

6   A.   Yes, sir.

7   Q.   And did you give the key to someone?

8   A.   That was given to Gino Travazon (phonetic) in the L.A.

9   office.

10   Q.   So you gave that key to Gino Travazon?

11   A.   I did.

12   Q.   Who was Gino Travazon at the time you provided him with

13   that key?

14   A.   He was vice president of customer support, I believe

15   was his title.

16   Q.   He was working for NagraStar USA?

17   A.   Nagra USA, yes, sir.

18   Q.   What was done with things like printers and PC's that

19   were in the office?

20   A.   That was all returned to the El Segundo office as well.

21   Q.   That was the El Segundo office of Nagra USA?

22   A.   That's correct.

23   Q.   As we sit here today, do you have any documents that

24   relate to this project?

25   A.   No, sir.

1   THE COURT: All right.

2   MR. EBERHART: That's all, Your Honor.

3   THE COURT: All right. Counsel, your objection.

4   MR. HAGAN: Yes, Your Honor.

5   As Mr. Eberhart's direct examination and offer of

6   proof demonstrate, Mr. DeHaan is called for no other purpose

7   but an attempt to get the last word and attempt to attack

8   Mr. Kudelski's business practices which are not at issue in

9   this litigation.

10   Everything Mr. DeHaan just testified to are

11 consistent with what Mr. Kudelski said and does not rebut

12 his testimony in any way. The only possible issues that

13 they could be offering him for is that they used certain

14 equipment in the reverse-engineering of a Motorola product,

15 which is not at issue in this case, and generated reports.

16   Mr. Kudelski testified that he wasn't aware of the

17 exact processes used or whether or not reports were, in

18 fact, generated. Mr. DeHaan cannot testify as to whether or

19 not Mr. Kudelski had that knowledge, nor can he testify as

20 to whether or not Mr. Kudelski received or at any time had

21 notice of those written reports to the extent that they did,

22 in fact, exist.

23   So our objection, Your Honor, would be, number

24 one, it's improper surrebuttal.

25   Number two, it's an "attempt to get the last word"

1   tactic. Simply because we brought Mr. Kudelski from

2   Switzerland to testify does not give them the right to try

3   to attack his business practices, which are not at issue in

4   this case.

5   Number three, this would create a mini-trial, the

6   reverse-engineering project of the Motorola set-top box,

7   which is not at issue, was not even completed. We would be

8   forced to have to call lawyers involved in that project who

9   oversaw that project and other engineers and representatives

10   of Motorola who were informed of the project and of

11   Nagra-France who participated in the project.

12   Finally, Your Honor, there's no relevance under

13   402 because there's no testimony from Mr. DeHaan that makes

14   a material issue in this case more or less likely.

15   And, finally, even assuming there was some

16   marginal relevance, it is substantially outweighed by the

17   prejudicial effect in that it would confuse the jury, it

18   would create a mini-trial within a trial on issues that are

19   simply not relevant to this litigation, and it would unduly

20   prolong this trial, which the jury has already sat through

21   and which they are prepared and both sides are prepared to

22   submit to them to render a verdict.

23   So we would move to strike Mr. DeHaan's testimony

24   under each of those grounds.

25   THE COURT: All right. Counsel.

1   MR. EBERHART: Several points, Your Honor.

2   First, plaintiffs brought out in their direct of

3   Mr. Kudelski the issue of the BBCO project. And certainly

4   bringing forth the full facts of that project is proper

5   surrebuttal in response to that testimony.

6   In particular, Your Honor, Mr. Kudelski testified

7   that the BBCO project did not involve the

8   reverse-engineering of conditional access functionality. He

9   said it only involved reverse engineering of the scrambling

10   functionality.

11   Mr. DeHaan's testimony is directly contrary. That

12   project involved reverse-engineering both the conditional

13   access functionality and the scrambling functionality of the

14   Motorola ace module.

15   In a case where reverse engineering of conditional

16   access is at the heart of the issues, we believe that is an

17   absolutely material piece of evidence and a proper

18   surrebuttal to Mr. Kudelski's testimony.

19   THE COURT: Objection by EchoStar is overruled.

20   You may present this as rebuttal evidence.

21   Kristee, get the jury.

22   (In the presence of the jury.)

23   THE COURT: Thank you, sir.

24   If you would be seated, please.

25   We're back in session. All counsel are still

1   present. The parties are present.

2   And Counsel, if you would like to proceed.

3   DEFENSE SURREBUTTAL

4   THE COURT: Sir, would you raise your right hand,

5   please. Kristee's going to re-swear you.

6   DANIEL DeHAAN, DEFENSE SURREBUTTAL WITNESS, SWORN

7   THE WITNESS: I do.

8   THE COURT: Thank you, sir. Would you state your

9   full name for the jury.

10   THE WITNESS: My name is Dan DeHaan.

11   THE COURT: And spell your last name.

12   THE WITNESS: D-E, capital H-A-A-N.

13   THE COURT: Spell it again, please.

14   THE WITNESS: D-E, capital H-A-A-N.

15   THE COURT: And Counsel, this would be surrebuttal

16 on behalf of NDS.

17   MR. EBERHART: Mr. Eberhart for NDS.

18   DIRECT EXAMINATION

19 BY MR. EBERHART:

20 Q.   Good afternoon, Mr. DeHaan.

21 A.   Good afternoon.

22 Q.   Where are you currently employed?

23 A.   With NDS Americas.

24 Q.   How long have you worked for NDS Americas?

25 A.   Approximately five years.

1 Q.   Where were you employed before you began working for

2 NDS Americas?

3 A.   Nagra USA.

4 Q.   And how long did you work for Nagra USA?

5 A.   Approximately two years.

6 Q.   What did you do for Nagra USA during the course of your

7 employment?

8 A.   I was involved in a project called BBCO.

9 Q.   And what was BBCO?

10 A.   It was a project intended to create a forced simulcrypt

11 solution to allow compatibility of the NagraVision

12 conditional access system with the Motorola DigiCipher two

13 conditional access system.

14 Q.   And when you say "forced simulcrypt," explain to the

15 jury what you mean by that, please.

16 A.   Motorola's conditional access system was proprietary in

17 that they did not publish external interfaces to allow other

18 systems to interoperate with it. It was the goal of the

19 project to reverse-engineer the Motorola system to enable

20 the Nagra conditional access system to extract the

21 scrambling key that was used to actually protect the

22 broadcast content, to extract it from the Motorola system

23 and convey it using their own conditional access system to

24 another population of set-top boxes, thus allowing a cable

25 operator to buy competitive set-top boxes, presumably from

1 vendors that would be lower cost than Motorola.

2 Q.   And those different set-top boxes -- would those

3 set-top boxes use Nagra technology?

4 A.   That was the intent, yes.

5 Q.   And would those set-top boxes use NagraStar Smart

6 Cards?

7 A.   That was the intent.

8 Q.   And so the intent of the project was to create an

9 environment in which Nagra could sell its Smart Cards into

10 set-top boxes for cable companies?

11 A.   That's correct.

12 Q.   And those set-top boxes would be in competition with

13 set-top boxes made by Motorola?

14 A.   That's correct.

15 Q.   Now, during the course of the time you worked for --

16 the team that you worked on the BBCO project -- were you

17 always employed by Nagra USA?

18 A.   Yes.

19 Q.   And where were the offices of the BBCO project?

20 A.   In San Diego, California.

21 Q.   And during the time you worked for Nagra USA, did Nagra

22 have other offices in California?

23 A.   NagraVision had and continues to have an office in

24 Los Angeles, or El Segundo.

25 Q.   And am I correct to understand that the BBCO offices

1   were separate from the Nagra offices in El Segundo?

2   A.   That's correct.

3   Q.   Did you have an understanding as to whether the BBCO

4   project had been approved by the Kudelski Group in

5   Switzerland?

6   A.   It was my understanding that it had been approved by

7   Kudelski, yes.

8   Q.   Did the BBCO project involve any reverse engineering?

9   A.   Yes.

10   Q.   What was the focus of the reverse engineering efforts

11   of the BBCO project?

12   A.   The bulk of the cryptography within the Motorola system

13   was embodied in a secure chip called an ASIC, and it had

14   names called "TSODA" or "ACE," depending on which version of

15   the chip or the age of the chip.

16   The idea of the project was to take the chip apart,

17   reverse-engineer it, understand how the key was generated

18   within the chip, and thereby figure out a way to extract the

19   key from the chip, create some sort of interface to allow

20   the key to be removed from the chip and shared with the

21   NagraVision system so Nagra's system could run in parallel

22   and cooperatively with the DigiCipher chip.

23   Q.   Did the reverse-engineering work that you did for Nagra

24   USA -- withdrawn.

25   Did the reverse-engineering work in the BBCO project

1 involve reverse-engineering of the conditional access

2 functionality of the Motorola ASIC?

3 A.   Yes.

4 Q.   Did the reverse-engineering work of BBCO also involve

5 reverse-engineering the scambling functionality of the

6 Motorola ASIC?

7 A.   Yes.

8 Q.   What was the budget for the BBCO project?

9 A.   I believe it was on the order of $13 million.

10 Q.   And what portion of that budget was devoted to the

11 reverse-engineering work?

12 A.   Approximately 25 percent.

13 Q.   So that's about $3 million over the course of the

14 project?

15 A.   That's correct.

16 Q.   How long did the project last?

17 A.   Approximately two years.

18 Q.   Let's talk about some of the specific steps that were

19 undertaken by Nagra USA or its consultants as part of this

20 project.

21   Did anyone use nitric acid to decapsulate the Motorola

22 ACE module?

23 A.   Yes.

24 Q.   Who performed that work?

25 A.   It was a company -- I believe it was Analytical Systems

1   or Analytical Solutions -- ASE in Albuquerque.

2   Q.   Was there a particular individual at ASE that conducted

3   that work?

4   A.   There were a number of individuals there. The lead,

5   the guy who ran the company, was a guy named Mike Strizich,

6   S-T-R-I-Z-I-C-H.

7   Q.   And during the course of the BBCO project, was

8   Analytical Solutions a consultant to Nagra USA?

9   A.   Yes.

10   Q.   Was a scanning electron microscope used in the course

11   of the BBCO project?

12   A.   Yes.

13   Q.   How was it used?

14   A.   It was used to take layer-by-layer photographs of the

15   chip, very detailed photographs.

16   Q.   Who undertook that work?

17   A.   ASE.

18   Q.   Were there ever any other consultants to Nagra USA who

19   used a scanning electron microscope to reverse-engineer the

20   Motorola ACE module?

21   A.   Initially there was a company called Chipworks up in

22   Canada that performed a similar task.

23   Q.   And what was Chipworks trying to accomplish by using

24   the scanning electron microscope?

25   A.   They were specifically hired to extract the ROM code,

1 the actual microcontroller code from within the ASIC.

2 Q.   Did Chipworks succeed in extracting that ROM code?

3 A.   Yes.

4 Q.   And was that ROM code provided to Nagra USA?

5 A.   Specifically it was provided to Mr. Stephen Finnegan.

6 Q.   And did Analytical Solutions also succeed in extracting

7 that ROM code?

8 A.   Yes.

9 Q.   And was that ROM code provided to Nagra USA or one of

10 its consultants?

11 A.   Specifically to its consultant.

12 Q.   And the consultant's name was?

13 A.   Stephen Finnegan.

14 Q.   Who was Stephen Finnegan in the context of the BBCO

15 project?

16 A.   He was a consultant to NagraVision.

17 Q.   And what was Mr. Finnegan's role?

18 A.   His job was to disassemble the ROM code and analyze it

19 to understand its functionality.

20 Q.   And how did Mr. Finnegan disassemble the Motorola ROM

21 code?

22 A.   There was a commercial product called IDA Pro that was

23 used to put this bunch of ones and zeros in and have it

24 reproduce the microprocessor assembly code -- source code,

25 if you will.

1　Q.　And did Mr. Finnegan produce any sort of report of his

2　disassembly work?

3　A.　Yes.　He produced a functional spec that described the

4　function of each subroutine in the firmware.

5　Q.　And how long was that functional spec that Mr. Finnegan

6　produced?

7　A.　Something on the order of 50 pages.

8　Q.　And describe briefly for the jury what you mean by a

9　"functional spec."　What information was in the document

10　that Mr. Finnegan produced?

11　A.　The idea was for the rest of the engineering team to

12　understand what the firmware inside that chip did but not to

13　know how it did it.　So this guy's job was to analyze each

14　subroutine, what the inputs were and what the outputs were.

15　So he just gave us a functional spec that said this piece of

16　code performs this function, and this piece of code performs

17　this function without telling us exactly what the code was.

18　Q.　And did that functional spec describe any of the

19　conditional access functionality of the Motorola ASIC?

20　A.　Only in bits and pieces, but that was a component of

21　the conditional access reverse engineering to understand how

22　messages were extracted from the transport stream and

23　processed within the chip.

24　Q.　So those are both functions of the conditional access

25　portion of the Motorola ROM code?

1 A.   Yes.

2 Q.   And during the course of this work, was Mr. Finnegan a

3 consultant to Nagra USA?

4 A.   Yes.

5 Q.   Was a FIB ever used -- or focused ion beam -- ever used

6 to reverse-engineer the Motorola ASIC?

7 A.   Yes.

8 Q.   Who used the FIB?

9 A.   ASC did.

10 Q.   How did ASC or Mr. Strizich use that FIB?

11 A.   The goal was a focused iron beam allowed basically to

12 create new wires, if you will, to create new connections

13 onto this opened-up microprocessor. The idea was to replace

14 the firmware that was inside the chip with an external chip

15 that had more firmware on it, fooling the microprocessor

16 into spilling the contents of the RAM memory, the transient

17 memory, inside the chip.

18 Q.   You've mentioned that the chip had ROM that was

19 successfully extracted. You've now mentioned that the

20 Motorola chip also had RAM. Were you ever successful in

21 extracting the RAM during the course of the BBCO project?

22 A.   Honestly, I don't know. We extracted the RAM contents,

23 but we never finished the project to be able to decrypt the

24 contents of the RAM or determine whether it was actually

25 successfully extracted.

1 Q.   Now, was any documentation prepared of the BBCO

2 project?

3 A.   Yes.

4 Q.   What documentation was prepared?

5 A.   Certainly there was a number of PowerPoint

6 presentations for the purposes of sales and status reports,

7 internal and external. There were functional specs and

8 system specs required that would define messaging that was

9 required within the system, timing, interfaces that were

10 required.

11 Q.   Were any PowerPoint presentations prepared?

12 A.   Yes.

13 Q.   Were any budgeting documents prepared?

14 A.   Yeah. Internal budget requests and status reports to

15 the management in Switzerland.

16 Q.   And were those budget requests and status reports

17 provided to management in Switzerland?

18 A.   Yes.

19 Q.   Did you ever meet with any of the Kudelski executives

20 in Switzerland during the course of your work on the BBCO

21 project?

22 A.   I did.

23 Q.   With whom did you meet?

24 A.   I met with Philippe Stransky, the chief technical

25 officer.

1 Q.   And what was the subject of your meeting with

2 Mr. Stransky?

3 A.   To provide Philippe with a technical status report of

4 where the project stood and to discuss allocation of

5 NagraVision engineering resources to help finish the

6 project.

7 Q.   Did you inform Mr. Stransky of any of the technical

8 information that you had acquired as a result of the reverse

9 engineering of the Motorola ASIC?

10 A.   The briefing that was prepared for him included an

11 overview of the technology used to take the chip apart and

12 an estimation of the progress that had been made to date at

13 that time.

14 Q.   And did that description of the progress that had been

15 made to date include description of the functionality of the

16 Motorola ASIC that had been understood so far by the BBCO

17 team?

18 A.   No. No. The -- that level of detail was not provided

19 to Cheseaux.

20 Q.   And did you ever provide any documents to Mr. Stransky,

21 either at that meeting or in preparation for it?

22 A.   Yeah, I did prepare a system spec as well as a

23 PowerPoint.

24 Q.   And by a "system spec," what do you mean?

25 A.   This is the spec that defined the necessary interfaces

1 in the system that would be required to touch the

2 NagraVision system and thus would require support from the

3 engineering resources in Switzerland.

4 Q.   Okay. Did you meet with any other NagraVision or

5 Kudelski Group executives while you were in Switzerland?

6 A.   Yeah, there was a gentleman named Christophe Nicolas,

7 who at the time was in charge of their Smart Cards.

8 Q.   And what was the subject matter of your meeting with

9 Mr. Nicolas?

10 A.   A technical discussion of how to utilize NagraVision

11 Smart Cards in a Motorola environment.

12 Q.   And what was the issue regarding whether you could use

13 a Nagra Smart Card in a Motorola environment?

14 A.   The Motorola system changes its cryptographic keys

15 quite rapidly, far more so than a normal Smart Card is

16 capable of dealing with. So we had to figure out a way to

17 make a Smart Card work in that environment, either a faster

18 Smart Card or some way to slow down the key changes.

19 Q.   And did your discussions with Mr. Nicolas involve

20 conveying to him any information you had obtained as a

21 result of reverse-engineering the Motorola ASIC?

22 A.   Yeah. We had to describe in detail how we believed

23 that at the time the best we knew about how keys were

24 generated and at what rate.

25 Q.   And when the BBCO project began, was Motorola aware

1 that Nagra USA was undertaking this work?

2 A.   Would you please repeat the question.

3 Q.   Absolutely.

4   At the outset of the BBCO project, was Motorola aware

5 that Nagra USA was undertaking this work?

6 A.   Not as far as I know.

7 Q.   And I believe you testified earlier that -- well, let

8 me just ask the question directly.

9   Why did Nagra USA undertake this project rather than

10 attempting to license the technology from Motorola?

11 A.   Previous experience in the industry had shown to Nagra

12 and other players in the industry that Motorola was simply

13 not willing to open their interfaces to allow a competitor's

14 system to exist -- to coexist.

15 Q.   Did Motorola ever become aware of the BBCO project?

16 A.   Yes.

17 Q.   How did Motorola become aware?

18 A.   It was a NagraVision employee that told 'em.

19 Q.   Are you familiar with an individual named John Markey?

20 A.   Yes.

21 Q.   Who is John Markey?

22 A.   At the time, John Markey was the chief marketing

23 officer of Nagra.

24 Q.   And was he the chief marketing officer of Nagra

25 throughout the time you worked on the BBCO project?

1   A.   Yes.

2   Q.   And is Dr. Markey the individual who informed Motorola

3   of the BBCO project?

4   A.   Yes.

5   Q.   What did Dr. Markey tell you about his interaction with

6   Motorola?

7   MR. HAGAN: Objection. Hearsay.

8   THE COURT: Overruled.

9   THE WITNESS: John Markey came back from a trade

10   show and announced to the project team that he had informed

11   Motorola that we were in the process of whacking their

12   DigiCipher system.

13   BY MR. EBERHART:

14   Q.   He said he told Motorola that you were in the process

15   of whacking DigiCipher?

16   A.   That's correct.

17   Q.   What is DigiCipher?

18   A.   DigiCipher is the trade name for Motorola's conditional

19   access system.

20   Q.   Now, at the time you worked on the BBCO project, did

21   you think it was proper reverse-engineering, a lawful

22   effort, to reverse-engineer the system?

23   A.   Yes.

24   Q.   In your view, is reverse engineering of a competitor's

25   system proper?

1   A.   Yeah.

2   Q.   What are proper reasons that someone might

3   reverse-engineer a competitor's system?

4   THE COURT: Counsel, I think this is beyond the

5   scope.

6   I allowed him for surrebuttal for certain factual

7   issues. This is not what was represented.

8   BY MR. EBERHART:

9   Q.   Did the BBCO project come to an end?

10   A.   Yes, it did.

11   Q.   How did it come to an end?

12   A.   Shortly after the fall of 2002 when Dr. Markey told us

13   that he had announced to Motorola the scope of the project,

14   the funding from Cheseaux, from our corporate office in

15   Switzerland, basically dried up. And shortly after that, we

16   were informed that the project was being shut down.

17   Q.   Were you told why the project was shut down?

18   A.   Not directly.

19   Q.   Did you have any role in winding up the operations of

20   the BBCO project?

21   A.   Yes, sir. I was the last guy left in the building and

22   basically had to turn out the lights.

23   Q.   Okay. Did you do anything with respect to printed

24   documents that had been generated in the course of the BBCO

25   project?

1 A.   All confidential documents were returned to Nagra

2 counsel.

3 Q.   What was the name of that counsel?

4 A.   Piper Marbury.

5 Q.   And what was done with nonconfidential documents?

6 A.   Shredded.

7 Q.   Did you do anything with respect to electronic

8 materials that were generated in the course of the BBCO

9 project?

10 A.   I went out and rented a self-storage unit. All

11 electronic hard drives and media were stored in that storage

12 unit.

13 Q.   Was anything done with particularly sensitive

14 electronic files?

15 A.   All sensitive electronic files were encrypted using a

16 commercial product call PGP, stored on optical media, and

17 left in the storage unit.

18 Q.   And to who was PGP keyed, or those sensitive electronic

19 materials encrypted?

20 A.   It's a NagraVision ADK. They call it an alternate

21 decryption key. So the officer at Nagra had the ability to

22 decrypt should it be required.

23 Q.   So only the security officer of Nagra could decrypt

24 that material after you had decrypted it and burned it to

25 the CDs?

1 A.   Correct.

2 Q.   What did do you with the hard drives from the servers

3 and workstations that had been used in the BBCO project?

4 A.   They were all in the storage unit.

5 Q.   So those were pulled --

6 A.   Removed from the workstations and servers and stored in

7 the storage unit.

8 Q.   And was that storage unit locked up?

9 A.   Yes, sir.

10 Q.   Did you give the key to someone?

11 A.   It was given to Gino Travazon, the guy in charge of the

12 El Segundo NagraVision office.

13 Q.   And what was done with printers and the PCs that didn't

14 have their hard drives anymore and other office equipment?

15 A.   It was all returned to the El Segundo office as well.

16 Q.   Okay. And after you completed this shutdown of the

17 BBCO project, did you retain any documents or evidence of

18 that work?

19 A.   No, no.

20 Q.   One last thing, sir. You mentioned, obviously,

21 reverse-engineering of a Motorola ASIC. Was Motorola

22 hardware used during the course of that reverse-engineering

23 work?

24 A.   Yes.

25 Q.   And what sort of Motorola hardware?

1   A.   It was necessary to obtain some chips to do -- and the

2   way we did it was by buying Motorola scramblers -- they're

3   called integrated receiver transcoders -- from distribution,

4   and we removed the chips from those devices and performed

5   the analysis on them.

6   Q.   And what was done with those Motorola devices and chips

7   at the end of the project?

8   A.   They were all stored in the storage locker.

9   Q.   And so that was the locker that was locked up, and the

10   key was given to Nagra USA?

11   A.   Yes, sir.

12   MR. EBERHART: Nothing further.

13   THE COURT: Mr. Hagan, cross-examination on behalf

14   of NDS.

15   MR. HAGAN: Thank you, Your Honor.

16   THE COURT: I'm sorry. On behalf of Nagra and

17   EchoStar. My apologies.

18   CROSS-EXAMINATION

19   BY MR. HAGAN:

20   Q.   Good afternoon, Mr. DeHaan.

21   A.   Good afternoon.

22   Q.   We met earlier today when I took your deposition,

23   correct?

24   A.   That's correct.

25   Q.   Now, if I understood that testimony, you are an

1 employee of the defendants now; is that right?

2 A.   That's correct.

3 Q.   And you were hired by the defendants in roughly July of

4 2003?

5 A.   That's correct.

6 Q.   About a month after this lawsuit was filed?

7 A.   Honestly, I don't know when this was filed.

8 Q.   Prior to that -- well, let me back up for a second.

9   You were contacted last night by the defendants'

10 attorneys and asked to come down and testify today; is that

11 right?

12 A.   Two days ago, yeah.

13 Q.   Okay. Now, during the 2001 -- May of '01 to June of

14 '03, you worked for a company called Nagra France; is that

15 right?

16   MR. EBERHART: Objection. Misstates prior

17 testimony.

18 BY MR. HAGAN:

19 Q.   I'm sorry, Nagra USA.

20 A.   Yeah.

21 Q.   And you performed some work for Nagra USA on a project

22 called BBCO?

23 A.   That's correct.

24 Q.   Do you know what the letters BBCO stands for?

25 A.   Broadband Corporation.

1 Q.   Now, the focus of that project -- if I understood your

2 testimony correctly -- or the goal of that project was to

3 develop a mechanism to share a descrambling key, an

4 algorithm used by DigiCipher; is that right?

5 A.   That's correct, yes.

6 Q.   Now, that project, if I understood your depo testimony

7 correctly, if you put it in a pie chart and you had a

8 hundred percent of it, only about 25 percent of it related

9 to reverse engineering and compatibility analysis; is that

10 right?

11 A.   That's approximately right, yes.

12 Q.   Another 25 percent related to the development of IRD's,

13 or set-top boxes?

14 A.   Set-top boxes, right.

15 Q.   And roughly half of that project, or the resources

16 dedicated to that project, related to attorneys and

17 administration -- administrative issues; isn't that right?

18 A.   That's right.

19 Q.   In fact, attorneys worked hand-in-hand with the BBCO

20 team throughout the entire course of that project, right?

21 A.   I wouldn't say hand-in-hand, but they certainly

22 provided us counsel on how to do our job.

23 Q.   And if I understood your testimony earlier correctly,

24 they were more heavily involved in the 25 percent of the

25 project that involved compatibility analysis and reverse

1   engineering; is that right?

2   A.   That's fair to say, yes.

3   Q.   And what is your understanding of why the attorneys

4   were so heavily involved in that component of the BBCO

5   project?

6   A.   The reverse-engineering aspect was considered to be

7   something of a gray area legally, and so we did the best we

8   could at the time to keep as clean as possible legally.

9   Q.   In fact, you testified this afternoon that the

10   attorneys were there to make sure that everything was done

11   in accordance with applicable laws, including copyright

12   laws; is that right?

13   A.   Absolutely.

14   Q.   You don't think that there was anything improper about

15   the BBCO project, do you, sir?

16   A.   No, not at all.

17   Q.   You don't think there was anything unethical or

18   anti-competitive about the BBCO project, do you?

19   A.   No, sir.

20   Q.   In fact, you think that the entirety of that project

21   was conducted aboveboard and in compliance with all

22   applicable laws, including copyright law?

23   A.   Absolutely.

24   Q.   You wouldn't have engaged in any of that work had it

25   been underboard or unlawful; is that right?

1 A.   That's correct.

2 Q.   And you're not here to testify that all

3 reverse-engineering projects are unlawful, correct?

4 A.   Of course not, no.

5 Q.   In fact, as long as you use the results of reverse

6 engineering for a lawful and proper way, you don't think

7 that there's anything wrong with that?

8 A.   That's correct.

9 Q.   You don't think that the results of the reverse

10 engineering or compatibility analysis component of the BBCO

11 project was used in any improper or unlawful way, do you?

12 A.   No, sir.

13 Q.   In fact, that project wasn't even completed, right?

14 A.   That's correct.

15 Q.   Now, you never had any discussions with the chairman

16 and chief executive officer of the Kudelski Group, Mr. Andre

17 Kudelski; is that right?

18 A.   Never have, no, sir.

19 Q.   To your knowledge, he didn't attend any of the meetings

20 that you were present at, at the BBCO project?

21 A.   That's correct.

22 Q.   And that project, that was done in leased office space,

23 is that right, a suite with about nine rooms?

24 A.   Correct.

25 Q.   You weren't engaging in any activities in a basement,

1   right?

2   A.   No, sir.

3   Q.   Now, you also testified that you never had any direct

4   communications with Mr. Kudelski, right?

5   A.   That's correct.

6   Q.   You never transmitted any reports to Mr. Kudelski or

7   any PowerPoint presentations; is that right?

8   A.   I personally did not, no.

9   Q.   In fact, you don't have any knowledge as to whether or

10 not Mr. Kudelski even saw any of those reports or PowerPoint

11 presentations?

12 A.   Not -- certainly not from me.

13 Q.   Now, if I understood your earlier testimony, the

14 primary focus of that 25 percent of the project that dealt

15 with reverse engineering and compatibility analysis dealt

16 with the part of the ASIC involving scrambling/descrambling;

17 is that right?

18 A.   It was involved with analysis of the entire chip,

19 including descrambling or scrambling as well as the

20 conditional access message processing.

21 Q.   Well, didn't you testify this afternoon that the focus

22 of the compatibility analysis dealt with the

23 scrambling/descrambling part and that the goal of the

24 project was to develop a forced simulcrypt solution that

25 would coexist with the DigiCipher II conditional access

1 technology?

2 A.   No, sir. At least my understanding of my deposition

3 today and my intent is that the project was to understand

4 the function of the chip, which included conditional access

5 message processing, key handling specifically, which is the

6 main role of a conditional access system, as well as to

7 understand the specific scrambling and descrambling

8 algorithm implemented by the chip.

9 Q.   Now, it's your understanding that the project manager

10 for the BBCO project was a gentleman named Dr. John Markey;

11 is that correct?

12 A.   That's correct.

13 Q.   And you understand he was a former employee of the

14 Kudelski group of companies?

15 A.   Yes.

16 Q.   Do you have any knowledge as to his departure from the

17 Kudelski group of companies?

18 A.   I know that he departed. I don't know details.

19 Q.   Do you know that he made spurious allegations in a

20 lawsuit against Mr. Kudelski which were dismissed by a

21 court?

22 A.   I'm not aware.

23   MR. EBERHART: Objection. Assumes facts not in

24 evidence.

25   THE COURT: Well, he's not aware. Disregard the

1 question. It assumes facts not in evidence.

2 BY MR. HAGAN:

3 Q. Well, tell us what your opinion is of Dr. Markey, the

4 project manager for the BBCO project, based on your personal

5 dealings with him.

6 A. Dr. Markey was a very, very intelligent man. He was a

7 rather abrasive personality, hard to get along with; but he

8 had, I thought, a very brilliant idea.

9 Q. In fact, didn't you testify under oath a few hours ago

10 that you believed that Dr. Markey was not a trustworthy

11 person and more often than not, he was less than candid with

12 you?

13 A. Yes, sir.

14 Q. And didn't you testify that Dr. Markey had a way to

15 give you an answer that sounded true but turned out not to

16 be so true?

17 A. I did say that. Yes, that's true.

18 Q. Now, Mr. -- I'm sorry. Dr. Markey told you that he

19 notified Motorola that the BBCO project was underway in

20 2002; is that right?

21 A. That's correct.

22 Q. You don't know as you sit here whether or not

23 Mr. Kudelski or anyone else within the Kudelski group of

24 companies had spoken to Motorola about this project before

25 its inception; is that right?

1   A.   I'm not aware of that conversation, if it happened.

2   Q.   Now, you testified that certain reports were generated

3   in the process of the BBCO project; is that right?

4   A.   That's correct.

5   Q.   Now, did any of those reports -- well, let me back up

6   for a minute.

7   Did the attorneys supervise the preparation of those

8   reports and the contents that went into 'em?

9   A.   I do not believe that -- you know, at one point the

10   attorneys did vet external presentations to make sure we

11   were not presenting something inappropriate. Internal

12   presentations were not vetted.

13   Q.   Absolutely. And that was because you wanted to make

14   sure -- in fact, Nagra USA wanted to ensure that they were

15   in full compliance with all applicable laws, including

16   copyright laws?

17   A.   That's true.

18   Q.   Now, the reports that were generated, did they describe

19   in any way a method to hack the Motorola set-top box?

20   A.   No.

21   Q.   Did those reports describe in any way a method to

22   create counterfeit or pirated Motorola set-top boxes?

23   A.   No.

24   Q.   Did those reports describe in any way a method to

25   develop technology to steal copyrighted programming using a

1 Motorola set-top box?

2 A.   No.

3 Q.   Have you seen the report generated by the defendants'

4 Haifa team in this case?

5 A.   No, sir.

6 Q.   Would you be surprised if that report described in

7 detail how to hack EchoStar's security system in the

8 United States?

9 A.   I'm not aware of the Haifa team. I don't know what

10 their capabilities are or their missions.

11 Q.   Based on your experience in the BBCO project, would

12 that be something that you believe should be included in

13 such a report --

14   MR. EBERHART: Objection --

15 BY MR. HAGAN:

16 Q.   -- including the dealings that you had with the

17 attorneys overseeing that process?

18   MR. EBERHART: Scope, and improper opinion.

19   THE COURT: I'm not sure what the question is.

20 I'm going to strike the question. I don't understand the

21 question.

22 BY MR. HAGAN:

23 Q.   Mr. DeHaan, based on your experience in the BBCO

24 project, including your experience in preparing and

25 reviewing the written reports from that project, would you

1   expect to see a section in the defendants' report that

2   describes in detail how to hack EchoStar's security system

3   in the United States?

4   MR. EBERHART: Objection to scope, and improper

5   opinion.

6   THE COURT: I'm going to sustain it. I don't

7   think he can make that comparison.

8   You haven't read the Headend Report, have you?

9   THE WITNESS: No, sir.

10   THE COURT: The Haifa team report?

11   THE WITNESS: I'm not familiar with it.

12 BY MR. HAGAN:

13 Q.   In preparing you for your testimony here today, did the

14 defendants' counsel show you a copy of that report?

15 A.   I'm not aware of the report. No.

16 Q.   Did they tell you at any time about their efforts to

17 develop a method to hack EchoStar's security system?

18 A.   I'm not familiar with it. No, sir.

19 Q.   Did they tell you at any time that they shared that

20 information with a gentleman named Chris Tarnovsky, who was

21 previously involved in piracy?

22   MR. EBERHART: Your Honor, I'm going to object to

23 the extent this is calling for attorney-client

24 communications. This is entirely improper.

25   THE COURT: It's not attorney-client. It's just

1   that each of you are starting to argue the case through a

2   witness.

3   I think the only import is what the BBCO function

4   was. And I think that we've gotten down to that for both

5   sides.

6   I'll let you continue, Counsel, but I don't want

7   to use the comparison.

8   MR. HAGAN: Certainly, Your Honor.

9   THE COURT: He hasn't looked at the Headend

10   Report. It's unduly consumptive of time. He can't make

11   that -- unless you want to take time. If both of you want

12   to qualify him as an expert witness, we'll send him out in

13   the hallway and bring him back in a year. I'm just kidding.

14   MR. HAGAN: I think the jury is ready to finish up

15   with this witness. I just have a couple more questions.

16   BY MR. HAGAN:

17   Q.   Now, Mr. DeHaan, you believe that every step of the

18   way, every process engaged in by you and the other team of

19   engineers and the counsel overseeing that project in the

20   BBCO process, was all legitimate, correct?

21   A.   That's correct.

22   Q.   Did you ever disclose any of the confidential

23   information related to the BBCO project to individuals

24   engaged in satellite piracy or hacking?

25   A.   Not to the best of my knowledge, no.

1 Q.   Would you have felt comfortable disclosing that

2 information?

3 A.   No, sir.

4 Q.   In fact, I believe you testified that you took great

5 pains to keep that information confidential; is that right?

6 A.   That's correct.

7 Q.   Now, would you have posted any of that information on

8 the Internet?

9   MR. EBERHART: Objection. Scope and 403.

10   THE COURT: Overruled.

11   You can answer that question.

12   THE WITNESS: No, I would not have.

13 BY MR. HAGAN:

14 Q.   Why not?

15 A.   It would have been inappropriate for the good of my

16 career.

17   MR. HAGAN: Thank you, Mr. DeHaan.

18   No further questions, Your Honor.

19   THE COURT: All right. Counsel, redirect.

20   REDIRECT EXAMINATION

21 BY MR. EBERHART:

22 Q.   Mr. DeHaan, to whom did John Markey report during the

23 time of the BBCO project?

24 A.   Directly to Andre Kudelski.

25 Q.   And did there come a time when Mr. Markey stopped being

1 the direct report to Andre Kudelski?

2 A.   Clearly that occurred, but not necessarily on my watch.

3 Q.   Okay. Are you familiar with an individual named Steve

4 White?

5 A.   Yes, I am.

6 Q.   Who is Steve White?

7 A.   Steve was one of the consultants working on the BBCO

8 project.

9 Q.   And did Steve White work on the BBCO project before you

10 joined that project?

11 A.   Yes.

12 Q.   And did Mr. White interact directly with Andre

13 Kudelski?

14 A.   Yes.

15 Q.   And did Mr. White describe the substance of the project

16 to Mr. Kudelski?

17 A.   Yes.

18 Q.   And what was the purpose of Mr. White's description of

19 the project to Mr. Kudelski?

20   MR. HAGAN: Foundation.

21   THE COURT: Well, yeah.

22   Were you there when he described this to

23 Mr. Kudelski?

24   THE WITNESS: I was not personally there, no, sir.

25   THE COURT: So he's relating it to you?

1   THE WITNESS: Yes, sir.

2   THE COURT: Sustained.

3   BY MR. EBERHART:

4   Q.   Was Mr. White a Nagra consultant at the time he made

5   these statements to you?

6   A.   Yes.

7   Q.   And was Mr. White repeating statements that

8   Mr. Kudelski made to him at the time Mr. -- at a time when

9   Mr. White was a Nagra consultant?

10   A.   Yes.

11   MR. EBERHART: Your Honor, I believe this is an

12   exception to hearsay. These are statements of a party

13   opponent.

14   THE COURT: You may proceed.

15   MR. EBERHART: Okay.

16   BY MR. EBERHART:

17   Q.   Why did Mr. White convey to Andre Kudelski the

18   substance of the BBCO project?

19   A.   Originally John Markey, as the project leader, was the

20   direct interface with the corporate office in Switzerland,

21   and he was the guy that would arrange to have our purchase

22   orders and our funding approved by Switzerland.

23   At later stages of the project, John Markey was less

24   and less present and had apparently lost his influence over

25   Andre to allow funding to continue.

1   So it was -- Steve took it upon himself to appeal to

2 Nagra management, each P.O., you know, one purchase order at

3 a time, to try to get funding to continue the project.

4 Q.   And Mr. White's attempts to get funding, were those

5 directly with Andre Kudelski?

6 A.   It was with Andre Kudelski and with Pierre Roy, their

7 operations executive. I don't know his exact title.

8   MR. EBERHART: Thank you.

9   THE COURT: Recross?

10   MR. HAGAN: Nothing further, Your Honor.

11   THE COURT: May the witness be excused, Counsel?

12   MR. EBERHART: Yes, Your Honor.

13   THE COURT: All right. Thank you very much, sir.

14 You may step down.

15   (Witness excused.)

16   THE COURT: All right. Counsel, any surrebuttal?

17   MR. SNYDER: Your Honor, we would like to move the

18 admission of four exhibits that have been previously

19 identified.

20   THE COURT: Were those identified just with the

21 last witness?

22   MR. SNYDER: No, Your Honor, they were previously

23 identified.

24   THE COURT: We can do that outside the presence of

25 the jury.

1   Now, I hate to bother you, ladies and gentlemen,

2   but I'm going to ask you to go back to the jury room for

3   just a moment. I want to see exactly where we are in this

4   case without you being present for just a moment.

5   I'll come and get you in just a few moments, okay?

6   Please don't discuss this matter amongst yourselves nor form

7   or express any opinion concerning this case.

8   (Jury recesses.)

9   (Outside the presence of the jury.)

10   THE COURT: Okay. Now, what are those items of

11   evidence?

12   MR. SNYDER: Numbers 136-A --

13   THE COURT: Why don't you show that to the

14   opposition.

15   MS. SHEPARD: Christine and I have already gone

16   over them.

17   THE COURT: Is that acceptable?

18   MS. WILLETTS: Yes, Your Honor.

19   THE COURT: What is your next item?

20   MR. SNYDER: 141.

21   THE COURT: 141, is that acceptable?

22   MS. WILLETTS: Yes, Your Honor.

23   THE COURT: The next item?

24   MR. SNYDER: 29.

25   THE COURT: I thought 29 was already received.

1   MR. SNYDER: I thought so, too.

2   MS. SHEPARD: It's a little unclear because we

3   don't have the transcript back because it's a video

4   deposition.

5   THE COURT: Is that acceptable?

6   MS. WILLETTS: Yes, Your Honor.

7   MR. SNYDER: And finally, 826, Your Honor.

8   THE COURT: 826, is that acceptable?

9   MS. WILLETTS: Yes, Your Honor.

10   THE COURT: I'll inform the jury when we come back

11   in that we've received those items outside their presence.

12   Now, are you resting on surrebuttal?

13   MR. EBERHART: Yes.

14   THE COURT: Do you want sur, sur, surrebuttal? If

15   you do, we can have a mini trial. I can outlast you.

16   MR. HAGAN: I don't think we need one. May I have

17   a moment to confer?

18   THE COURT: Why don't we go find all the attorneys

19   over there with the Piper firm and get the Martin people in

20   here. It's going to be terrific.

21   And then you can think of something else on behalf

22   of NDS.

23   (Pause in the proceedings at 4:10 p.m.)

24   THE COURT: All right. We're back on the record.

25   The Court's provided time for each of the parties to make

1   certain that they've had a full and complete case or to

2   suggest to the Court that they'd like to try additional

3   witnesses, to identify those witnesses, and then we can pick

4   a date in the future for the jury.

5   Counsel, on behalf of NDS, have you completed your

6   surrebuttal?

7   MR. SNYDER: We have, Your Honor.

8   THE COURT: Let me turn to EchoStar.

9   MR. HAGAN: Your Honor, we do not need to call any

10   further witnesses.

11   THE COURT: I want to make sure both sides are

12   absolutely satisfied that you've called the witnesses that

13   have been available and there's no complaints about you not

14   having a full trial.

15   So once again, you've had time to consult with

16   your principals. You've been here the whole time. Make

17   whatever phone calls you want to, to anybody, to get their

18   permission. I know you've got authority, but just as a

19   courtesy.

20   You can do the same thing on behalf of NDS. You

21   can call anybody you'd like to.

22   But if counsel are satisfied, then I'll inform the

23   jury that the evidentiary portion of the case is concluded.

24   Once again, is that satisfactory to EchoStar and

25   NagraStar?

1   MR. HAGAN: It is, Your Honor.

2   THE COURT: And to NDS?

3   MR. SNYDER: Yes, Your Honor.

4   THE COURT: All right. Well, then, I'll get the

5   jury, and we'll formally excuse them until probably

6   8:30 tomorrow.

7   Let me talk to each of you.

8   I've decided that I'm going to have you argue

9   first. After listening to today's events, I'm going to make

10   certain that the arguments begin and conclude tomorrow.

11   And I'm a little afraid that I might get pushed

12   with my jury instructions, which I regard as very important.

13   And if I am, then I'll read those next Tuesday when they

14   return, because Mr. Bender's informed us that he's leaving

15   for his daughter's graduation, which we all knew about, and

16   that we'll be dark on Thursday, Friday and Monday.

17   If I'm not pushed, then I'll read them after the

18   conclusion of your argument.

19   But I think it's wise, even though you may

20   disagree, that you have the opportunity to argue while the

21   jury's relatively fresh, before I read an hour and a half of

22   instructions.

23   It also lets me watch you, quite frankly, and that

24   way I can see if anybody strays. If anybody strays from the

25   instructions we are going to decide once again this evening,

1   I can correct that very quickly.

2   So, Counsel --

3   If there's nothing further, Kristee, would you be

4   kind enough to summon the jury.

5   And if you want additional time in light of that,

6   Counsel, you can have three hours per side. Think about

7   that. It's a very generous offer. You don't have any time

8   limits. I'll up the time limits for you, if you would like.

9   (Discussion off the record.)

10   (In the presence of the jury.)

11   THE COURT: All right. We're back in session.

12   All counsel are present.

13   Counsel, thank you for your courtesy.

14   The jury's now present.

15   Outside your presence there's been four more

16   exhibits received by the Court. I just need to make a

17   record in your presence.

18   136-A has been received; 141 has been received; 29

19   has been received, which I believe has previously received;

20   and 826 was just received.

21   (Exhibits 136-A, 141, 29 and 826 received in evidence.)

22   And, Counsel, once again let me turn to NDS,

23   et al.

24   Counsel, any further surrebuttal?

25   MR. SNYDER: No. The defense rests, Your Honor.

1   THE COURT: Let me turn back to EchoStar and

2   NagraStar. Any further evidence you wish to present?

3   MR. HAGAN: Plaintiffs rest, Your Honor.

4   THE COURT: Okay. The evidentiary portion of this

5   case is concluded.

6   We're about one day ahead of schedule.

7   I actually thought that you would be going on your

8   trip on Thursday and I'd probably hear the argument on the

9   Tuesday that you were returning. But I think, if we work

10 hard, we can have the arguments occur tomorrow.

11   We have a little bit more to do between

12 6:00 o'clock and 4:00 o'clock this morning, but we'll get it

13 done.

14   And so when you come in tomorrow, I'd like you to

15 come in at 8:30. At that time you're going to hear the

16 concluding arguments by both parties.

17   So we're really a day ahead of schedule. Counsel

18 have done an extraordinary job. My compliments to both

19 sides. Frankly, their enthusiasm on Saturday and Sunday has

20 kept me going. I really appreciate that.

21   (Laughter.)

22   THE COURT: I'll probably be able to instruct you

23 also at the end of the day, but I'll take a gauge about how

24 you're doing at that time.

25   Right now we have an agreement between counsel

1   that they can argue for 18 hours apiece. I'm just joking.

2   It's a time to argue.

3   I still want to make certain that it's agreeable.

4   If it's not, tell me now. Is 2 1/2 hours still acceptable?

5   MR. SNYDER: Yes, Your Honor.

6   MR. WELCH: Yes, Your Honor.

7   THE COURT: They've even agreed to no more than

8   2 1/2 hours. That's fair with the abundance of evidence.

9   Their job is now to put that together in a form that

10   hopefully can take you to the position of what the

11   respective sides believe their positions warrant.

12   But remember -- for goodness sake -- I'll tell you

13   a couple of stories. I used to practice in the days where

14   the judge wouldn't even allow a court reporter to read back

15   testimony. No exhibits were shown during a trial. You sat

16   there, probably for three weeks instead of four, but you

17   might not have had any idea of what was happening.

18   So I just come from that 1970's experience. I

19   pledged if I was ever on the bench, I didn't want my jurors

20   to go through the same thing, and I didn't want my litigants

21   to go through it.

22   So on one hand, I'm very pleased that we took the

23   time, but I do tell you we could have tried the case three

24   days faster if we wouldn't have shown you any exhibits, if

25   nothing would have gone up.

1   I don't know how you would have understood the

2   case. And I think by taking that time then, whether you

3   take minutes, hours, days, or weeks -- and you don't know

4   where your deliberations take you; you haven't started that

5   process -- you're certainly in a much better position having

6   seen the exhibits as you go. You may not recall the exact

7   number, but you've got us here full time 24-7 for whatever

8   you need.

9   Let me tell you a couple other things just in

10 advance. I don't have normal working hours here. It's a

11 terrible price to have an open court for litigation, but I

12 truly enjoy litigation and the litigants. And when you

13 finally go back for your deliberations, you'll probably

14 start up a short time tomorrow, and then you'll be on your

15 way until the following Tuesday.

16   You'll set the hours. If you want to continue to

17 come in at 8:00 o'clock, that's fine. If you want to come

18 in at 7:30, that's fine. If you want to come in at

19 8:30, that's fine. You'll set your hours during your

20 deliberation process.

21   I just ask that you give us a relatively complete

22 day, as you have; that, you know, if you do recess, it's

23 sometime between 4:00 and 5:00 o'clock. Certainly on

24 Fridays we've fallen into a habit of 4:00 o'clock.

25   But if you also want to go late, I think it's

 1   pretty arrogant on my part to decide that just because I

 2   think the working day might be 8:00 o'clock at night I'm

 3   calling in and telling you that you have to go home. If

 4   you're right in the middle of something at 5:00 o'clock,

 5   finish that debate. Or if you just need a fresh start the

 6   next day, if you've reached that point, it's just better to

 7   get away from it. Go home at 4:00 o'clock. So set your own

 8   hours, and it's whatever you need.

 9   Kristee will talk to you about that, and just tell

10   her you're leaving for the day each day after deliberations

11   and what time you want to start. Okay?

12   Also set your own lunch hours. I've been setting

13   an hour, but you might want an hour and 15 minutes, and/or a

14   little bit longer.

15   Kristee, once we swear them, can we take them to

16   lunch?

17   THE CLERK: Yes.

18   THE COURT: As soon as I swear you, we can pay for

19   your lunch, but you're limited to $2 a day.

20   (Laughter.)

21   THE COURT: You're limited to about 12 or 14

22   dollars a day, so you can't go very far. But you can go to

23   lunch as a group or split up. If you split up, we can't pay

24   for it. If you go as a group, we can take you across the

25   street. And I would say an hour and 15 minutes to get in

1   and out of the restaurant. We'll explain that.

2   You'll see that all counsel will be right in

3   court. So if you bump into them, it's because they're

4   ordered to remain on the premises. I'm not hunting for

5   counsel outside the Court in case you have a question, and

6   they know that.

7   So has anybody talked to anybody about this case

8   so I can start all over again? Don't do it. It's my

9   general way of kidding you, but don't reach out. These are

10   dangerous times.

11   Now, let me talk to counsel about one more thing.

12   I'll need the court reporter.

13   (Sidebar Conference reported as follows:)

14   THE COURT: I'm at sidebar.

15   We have a date. We got it from Court

16   Administration. Dateline will be on tonight or tomorrow

17   night. So, I mean, you couldn't ask for a worse time. And

18   the question is, if you want me to warn them. And I promise

19   you this: If they're not warned and they hear about this, I

20   am not granting a new trial 'cause I'm giving you that

21   option of telling them. I'll leave it up to you.

22   MR. KLEIN: Can we talk?

23   THE COURT: Yeah, go talk.

24   Okay. All right, then. We're back in session.

25   All counsel are present.

1   Thank you, counsel, for your courtesy.

2   (In open court.)

3   THE COURT: We'll see you at 8:30 tomorrow.

4   And I'm going to admonish you to be careful about

5   watching the press. The case is ended. We expect that

6   there's going to be some press notoriety, both in the

7   written press and in the media. And just asking you to be

8   cautious. If you recognize anything about this case, please

9   do your best to flip that channel, turn the radio, or set

10   aside the paper. That's about the best we can do.

11   Okay. We'll see you tomorrow at 8:30. You're

12   admonished not to discuss this matter amongst yourselves nor

13   form or express any opinion concerning the case.

14   Good night.

15   (Jury adjourns.)

16   (Outside the presence of the jury.)

17   THE COURT: All right. Counsel, back in session.

18   All of the counsel are still present.

19   This evening I'm going to demand that lead counsel

20   be present so that any rulings that are made on the Rule 50

21   and the jury instructions, that counsel are aware of the

22   Court's rulings.

23   I don't think it has to take that long, but I want

24   to make certain as a consistent courtesy on my part that

25   each of you are satisfied with your Rule 50 arguments, and

b8980393-7245-4f26-8a2d-aec59f8e7cc6

1   if you would like to renew any portion of that argument,

2   make any further record, you're invited to do so.

3   Let me just start with, the Rule 50 came from both

4   of you. I mean, it was kind of a coequal effort, so let me

5   just start with NDS.

6   Any further comments on Rule 50s that you would

7   like to make?

8   MR. SNYDER: Your Honor, very briefly.

9   THE COURT: Please.

10   MR. SNYDER: The testimony of Mr. Andre Kudelski,

11   I believe, confirmed the need for our or the wisdom of our

12   Rule 50 motion on two issues.

13   First, relating to the mitigation of damages, he

14   testified specifically that they did not follow the

15   warranty, even though it was available, and that they did

16   not apply the term of that warranty, which was the direct

17   cost of manufacturing, excluding overhead, which was

18   something that was available to EchoStar and was not used.

19   THE COURT: Okay.

20   MR. SNYDER: Second, related to our motion on

21   disgorgement, I believe that Mr. Kudelski's testimony is not

22   sufficient to contradict the testimony of the only

23   testifying witness from DirecTV; that EchoStar and

24   NagraStar, the plaintiffs in this case, would not and could

25   not have gotten the DirecTV contract, regardless of the

1   state of EchoStar and NagraStar's security and their

2   conditional access system.

3   THE COURT: Okay.

4   Mr. Stone.

5   MR. STONE: No, he stole my thunder. That was it

6   on the issue.

7   THE COURT: Mr. Eberhart and Mr. Klein?

8   MR. KLEIN: Nothing, Your Honor.

9   MR. EBERHART: Nothing.

10   THE COURT: Mr. Welsh and Mr. Hagan?

11   MR. WELCH: Mr. Hagan will argue it.

12   THE COURT: Okay.

13   MR. HAGAN: Your Honor, for purposes of preserving

14   our Rule 50 motions, we urge those formally at this time.

15   THE COURT: Okay.

16   MR. HAGAN: And would submit on those grounds.

17   To address the two issues raised by Mr. Snyder

18   with respect to mitigation, it is still our position that

19   the defendant should not benefit from their wrongdoing.

20   They can certainly argue that the plaintiffs failed to

21   properly mitigate their damages, but it's -- I believe that

22   the Court has adequately addressed that in the instructions

23   as they stand.

24   With respect to disgorgement, two points,

25   Your Honor:

1   First, the testimony of Mr. Kudelski as well as

2   the testimony of Mr. Kahn demonstrate that DirecTV was in

3   negotiations with Nagra to switch conditional access

4   providers, and that was in the '98/'99 time frame.

5   They decided not to go forward with inking a

6   settlement or inking a new deal for two reasons: One, they

7   learned that Nagra's conditional access system had been

8   compromised, and this was shortly after the November 1998

9   Headend Report; two, they were told of that compromise by

10   representatives of the defendants. I think that certainly

11   establishes a motive for the defendants to engage in the

12   conduct in which they engaged as well as to provide that

13   information to representatives of DirecTV to sway them away

14   from entering into a new deal with Nagra.

15   Second point: It is irrelevant under the law

16   under the disgorgement theory that we have alleged through

17   the California Penal Code whether or not Nagra actually

18   signed a deal with Kudelski or whether or not Kudelski or

19   DirecTV was actually going to enter into that deal. The

20   disgorgement component of the California Penal Code is

21   punitive in nature. And the disgorgement theory allows for

22   revenues, not profits.

23   So at this time we would reurge our Rule 50

24   motion, striking the exhibit offered by the defendants that

25   set forth costs associated with earning those revenues and

1   any testimony by the defendants' corporate representative,

2   Dov Rubin, related to that exhibit.

3   THE COURT: Okay. Anything further by any

4   counsel?

5   MR. SNYDER: Very, very briefly, Your Honor.

6   Two-points:

7   First, Mr. Kudelski testified that the reason that

8   Nagra did not get the DirecTV contract was because

9   News Corporation purchased an interest in DirecTV, which is,

10   of course, unrelated to any of these events and certainly to

11   the security of their system. And that would prevent any

12   notion of causation.

13   And then finally and formally, we reurge -- if I

14   haven't mentioned them, we reurge all of our motions

15   previously made on Friday.

16   THE COURT: Okay. I want to make sure everybody

17   is exhausted and you've had your say.

18   Mr. Hagan.

19   MR. HAGAN: Your Honor, we submit with the

20   arguments that we have already made as well as the briefing

21   that we have submitted to the Court.

22   THE COURT: Okay.

23   We've been working very hard in your absence

24   trying to anticipate what these last few days would bring.

25   And even within the last couple hours there's been some

1   updating going on over lunch. Some of these issues between

2   the two of you on Rule 50 were frozen, quite frankly, a long

3   time ago.

4   The disgorgement, the damages, and the

5   counterclaim, whether estoppel would still lie -- there were

6   some significant issues left that I promised each of you I'd

7   wait to decide until Kudelski, Dr. Peled, whomever would

8   testify in rebuttal or surrebuttal.

9   So if you'll give us a few moments, I think that

10   we will send out to you about 15 to 20 pages of rulings. I

11   think you'll need an hour to absorb those rulings, and then

12   I propose to meet you at 6:00 o'clock to go over the

13   remainder of the instructions with you in light of the

14   Court's rulings. I think I can do that within an hour.

15   But once you see my rulings, I'm giving you every

16   opportunity now to make any further statements because those

17   are not subject to reargument.

18   So if there's anything else that you could

19   possibly say, this is the time because it won't be a

20   negotiating option at that time.

21   And I just want to make certain that you're

22   satisfied, Mr. Snyder, and Mr. Hagan, you're satisfied.

23   MR. SNYDER: Submitted, Your Honor.

24   THE COURT: Okay.

25   MR. HAGAN: Submitted with one point, Your Honor.

b8980393-7245-4f26-8a2d-aec59f8e7cc6

1   We think that the Court has taken great pains to

2   go with the conservative approach. In that vein, we think

3   that a question of disgorgement should go to the jury. If

4   the Court decides subsequently that the jury's verdict is

5   inconsistent with arguments made by the defendants or what

6   the Court believes the Ninth Circuit would do, then the

7   Court can certainly take that away at that time. If the

8   Ninth Circuit decides that disgorgement was an improper

9   remedy to be submitted to the jury, then they can take it

10   away at that time.

11   Alternatively, if we do not allow that issue to go

12   to the jury and the Ninth Circuit decides that it was a

13   proper issue for their consideration, then we're going to be

14   right back down here again on one particular issue.

15   THE COURT: Well, I think you're both in a few

16   moments going to be very pleased and very displeased.

17   I want to make sure you have concluded.

18   MR. HAGAN: I have, Your Honor.

19   THE COURT: I'm deeply concerned about the

20   disgorgement theory. And you have a way, literally, of

21   getting a billion dollars or more, frankly, without the

22   disgorgement theory. It's only a part and parcel of it.

23   You have numerous ways of calculating damages in this matter

24   that could be astronomical. And I consider that a very

25   small part of your case and quite frankly not the linchpin

1 of your damages argument.

2   I've set forth a number of reasons you're going to

3 see why I'm going to grant the Rule 50 on the disgorgement.

4   Concerning unclean hands, some of the displeasure

5 NDS is going to feel is as follows, and I'm going to grant

6 your Rule 50 concerning unclean hands. I don't see any

7 nexus between the conduct here, and we've set that forth in

8 probably four or five pages concerning the disgorgement

9 theory and a number of pages concerning the unclean hands

10 issues.

11   Also I don't see any damages. Future or

12 speculative damages, as you ably pointed out with the last

13 witness, have been rather consistent. There are no damages

14 that are going to be awarded or the jury's going to consider

15 on the counterclaim by NDS.

16   And you're going to see about 10 or 11 rulings

17 which will lead to, I think, our 15th or 18th rework of

18 these instructions outside your presence. And I'll probably

19 give you a copy of these instructions with our notation

20 first on the side. But the rulings will briefly be as

21 follows, and then you can start the process of bringing

22 these out for counsel.

23   The motion for judgment as a matter of law as to

24 disgorgement is granted.

25   The judgment for -- motion for judgment as a

1   matter of law as to disgorgement is -- I'm sorry --

2   defendants' motion for judgment as a matter of law as to

3   disgorgement is granted.

4   Plaintiffs' motion for a judgment as a matter of

5   law to disgorgement is deemed moot.

6   Defendants' motion for judgment as a matter of law

7   that damages related to the card swap are barred by the

8   statute of limitations based on the 1998 postings is denied.

9   Defendants' motion for judgment as a matter of law

10 based on EchoStar and NagraStar's failure to enforce the

11 warranty provisions is denied.

12   Plaintiffs' motion for judgment as a matter of law

13 is granted on defendants' unclean hands defense.

14   Plaintiffs' motion to strike the unclean hands

15 defense is deemed moot.

16   Plaintiffs' affirmative defense of unclean hands

17 is stricken.

18   Plaintiffs' motion for judgment as a matter of law

19 on defendant's CUTSA counterclaim damages is hereby granted.

20   Plaintiffs' defense of failure to mitigate is

21 stricken.

22   Now, I'm going to give one of you the first copy

23 of these. But, quite frankly, as far as your damages claims

24 are concerned, you have ways of getting to damages that are

25 astronomical. You just need to sit and think about that for

1   a moment. You've got trebling potentially. I'm not sending

2   this up to the Circuit, and you'll see four pages of why.

3   There are four separate reasons that I feel very strongly

4   about, so you're not going up to the jury on disgorgement.

5   And although I've been cautious, I'm fairly confident that

6   this does not belong in front of the jury.

7   As far as unclean hands are concerned, I don't

8   find a nexus here. I don't find a nexus between the conduct

9   and pirating, et cetera, and I don't see any damages

10   testified to, and speculative damages in the future are not

11   damages. The law is very clear on that.

12   But instead of ad-libbing from the stand, you've

13   got 15 pages in small print. If I put out a normal order,

14   it would be about 35 pages. It's going to take you awhile

15   to absorb that, frankly. I'm not going to waste time with

16   the instructions right now. We're done with the

17   instructions. When I gave these to you, these will be the

18   instructions. We've hashed these more often than you can

19   imagine. So we're done.

20   But I'm going to go over them with you. Over the

21   weekend, I missed a couple -- for instance, on Page 29, the

22   contributory liability, the subparagraph 2, it used to read

23   that "defendants intentionally induced or materially

24   contributed the circumvention." Well, I think it deserves

25   the word "to" in there. It's a small thing, and I'm

1   supposed to catch that. And by this time, I think I've got

2   these instructions memorized.

3   The same thing, of course, on Page 38 concerning

4   contributory liability, need to add the word "to."

5   You know, if the jury accepts your argument,

6   you've potentially got damages as high as 1,000 to $10,000.

7   Take $10,000 just for one year times a hundred thousand

8   minimally. That's a billion dollars.

9   And, I mean, this could be zero liability or

10   astronomical liability, let alone compounding that over more

11   than one year. So let alone other sections that are

12   cumulative. And, of course, this could add up to be zero,

13   quite frankly.

14   I'm going to ask you on Claim No. 4 a little bit

15   about the tolling provision. That's something I still want

16   to talk to you about tonight.

17   The last two portions, the violation of

18   California -- or the last two "dots" have been stricken by

19   the Court. You'll see that on our instructions in a few

20   moments. The first is still in play. I'm a little bit

21   concerned about the June 6, 1999, because right now it reads

22   "occurred on or after June 6, 2000." But there's a strong

23   argument that you could reach back to June 6th of 1999 in

24   terms of damages. That's going to be so confusing to the

25   jury, but I'll talk to you about that in just a moment.

1   Also, on Claim 5, the same provision, the first

2   bullet points left, the last two are stricken.

3   You'll see that on actual damages and defendants'

4   revenues attributable to violations, we're going to strike

5   "and defendants' revenues," and you'll see in the body "plus

6   any defendants' revenues attributable to violations of

7   California Penal Code Section 593(e)(b)" have been stricken,

8   and the last bracketed paragraph that is still bracketed is

9   stricken.

10   You'll see that -- let me see if I can do this by

11 memory. In certain portion, it states "defendants," and

12 it's this Court's concern about criminal RICO and civil

13 RICO. These instructions are confusing because sometime it

14 refers to an individual, and it refers -- the jury may think

15 that a defendant is an individual.

16   Well, Tarnovsky's not a charged defendant here.

17 It's really NDS Americas and NDS Group, PLC. And so you'll

18 see that we've modified that in certain parts to make sure

19 who the defendants are on occasion, and other times you've

20 got a combination here.

21   And so you're going to have to look closely when

22 we finally get back on the record at, for instance, Claim 6,

23 the participation portion and the pattern of racketeering

24 activity on Page 2. We try to make that as sensible as we

25 can as well as the predicate acts by spelling out once again

1   so there's not confusion and in more detail what defendants

2   are. Because, in a sense, the defendants may be NDS

3   Americas and NDS Group, PLC. And that's the trouble with

4   applying criminal RICO to civil RICO.

5   But I've editorialized enough, and the courts hold

6   that there's such a thing, so there's apparently such a

7   thing.

8   I don't understand, and I'm striking with the

9   Court's ruling the plaintiffs' affirmative defense, defense

10   of failure to mitigate. It's no longer applicable, in my

11   opinion. There's no damages going to the jury.

12   I'm striking the -- well, I've still got a

13   question mark about estoppel, but it just doesn't seem

14   relevant now that there are no damages.

15   MR. SNYDER: I assume you mean on the

16   counterclaim, Your Honor?

17   THE COURT: That's on the counterclaim. I hope I

18   stated that.

19   Unclean hands affirmative defense, it doesn't make

20   sense to have those in the instructions.

21   Now, I'm going to do this from memory. The

22   special verdict forms have been substantially modified also.

23   On the fifth question, I understand that that

24   question is designed to go to the jury on the issue of

25   prejudgment interest. But when you read through that

1   special verdict and you get to question No. 5, which is the

2   bottom of the page, right here, there's no blank. So if

3   you're a jury and you're going through, you find oppression

4   or whatever, and you look for something to fill in, and

5   there's nothing there. So we're going to fill out

6   prejudgment interest. In other words, if they check that,

7   they ought to know what they're doing.

8   We don't see any sense anymore -- I certainly

9   don't -- as to some of your RICO findings. For instance,

10   questions No. 7, 8, 9 -- I'm wondering why they're there any

11   longer. And I'll go over those with you tonight.

12   I'm also thinking, concerning any injunctive

13   relief, that that is the Court's decision, and I'm thinking

14   about taking it out of the instructions. And I'll talk to

15   you about that tonight also. I think it's confusing for the

16   jury.

17   So anyway, I'm going to meet you at 6:00 o'clock

18   or a little after. You are going to sit down quietly as a

19   group so you can discuss these. You can make more than one

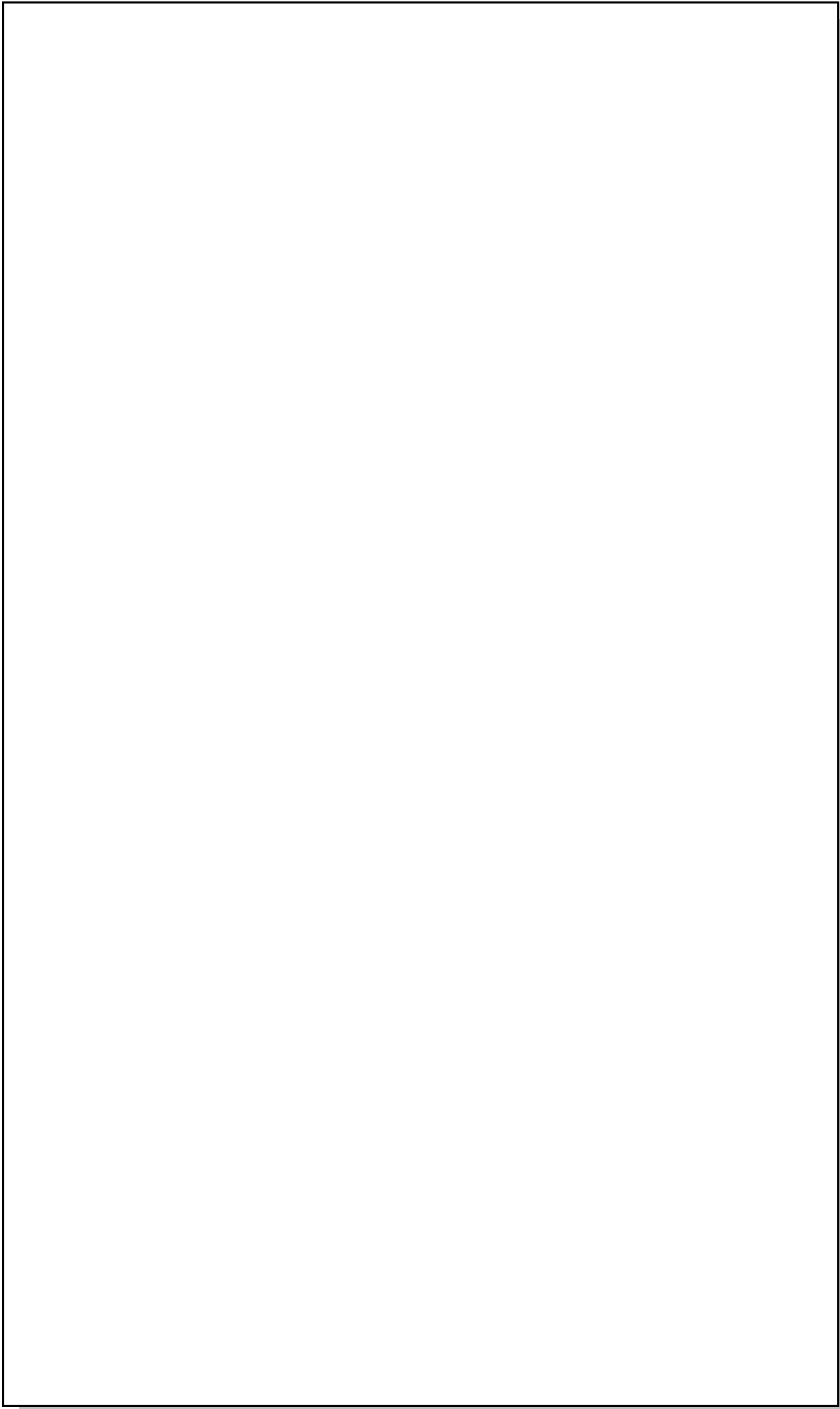20   copy.

21   These are the Court's final ruling. They're not

22   subject to debate anymore.

23   All right. Thank you very much.

24   (At 4:55 p.m., proceedings were adjourned.)

25   -oOo-

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1   -oOo-

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   _____

                       DEBBIE GALE, U.S. COURT REPORTER

16   CSR NO. 9472, RPR

17

18

19

20

21

22

23

24

25

55:23 80:8,10
basement 50:25
basically 37:11
43:15,22
basis 9:16
BBCO 10:5 11:13
11:16,17,20
13:2 14:6,21
15:12 17:15,17
17:21 19:16
21:9,11 22:17
24:18 28:3,7
30:8,9 31:16,19
31:25 32:3,8,11
32:25 33:4,8
34:7,11 35:14
37:21 38:1,20
39:16 40:25
41:4,15,25 42:3
42:20 43:9,20
43:24 44:8 45:3
45:17 47:22,24
48:19 49:4,15
49:18 50:10,20
52:10 53:4,19
54:3 55:11,23
57:3,20,23
58:23 59:7,9
60:18
beam 15:25 37:5
37:11
bearing 7:4,8,13
began 21:9 30:1
40:25
behalf 5:9 7:16,17
8:4,23 29:16
46:13,16 63:21
64:5,20
behavior 17:25
believe 6:3 13:12
17:4 20:19,25
20:25 22:1
25:14 28:16
33:9,25 41:7
54:9 55:12
57:17 58:4
60:11 66:19
68:11 73:11,21
74:21
believed 40:22

53:10
believes 78:6
belong 81:6
bench 68:19
Bender's 65:14
benefit 74:19
best 21:10 22:4
40:23 49:7
57:25 72:9,10
better 9:17 69:5
70:6
beyond 43:4
billion 78:21 82:8
binding 7:24
bit 67:11 70:14
82:14,20
bits 36:20
blank 85:2
body 83:5
bother 62:1
bottom 85:2
box 23:20 27:6
54:19 55:1
boxes 14:5,8,9,10
14:13,16,17
30:24,25 31:2,3
31:5,10,12,13
48:13,14 54:22
bracketed 83:8,8
briefing 39:10
76:20
briefly 36:8 73:8
76:5 79:20
brilliant 53:8
bring 9:20 57:13
76:24
bringing 28:4
79:21
Broadband 47:25
broadcast 30:22
brought 27:1 28:2
budget 14:21 33:8
33:10 38:14,16
budgeting 38:13
building 43:21
bulk 32:12
bullet 83:2
bump 71:3
bunch 35:23
burned 44:24

business 14:7
26:8 27:3
buy 30:25
buying 46:2

_____

C

CA 14:1 21:6
cable 13:22,25
30:24 31:10
calculating 78:23
California 1:2,16
1:23 2:15,21 5:1
17:18 31:20,22
75:17,20 82:18
83:7
call 9:7 27:8
44:16,20 64:9
64:21
called 11:13 13:13
13:13 15:10
17:3 26:6 30:8
32:13,14 34:21
35:22 46:3
47:14,22 64:12
calling 9:17 56:23
70:3
calls 64:17
Canada 34:22
candid 53:11
capabilities 55:10
capable 40:16
capital 29:12,14
card 7:2,4 20:3
40:13,15,17,18
80:7
cards 7:12 14:11
14:12 19:22
20:1 31:6,9 40:7
40:11
career 58:16
careful 72:4
CARTER 1:3
case 26:15 27:4
27:14 28:15
55:4 57:1 62:4,7
64:1,23 67:5
68:23 69:2 71:5
71:7 72:5,8,13
73:24 78:25
catch 82:1

causation 76:12
cause 71:20
cautious 72:8
81:5
CDs 44:25
cell 16:23
cells 15:24
Center 2:14
CENTRAL 1:2
certain 9:9 26:13
43:6 54:2 64:1
65:10 68:3
72:24 77:21
83:11,18
certainly 28:3
38:5 48:21
51:12 57:8 69:5
69:23 74:20
75:10 76:10
78:7 85:8
CERTIFICATE
87:3
certify 87:5
cetera 21:8 23:16
81:9
CHAD 2:5
chairman 50:15
changed 13:12
20:2
changes 40:14,18
channel 72:9
characterize
15:23
charge 19:22 40:7
45:11
charged 83:16
chart 48:7
check 85:6
Cheseaux 22:23
22:24,25 23:2,3
39:19 43:14
chief 12:11,19,22
20:10 38:24
41:22,24 50:16
chip 15:19,21,22
15:24 32:13,15
32:15,16,18,19
32:20,22 34:15
36:12,23 37:14
37:14,17,18,20

39:11 51:18
52:4,8
chips 46:1,4,6
Chipworks 34:21
34:23 35:2
Chris 56:20
Christine 2:5
62:15
Christophe 18:14
19:20 40:6
circuit 13:7 78:6
78:8,12 81:2
circumvention
81:24
civil 83:12 84:4
Claim 82:14 83:1
83:22
claimed 22:14
claims 80:23
clean 49:8
clear 81:11
Clearly 59:2
CLERK 70:17
close 23:14
closely 83:21
code 10:8,8 16:6,7
16:25 17:2
18:23 19:3,5,10
19:12,17,18
34:25 35:1,2,4,7
35:9,18,21,24
35:24 36:16,16
36:17,25 75:17
75:20 83:7 87:6
coequal 73:4
coexist 14:1 41:14
51:25
collectively 6:22
6:24
combination
83:20
come 22:17,22
43:9,11 47:10
58:25 62:5
63:10 67:14,15
68:18 69:17,17
69:18
comfortable 58:1
coming 8:18
comments 73:6

commercial 35:22
44:16
communications
6:19 51:4 56:24
companies 31:10
52:14,17 53:24
company 33:25
34:5,21 47:14
comparison 56:7
57:7
compatibility
30:11 48:9,25
50:10 51:15,22
compatible 11:18
competition
31:12
competitive 30:25
competitor's
41:13 42:24
43:3
complaints 64:13
complete 20:16
64:1 69:21
completed 27:7
45:16 50:13
64:5
compliance 49:21
54:15
compliments
67:18
component 36:20
49:4 50:10
75:20
compounding
82:10
compromise 75:9
compromised
75:8
concern 9:4 83:12
concerned 78:19
80:24 81:7
82:21
concerning 8:24
62:7 72:13 79:4
79:6,8,9 82:3
85:12
conclude 65:10
concluded 64:23
67:5 78:17
concludes 7:14

concluding 67:16
conclusion 65:18
conditional 11:19
13:6,9,16,22,24
14:8 21:20 28:8
28:12,15 30:12
30:13,16,20,23
33:1 36:19,21
36:24 42:18
51:20,25 52:4,6
74:2 75:3,7
conduct 75:12
79:7 81:8
conducted 34:2
49:21
confer 63:17
Conference 71:13
87:10
confident 5:17
81:5
confidential
23:19,24 44:1
57:22 58:5
confirmed 73:11
conformance
87:9
confuse 27:17
confusing 82:24
83:13 85:15
confusion 84:1
connections 37:12
conservative 78:2
consider 78:24
79:14
consideration
78:13
considered 23:19
23:24 24:3 49:6
consistent 26:11
72:24 79:13
consult 64:15
consultant 15:15
17:7 34:8 35:11
35:16 37:3 60:4
60:9
consultants 16:24
33:19 34:18
35:10 59:7
consultant's
35:12

consumed 14:23
consumptive
57:10
contacted 47:9
contacts 16:9
content 16:21
30:22
contents 16:8
37:16,22,24
54:8
context 35:14
continue 57:6
60:25 61:3
69:16
Continued 4:1
continues 31:23
contract 73:25
76:8
contradict 73:22
contrary 28:11
contributed 81:24
contributory
81:22 82:4
conversation
22:13,14 54:1
convey 22:8 30:23
60:17
conveyed 21:22
22:1
conveying 40:20
cooperation 14:9
cooperatively
32:22
copy 6:11,12,14
6:15,16 56:14
79:19 80:22
85:20
copyright 49:11
49:22 54:16
copyrighted
54:25
CORP 1:5
corporate 23:1
43:14 60:20
76:1
Corporation 2:3
6:20,21,22
47:25 76:9
correct 8:10
13:18 14:19,20

15:16 16:13,14
24:12 25:22
31:11,14,25
32:2 33:15
42:16 45:1
46:23,24 47:2,5
47:23 48:5 50:1
50:3,8,14,21,24
51:5 52:11,12
53:21 54:4
57:20,21 58:6
66:1 87:7
correctly 13:15
48:2,7,23
cost 31:1 73:17
Costa 11:4
costs 75:25
counsel 5:6,8,13
6:2,8 7:18,20,23
8:3,9,17,21 10:2
12:2,25 19:1
25:1 26:3 27:25
28:25 29:2,15
43:4 44:2,3
48:22 56:14
57:6,19 58:19
61:11,16 64:5
64:22 66:2,6,12
66:13,22,24
67:17,25 71:2,5
71:11,25 72:1
72:17,18,19,21
76:4 79:22
counterclaim
77:5 79:15
80:19 84:16,17
counterfeit 54:22
couple 57:15
68:13 69:9
76:25 81:21
course 11:10
12:16 16:1,3
23:18 24:2,14
30:6 31:15
33:13 34:7,10
37:2,21 38:20
43:24 44:8
45:22 48:20
50:4 76:10 82:3
82:12

court 1:1,21,22
5:5,13,15,21,25
6:2,5,11 7:18,20
7:22 8:3,6,9,12
8:21 9:2,4,18,19
9:20 10:12,17
10:23 12:2,13
12:18,21,24
17:9,11,13
18:15,18,21,23
18:25 21:25
22:3,8,24 23:2,4
26:1,3 27:25
28:19,23 29:4,8
29:11,13,15
42:8 43:4 46:13
46:16 52:21,25
55:19 56:6,10
56:25 57:9
58:10,19 59:21
59:25 60:2,14
61:9,11,13,16
61:20,24 62:10
62:13,17,19,21
62:23,25 63:5,8
63:10,14,18,24
64:2,8,11 65:2,4
66:11,16 67:1,4
67:22 68:7,14
69:11 70:18,21
71:3,5,12,14,15
71:23 72:2,3,17
73:9,19 74:3,7
74:10,12,15,22
76:3,16,21,22
77:24 78:1,4,6,7
78:15,19 82:19
84:17 87:15
courtesy 5:8
64:19 66:13
72:1,24
courts 84:5
Court's 63:25
72:22 77:14
83:12 84:9
85:13,21
create 15:23
17:21 27:5,18
30:10 31:8
32:19 37:12,12

54:22
created 17:23
creating 22:7
criminal 83:12
   84:4
CROSS 3:12
cross-examinati...
   9:13 46:13,18
cryptographic
   40:14
cryptography
   32:12
CSR 1:21 87:16
cumulative 82:12
currently 11:3
   29:22
customer 25:14
customers 18:5
CUTSA 80:19

D

D 2:5,19 3:1
damages 73:13
   74:21 77:4
   78:23 79:1,11
   79:12,13 80:7
   80:19,23,24
   81:9,10,11 82:6
   82:24 83:3
   84:11,14
Dan 9:1 29:10
dangerous 71:10
Daniel 3:5,13
   10:15 29:6
DARIN 2:13
dark 65:16
database 7:3,7,12
date 39:12,15
   64:4 71:15
   87:12
Dateline 71:16
daughter's 65:15
David 1:3 2:6,13
   2:24
day 1:8 5:2 67:6
   67:17,23 69:22
   70:2,6,10,10,19
   70:22
days 47:12 68:13
   68:24 69:3

76:24
deal 23:14 75:6
   75:14,18,19
dealing 40:16
dealings 53:5
   55:16
dealt 51:14,15,22
debate 70:5 85:22
Debbie 1:21 87:15
decapsulate 15:7
   33:21
decapsulating
   15:19
decide 65:25 70:1
   77:7
decided 65:8 75:5
decides 78:4,8,12
decision 23:7,10
   85:13
decrypt 37:23
   44:22,23
decrypted 44:24
decryption 44:21
dedicated 48:16
deemed 80:5,15
deeply 78:19
defendant 2:11
   74:19 83:15,16
defendants 1:9
   3:8 6:23 7:17
   9:7,16 47:1,3,9
   55:3 56:1,14
   75:10,11,24
   76:1 78:5 80:2,6
   80:9,13 81:23
   83:3,5,6,11,19
   84:1,2
defendant's 80:19
defense 3:7 10:15
   29:3,6 66:25
   80:13,15,16,20
   84:9,9,19
define 38:8
defined 21:1,7
   39:25
DeHaan 3:5,13
   9:1,7,11,17,20
   10:4,6,15 11:3
   26:6,10,18
   27:13 29:6,10

29:20 46:20
   55:23 57:17
   58:17,22
DeHaan's 9:14
   27:23 28:11
deliberation
   69:20
deliberations
   69:4,13 70:10
demand 72:19
demonstrate 26:6
   75:2
denied 80:8,11
departed 52:18
departure 52:16
depending 13:11
   32:14
depo 48:6
deposed 9:11
deposition 9:14
   46:22 52:2 63:4
descrambling
   48:3 51:19 52:7
describe 19:10
   36:8,18 40:22
   54:18,21,24
   59:15
described 36:3
   55:6 59:22
describes 56:2
description 39:14
   39:15 59:18
deserves 81:24
designed 16:7
   84:24
detail 39:18 40:22
   55:7 56:2 84:1
detailed 34:15
details 52:18
determine 37:24
develop 48:3
   51:24 54:25
   56:17
developed 14:6
development
   48:12
devices 46:4,6
devoted 33:10
Diego 17:19 31:20
different 13:11

31:2
DigiCipher 21:18
   21:19 22:15,20
   30:12 32:22
   42:12,15,17,18
   48:4 51:25
direct 3:12 9:12
   11:1 12:11 26:5
   28:2 29:18 51:3
   59:1 60:20
   73:16
directly 10:4
   28:11 41:8
   43:18 58:24
   59:12 61:5
director 12:10
DirecTV 73:23,25
   75:2,13,19 76:8
   76:9
disagree 65:20
disassemble
   16:24 35:18,20
disassembled
   17:2 19:5
disassembling
   19:17
disassembly 10:7
   17:6 19:3 36:2
disclose 57:22
disclosing 58:1
discuss 20:14 39:4
   62:6 72:12
   85:19
discussion 19:25
   40:10 66:9
discussions 40:19
   50:15
disgorgement
   73:21 74:24
   75:16,20,21
   77:4 78:3,8,20
   78:22 79:3,8,24
   80:1,3,5 81:4
dismissed 52:20
displaced 14:17
displeased 78:16
displeasure 79:4
dispose 23:14
Disregard 52:25
distribution 46:3

District 1:1,2,22
DOC 1:7
document 23:19
   36:9
documentation
   17:21,23 38:1,4
documents 18:6
   18:15,16,16
   20:17,23 23:17
   23:23 24:5
   25:23 38:13
   39:20 43:24
   44:1,5 45:17
doing 67:24 85:7
dollars 70:22
   78:21 82:8
dots 82:18
Dov 2:24 76:2
Dr 5:12,17,23
   12:15,19 21:14
   21:15,22 22:1
   22:12,19 42:2,5
   43:12 52:10
   53:3,6,10,14,18
   77:7
dried 43:15
drives 24:13,16
   44:11 45:2,14
D-E 9:3 29:12,14
D16V4 1:25

E

E 3:1
earlier 41:7 46:22
   48:23 51:13
earning 75:25
Eberhart 2:13
   3:13,15 9:3 10:4
   10:21 11:2 12:4
   13:1 17:14 19:2
   22:11 23:5 26:2
   28:1 29:17,17
   29:19 42:13
   43:8 46:12
   47:16 52:23
   55:14,18 56:4
   56:22 58:9,21
   60:3,11,15,16
   61:8,12 63:13
   74:7,9

Eberhart's 26:5
EchoStar 1:5,25
  2:3 5:10 6:19,20
  6:21,21,22 7:4,7
  7:12,16 8:4,23
  28:19 46:17
  64:8,24 67:1
  73:18,23 74:1
  80:10
EchoStar's 7:2,6
  7:11 55:7 56:2
  56:17
editorialized 84:5
effect 27:17
effort 42:22 73:4
efforts 32:10
  56:16
either 20:23 39:21
  40:17
El 17:18 25:20,21
  31:24 32:1
  45:12,15
electron 10:7
  15:21 16:22
  34:10,19,24
electronic 24:1
  44:7,11,14,15
  44:18
em 41:18 54:8
Embarcadero
  2:14
embodied 32:13
employed 10:4
  11:3,5,8 29:22
  30:1 31:17
employee 41:18
  47:1 52:13
employees 18:9
employment 11:6
  11:11 30:7
enable 30:19
encrypted 24:5,7
  24:8,10 44:15
  44:19
endeavored 13:25
ended 72:5
end-to-end 21:4,6
enforce 80:10
engage 75:11
engaged 49:24

57:18,24 75:12
engaging 50:25
engineer 11:12
engineering 15:1
  21:5 24:5,19,22
  28:9,15 32:8,10
  36:11,21 39:5,9
  40:3 42:24 48:9
  49:1 50:6,10
  51:15
engineers 27:9
  57:19
England 5:23
enjoy 69:12
ensure 54:14
enter 75:19
entering 75:14
enthusiasm 67:19
entire 48:20 51:18
entirely 56:24
entirety 11:23
  49:20
environment 20:2
  31:9 40:11,13
  40:17
equipment 23:16
  26:14 45:14
equipped 14:10
establish 21:3
establishes 75:11
estimation 39:12
estoppel 77:5
  84:13
et 1:5,8 2:3,11
  21:8 23:16
  66:23 81:9
evening 65:25
  72:19
event 19:19
events 65:9 76:10
eventually 13:13
everybody 76:16
evidence 3:18 4:2
  7:17,25 8:1,2
  28:17,20 45:17
  52:24 53:1
  62:11 66:21
  67:2 68:8
evidentiary 64:23
  67:4

exact 26:17 61:7
  69:6
exactly 36:17 62:3
examination 5:9
  9:12 11:1 26:5
  29:18 58:20
exception 60:12
excluding 73:17
excuse 65:5
excused 6:1 61:11
  61:15
executed 16:6,7
executive 22:9
  50:16 61:7
executives 38:19
  40:5
exhausted 76:17
exhibit 3:18 4:2
  7:1,5,10,16,16
  8:1,2 75:24 76:2
exhibits 3:17 4:1
  6:25 61:18
  66:16,21 68:15
  68:24 69:6
exist 26:22 41:14
expect 10:21 56:1
  72:5
experience 41:11
  55:11,23,24
  68:18
expert 57:12
explain 30:14
  71:1
explained 22:5
express 62:7
  72:13
extent 26:21
  56:23
external 16:7,9,10
  30:17 37:14
  38:7 54:10
extract 30:20,22
  32:18 34:25
extracted 13:8
  16:16,19,21,22
  36:22 37:19,22
  37:25
extracting 15:20
  19:16 35:2,6
  37:21

extraction 10:8
extraordinary
  67:18
e-mailed 20:19

———— **F** ————
facilities 17:15,17
fact 26:18,22
  48:19 49:9,20
  50:5,13 51:9
  53:9 54:14 58:4
facts 28:4 52:23
  53:1
factual 43:6
failed 74:20
failure 80:10,20
  84:10
fair 15:14 49:2
  68:8
fairly 81:5
fall 21:24 43:12
fallen 69:24
familiar 11:13
  41:19 56:11,18
  59:3
far 20:3 39:16
  40:15 41:6
  70:22 80:23
  81:7
faster 40:17 68:24
Federal 1:21
feel 5:17 79:5
  81:3
felt 58:1
FIB 10:7 15:25
  16:3,9 37:5,8,10
fifth 84:23
figure 14:1 32:18
  40:16
File 6:17
filed 47:6,7
files 44:14,15
fill 85:4,5
final 6:2,4,5 85:21
finally 27:12,15
  63:7 69:13
  76:13 83:22
find 9:19,21 63:18
  81:8,8 85:3
findings 85:9

fine 6:13 69:17,18
  69:19
finish 39:5 57:14
  70:5
finished 37:23
Finnegan 17:8,10
  17:12,15 35:5
  35:13,14,20
  36:1,5,10 37:2
Finnegan's 35:17
firm 15:10 63:19
firmware 15:21
  18:1 36:4,12
  37:14,15
first 28:2 65:9
  73:13 75:1 76:7
  79:20 80:22
  82:20 83:1
five 20:25 29:25
  79:8
flip 72:9
focus 11:20 13:5,6
  32:10 48:1
  51:14,21
focused 15:25
  37:5,11
follow 73:14
following 10:10
  69:15
follows 6:24 71:13
  79:5,21
fooling 37:15
forced 11:18 12:1
  14:13,16 27:8
  30:10,14 51:24
foregoing 87:6
form 62:6 68:9
  72:13
formally 6:20
  7:15 65:5 74:14
  76:13
format 87:9
former 12:22
  52:13
forms 23:16 84:22
forth 28:4 75:25
  79:2,7
forward 10:13
  75:5
foundation 12:13

59:20
Fountainview 2:7
four 61:18 66:15
68:16 79:8 81:2
81:3
frame 75:4
France 47:14
Francisco 2:15
frankly 65:23
67:19 77:2
78:21,25 80:23
81:15 82:13
fresh 65:21 70:5
Friday 65:16
76:15
Fridays 69:24
front 81:6
frozen 77:2
full 28:4 29:9
54:15 64:1,14
69:7
function 36:4,16
36:17 52:4 57:3
functional 19:12
21:4 36:3,5,9,15
36:18 38:7
functionality 28:8
28:10,13,13
33:2,5 35:19
36:19 39:15
functions 13:16
13:17 21:5
36:24
funding 22:23
43:14 60:22,25
61:3,4
further 5:11,13
5:14 8:3 46:12
58:18 61:10
64:10 66:3,24
67:2 73:2,6 76:3
77:16
future 64:4 79:11
81:10
F-I-N-N-E-G-A...
17:12

G

Gale 1:21 87:15
gauge 67:23

general 19:9 71:9
generated 23:18
24:2 26:15,18
32:17 40:24
43:24 44:8 54:2
54:18 55:3
generous 66:7
gentleman 9:5,24
17:7 40:6 52:10
56:20
gentleman's
22:10
gentlemen 62:1
getting 78:21
80:24
Gino 25:8,10,12
45:11
give 14:24 21:1
25:7 27:2 45:10
53:15 69:21
77:9 79:19
80:22
given 25:8 45:11
46:10
giving 71:20
77:15
go 6:5 8:15 9:19
62:2 63:18
68:20,21 69:6
69:13,25 70:3,7
70:22,22,24
71:23 75:5
77:12 78:2,3,11
81:20 84:24
85:11
goal 21:3 30:18
37:11 48:2
51:23
going 6:6 8:14
10:19,20 29:5
55:20 56:6,22
62:2 63:20 65:8
65:9,25 67:7,15
67:20 72:4,6,19
75:19 77:1
78:13,16 79:2,3
79:5,5,14,14,16
80:22 81:4,14
81:15,20 82:14
82:24 83:4,21

84:11,21 85:3,5
85:17,18
good 29:20,21
46:20,21 58:15
72:14
goodness 68:12
gotten 57:4 73:25
graduation 65:15
grant 79:3,5
granted 79:24
80:3,13,19
granting 71:20
gray 49:7
great 58:4 78:1
grounds 27:24
74:16
group 1:8 2:11
6:23 12:6 32:4
40:5 50:16
52:14,17 53:23
70:23,24 83:17
84:3 85:19
grow 16:9
guy 34:5,5 43:21
45:11 60:21
guy's 36:13

H

habit 69:24
hack 54:19 55:7
56:2,17
hacking 22:16
57:24
Hagan 2:5 3:14
5:20 6:4,10,19
7:21 8:5,7 9:6
26:4 42:7 46:13
46:15,19 47:18
53:2 55:15,22
56:12 57:8,14
57:16 58:13,17
59:20 61:10
63:16 64:9 65:1
67:3 74:10,11
74:13,16 76:18
76:19 77:22,25
78:18
Haifa 55:4,9
56:10
half 48:15 65:21

hallway 57:13
hand 29:4 68:22
handle 20:4
handling 52:5
hands 79:4,6,9
80:13,14,16
81:7 84:19
hand-in-hand
48:19,21
happened 54:1
happening 68:17
hard 24:13,16
44:11 45:2,14
53:7 67:10
76:23
hardware 24:19
24:21 45:22,25
HARTSON 2:18
hashed 81:18
hate 62:1
Headend 56:8
57:9 75:9
hear 9:25 10:23
21:25 67:8,15
71:19
hearing 9:21
hearsay 42:7
60:12
heart 28:16
heavily 48:24
49:4
held 87:8
help 15:23 39:5
high 82:6
hired 15:13 34:25
47:3
HOGAN 2:18
hold 84:5
home 10:20 70:3
70:7
Honestly 37:22
47:7
Honor 5:11,14,19
5:20,24 6:10 8:5
8:11 9:6 10:22
26:2,4,23 27:12
28:1,6 46:15
56:22 57:8
58:18 60:11
61:10,12,17,22

62:18,22 63:6,7
63:9 64:7,9 65:1
65:3 66:25 67:3
68:5,6 73:8 74:8
74:13,25 76:5
76:19 77:23,25
78:18 84:16
HONORABLE
1:3
hope 84:17
hopefully 68:10
hour 65:21 70:13
70:13,25 77:11
77:14
hours 53:9 66:6
68:1,4,8 69:3,10
69:16,19 70:8
70:12 76:25
house 17:16
Houston 2:8
hundred 48:8
82:7
hunting 71:4
H-A-A-N 9:3
29:12,14

I

IDA 17:3,4 35:22
idea 12:14 32:16
36:11 37:13
53:8 68:17
identification
3:18,19,21,22
3:24 4:2 7:4,8
7:13
identified 61:19
61:20,23
identify 64:3
II 51:25
imagine 81:19
immediately 11:5
implemented
52:8
implementing
13:22
import 57:3
important 65:12
improper 26:24
49:14 50:11
55:18 56:4,24

78:8
inappropriate
  54:11 58:15
inception 53:25
include 39:15
included 14:13
  15:19 39:10
  52:4 55:12
including 49:11
  49:22 51:19
  54:15 55:16,24
inconsistent 78:5
inconvenience
  8:16
individual 17:5
  34:2 41:19 42:2
  59:3 83:14,15
individuals 34:4
  57:23
induced 81:23
industry 41:11,12
influence 60:24
inform 5:21 39:7
  63:10 64:22
information 4:3,4
  7:2,6,11 9:14
  14:5 20:5 21:23
  22:1 23:15 36:9
  39:8 40:20
  56:20 57:23
  58:2,5,7 75:13
informed 9:6
  19:15 22:15,19
  27:10 42:2,10
  43:16 65:14
Initially 34:21
injunctive 85:12
inking 75:5,6
inputs 19:14
  36:14
inside 36:12 37:14
  37:17
instance 81:21
  83:22 85:9
instruct 67:22
instructed 24:24
instructions
  65:12,22,25
  72:21 74:22
  77:13 79:18,19

81:16,17,18
82:2,19 83:13
84:20 85:14
integrated 46:3
intellectual 23:15
intelligent 53:6
intend 14:5
intended 9:7
  11:17 30:10
intent 31:4,7,8
  52:3
intentionally
  81:23
interact 59:12
interaction 42:5
interest 76:9
  84:25 85:6
interface 32:19
  60:20
interfaces 18:3
  21:5 30:17 38:9
  39:25 41:13
internal 16:8 38:7
  38:14 54:11
internally 18:5
Internet 58:8
interoperate
  30:18
invited 73:2
involve 13:2
  24:18 28:7 32:8
  33:1,4 40:19
involved 10:6
  23:9 27:8 28:9
  28:12 30:8
  48:24,25 49:4
  51:18 56:21
involvement
  23:13
involving 20:1
  51:16
ion 15:25 37:5
IRD's 48:12
iron 37:11
irrelevant 75:15
issue 8:24 9:18
  26:8,15 27:3,7
  27:14 28:3
  40:12 74:6
  78:11,13,14

84:24
issues 26:12 27:18
  28:16 43:7
  48:17 73:12
  74:17 77:1,6
  79:10
item 62:19,23
items 7:22 62:10
  63:11
IV 1:8 5:2

J

job 20:16 23:14
  35:18 36:13
  48:22 67:18
  68:9
John 12:15,19
  21:14,16 41:19
  41:21,22 42:9
  52:10 58:22
  60:19,23
joined 59:10
joint 7:14
jointly 6:24
joking 68:1
judge 1:3 68:14
judgment 79:23
  79:25,25 80:2,4
  80:6,9,12,18
Judicial 87:10
July 47:3
June 47:13 82:21
  82:22,23
jurors 68:19
jury 1:15 3:6 5:4
  6:6 8:13,15,19
  8:20 10:11,20
  27:17,20 28:21
  28:22 29:9
  30:15 36:8
  57:14 61:25
  62:2,8,9 63:10
  64:4,23 65:5,12
  66:4,10 72:15
  72:16,21 78:3,9
  78:12 81:4,6
  82:5,25 83:14
  84:11,24 85:3
  85:16
jury's 5:5 8:21

65:21 66:14
78:4 79:14

K

Kahn 75:2
keep 49:8 58:5
KENNETH 2:19
kept 67:20
key 13:8 24:9,11
  25:7,10,13
  30:21 32:17,19
  32:20 40:18
  44:21 45:10
  46:10 48:3 52:5
keyed 44:18
keys 20:2 40:14
  40:23
kidding 57:13
  71:9
kind 66:4 73:4
Klein 2:19 71:22
  74:7,8
knew 40:23 65:15
know 12:2 17:20
  22:10 36:13
  37:22 41:6 47:7
  47:24 52:18,18
  52:19 53:22
  54:9 55:9 61:2,7
  64:18 69:1,3,22
  71:6 82:5 85:7
knowledge 21:10
  22:4 26:19
  50:19 51:9
  52:16 57:25
known 6:20
Kristee 6:14
  28:21 66:3 70:9
  70:15
Kristee's 29:5
Kudelski 5:18,21
  9:10,12,13 10:5
  12:6,12,17 18:9
  23:7 26:11,16
  26:19,20 27:1
  28:3,6 32:4,7
  38:19 40:5
  50:16,17 51:4,6
  51:10 52:14,17
  52:20 53:23,23

58:24 59:1,13
59:16,19,23
60:8,17 61:5,6
73:10 75:1,18
75:18 76:7 77:7
Kudelski's 9:15
  26:8 28:18
  73:21

L

L 2:18
ladies 62:1
late 69:25
Laughter 67:21
  70:20
law 2:7,14,19
  49:22 75:15
  79:23 80:1,2,5,6
  80:9,12,18
  81:11
lawful 42:21 50:6
laws 49:11,12,22
  54:15,16
lawsuit 47:6
  52:20
lawyers 27:8
layer 15:22
layer-by-layer
  34:14
lead 34:4 72:19
  79:17
leader 60:19
learned 75:7
leased 50:22
leave 71:21
leaving 65:14
  70:10
left 43:21 44:17
  77:6 83:2
legally 49:7,8
legitimate 57:20
letters 47:24
Let's 10:23 15:5
  19:3 33:18
level 19:9 39:18
liability 81:22
  82:4,9,10
license 41:10
lie 77:5
light 66:5 77:13

lights 43:22	**mark** 84:13	**Mesa** 11:4	82:20	15:12,15 16:24
limitations 80:8	**marketer** 12:18	**message** 51:20	**Monday** 65:16	17:7,17 19:15
limited 70:19,21	**marketing** 12:11	52:5	**month** 47:6	19:16 20:1
limits 66:8,8	12:20,22 22:9	**messages** 36:22	**moot** 80:5,15	24:10 25:1,17
linchpin 78:25	41:22,24	**messaging** 21:7	**morning** 9:7	25:21 30:3,4,6
listening 65:9	**Markey** 12:15,19	38:8	67:12	30:20 31:3,9,17
literally 78:20	21:14,15,22	**met** 18:13 38:24	**Moskowitz** 2:24	31:21,21 32:1
litigants 68:20	22:2,3,12,19	46:22	**motion** 73:12,20	32:23 33:19
69:12	41:19,21,22	**method** 54:19,21	75:24 79:23,25	34:8,18 35:4,9
litigation 26:9	42:2,5,9 43:12	54:24 56:17	80:2,4,6,9,12,14	37:3 40:13 41:1
27:19 69:11,12	52:10 53:3,6,10	**methodology** 15:6	80:18	41:5,9,11,23,24
little 63:2 65:11	53:14,18 58:22	**microcontroller**	**motions** 74:14	44:1,21,23
67:11 70:14	58:25 60:19,23	16:6 35:1	76:14	46:10,16 47:14
82:14,20 85:18	**Martin** 22:1	**microprocessor**	**motive** 75:11	47:19,21 54:14
LLC 6:20,22	63:19	15:20 35:24	**Motorola** 11:19	60:4,9 61:2 75:3
located 17:17	**material** 24:10,24	37:13,15	13:6,10,21,22	75:14,17 76:8
location 24:17	25:4 27:14	**microscope** 10:7	14:2,18 15:7,18	**NagraStar** 5:10
lock 25:2	28:17 44:24	15:21 16:22	16:12,15,18	6:22 8:4 25:16
locked 45:8 46:9	**materially** 81:23	34:10,19,24	17:6 18:1 19:17	31:5 64:25 67:2
locker 24:6,23,25	**materials** 24:1,3	**middle** 70:4	21:9,11,17,20	73:24
25:5 46:8,9	44:8,19	**Mike** 34:5	21:23 22:5,9,15	**NagraStar's** 74:1
long 10:19 19:7	**matter** 19:23	**milestone** 19:19	22:19 24:19,21	80:10
29:24 30:4	20:11 40:8 62:6	**million** 14:24,25	26:14 27:6,10	**NagraVision**
33:16 36:5 50:5	72:12 78:23	15:3 33:9,13	28:14 30:12,19	12:11,20,23
72:23 77:2	79:23 80:1,2,4,6	**mini** 63:15	30:22 31:1,13	13:9 14:7 18:6
longer 8:22 70:14	80:9,12,18 87:8	**minimally** 82:8	32:12 33:2,6,21	20:10,15 21:6
84:10 85:11	**mean** 12:1 21:2	**mini-trial** 27:5,18	34:20 35:20	22:25 30:11
look 83:21 85:4	24:4 30:15 36:8	**minute** 19:4 54:6	36:19,25 37:6	31:23 32:21
looked 57:9	39:24 71:17	**minutes** 10:21,23	37:20 39:9,16	35:16 39:5 40:2
Los 2:21 31:24	73:4 82:9 84:15	69:3 70:13,25	40:11,13,14,21	40:4,10 41:18
lost 22:23 60:24	**mechanism** 48:3	**missed** 81:21	40:25 41:4,10	44:20 45:12
lower 31:1	**media** 24:6 44:11	**missions** 55:10	41:12,15,17	**Nagra's** 10:5
lunch 70:12,16,19	44:16 72:7	**Misstates** 47:16	42:2,6,11,14	23:20 24:9
70:23 77:1	**medium** 23:16	**mitigate** 74:21	43:13 45:21,21	32:21 75:7
L.A 25:8	**meet** 18:9,12	80:20 84:10	45:25 46:2,6	**Nagra-France**
	38:19,23 40:4	**mitigation** 73:13	53:19,24 54:19	27:11
——— M ———	77:12 85:17	74:18	54:22 55:1	**name** 8:24 9:2
M 2:5	**meeting** 19:20,23	**models** 15:23	**Motorola's** 30:16	13:10,12 17:11
main 52:6	20:8,11,18,20	**modified** 83:18	42:18	21:20 22:10
man 53:6	20:23 39:1,21	84:22	**Motorola-comp...**	29:9,10,11
management 7:3	40:8	**module** 13:14,16	20:2	35:12 42:18
7:6,11 38:15,17	**meetings** 50:19	13:19 15:7,18	**move** 27:23 61:17	44:3
61:2	**memorized** 82:2	16:12,15,18	**MYERS** 2:12	**named** 17:7 34:5
manager 52:9	**memory** 16:8,11	19:17 28:14		40:6 41:19
53:4	37:16,17 83:11	33:22 34:20	**——— N ———**	52:10 56:20
manufacturing	84:21	**moment** 8:16 62:3	**N** 3:1	59:3
73:17	**mentioned** 16:11	62:4 63:17 81:1	**Nagra** 11:7,8,10	**names** 13:11
Marbury 23:22	19:20 20:8	82:25	11:21,24 13:19	32:14
44:4	37:18,19 45:20	**moments** 62:5	13:20,24 14:4,4	**nature** 75:21
marginal 27:16	76:14	77:9 78:16	14:10,10,12	**NDS** 1:8 2:11 6:23

6:23,24 11:4,6
29:16,17,23,24
30:2 46:14
63:22 64:5,20
65:2 66:22 73:5
79:5,15 83:17
83:17 84:2,3
necessarily 59:2
necessary 39:25
46:1
need 63:16 64:9
66:16 69:8 70:5
70:8 71:12
73:11 77:11
80:25 82:4
negotiating 77:20
negotiations 75:3
never 37:23 50:15
50:18 51:3,6
new 37:12,12
71:20 75:6,14
News 76:9
nexus 79:7 81:8,8
Nicolas 18:14
19:20,21,24,25
40:6,9,19
night 9:8 47:9
70:2 71:17
72:14
nine 50:23
Ninth 78:6,8,12
nitric 33:21
NOLL 2:6
nonconfidential
44:5
normal 40:15
69:10 81:13
Nos 7:13
notation 79:19
notice 26:21
notified 53:19
notion 76:12
notoriety 72:6
November 75:8
number 7:1 18:4
26:23,25 27:5
34:4 38:5 69:7
79:2,9
Numbers 62:12
numerous 78:23

O

O 1:3
oath 53:9
object 56:22
objection 7:18,19
7:20,21 26:3,23
28:19 42:7
47:16 52:23
55:14 56:4 58:9
observation 16:23
obtain 20:14 46:1
obtained 20:5
40:20
Obtaining 20:13
obviously 45:20
occasion 83:19
occur 67:10
occurred 59:2
82:22
offer 7:15 10:2
26:5 66:7
offered 9:9 75:24
offering 26:13
office 17:19 23:1
23:14 25:9,19
25:20,21 31:23
43:14 45:12,14
45:15 50:22
60:20
officer 12:11,20
12:22 20:10
38:25 41:23,24
44:21,23 50:16
offices 17:18
31:19,22,25
32:1
Official 1:21
off-the-shelf 17:3
Oh 19:8
okay 5:13 12:5,24
14:12 15:5 19:9
19:15,20 21:2
24:18 40:4
43:23 45:16
47:13 59:3
60:15 62:5,10
67:4 70:11
71:24 72:11
73:19 74:3,12

74:15 76:3,16
76:22 77:24
once 21:25 64:15
64:24 65:25
66:22 70:15
77:15 83:25
ones 35:23
oOo 85:25 87:1
open 41:13 69:11
72:2
opened-up 37:13
operations 43:19
61:7
operator 30:25
operators 13:22
13:25
opinion 53:3
55:18 56:5 62:7
72:13 84:11
opponent 60:13
opportunity
65:20 77:16
opposition 62:14
oppression 85:3
optical 24:5 44:16
option 71:21
77:20
order 19:8 33:9
36:7 61:2 81:13
ordered 71:4
orders 60:22
organization
20:15
original 13:12
Originally 60:19
ought 85:7
outlast 63:15
outputs 19:14
36:14
outset 41:4
outside 3:5 8:20
10:10 61:24
62:9 63:11
66:15 71:5
72:16 79:18
outweighed 27:16
out-of-the-pres...
9:21
out-of-town 12:18
overhead 73:17

overruled 28:19
42:8 58:10
oversaw 27:9
overseeing 55:17
57:19
overview 39:11
o'clock 67:12,12
69:17,23,24
70:2,4,7 77:12
85:17
O'MELVENY
2:12

P

page 3:2 81:21
82:3 83:24 85:2
87:9
pages 19:8 36:7
77:10 79:8,9
81:2,13,14
pains 58:5 78:1
paper 23:23 72:10
paragraph 83:8
parallel 32:21
parcel 78:22
part 21:3 24:19
33:19 51:16,23
70:1 72:24
78:22,25
participated 9:11
27:11
participation
15:19 83:23
particular 28:6
34:2 78:14
particularly
44:13
parties 5:6,17
7:15 29:1 63:25
67:16
partners 14:9
parts 83:18
party 60:12
pattern 83:23
Pause 63:23
pay 70:18,23
PCs 45:13
PC's 25:18
Peled 5:7,12,17
5:23 77:7

Penal 75:17,20
83:7
people 63:19
percent 33:12
48:8,8,12,24
51:14
performance
19:11,12
performed 33:24
34:22 46:4
47:21
performs 36:16
36:16
permission 64:18
person 53:11
personal 53:4
personality 53:7
personally 51:8
59:24
PGP 24:9,9,10
44:16,18
Philippe 18:13
20:8,9 38:24
39:3
phone 64:17
phonetic 25:8
photographs
15:22 34:14,15
physically 24:15
pick 64:3
pie 48:7
piece 7:24 28:17
36:15,16
pieces 36:20
Pierre 61:6
Piper 23:22 44:4
63:19
piracy 56:21
57:24
pirated 54:22
pirating 81:9
place 23:2 24:24
placed 24:5,6,16
24:23 25:4
PLAINTIFF 2:3
plaintiffs 1:6 3:4
3:9 6:19 8:8
28:2 67:3 73:24
74:20 80:4,12
80:14,16,18,20

84:9
play 82:20
played 23:7
players 41:12
PLC 1:8 2:11 6:23
  83:17 84:3
please 6:17 9:24
  10:13,17 28:24
  29:5,13 30:15
  41:2 62:6 72:8
  73:9
pleased 68:22
  78:16
pledged 68:19
plus 83:5
point 5:16 22:17
  54:9 70:6 75:15
  77:25
pointed 79:12
points 28:1 74:24
  83:2
population 30:24
portion 33:10
  36:25 64:23
  67:4 73:1 83:11
  83:23
portions 82:17
position 68:10
  69:5 74:18
positions 68:11
possibility 9:8
possible 26:12
  49:8
possibly 77:19
posted 58:7
postings 80:8
potential 18:4
potentially 81:1
  82:6
PowerPoint 18:4
  18:20,21 38:5
  38:11 39:23
  51:7,10
PowerPoints
  20:19,22
practice 68:13
practices 26:8
  27:3
predicate 83:25
prejudgment

84:25 85:6
prejudicial 27:17
premises 71:4
preparation
  20:23 39:21
  54:7
prepare 39:22
prepared 10:8
  19:5 27:21,21
  38:1,4,11,13
  39:10
preparing 55:24
  56:13
presence 3:5 5:4
  8:20 10:11
  28:22 61:24
  62:9 63:11
  66:10,15,17
  72:16 79:18
present 2:23 5:5,6
  8:22 28:20 29:1
  29:1 50:20
  60:24 62:4
  66:12,14 67:2
  71:25 72:18,20
presentations
  18:4 38:6,11
  51:7,11 54:10
  54:12
presenting 54:11
preserving 74:13
president 25:14
PRESIDING 1:3
press 72:5,6,7
presumably
  30:25
pretty 70:1
prevent 76:11
Previous 41:11
previously 56:21
  61:18,22 66:19
  76:15
price 69:11
primary 51:14
principals 64:16
print 81:13
printed 23:17,19
  43:23
printers 25:18
  45:13

prior 11:5 47:8,16
Pro 17:4 35:22
probably 65:5
  67:8,22 68:16
  69:13 79:8,18
problem 8:24
proceed 12:3 29:2
  60:14
proceedings 1:14
  3:2 63:23 85:24
  87:8
process 22:5
  42:11,14 54:3
  55:17 57:18,20
  69:5,20 79:21
processed 36:23
processes 26:17
processing 51:20
  52:5
produce 11:17
  36:1
produced 36:3,6
  36:10
product 17:3
  26:14 35:22
  44:16
profits 75:22
programming
  54:25
progress 39:12,14
project 10:5,6
  11:14,16,17,17
  11:20 12:6,10
  12:16 13:2,25
  14:4,6,21,23
  15:12,15 17:21
  19:16 20:6,14
  21:3,9,11 22:17
  22:22 23:10,18
  24:2,14,18
  25:24 27:6,8,9
  27:10,11 28:3,4
  28:7,12 30:8,10
  30:19 31:8,16
  31:19 32:4,8,11
  32:16,25 33:8
  33:14,16,20
  34:7,11 35:15
  37:21,23 38:2
  38:21 39:4,6

40:25 41:4,9,15
  41:25 42:3,10
  42:20 43:9,13
  43:16,17,20,25
  44:9 45:3,17
  46:7 47:21 48:1
  48:2,6,15,16,20
  48:25 49:5,15
  49:18,20 50:11
  50:13,20,22
  51:14,24 52:3,9
  52:10 53:4,4,19
  53:24 54:3
  55:11,24,25
  57:19,23 58:23
  59:8,9,10,15,19
  60:18,19,23
  61:3
projects 50:3
prolong 27:20
promise 8:15
  71:18
promised 77:6
proof 10:2 26:6
proper 28:4,17
  42:21,25 43:2
  50:6 78:13
properly 74:21
property 23:15
propose 77:12
proposed 18:2
proprietary 30:16
protect 30:21
provide 20:13,17
  20:21,22 39:3
  39:20 75:12
provided 18:6
  25:12 35:4,5,9
  38:17 39:18
  48:22 63:25
providers 75:4
provision 82:15
  83:1
provisions 80:11
publish 30:17
pulled 45:5
punitive 75:21
purchase 60:21
  61:2
purchased 14:18

76:9
purpose 26:6
  59:18
purposes 38:6
  74:13
pursuant 87:5
pushed 65:11,17
put 23:20 35:23
  48:7 68:9 81:13
p.m 5:3 63:23
  85:24
P.O 61:2

──────────
          Q
──────────
qualify 57:12
quarter 15:2
question 16:17
  41:2,8 53:1
  55:19,20,21
  58:11 71:5,18
  78:3 84:13,23
  84:24 85:1
questions 5:12
  9:22 57:15
  58:18 85:10
quick 9:19
quickly 66:1
quietly 85:18
quite 40:15 65:23
  77:2 78:25
  80:23 82:13

──────────
          R
──────────
R 2:13
racketeering
  83:23
radio 72:9
raise 8:23 10:14
  29:4
raised 74:17
RAM 16:8,12
  37:16,20,21,22
  37:24
ran 34:5
random-access
  16:8
rapidly 20:2,3
  40:15
rate 40:24
reach 71:9 82:23

reached 70:6
read 3:3 6:6,8,15
    7:23 56:8 65:13
    65:17,21 68:14
    81:22 84:25
reads 82:21
ready 57:14
really 12:14 67:17
    67:20 83:17
reargument
    77:17
reason 76:7
reasons 43:2 75:6
    79:2 81:3
rebut 9:9,15
    26:11
rebuttal 3:4 8:4,8
    9:22 28:20 77:8
recall 14:7,23
    19:22 69:6
received 7:22 8:1
    8:2 12:11 26:20
    62:25 63:11
    66:16,18,18,19
    66:19,20,21
receiver 7:8 46:3
recess 69:22
recesses 8:19 62:8
recognize 72:8
record 3:3 6:9
    63:24 66:9,17
    73:2 83:22
Recross 3:12 61:9
redirect 3:12 5:9
    58:19,20
referenced 9:8
refers 83:14,14
regard 65:12
regarding 40:12
regardless 73:25
regulations 87:10
relate 25:24
related 7:3,7,12
    48:8,12,16
    57:23 73:20
    76:2 80:7
relating 59:25
    73:13
relationship
    15:11

relatively 65:21
    69:21
release 5:17
releasing 5:15
relevance 27:12
    27:16
relevant 27:19
    84:14
relief 85:13
remain 71:4
remainder 77:13
remaining 23:15
remedy 78:9
remember 68:12
removed 24:15
    32:20 45:6 46:4
render 27:22
renew 73:1
rented 17:19
    44:10
repeat 16:17 41:2
repeating 60:7
replace 16:5
    37:13
report 36:1 39:3
    55:3,6,13 56:1,8
    56:10,14,15
    57:10 58:22
    59:1 75:9
reported 71:13
    87:7
reporter 1:21
    68:14 71:12
    87:15
REPORTER'S
    1:14
reports 10:8
    26:15,17,21
    38:6,14,16 51:6
    51:10 54:2,5,8
    54:18,21,24
    55:25
representative
    76:1
representatives
    27:9 75:10,13
represented 43:7
represents 7:1,5
    7:10
reproduce 35:24

requests 38:14,16
require 40:2
required 21:6
    38:8,9,10 40:1
    44:22
requirement 21:7
resources 20:15
    39:5 40:3 48:15
respect 6:25
    23:17 24:1
    43:23 44:7
    74:18,24
respective 68:11
respond 9:18
response 28:5
rest 3:4,8,9 8:8
    36:11 67:3
restaurant 71:1
resting 8:6 63:12
rests 66:25
result 39:8 40:21
results 50:5,9
retain 45:17
return 5:16,22,23
    65:14
returned 25:20
    44:1 45:15
returning 67:9
reurge 75:23
    76:13,14
revenues 75:22,25
    83:4,5,6
reverse 14:25
    21:5 24:19,22
    28:9,15 32:8,10
    36:21 39:8
    42:24 48:9,25
    50:5,9 51:15
reverse-engineer
    13:19 15:18
    30:19 32:17
    34:19 37:6
    42:22 43:3
reverse-enginee...
    13:2,5 15:6 16:1
    16:4 20:6 22:6
    26:14 27:6 28:8
    28:12 32:23,25
    33:1,4,5,11
    40:21 42:21

45:21,22 49:6
    50:3
reviewing 55:25
rework 79:17
re-swear 29:5
RICHARD 2:18
RICO 83:12,13
    84:4,4 85:9
right 5:5,15 6:8
    8:12,21 9:21
    10:12 26:1,3
    27:2,25 29:4
    47:1,11,15 48:4
    48:10,11,14,17
    48:18,20 49:1
    49:12,25 50:13
    50:17,23 51:1,4
    51:7,17 53:20
    53:25 54:3 58:5
    58:19 61:13,16
    63:24 65:4
    66:11 67:25
    70:4 71:2,24
    72:17 78:14
    81:16 82:21
    85:2,23
right-hand 10:14
role 19:21 23:7
    35:17 43:19
    52:6
ROM 10:7,8 16:6
    16:7,10,12,15
    16:18,21,25
    17:2,6 19:3,5,10
    19:17,18 34:25
    35:2,4,7,9,18,20
    36:25 37:18
room 1:22 8:15
    62:2
rooms 50:23
roughly 47:3
    48:15
Roy 61:6
RPR 1:21 87:16
Rubin 2:24 76:2
Rule 72:20,25
    73:3,6,12 74:14
    75:23 77:2 79:3
    79:6
ruling 84:9 85:21

rulings 72:20,22
    77:10,11,14,15
    79:16,20
run 32:21
R0017942225 7:8
R0019355010 7:9

S

SACV 1:7
sake 22:6 68:12
sales 38:6
San 2:15 17:19
    31:20
Santa 1:16,23 5:1
sat 9:12 27:20
    68:15
satellite 1:5 2:3
    6:20,21 7:7
    57:24
satisfactory 64:24
satisfied 64:12,22
    72:25 77:22,22
Saturday 67:19
saw 51:10
scambling 33:5
scanning 10:7
    15:21 16:22
    34:10,19,24
schedule 67:6,17
scope 43:5,13
    55:18 56:4 58:9
scramblers 46:2
scrambling 13:8
    13:17 28:9,13
    30:21 51:19
    52:7
scrambling/des...
    51:16,23
seated 5:7 10:18
    28:24
second 47:8 73:20
    75:15
section 56:1 83:7
    87:5
sections 82:11
secure 32:13
security 44:23
    55:7 56:2,17
    74:1 76:11
see 9:13,25 56:1

62:3 65:24 71:2
72:3,11 77:15
79:3,6,11,16
81:2,9 82:19
83:3,5,10,10,18
85:8
seen 55:3 69:6
Segundo 17:18
25:20,21 31:24
32:1 45:12,15
self-storage 44:10
sell 13:24 14:5,9
31:9
selling 14:8
send 10:20 57:12
77:10
sending 81:1
sense 9:23 84:2,20
85:8
sensible 83:24
sensitive 24:3
44:13,15,18
separate 32:1
81:3
served 13:16
servers 24:15
45:2,6
services 13:24
session 28:25
66:11 71:24
72:17
set 69:16,19 70:7
70:12 72:9
75:25 79:2,7
setting 70:12
settlement 75:6
set-top 14:5,8,9
14:13,16,17
27:6 30:24,25
31:2,3,5,10,12
31:13 48:13,14
54:19,22 55:1
share 48:3
shared 13:9 32:20
56:19
SHEPARD 62:15
63:2
shipped 23:20
short 69:14
shortly 8:18 22:18

22:19 43:12,15
75:8
show 21:16,24
42:10 56:14
62:13
shown 41:11
68:15,24
Shredded 23:25
44:6
shut 43:16,17
shutdown 23:10
45:16
side 66:6 79:20
sidebar 71:13,14
sides 27:21 57:5
64:11 67:19
68:11
signaling 18:3
21:1,7
signed 75:18
significant 77:6
similar 34:22
simply 27:1,19
41:12
simulcrypt 11:18
12:1 13:21
14:14,17 22:7
30:10,14 51:24
sir 10:12,17 11:22
14:15 16:20
18:22,24 25:6
25:17,25 28:23
29:4,8 43:21
45:9,20 46:11
49:15,19 50:12
50:18 51:2 52:2
53:13 55:5 56:9
56:18 58:3
59:24 60:1
61:13
sit 25:23 53:22
80:25 85:18
slow 40:18
small 78:25 81:13
81:25
Smart 14:11,12
19:22 20:1,3
31:5,9 40:7,11
40:13,15,17,18
Snyder 2:13 5:14

5:19 7:19 8:11
9:1 61:17,22
62:12,20,24
63:1,7 64:7 65:3
66:25 68:5 73:8
73:10,20 74:17
76:5 77:22,23
84:15
software 17:3
sold 14:8,13,16,18
solution 18:2
30:11 51:24
solutions 18:18
34:1,8 35:6
soon 70:18
sorry 8:16 16:17
17:9 46:16
47:19 53:18
80:1
sort 32:19 36:1
45:25
sounded 53:15
source 35:24
space 50:22
speak 8:16
spec 17:25 21:1,2
36:3,5,9,15,18
39:22,24,25
special 84:22 85:1
specific 7:3,7,12
33:18 52:7
specifically 12:15
15:5 18:13
34:25 35:5,11
52:5 73:14
specifications
18:19
specs 17:24 18:1
38:7,8
speculate 23:8
speculative 79:12
81:10
spell 9:2 17:11
29:11,13
spelling 83:25
spent 14:25
spill 16:7
spilling 37:16
split 70:23,23
spoken 53:24

spurious 52:19
stages 60:23
stand 74:23 81:12
standard 15:23
stands 47:24
Stars 2:20
start 5:15 69:14
70:5,11 71:8
73:3,5 79:21
started 69:4
starting 57:1
state 29:8 74:1
stated 84:18
statements 9:9
60:5,7,12 77:16
states 1:1,22 55:8
56:3 83:11 87:6
87:10
status 20:13 38:6
38:14,16 39:3
statute 80:8
steal 54:25
stenographically
87:7
step 5:25 10:13
19:3 57:17
61:14
Stephen 17:7,10
35:5,13,14
steps 15:17 33:18
Steve 59:3,6,7,9
61:1
stipulate 6:24
stipulation 3:3
6:2,4,5,7,9,18
7:14,24
stipulations 7:23
stole 74:5
Stone 2:18 74:4,5
stood 39:4
stopped 58:25
storage 23:16
24:6,16,23,25
25:2,5 44:11,17
45:4,7,8 46:8
stored 44:11,16
45:6 46:8
stories 68:13
Stransky 18:13
20:8,9,12 38:24

39:2,7,20
strays 65:24,24
stream 36:22
street 1:22 70:25
stricken 80:17,21
82:18 83:2,7,9
strike 27:23 55:20
80:14 83:4
striking 75:24
84:8,12
Strizich 34:5
37:10
strong 82:22
strongly 81:3
subject 19:23
20:11 39:1 40:8
77:17 85:22
submit 27:22
74:16 76:19
submitted 76:21
77:23,25 78:9
subparagraph
81:22
subroutine 36:4
36:14
subroutines 19:11
subscriber 4:3,4
7:2,3,6,6,11,11
subsequently
78:4
substance 59:15
60:18
substantially
27:16 84:22
succeed 35:2,6
succeeded 14:4
19:16
successful 37:20
successfully 16:16
16:19 37:19,25
sufficient 73:22
suggest 64:2
suite 2:8,15,20
17:19 50:23
summon 66:4
Sunday 67:19
supervise 54:7
support 25:14
40:2
supposed 82:1

sur 63:14,14
sure 19:19 49:10
    54:10,14 55:19
    64:11 76:16
    78:17 83:18
surgically 16:5
surprised 55:6
surrebuttal 3:7,8
    3:9 8:9,25 9:22
    10:1 26:24 28:5
    28:18 29:3,6,15
    43:6 61:16
    63:12,14 64:6
    66:24 77:8
sustain 56:6
Sustained 60:2
swap 80:7
sway 75:13
swear 70:15,18
switch 75:3
Switzerland 5:22
    12:7 18:7,10
    19:15,21 23:3
    27:2 32:5 38:15
    38:17,20 40:3,5
    43:15 60:20,22
SWORN 10:15
    29:6
system 11:12,18
    11:19 13:9 14:1
    14:2 18:2 20:3
    21:1,2,4,6,7,21
    30:12,13,16,19
    30:20,22,23
    32:12,21,21
    38:8,9 39:22,24
    40:1,2,14 41:14
    42:12,19,22,25
    43:3 52:6 55:7
    56:2,17 74:2
    75:7 76:11
systems 15:10,11
    15:14,17 30:18
    33:25
S-T-R-I-Z-I-C-H
    34:6
S0000121761 7:13
S0002017060 7:13
S0003804033 7:4

T

T 2:4
tactic 27:1
take 10:19 14:24
    32:16 34:14
    39:11 57:11
    67:23 68:10
    69:3,4 70:15,24
    72:23 78:7,9
    81:14 82:7
taken 3:5 10:10
    78:1
talk 15:5 33:18
    65:7 70:9 71:11
    71:22,23 82:16
    82:25 85:14
talked 71:7
Tarnovsky 56:20
Tarnovsky's
    83:16
task 34:22
team 17:20 31:16
    36:11 39:17
    42:10 48:20
    55:4,9 56:10
    57:18
technical 17:24
    18:2,18,19
    20:10,15,22
    38:24 39:3,7
    40:10
Technologies
    6:21
technology 22:6
    24:4 31:3 39:11
    41:10 52:1
    54:25
television 7:8
tell 21:15,22 42:5
    53:3 56:16,19
    68:4,12,23 69:9
    70:9
telling 36:17 70:3
    71:21
term 73:16
terms 82:24
terrible 69:11
terrific 63:20
testified 10:5

    26:10,16 28:6
    41:7 49:9 51:3
    54:2 58:4 73:14
    76:7 81:10
testify 10:6 26:18
    26:19 27:2
    47:10 50:2
    51:21 53:9,14
    77:8
testifying 9:5
    73:23
testimony 3:5
    9:14,15 10:10
    10:22 13:15
    26:12 27:13,23
    28:5,11,18
    46:25 47:17
    48:2,6,23 51:13
    56:13 68:15
    73:10,21,22
    75:1,2 76:1
Texas 2:8
thank 5:8,24 6:17
    10:12,17 12:24
    17:13 18:25
    23:4 28:23 29:8
    46:15 58:17
    61:8,13 66:13
    72:1 85:23
theory 75:16,21
    78:20,22 79:9
they'd 64:2
thing 45:20 64:20
    68:20 71:11
    81:25 82:3 84:6
    84:7
things 25:18 69:9
think 8:18 42:21
    43:4 49:14,17
    49:20 50:6,9
    56:7 57:3,4,14
    63:16,21 65:19
    66:6 67:9 69:2
    69:25 70:2
    72:23 75:10
    77:9,11,14 78:1
    78:2,15 79:17
    80:25 81:24
    82:1 83:14
    85:15

thinking 85:12,13
thought 53:8
    62:25 63:1 67:7
thousand 82:7
three 27:5 66:6
    68:16,23
thunder 74:5
Thursday 65:16
    67:8
time 7:15 8:6
    10:19 19:21,25
    20:9 25:12
    26:20 31:15,21
    39:13 40:7,23
    41:22,25 42:20
    49:8 56:16,19
    57:10,11 58:23
    58:25 60:4,8,8
    61:3 63:25
    64:15,16 66:5,7
    66:8 67:15,24
    68:2,23 69:2,7
    69:14 70:11
    71:17 74:14
    75:4,23 77:3,19
    77:20 78:7,10
    81:15 82:1
times 71:10 82:7
    83:19
timing 21:8 38:9
title 25:15 61:7
    87:6
today 8:14 25:23
    46:22 47:10
    52:3 56:13
today's 65:9
told 12:15 21:14
    41:18 42:14
    43:12,17 53:18
    75:9
tolling 82:15
tomorrow 10:20
    65:6,10 67:10
    67:14 69:14
    71:16 72:3,11
tonight 71:16
    82:16 85:11,15
total 14:23
touch 40:1
trade 21:16,20,24

    42:9,18
transcoders 46:3
transcript 1:14
    63:3 87:7,9
transient 37:16
transmitted 51:6
transport 36:22
Travazon 25:8,10
    25:12 45:11
trebling 81:1
trial 1:15 27:18
    27:20 63:15
    64:14 68:15
    71:20
tried 68:23
trip 67:8
trouble 84:3
true 11:23 53:15
    53:16,17 54:17
    87:6
truly 10:1 69:12
trustworthy
    53:10
try 27:2 61:3 64:2
    83:24
trying 34:23
    76:24
TSODA 13:13
    32:14
Tuesday 1:17 5:1
    65:13 67:9
    69:15
turn 43:22 64:8
    66:22 67:1 72:9
turned 53:15
two 7:5 11:23
    13:11 14:21
    16:11 26:25
    30:5,12 33:17
    47:12 73:12
    74:17,24 75:6,9
    77:2 82:17,18
    83:2
Two-points 76:6
type 18:16 20:22
types 16:11
typical 20:3

U

unclean 79:4,6,9

80:13,14,16
81:7 84:19
unclear 63:2
underboard
49:25
understand 13:8
13:15 22:23
31:25 32:17
35:19 36:12,21
52:3,7,13 55:20
84:8,23
understanding
12:5,9,10,14
23:6 32:3,6 49:3
52:2,9
understood 39:16
46:25 48:1,6,23
51:13 69:1
undertake 15:17
41:9
undertaken 33:19
undertaking 41:1
41:5
undertook 15:9
17:5 34:16
underway 53:19
unduly 27:19
57:10
unethical 49:17
unit 25:2 44:10,12
44:17 45:4,7,8
United 1:1,22
55:8 56:3 87:6
87:10
unlawful 49:25
50:3,11
unrelated 76:10
unsuccessful
13:20
updating 77:1
urge 74:14
USA 11:7,8,10,21
11:24 15:12,15
16:24 19:16
25:16,17,21
30:3,4,6 31:17
31:21 32:24
33:19 34:8,18
35:4,9 37:3 41:1
41:5,9 46:10

47:19,21 54:14
USA's 17:17
use 10:6 31:3,5
33:21 37:10
40:12 50:5 57:7
utilize 40:10
U.S 13:21,25
87:15

___

V

vein 78:2
vendor 15:13
vendors 31:1
verdict 27:22 78:4
84:22 85:1
version 32:14
vet 54:10
vetted 54:12
vice 25:14
video 63:3
view 42:24
violation 82:17
violations 83:4,6
Volume 1:8 5:2
vs 1:7

___

W

W 2:13
WADE 2:4,6
wait 77:7
waiting 10:3
want 6:8 8:16
13:19 21:25
57:6,11,11 62:3
63:14 64:11,17
66:5 68:3,19,20
69:16,17,18,25
70:11,13 71:18
72:23 76:16
77:21 78:17
82:15
wanted 8:23
13:24 54:13,14
warn 71:18
warned 71:19
warrant 68:11
warranty 73:15
73:16 80:11
wasn't 26:16
50:13

waste 81:15
watch 59:2 65:23
watching 72:5
way 9:15,19,25
14:1 26:12
32:18 40:16,18
46:2 50:6,11
53:14 54:19,21
54:24 57:18
65:24 69:15
71:9 78:20
ways 78:23 80:24
weekend 81:21
weeks 68:16 69:3
WELCH 2:4,6
5:11 68:6 74:11
Welsh 74:10
went 13:11 44:10
54:8
weren't 50:25
West 1:22 2:14
we'll 9:20,25
57:12 65:5,16
67:12 71:1 72:3
72:11
we're 8:13,14
10:2 28:25
63:24 66:11
67:6,17 71:24
78:13 81:16,19
83:4 85:5
we've 57:4 63:11
69:24 76:23
79:7 81:18
83:18
whacking 21:18
22:15,16,20
42:11,15
White 59:4,6,9,12
59:15 60:4,7,9
60:17
White's 59:18
61:4
WILLETTS 2:5
62:18,22 63:6,9
willing 41:13
winding 43:19
wires 37:12
wisdom 73:11
wise 65:19

wish 67:2
withdrawn 14:3
32:24
witness 5:24 6:1,3
8:24 10:15,16
12:15,19,22
17:10,12 18:17
18:19,22,24
22:2,4,9,25 23:3
29:6,7,10,12,14
42:9 56:9,11
57:2,12,15
58:12 59:24
60:1 61:11,15
61:21 73:23
79:13
witnesses 3:12
5:16 64:3,3,10
64:12
wondering 85:10
word 18:17 26:7
26:25 81:25
82:4
words 22:12 85:6
work 10:9 11:20
13:3,5 15:9 16:1
16:4 17:15 18:3
24:18 30:4
32:23,25 33:4
33:11,24 34:3
34:16 36:2 37:2
38:20 40:17
41:1,5 45:18,23
47:21 49:24
59:9 67:9
worked 11:24
17:16 29:24
31:15,16,21
41:25 42:20
47:14 48:19
working 25:16
30:1 59:7 69:10
70:2 76:23
workstations
24:15 45:3,6
worse 71:17
wouldn't 48:21
49:24 68:14,24
written 17:24,25
26:21 55:25

72:7
wrong 50:7
wrongdoing
74:19

___

X

X 3:1

___

Y

yeah 38:14 39:22
40:6,22 43:1
47:12,20 59:21
71:23
year 57:13 82:7
82:11
years 11:8,23
14:22 20:25
29:25 30:5
33:17

___

Z

zero 82:9,12
zeros 35:23

___

$

$10,000 82:6,7
$13 14:24,25 33:9
$2 70:19
$3 15:3 33:13

___

0

01 47:13
03 47:14
03-950 1:7

___

1

1,000 82:6
1-053 1:22
1/2 68:4,8
10 79:16
11 79:16
12 70:21
136-A 3:21 62:12
66:18,21
14 70:21
1400 2:20
141 3:22 62:20,21
66:18,21
15 10:21,23 70:13
70:25 77:10
81:13

15th 79:17
1510 4:3 6:25 7:1
   7:16,22 8:1
16 1:8 5:2
18 68:1
18th 79:17
1970's 68:18
1998 75:8 80:8
1999 2:20 82:21
   82:23

2

2 68:4,8 81:22
   83:24
2:59 5:3
20 77:10
2000 82:22
2001 11:9 47:13
2002 21:24 43:12
   53:20
2003 11:9 47:4
2008 1:17 5:1
   87:12
2008-05-06 1:25
24-7 69:7
2401 2:7
25 33:12 48:8,12
   48:24 51:14
2600 2:15 4:4
   6:25 7:5,10,16
   7:22 8:2
275 2:14
28 3:7,13 87:6
29 3:19 62:24,25
   66:18,21 81:21

3

310 2:21
35 81:14
38 82:3

4

4 82:14
4th 1:22
4:00 67:12 69:23
   69:24 70:7
4:10 63:23
4:55 85:24
402 27:13
403 58:9

411 1:22
415 2:16
45 3:14

5

5 3:3 83:1 85:1
5:00 69:23 70:4
50 19:8 36:7
   72:20,25 73:3
   73:12 74:14
   75:23 77:2 79:3
   79:6
50s 73:6
558-8141 1:23
57 3:15
593(e)(b) 83:7

6

6 1:17 5:1 82:21
   82:22 83:22
6th 82:23
6:00 67:12 77:12
   85:17
65 3:8,19,21,22,24
66 3:9

7

7 3:4 4:3,4 85:10
   87:12
7:30 69:18
700 2:8
713 2:9
714 1:23
753 87:5
77057 2:8
785-4600 2:21

8

8 85:10
8:00 69:17 70:2
8:30 65:6 67:15
   69:19 72:3,11
826 3:24 63:7,8
   66:20,21

9

9 85:10
90067 2:21
92701 1:23
94111 2:15
9472 1:21 87:16

952-4334 2:9
98 75:4
984-8700 2:16
99 75:4