

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STINGRAY GROUP INC. AND STINGRAY MUSIC USA, INC.,
PETITIONERS,

v.

DR. EDWIN A. HERNANDEZ-MONDRAGON,
PATENT OWNER.

CASE IPR2025-349
PATENT 10,123,074

CASE IPR2025-00350
PATENT 10,524,002

CASE IPR2025-00351
PATENT 11,140,441

VIDEOTAPED ZOOM

DEPOSITION OF: Stuart Lipoff
ON BEHALF OF: Patent Owner
DATE: September 2, 2025
TIME: 10:21 a.m. - 4:06 p.m., PST
PLACE: Via Zoom
(All Parties)

REPORTED BY: LACEY J. LINK, RPR, FPR, LCR
Stenographic Court Reporter
Notary Public
State of Florida at Large

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INDEX TO PROCEEDINGS

STUART LIPOFF	PAGE	LINE
Direct Examination by Mr. Drolet:	5	16
Certificate of Oath	154	1
Certificate of Reporter	155	1
Errata Sheet	156	1

INDEX OF EXHIBITS

Exhibit No.		PAGE
Exhibit 1	US 10,123,074 Patent	48
Exhibit 2	US 8,954,600 Patent (Avellan Patent)	48
Exhibit 3	Figure 1 from Avellan with the Highlight	78
Exhibit 4	Stuart Lipoff Declaration	154

1 THE VIDEOGRAPHER: All right. Good morning,
2 we are on the record. The time is 10:20 a.m. on
3 September 2nd, 2025.

4 Please note that this deposition is being
5 conducted virtually. Quality of the recording
6 depends on the quality of camera and Internet
7 connection of participants. What is seen from the
8 witness and heard on the seen is what will be
9 recorded. Audio and video recording will continue
10 to take place unless all parties to go off the
11 record.

12 This is Media Unit Number 1 in the video
13 deposition of Stuart Lipoff in the matter of
14 Stingray Group, Inc., et al. v.
15 Dr. Edwin A. Hernandez-Mondragon with respect to
16 Case IPR 2025-00349, IPR 2025-00350, IPR 2025-00351.

17 This remote is being conducted -- this
18 deposition is being conducted remotely via Zoom.

19 My name is Lee Godfrey, representing Veritext.
20 I am the videographer. The court reporter is
21 Lacey Link from the firm Veritext.

22 Counsel and all parties present will now state
23 their appearances and affiliations for the record;
24 after which, the court reporter will swear in the
25 witness, and counsel may proceed.

1 MR. DROLET: Hi. Good morning. I'm
2 Rob Drolet. I'm here representing Dr. Hernandez.

3 MR. MCBRIDE: Michael McBride on behalf of the
4 Stringray Petitioners.

5 THE STENOGRAPHER: Okay. And upon agreement
6 of counsel, I will now swear in Mr. Lipoff via Zoom
7 methods.

8 Please raise your right hand, Mr. Lipoff.

9 Do you solemnly swear or affirm the testimony
10 you are about to give will be the truth, the whole
11 truth, and nothing but the truth, so help you God?

12 THE WITNESS: I do.

13 STUART LIPOFF,
14 was called as a witness and, having first been duly
15 sworn, testified as follows:

16 DIRECT EXAMINATION

17 BY MR. DROLET:

18 Q We good?

19 All right. Mr. Lipoff, hi. My name is
20 Rob Drolet. Thank you for making time for us.

21 Have you been deposed before? Is this your
22 first deposition?

23 A Yes, I have.

24 Q Okay. Several times, or is this recently?

25 A I guess in the last year. And, yes, several

1 times.

2 Q So we're just trying to go ahead and
3 understand your -- your -- your thought process, your
4 thinking. The questions, I'm going to try and be civil
5 with you, to try to get an understanding of your
6 viewpoint of your -- of your declaration.

7 Can you please let me know, are you currently
8 on any medication, anything at all right now that would
9 prevent you from giving honest testimony today?

10 A Nothing I'm aware of, no.

11 Q All right. So the way it's going to work is
12 we're going to take breaks when you -- when you need to.
13 It's not going to be a marathon where -- where -- you
14 know, if you need to take a comfort break, please let me
15 know. We'll break as often as you need.

16 You mentioned earlier about text on the -- on
17 the video. I'll do my best to enunciate and speak
18 clearly. If at any time I say something that doesn't
19 make sense or you want me to repeat, please say, "Can you
20 please repeat?" And I'll do my best to go ahead and
21 either rephrase it or say it louder so that I'm
22 understood. Is that fair?

23 A Yeah, that's -- that's good. I can hear you
24 fine now. Hopefully, it'll -- it'll stay that way, as
25 long as the Internet Gods cooperate.

1 Q Yes. Yes, sir.

2 So can you please state your full name,
3 please, for the record?

4 A Yeah. My first name is Stuart, middle name
5 Jack, and last name Lipoff.

6 Q And your -- your business address is -- is
7 what?

8 A It's 2877 Paradise Road, Unit 205, Las Vegas,
9 Nevada, ZIP Code 89109.

10 Q Is that your home address?

11 A Yes, it is.

12 Q Are you currently employed?

13 A Yes, by my Subchapter S-corporation, of which
14 I am the one employee.

15 Q So your at your business location, correct, at
16 this time; correct?

17 A That's correct. My -- I -- I work out of my
18 home office.

19 Q And what's the -- what's the nature of your --
20 your company and your business?

21 A I provide technology-based consulting services
22 to stakeholders that are in the telecom, information
23 technology consumer electronics business.

24 Q Okay. So prior to you forming your own
25 corporation, who was your previous employer?

1 A I -- I last worked for the Arthur D. Little
2 company. Well, actually, I -- I started working as a
3 partnership under the same name, and then I formed the
4 corporation. But before I went into my private practice,
5 I worked for the Arthur D. Little company that was based
6 in Cambridge, Massachusetts.

7 Q And for how long were you working with them?

8 A About 25 years.

9 Q So -- and how long have you been working
10 currently with your present corporation?

11 A Since about -- let's see. 19 -- 1980.

12 Q So since 1980, you've been with your
13 S-Corporation?

14 A I have been in private practice. I left
15 Arthur D. Little around 1980, yeah. And I -- I worked
16 briefly as a partnership, and then I formed the S-Corp.

17 Q So from 1980 until present, you've been in the
18 consulting business; is that a fair statement?

19 A Actually, since I joined Arthur D. Little in
20 1976, I've been in the consulting business because they
21 are a -- they're a -- they're a consulting -- like a
22 professional services company that provides consulting.
23 So I was still as an employee, and now I'm effectively in
24 private practice.

25 Q Okay. So since 1980, you've been doing your

1 own business here providing consulting in this -- in
2 these -- for these industries.

3 What area of expertise does your corporation
4 provide as far as consulting?

5 A So I think I mentioned just a moment ago I
6 generally consider the field of -- the stakeholders that
7 I work for are companies that are in the telecom,
8 information technology, media, and electronics
9 businesses.

10 My expertise, which cuts across all those
11 areas, is generally in communications technology,
12 communications theory, circuit design.

13 Q So of those -- of those areas, the circuit
14 design, what's your -- what's your percentage breakdown
15 of -- like, how much do you do in the circuit design
16 aspect of your consulting work?

17 A Well, just to be clear, you -- you -- you
18 mentioned circuit design, so the design work that I do is
19 a combination of design of overall systems, design of
20 architectures, design of protocols, design of circuits,
21 so it's -- it's a mixture, and it's -- it can be kind of
22 hard to quantify.

23 In some cases, I'm actually building
24 prototypes; and other cases, I'm reviewing the paper
25 representations of other people's designs; and some cases

1 I'm providing reports, which essentially provide the
2 design.

3 And I also do some procurement support work
4 where some of my clients are procuring very complex
5 systems, and I basically design the -- the request for
6 proposal, which has the -- the overall architecture, and
7 so I -- I work with a variety of different modalities, I
8 should say, of providing design. What's common to all of
9 them is that they have technical engineering input.

10 Q Thank you. And I apologize for my -- my
11 ignorance in your field. That's why I'm asking these
12 questions.

13 I imagine, when you get hired as a consultant
14 in these areas, you're doing a lot of things for -- for
15 the people hiring, correct, so you mentioned procurement,
16 you mentioned architecture.

17 So can you just talk about your last
18 consulting client you had as far as what things you were
19 doing for them?

20 A Yeah, well, excluding the -- the litigation
21 support work, which is also a component of what I do
22 that's the basis of this today, probably the -- the last
23 major assignment that was not litigation support would
24 have been the development of some of the -- the protocols
25 that provide quality of service to rich media over --

1 over cable modems. And it was work that I did for the
2 cable industry, and it involved several different clients
3 that were together as a consortium, including cable apps.

4 Q So somebody that dealt with actual material
5 specifications of different types and protocols; is that
6 correct?

7 A That's correct.

8 Q So -- so that's the last thing you mentioned.
9 In general, the -- the types of things that
10 you provide for your clients is your expertise in these
11 areas.

12 Do you consider yourself being specialized in
13 any one specific segment of your industry?

14 A Well, I think I -- to answer that, let me
15 separate the -- my experience in the industry from my
16 expertise in the technology.

17 So there are several industries in which I
18 work heavily and which I consider I have industry
19 expertise that informs me when I provide technology
20 advice.

21 So I work fairly heavily in the media and
22 entertainment, consumer electronics area, information
23 technology, semiconductor industries.

24 On the communications side, my -- my clients
25 have been cable companies, cell -- cell phone service

1 providers, Voice over IP service providers.

2 My expertise, which is involved in each of
3 those industries, is, as I said before, the kind of
4 common thread of it is -- is communications systems and
5 communications circuit design.

6 Q So -- so you mentioned that -- that you have
7 touch points with media and entertainment; correct? So
8 what -- what, I don't know, companies or what industries
9 were you specifically involved with in media and
10 entertainment?

11 A So I think I had mentioned a moment ago the
12 cable industry. My clients include Comcast, and then
13 some of these -- some of my clients have subsequently
14 been acquired in the different organizations.

15 But over the years, cable ads, Comcast, TCI,
16 Time Warner Entertainment, Cox, Charter.

17 On the broadcast side, I have done quite a bit
18 of work for the National Association of Broadcasters, and
19 for an organization called Maximum Service TV, MSTV.

20 Let's see. On the -- well, those -- those
21 are -- you asked me about the media side, so those are
22 the media side, yeah.

23 Q Entertainment?

24 A Yeah, they're -- well, those companies now
25 are -- the range of things that they're involved in go --

1 you know, like -- like Comcast is both a service
2 provider, Internet service provider, and they also
3 originate their -- their own entertainment. So I have
4 worked on -- on projects that cut across all three of
5 those industries.

6 For example, I worked on digital rights
7 management associated with Comcast delivering their own
8 entertainment through their own network, and then
9 eventually provided over cable modem to Set Top boxes.

10 But I've also worked for Fox studios. I
11 worked for the -- the International Federation --
12 Federation of Phono- -- Phonographic Institute, IFPI,
13 which is a European provider of music. I have worked for
14 a couple of DRM companies that were selling their DRM
15 technology to the music industry.

16 I worked for the Recording Industry
17 Association of America, RIAA, which I guess is purely
18 kind of on the entertainment side.

19 Q Thank you.

20 A But there have been a mix of things. I -- I
21 think a fair amount of this is in -- is in my -- my CV
22 that was attached to my declarations.

23 Q Yes, sir. Thank you. Thank you.

24 So in what capacity were you specifically
25 deploying your skill sets? To solve problems for them,

1 design features for -- for their -- for their
2 infrastructure? What specifically were you engaged with
3 with some of these projects?

4 A Well, again, it varies. In some cases --
5 well, just -- just -- I'll take one extreme. In one
6 instance, the client I was working for recently had the
7 resignation of their Chief Technology Officer, and this
8 was Magna box cable TV who -- who was providing Set Top
9 boxes mainly -- mainly to outbreakers (phonetic) up in
10 Canada.

11 But they -- they lost their -- their chief
12 engineer effectively, their CTO, and I took on that
13 responsibility for a period of about three months while
14 they were seeking a new person by basically doing circuit
15 design and development.

16 In other instances, I have been -- at the
17 other extreme, I've been asked to come in and do a design
18 review, and my client had their own engineering
19 department, had just finished their own project and were
20 applying to their management to, you know, get approval
21 for additional funding to go in. And the management, in
22 some cases, would -- would look for an outside
23 third-party opinion about the -- the -- the design that
24 had been developed by their own in-house team, would ask
25 me to review it.

1 And then somewhere in the middle of that -- I
2 mentioned procurement support -- I worked for several
3 very large organizations that have many locations,
4 electric power companies, banks, transportation
5 companies, where they wanted to procure a -- a new system
6 to replace their existing system.

7 Might have a legacy system that was based on
8 circuit switch technology and wanted to go to Voice over
9 IP and fiberoptics, and I would come up with an overall
10 design of the new system in -- on paper and would
11 incorporate it into a request for proposal, would --
12 would respond to the -- when the parties that responded
13 to the request for proposal would send them in, I would
14 be asking my client to review their -- their -- the
15 responses and to help them select the particular bidder.

16 And some cases it would end there, and some
17 cases they would want -- they would want me to provided
18 additional support while the -- once the award had been
19 made to monitor the progress and to sign off on various
20 performance milestones in order for the bidder to be
21 paid. So that would be, you know, kind of in the
22 procurement support side.

23 So I've been involved from kind of the initial
24 design, the review of the designs. Some cases, I have
25 had manufacturing companies that have asked me to take a

1 look at an existing product and to -- to do some cost
2 reduction analysis to see whether or not there might be
3 some changes in the -- in the overall product design,
4 substitution of some of the expensive components or
5 replacing one of the -- the designs that would have
6 multiple low levels of integration with an integrated
7 circuit, and they would ask me to come up with a new
8 design, and they would reduce the cost.

9 So it's been -- it's been a mix of things over
10 a period that's, you know, been now probably over
11 50 years or so of doing this work.

12 Q Yes, sir. Yes, sir. It sounds like you have
13 a broad experience in a lot of different types of
14 functionalities. It seems like you kind of deployed your
15 expertise in functional and management processes within
16 these organizations. Is that -- would that be correct?

17 A I -- I think that's a fair statement, yes.

18 Q So you mentioned previously that you do some
19 litigation work, right, as far as what you do for -- for
20 your company.

21 What -- what percentage of your -- of your
22 time do you do devoted to litigation support, whether it
23 be this type of thing or declarations or investigations?

24 A So prob- -- probably over my -- my career,
25 maybe about 10 percent. Over the -- probably since

1 COVID, more like 80 percent.

2 And I am -- I am now living in a small
3 apartment here in Las Vegas, so I -- I no longer have
4 access to a laboratory where I would do actual product
5 development work with circuits. My product development
6 work is now limited to paper designs.

7 But, yeah, so it's been -- since COVID, it's
8 mainly been litigation support work.

9 Q Okay. Since 2022, I guess, or 2020 -- when
10 was COVID?

11 A Yeah.

12 Q Three years ago?

13 A Yeah. Three. Three, four years ago.

14 Q So -- so you mentioned that -- because of this
15 litigation work you do. Can you talk about your previous
16 litigation case, what it was about?

17 A What --

18 MR. MCBRIDE: Hold on. I'm going to just jump
19 in. Objection to form. And objection if this calls
20 for privileged information you would have with those
21 clients as part of those litigations, I would
22 recommend and instruct you not to answer.

23 MR. DROLET: Counsel --

24 THE WITNESS: Yeah.

25 MR. DROLET: -- can I ask about what industry

1 that it's in? Can he -- can I ask what --

2 MR. MCBRIDE: I think, Counsel, maybe -- maybe
3 take another stab at the question, keeping it broad
4 without involving any further details that might
5 have been shared as part of this litigation.

6 BY MR. DROLET:

7 Q Mr. Lipoff?

8 A Yes.

9 Q Without breaching any confidentiality
10 agreements, without divulging anything that you
11 shouldn't, can you please describe the type of matter
12 that you last worked on?

13 A Yeah. So I -- I have several ongoing cases at
14 the moment, and I'm not -- without actually going back
15 and checking, I don't recall which of them have actually
16 been -- been disclosed.

17 But with respect to your question, I'm -- I'm
18 looking at my CV that's attached to the -- the 349074
19 patent litigation. And on Page 9 of my CV, there is --
20 there is a list of my expert witness engagements on
21 Page 9 through -- through 15, and I think that's probably
22 representative of -- so those have been ones where I
23 have -- I've either been deposed or I testified in Court.

24 It's -- so I have hard copies of the --
25 counsel provided me with witness binders that have hard

1 copies of my -- my declaration and some of the related
2 documents, the Petition and -- and references and stuff.

3 And so I'm looking at Page 73 of the PDF of my
4 declaration, IPR 2025-00349, which is the -- the
5 declaration for the 074 patent. And on Page 73 and 77 of
6 the PDF, and it says Page 9 at the bottom, there is a
7 four-page table with my expert witness engagements.

8 Q Bear with me.

9 A Do you want me to read some of them or --

10 Q No. We can put it on the screen right now.

11 A Okay. Yeah.

12 Q Is this what you're referring to, Mr. Lipoff?

13 A Yeah, I can. It's a little hard to see on the
14 screen, but I can tell that is the correct page, yep.

15 Q Okay. Which is the -- so I'm going to stop.
16 All of these you've actually worked on; is that correct?

17 A Yeah. These are ones where I have been -- one
18 way or the other, I've -- it's been publicly disclosed,
19 either because I gave a deposition and it was like an IPR
20 that was -- a paper that was published, you know, by --
21 by the PTAB; or if it was federal court or a ITC matter,
22 it was made public that I was testifying on behalf of
23 whoever the client was.

24 Q And this is representative of the last ten
25 years of work or shorter period, time frame?

1 A You know, I don't know. It was -- this
2 declaration was prepared at the end of December of last
3 year, and I think it included -- I don't have dates on
4 this table. I guess it could be looked up, because some
5 of the -- the IPR's have got, like, you know, dash 2020.

6 Q If it matters, Mr. Lipoff, you actually gave
7 declarations; is that correct?

8 A It depends on whether it was a declaration or
9 if it was a -- a declaration, if it was a IPR or an
10 expert report, if it was a federal court case.

11 In all instances, I provided -- in all
12 instances, I provided a declaration, expert report. And
13 in many cases, I was either deposed or I gave testimony.

14 Q Okay. So have you ever been disqualified or
15 limited or excluded as an expert witness?

16 A Like a Daubert motion? No, never.

17 Q Can you please -- I know in your -- it's in
18 your CV, but can you please tell me about what licenses
19 you hold right now, currently?

20 A Well, I have -- I'm a Registered Professional
21 Engineer, a Licensed Professional Engineer in Nevada,
22 also in Massachusetts. And I hold a Federal
23 Communications Commission General Radio Telephone License
24 and also a -- an Advanced Class Amateur Radio License,
25 FCC.

1 Q Thank you.

2 I'll ask these questions on a PE as well, but
3 have you -- when's the last time you actually utilized
4 your PE to stamp or to approve a design?

5 A I don't know that I have -- I've ever used
6 my -- my PE stamp to approve a design.

7 I have used it where I've testified in some
8 government proceedings, and the client -- client has
9 asked me to attach my -- my PE stamp to my report.

10 Q So --

11 A Never -- never in a -- in a design.

12 Q Understood. Understood. Just a question.

13 So you mentioned you have an FCC license; is
14 that correct?

15 A That's correct.

16 Q How many different types of licenses are
17 there?

18 MR. MCBRIDE: Objection; form.

19 BY MR. DROLET:

20 Q I guess I need -- I need to understand what
21 your license is. Can you explain what your FCC license
22 is?

23 A Yeah, so I have -- I have two -- two licenses
24 issued by the FCC. One of them is -- is called a General
25 Radio Telephone Certificate, which is a license -- it's

1 typically required -- it has -- it's required for a
2 number of different things, but the reason I obtained it
3 was it's required if you are working for a broadcast
4 radio or television station and you are maintaining the
5 over-the-air equipment, the transmitters, and you have to
6 actually log the readings and certify that it's operating
7 in accordance with FCC rules: It's on the right
8 radiofrequency and it's not over-deviating, that sort of
9 thing.

10 In order to be a broadcast engineer performing
11 those functions, you need an FCC General Radio Telephone
12 License. There -- there used to be third class, second
13 class, and first class. They -- they can -- and over
14 time, I have -- I have held first class license. They
15 ultimately collapse the first and the second class into
16 one. They now call it a General Radio Telephone License.
17 It's also required if you're an operator aboard a ship of
18 a certain size, like a cruise ship. I've never used it
19 for that purpose.

20 The other FCC license I hold is issued under
21 the -- a different part of the FCC rules that relates to
22 the amateur radio service or sometimes called AM Radio,
23 and that -- that -- over time, there are a bunch of
24 different classes.

25 Today, they have a novice technician, general,

1 advanced, and amateur extra. They all require
2 examinations that -- on FCC rules and communications
3 technology, and after you -- you pass those examinations,
4 you -- you get the right to use certain radiofrequencies
5 to talk to other radio amateurs.

6 Q So with the FCC licenses, are you required to
7 do yearly training or continuous training to keep those
8 things current?

9 A The FCC license does not require any continued
10 currency. There's just an initial test. The -- the
11 professional engineering licenses do have a -- a -- I
12 forget what they call it. But you continue -- you have a
13 continuing education requirement you have to certify each
14 time you renew the PE license.

15 Q You have to renew. And you're PE-certified in
16 how many states?

17 A Massachusetts and Nevada. Two states. Yeah,
18 originally, when I was living in Massachusetts, I took
19 the test and the exam there, and then when I -- I moved
20 to Nevada, they -- they don't have direct reciprocity,
21 but they accept some of the -- some of the elements.

22 I -- I had -- I had to take a separate exam
23 here on Nevada law and some -- some additional technical
24 requirements in order to get the Nevada license.

25 Q So the PE in Massachusetts, when did you

1 actually take the exam?

2 A Oh, my goodness. A long time ago. It would
3 have been -- I was -- I was working at Arthur D. Little.
4 So it would have been between 1976 and the '80s, when I
5 left ADL.

6 Nevada, I moved here about 10 years ago, and
7 I -- I got licensed here in Nevada about ten years ago.

8 Q So 2015, be fair to say that?

9 A Yeah, that order.

10 Q Okay. And so for both Massachusetts and
11 Nevada, you have to take, is it yearly? How often do you
12 have to take your -- your -- your courses to keep
13 current?

14 A Massachusetts doesn't have a continuing
15 education requirement, and Nevada does. I think the
16 license -- you know, I'm not sure. I think the license
17 period is two years. It might be -- it might be longer.
18 I don't remember. The -- I call it continuing education.
19 It's actually a mix of things that Nevada considers that
20 you can earn points, and you need a minimum number of
21 points in order to re-license. So some of them are
22 actually taking continuing education courses. Some of
23 them, you -- you can serve as -- you can present papers
24 at conferences, or you can serve as conference chairman.
25 Others, you can then -- you can lead industry standards

1 groups. And I've been involved in a mix of those
2 different activities, and I generally more than qualify
3 for the -- each renewal period to earn sufficient points
4 to be able to renew.

5 Q So if I understand correctly, for -- for
6 Nevada renewal, just by participation in your local
7 organizations, that kind of work, you gain enough points
8 so you don't have to take any courses; is that what I
9 understand?

10 A No. I -- I'm sorry if I -- if I confused you.
11 Nevada has a list of a variety of things, each of which
12 account for a certain number of points. Among those
13 continuing education is one of them where you can take
14 webinars or, you know, physically go to a university and
15 take the course. That's -- that's one mechanism.

16 And I have been involved in doing some remote
17 education. I earned some points for that. I
18 participate, listen in on webinars that are provided by
19 the IEEE, of which I'm a member. I also have been the
20 organizers of several technical conferences and on the
21 committees. I've earned some points for that, and I'm a
22 member of the Board of Governors of the -- the IEEE
23 Consumer Electronics Society, and that's -- being in the
24 leadership of -- of a technical society is one of the
25 other mechanisms to earn points; and spoken at

1 conferences; writing a technical paper, having something
2 published in a magazine or a journal. All of those
3 things contribute.

4 And, again, when it comes time for license
5 renewal, I -- I add them up and make sure that I at least
6 meet the minimum requirement for renewal.

7 Q Have you been published lately, anything
8 you've written?

9 A Yes. I -- I published, I guess most recently,
10 in two journals. One is the IEEE Consumer Electronics
11 Magazine, which is both a print and an online journal,
12 and I publish fairly regularly in a electronic
13 newsletter -- it's -- there's not a hard copy -- called
14 CTSoc World. CTSoc stands for Consumer Technology
15 Society.

16 So CT -- CTSoc World is a monthly electronic
17 magazine that's pushed to about 3,000 members of the IEEE
18 Consumer Technology Society.

19 And I think I -- I indicated -- I'm looking at
20 my CV, again. I don't know if it's in the printed
21 version that's in my declaration. I guess it's not
22 there. But my online CV, it just says if you -- if you
23 click here, it does a Google search for all my
24 publications, and it'll pull up my -- my various
25 publications.

1 Q Thank you.

2 So let's go through your academic background.
3 What's your highest degree you have?

4 A Well, on the technical side, I have a Master
5 of Science, Electrical Engineering. And I'm -- I'm
6 looking here so I get the date correct. It was 1974.
7 And I also have a Master of Business Administration, MBA
8 degree, which is not a technical degree, but that's -- I
9 have two master's degrees are my -- are my highest
10 academic achievement.

11 Q And your MBA was earned when?

12 A 1980 -- 1983.

13 Q Thank you.

14 A And this is -- again, this is in my CV. It's
15 attached to my declaration.

16 Q Okay. So can you talk to me a little bit
17 about how your combination of your academic training and
18 these activities you've been involved with, your
19 certifications and your -- your knowledge of the
20 industry, how that allowed you to gain understanding of
21 multimedia processing and Internet protocol control
22 delivery systems?

23 A Well, my bachelor's degrees are kind of --
24 they're circa -- I have a bachelor's degree in electrical
25 engineering in 1968 and a second bachelor's degree in

1 engineering physics in '69. There wasn't much in the way
2 of multimedia pre-Internet.

3 My MSEE is in 1974, and concentration was in
4 communications technology which involved protocols and so
5 forth. Most of the work that I've done in multimedia and
6 rich media and packet data communications has been
7 subsequent to my education, but I've -- I've worked on
8 dozens of projects where I had to either develop or apply
9 the protocols that were associated with delivery of
10 multimedia over -- over packets with a network such as
11 the Internet. I am -- I worked for the -- I think I
12 mentioned earlier I developed the DOCSIS cable modem
13 specifications that are -- are used now worldwide.

14 And as part of the DOCSIS cable
15 specifications, I included a MPEG convergence layer in
16 the downstream for delivery of streaming TV and also
17 included a variety of different capabilities, different
18 service levels that supported delay -- delay sensitive
19 delivery of multimedia such as voice and streaming video.

20 But I also -- for a period of time, I was the
21 vice president of industry -- vice president of standards
22 for the IEEE Consumer Technology Society where I was
23 involved with reviewing, suggesting, improving, and the
24 development of -- of various protocols that are used over
25 Wi-Fi cellular and cable TV for the delivery of streaming

1 multimedia.

2 I have been involved for about 35 years with
3 the IEEE conference on consumer electronics, the
4 International Conference of Consumer Electronics. And in
5 that regard, I have reviewed all the papers, academic
6 papers that have been presented each year, many of which
7 are dealing with either protocols or systems that deliver
8 multimedia.

9 So I'm -- I'm generally familiar with and have
10 worked with, in my consulting practice, an understanding
11 in application of the protocols --

12 Q Yes, sir.

13 A -- delivering of multimedia.

14 Q Yes, sir. So I imagine a lot of things you
15 just mentioned here are not only a firmware, but
16 they're -- they're -- they're protocols for the actual
17 infrastructure of the -- of the system itself. You
18 mentioned cable itself.

19 So you also mentioned something about rich
20 media. Can you explain that term?

21 A Yeah. I think the -- I don't know if there is
22 a -- a dictionary definition of some of the various, just
23 in terms of art, because it's a -- the whole area is
24 still kind of developing. But I think rich media,
25 multimedia kind of conflated together. There -- there --

1 there -- there's something where you have more than just
2 a simple -- a simple media type. So you generally have
3 got audio, video pictures, data, music.

4 In some cases, some of the media is delay
5 sensitive. That is you need to take into consideration
6 whether the communications channel is delivering it from
7 Point A to B. Is it a reliable channel or whether the --
8 in some cases, there may be -- it may vary over time,
9 like if you're on a cell phone and you're -- you're close
10 to the bay station and you may have a good connection,
11 but as you drive further away, your connection begins to
12 deteriorate, and the -- the media has to accommodate to
13 it; it has to adapt to it.

14 In the case of cable TV, a streaming video
15 delivered over the broadcast channel, it does not have
16 any -- much of a variation. If the same streaming media
17 is delivered over a cable modem, it's -- it's subject to
18 packet delays, and so you have to provide capability
19 to -- to maintain a high quality of service.

20 So rich media and multimedia is a picture of
21 audio, video pictures, still pictures, motion pictures,
22 data. Pretty much anything that's normally designed for
23 a human being to digest using one of their senses.

24 Q Thank you for that.

25 And so I imagine when you talk about rich

1 media, you're talking about data-heavy things, some
2 things that require significant bandwidth to transmit.
3 Is that my understanding of what you're talking about
4 here?

5 A Well, so, by the very concept of multimedia,
6 the bandwidth requirements vary. Transmitting
7 information about -- from a -- a remotely controlled
8 thermostat or a security system, which is just telling
9 you whether there is an alarm or what the temperature is,
10 is very low bandwidth.

11 High-resolution video with high-quality sound
12 is kind of the opposite extreme. That typically requires
13 a fairly high bandwidth. And the amount of bandwidth
14 varies, depending on the -- the amount of processing or
15 compression you do.

16 So it's -- the bandwidth is a combination of
17 what the total bit presentation to the end user is and
18 then also how much processing has been done from the time
19 the -- the media was created before it's sent to the
20 other end. You can -- you can reduce the bandwidth by --
21 by doing things called compression, which -- which will
22 reduce the bandwidth.

23 Q So back in 2010, when we're talking about
24 satellite transmissions, were there any restrictions then
25 with respect to bandwidth as far as -- or capability of

1 transferring data when you're talking about rich data --
2 rich media, I should say?

3 MR. MCBRIDE: Objection; form.

4 BY MR. DROLET:

5 Q So let me rephrase that because I need to
6 understand.

7 With satellite communications, as far as
8 infrastructure, as far as limitations go, as far as data
9 transfer rates, were there limitations with satellite
10 transmissions approximately 2 -- 2010?

11 MR. MCBRIDE: Objection to form.

12 BY MR. DROLET:

13 Q Can you tell me what restrictions with respect
14 to satellite transmissions in 2010?

15 A Yeah, I -- I would have to -- I would -- I
16 would have to go check some of the dates associated with
17 that. I don't believe I provided any -- any opinions
18 with respect to that in my -- my declaration, but
19 satellite transmission technology, in that general
20 vintage, varied all over the place.

21 You had very high band -- very high bandwidth,
22 one-way transmissions over -- over C-band satellites, and
23 you also had narrow band transmissions over what were
24 called VSATs, V-S-A-T. It's very small aperture
25 satellite terminals, which were used, like, for sending

1 credit card information for gas stations.

2 So the satellite communications varied all
3 over the place. The military had some high bandwidth
4 satellites. The -- there were some very narrow band
5 Voice-only satellites. They were all over the place.

6 Q So with the VSAT, were -- were you in the
7 range of kilobytes?

8 MR. MCBRIDE: Objection to scope.

9 MR. DROLET: I'm sorry?

10 MR. MCBRIDE: Objection to scope.

11 BY MR. DROLET:

12 Q Is satellite transmissions in -- what you're
13 talking about right now in the kilobyte -- kilobyte
14 range?

15 MR. MCBRIDE: Objection to scope.

16 A So I'm sorry. I'm not -- I'm not sure what
17 the question is, but I -- I don't think I -- I offered
18 any opinions about them, what the bandwidth of the
19 satellite systems were that I reviewed for -- for this
20 case, but --

21 BY MR. DROLET:

22 Q Understood.

23 A I'm sorry. I'm not sure.

24 Q Okay. It's okay. I apologize. I'm sorry.
25 I'm trying to understand your world better.

1 So let me say something you mentioned earlier.
2 Did you mention a DOCSIS system in kind of describing
3 some of the technology? Did I understand correctly,
4 DOCSIS?

5 A I -- I did. I -- again, I -- I want to see if
6 there was more power to it. I -- I believe my -- my CV
7 indicates the role that I had in the development of
8 the -- the DOCSIS standards. It does, yeah. Yes. I'm
9 sorry. Was there a question?

10 Q Yeah. Just tell me about how your involvement
11 was with the DOCSIS development.

12 A Well, pretty much, I -- I've had
13 involvement -- well, the -- the initial work that I did
14 was at the end of the 1980s, where I was hired by a
15 consortium of cable operators called MCNS. I think that
16 stands for Multimedia -- MCNS, yeah, Multimedia Channel
17 Networks Services or something like that. It was a
18 consortium of Cox, Time Warner, TCI, Rogers Cable of
19 Canada, and included CableLabs as one of the
20 participants. I was hired to develop the -- what today
21 are called the DOCSIS 1.0 Standards. Back then, they
22 were just the DOCSIS Standards.

23 And I -- I worked with my clients, with their
24 technical team, as well as some outside interested
25 parties, and we developed a -- a suite of standards that

1 today are called the DOCSIS 1.0 Standards.

2 I continued to be involved as a consultant to
3 CableLabs and, in some cases, individually at Cox and
4 Time Warner in the development of the second and third
5 generation of these DOCSIS Standards.

6 Originally, the DOCSIS 1.0 that I was
7 exclusively working on and then as a consultant working
8 with others to develop DOCSIS 1.1, DOCSIS 2.0, DOCSIS 3,
9 and DOCSIS 3.1, which are the -- predominantly are the --
10 DOCSIS 2 and DOCSIS 3 are predominantly the cable modem
11 standards that are in use today by cable operators to
12 deliver Internet services to the home.

13 Q Okay.

14 A Actually, now also to business, also used for
15 business.

16 Q Okay. Thank you.

17 So in addition to you actually work in the
18 field, getting your expertise, did you do -- in your past
19 education, involvement with the societies, did you do any
20 specific coursework, on top of everything you just told
21 me here, that allowed you to be able to be more versed
22 on -- on different streaming standards such as MPEG or
23 TSP, for instance?

24 A Not -- well, I -- I did -- I did attend some
25 state-of-the-art courses, noncredit courses at -- at

1 North Eastern in the 19 -- early '90s or so. But most of
2 the continuing, I would call it, pure educational
3 opportunities have been tutorials that I've attended at
4 conferences, as well as a variety of different webinars.

5 And I do regularly participate in them. The
6 probably 8 or so recent webinars that have been produced
7 over the last two years where, in my role at the IEEE of
8 vice president of industry activities and standards, I
9 was involved in -- in helping recruit and organize some
10 of these webinars, and then I also attended them myself.

11 There -- there are a variety of different
12 subjects, but many of them dealing with multimedia, body
13 of service protocols for sending information over -- over
14 a variety of different unreliable communications
15 networks.

16 Q Thank you, Mr. Lipoff.

17 So can I ask you about what efforts and
18 coursework or things you did to teach yourself about
19 writing code and -- yeah, just go back, and we'll start
20 there.

21 A Yeah. So at a couple different levels, for
22 many of my hardware product designs, I have had to
23 program microcomputers or microprocessors to perform some
24 of the logic functions.

25 And so I'm fluent in the assembly, like which

1 coding for a couple different processors: The -- the
2 Motorola 6800, 68,000 series, 6809, for which I had --
3 I've designed some Set Top boxes and consumer terminals
4 that I had to actually write the code for.

5 Also, somewhat familiar with the Z80
6 processor, which is a extended version of the Intel 8080
7 series of processors where I -- I had to write some
8 algorithms, some subroutines that were incorporated in
9 some other products to perform some communications
10 functions. So at the level of assembly language
11 programming, I have done quite a bit of work.

12 At the -- with respect to high-level programs,
13 I provide support for a number of different organizations
14 for online web services where I have written the -- the
15 HTML code that drives the web pages, and I programmed in
16 Java and JavaScript in order to support some of those
17 activities.

18 One example was, in fact, during the -- the --
19 another project I did for the cable industry called the
20 Next Generation Network of Architecture, NGNA. Our
21 clients were -- were looking for each of the individual
22 vendors who supply the cable industry to provide input
23 into what the next generation cable TV Set Top box was,
24 and they hired me to manage that project and develop the
25 recommendations.

1 In order to support that, I developed a
2 website that allowed each of the participants to sign up
3 for license agreements, participation agreements, and
4 then to securely upload their contributions to the
5 website, and then had different portals where our clients
6 had the rights to view some things and some of the
7 participants had only limited rights to view other
8 things.

9 I also provide the website support for the --
10 the Las Vegas Rotary Club, and I write all the code for
11 their -- their website and their systems. And for most
12 of the conferences that I've been involved with, I've had
13 some role in the website development for writing some
14 portion of the code.

15 So I'm familiar with HDML, JavaScript, and a
16 server-side scripting language called PHP that I've also
17 written code for.

18 I've also -- I've done some programming in the
19 ANSI C language, A-N-S-I-C, to support some of my own
20 needs where I digest incoming e-mails, and I resend them
21 out as I send messages to my own -- my own devices, and
22 I -- I programmed in -- in the C language for -- for that
23 purpose.

24 Q Thank you.

25 MR. DROLET: Counsel, if it's okay with you,

1 I'd like to take a little comfort break, if that's
2 okay. A 10-minute comfort break okay with you,
3 Mr. Lipoff?

4 THE WITNESS: Yep. Sounds good. So I have
5 like 17 after. Pick up again at 11:30? Does that
6 sound good?

7 MR. DROLET: Counsel, is that good with you?

8 MR. MCBRIDE: Good with me.

9 MR. DROLET: Lacey, good with you? Me? Yeah?

10 MR. MCBRIDE: Yes.

11 THE VIDEOGRAPHER: All right. Going off --
12 going off the record at 11:17 a.m.

13 (Recess.)

14 THE VIDEOGRAPHER: We are back on the record
15 at 11:29 a.m.

16 BY MR. DROLET:

17 Q Perfect. Mr. Lipoff, thank you. I needed to
18 take a comfort break, but you have the ability to ask for
19 one yourself anytime you need, okay?

20 A Okay.

21 Q So let's talk a little bit about, you know,
22 what you did to prepare for -- for this -- for -- for
23 game here; right?

24 Who helped you prepare your declaration, if
25 anyone, other than yourself?

1 A So I spent some time working with Mr. McBride
2 and, for a shorter period, with Mr. Wyde.

3 Q I'm sorry?

4 A Also with Mr. Wyde, W-Y-D-E.

5 Q How many hours have you already worked to date
6 on this -- these IPRs?

7 MR. MCBRIDE: Objection; form.

8 BY MR. DROLET:

9 Q How about a total number of hours you have
10 billed to date on the IPRs?

11 A I don't think I'd be able to answer that with
12 any accuracy without going back and looking at my -- my
13 billing records because I -- I haven't worked exclusively
14 on this. It's been on and off, and there has been other
15 work in between.

16 The last time I -- I worked on this is when I
17 filed my -- my declaration back in December and then --
18 and then more -- more recently over the last few days to
19 prepare for this dep- -- deposition.

20 Q So I saw your dec- -- I saw the materials you
21 considered in your declaration.

22 Did you review any materials not listed in
23 your declaration?

24 A Yeah. So at the time -- at the time I wrote
25 my declaration, I -- I did not have access to the -- I

1 want to make sure I -- I correctly describe this, the
2 patent owner's preliminary response, and the institution
3 decisions in preparing for this declaration.

4 In preparing for this deposition, after I
5 prepared the declaration, I also looked at the
6 preliminary responses from the patent owner, and I also
7 read the PTAB's institution decisions.

8 Q Thank you.

9 Can you describe the process you followed to
10 determine the level of ordinary skill in the art for each
11 of these patents?

12 A Yes. I think, at a high level, I -- I read
13 the specification of the patents, which were the same,
14 and then I looked at the -- the claims which were
15 different to understand the subject matter that was --
16 was part of these patents.

17 And I think as we -- we discussed previously,
18 they're dealing with various aspects of delivery of
19 multimedia content from content providers, like cable
20 operators and satellite companies.

21 So thinking about -- my understanding from the
22 criteria for person of ordinary skill, it should be
23 somebody with sufficient technical knowledge that they
24 could read and understand the subject matter and could
25 read and understand the scope of the -- the claims.

1 And seeing what the subject matter was
2 discovered in these patents, which is the multimedia
3 content from the cloud to cable operators, you know,
4 to -- to content providers, I -- I identified what I
5 thought were the level of education and/or substitute
6 relevant experience as somebody would need in order to be
7 able to read and understand these patents.

8 Q Did you consider any alternative definitions
9 for what person of ordinary skill in the art would be?

10 A I noticed in the patent owner's response, I
11 think they -- and I'm paraphrasing here because I -- I
12 don't have the words in front of me. I think they
13 generally agreed with -- with my characterization, but
14 they added some additional criteria associated with, I
15 think, software development or software systems.

16 But I think that was the -- I hadn't
17 considered that as being necessary to include in my
18 description of what a person of ordinary skill in the art
19 is because, in my description, I described familiarity
20 with the protocols in multimedia, which I think would
21 encompass the -- the software aspects that they were in
22 the patent owner's response.

23 Yeah, I'm sorry. I see you have that on the
24 screen. Can you make that just a little bit bigger? I
25 can -- I can't see it. But it's just -- that's perfect.

1 Perfect. I think that's a -- I think that's an accurate
2 description of what I considered.

3 Q Did you consider experience with -- with
4 writing any specific type of code when you do your
5 assessment?

6 A I -- I didn't exclude that as part of what I
7 came up with as a -- as a description of a person of
8 ordinary skill in the art. But as I mentioned a moment
9 ago, the -- the aspect of being able to understand the
10 protocols, the protocols are basically -- they're --
11 protocols are not hardware devices. They are software,
12 essentially, or computer instruction representations
13 of -- of -- of taking various steps to respond to inputs
14 and outputs.

15 So they -- they -- they would include aspects
16 of being able to understand the software, not to -- I
17 think that would encompass the same concepts that the
18 patent owner had put in their representation of what they
19 thought a person of ordinary skill would be.

20 Q Did you consider web-based expertise?

21 A Well, yeah. I think -- you know, I -- I
22 should -- in order to be able to provide an answer to
23 this, I -- I should refer -- if you'll give me a moment
24 to open up my -- one of my declarations and -- and look
25 at what I actually wrote there.

1 So I'm looking at -- I'm sorry. I think it's
2 the same in all of them. I just happened to randomly
3 open up the IPR for Patent 002, which is the IPR 00350,
4 and I'm looking at Paragraph 68, which is -- I don't
5 think it differs from any of them.

6 But a person of ordinary skill in the art with
7 a bachelor's degree or equivalent in computer science and
8 two years of experience in multimedia processing or
9 delivery using Internet protocols.

10 So that's what I -- what I wrote. I then
11 continued saying a person with less formal education or
12 experience could also meet the relative standards. So
13 I'm now looking at what I wrote.

14 And I'm sorry. I forgot your question. Could
15 you repeat that?

16 Q So I asked about what -- what alternative
17 definitions for the person of ordinary skill in the art
18 would be, and we've touched on that.

19 I asked specifically about web-based
20 experience. As you know, engineering experience is very
21 specific to its application, correct, even in electrical
22 engineering, even in computer science, for instance;
23 right? So this type of application, you know, it's
24 web-based, it's multimedia, it's code driven --

25 MR. MCBRIDE: Object to the form.

1 A Yeah. So I'm sorry. I just heard what you
2 said, but I'm not sure -- I want to answer your question.
3 So what -- what was the question?

4 BY MR. DROLET:

5 Q Okay. I'll strike that.

6 So can you describe the legal instructions you
7 received from counsel regarding claim construction?

8 A Can -- are you -- are you -- make sure I --
9 let me repeat what I think I heard you ask me.

10 Are you asking me for my understanding of what
11 the legal principles are with respect to claim
12 construction? Is that what you're asking me?

13 Q Yes, if that's what you implied.

14 A Yeah. So, again, I think it was the same in
15 all my declarations, but I'm -- I'm looking specifically
16 now at my 002 patent, the 350, 00350 IPR, and I have a
17 section in there called "Legal Principles," and then, on
18 Page 22, a paragraph for legal standard for claim
19 construction.

20 So the entirety of the legal principles
21 that's -- that's in my declarations were provided to me
22 by counsel, and I -- I -- I didn't order them. I read
23 them. I think I understood them, and I attempted to
24 apply them in performing my analysis.

25 So I don't know if you want me to read it, but

1 Paragraph 47 and 48 -- or beginning at Paragraph 47, I --
2 I -- I play back what -- what instructions were given to
3 me by counsel for the legal standard for claim
4 construction.

5 Q Thank you.

6 Can you identify what intrinsic sources you
7 relied upon in construing the claims of the first one?
8 We'll go with the 074 patent.

9 A Okay. And, again, I -- I have -- I have my
10 declaration for the 074. Are you -- are you asking me
11 about something specific in there? I'm sorry. I didn't
12 get the question.

13 Q So in claim construction, you go down using
14 the Phillips standards as far as how you construe the
15 claims in -- in -- the claims that are in the patent.

16 So you already said that you understood them
17 as -- as counsel provided you the guidance, the Phillips
18 guidance.

19 MR. MCBRIDE: Objection; form.

20 BY MR. DROLET:

21 Q So I'm explaining. So let me go back, and
22 I'll strike that.

23 So, specifically, in construing the claim --

24 A I'm sorry. Your -- your audio just cut out.

25 THE VIDEOGRAPHER: Yeah. Rob's frozen.

1 BY MR. DROLET:

2 Q -- information in construing the claim
3 construction?

4 A Okay. I --

5 MR. MCBRIDE: Counsel, I think you cut out.
6 You may want to rephrase or restate your question.

7 MR. DROLET: Yeah, I just got the notice that
8 it was unstable. Can you hear me and see me okay
9 now?

10 THE WITNESS: Yes. I have no problem at the
11 moment. You did cut out for just a second.

12 BY MR. DROLET:

13 Q Understood.

14 The question is kind of a broad question, and
15 I apologize for that. I'm kind of -- I'm kind of
16 fast-forwarding to understand your assessment of the --
17 your -- of the specification and what intrinsic
18 definitions in the specification you remember that you
19 pulled out to assist you in constructing your claims.

20 MR. MCBRIDE: Objection; form.

21 A I'm sorry. I think I heard your words, but
22 I -- I don't understand what you're asking me.

23 BY MR. DROLET:

24 Q No worries. Let's fast-forward here, because
25 I think -- if I have to come back and do that again, I

1 will. But let's talk about the 074 patent.

2 A Okay.

3 Q Let's put up the 074 patent. Bear with me,
4 Mr. Lipoff, as I get this up on the screen.

5 A I'm sorry. You're not waiting on me, are you?

6 Q No, no. It's all -- it's all me.

7 A Okay.

8 Q Sorry. All right. So we're showing you the
9 074 patent, which I know you're familiar with.

10 A Yes.

11 MR. DROLET: And we are going to go to the
12 claim language, if you'll pull those up again.

13 So, Lacey, this is Exhibit 2.

14 (Exhibit 2 was marked for identification.)

15 (Exhibit 1 was marked for identification.)

16 BY MR. DROLET:

17 Q So, Mr. Lipoff, we're looking at the very
18 first portion of Claim 1, the 074 patent.

19 A Yes, I see that.

20 Q Clear enough for you to see it?

21 A Yes, it is. But I have a suggestion that
22 might be helpful as we go through the claims. In -- in
23 each of my declarations, at the very beginning, I have a
24 list of the challenged claims, and why I'm suggesting
25 that might be more helpful to look at is it's -- it's

1 broken down by different elements, 1A, 1B, 1C, and what
2 you have up on the screen is accurate. But if we're
3 going to talk about individual elements, it might be
4 helpful to actually use the charts that's in the
5 declaration rather than what you have on the screen, but
6 it's up to you, whatever you want to do.

7 Q I want to be -- I want to be helpful and
8 not -- not cause any unnecessary exercise that we don't
9 have to.

10 However, the reason I want to look at the
11 patent is I want to -- I want to focus on the -- the
12 patent language as written, correct, in its -- in its
13 context.

14 A Okay.

15 Q If it would be helpful for you to look at
16 your -- your declaration to -- to get a bearing, you said
17 you had a hard copy there on your side in your --

18 A Okay.

19 Q I'm sorry, Mr. --

20 A Go ahead with your -- go ahead with your
21 questions. Sorry.

22 Q Oh, no, no. I want to go forward in a way
23 that's easy for everyone.

24 I do want to look at the claim language, but
25 you mentioned that it'd be helpful in our discussion to

1 reference the -- your assessment, right, your claim
2 construction? My -- my suggestion is: Do you happen to
3 have that handy so you can reference it so we can talk
4 about it, or how do you want to do this? I just want to
5 minimize going back and forth and -- and --

6 A Go ahead with your -- go ahead --

7 MR. MCBRIDE: Counsel, I think -- I think if I
8 can object quickly, I think there is -- just to kind
9 of -- you guys might be talking past each other on
10 this.

11 I think what Mr. Lipoff was referencing was
12 that, within the Petition in his declaration, those
13 elements are given letters, like 1A, 1B, and he's, I
14 think, suggesting that might be an easy way for you
15 to refer to things. But I -- however you want to
16 conduct your deposition is your business.

17 MR. DROLET: Thank you, Counsel.

18 MR. MCBRIDE: Sure.

19 BY MR. DROLET:

20 Q Is that -- is that correct? Is that what
21 Mr. McBride is suggesting, that we reference these
22 elements like that, it'll be helpful? Yes, Mr. Lipoff?
23 Yes?

24 A I'm sorry. Your -- your audio broke up, so I
25 didn't hear what you were saying.

1 Q I'm sorry.

2 MR. MCBRIDE: Sorry about that. Please
3 don't -- I mean, I just -- I thought that's what you
4 were saying.

5 MR. DROLET: Make it easy for everyone. So
6 let's stick to the claim on the patent. Hold on.
7 We'll go back to the -- to the -- to the claim, the
8 patent claim. Hold on. No. We're looking at the
9 patent.

10 MR. HERNANDEZ-MONDRAGON: There it is.

11 MR. DROLET: Oh, there we go.

12 BY MR. DROLET:

13 Q So can you read Element 1A from, after Roman
14 Numeral I, the first semicolon, please, Mr. Lipoff?

15 A Yeah, yeah. That's -- I -- I see what's up
16 there. What do you want me to do?

17 Q Could you read what's written as 1A, which is
18 after Numeral I to the first semicolon?

19 A Okay. I labeled 1A as "receiving, from a
20 content provider, a request for at least one media stream
21 for playback on a broadcast media channel, wherein at
22 least one media stream includes a plurality of multimedia
23 items of different types."

24 Q Okay. And now we're going to look at the
25 specification. And we're going to go from the

1 specification to a couple places. I want you to go to --

2 A Okay.

3 Q You there with me?

4 A Yeah. Tell me where you want me to go.

5 Q Column 2.

6 A Okay.

7 Q I'm going to get it up for you, Mr. Lipoff.

8 A Yeah.

9 Q Column 2, go down to Number 50.

10 Okay. Can you read the first sentence,
11 Mr. Lipoff, from the specification, Column 2, starting at
12 Line 50 to the first full -- to the first full sentence,
13 please?

14 A Okay. "An example computer-implemented method
15 can receive, from a content provider such as a cable or
16 satellite operator, a request for at least one media
17 stream for playback on a broadcast media channel."

18 Q Okay. So right there, the specification is
19 giving the definition that a content provider such as a
20 cable or satellite operator; is that correct?

21 MR. MCBRIDE: Objection; form.

22 BY MR. DROLET:

23 Q Okay. Can you, Mr. Lipoff, on the second --
24 Line 51 --

25 A Yes.

1 Q -- does Line 51 in the specification define
2 what a content provider is?

3 MR. MCBRIDE: Objection; form.

4 A Yeah, so I -- I would not use the word
5 "define." I think by preceding that as such as, I would
6 say the specification providing an example of two types
7 of content of providers such as cable or satellite
8 operator. I -- I -- I don't understand this to be
9 limiting since a content provider is used in other places
10 in the -- in the patent that don't appear to be limiting
11 it to just cable or satellite operators. But those
12 are -- those are two examples.

13 BY MR. DROLET:

14 Q Understood.

15 Okay. Can you give me examples in the
16 specification where content provider is defined in
17 another way?

18 MR. MCBRIDE: Objection; scope.

19 MR. DROLET: He just referenced it, and so he
20 just said that specification defines it in different
21 ways.

22 BY MR. DROLET:

23 Q Well, I'm asking where in the specification
24 does it define in a different way?

25 MR. MCBRIDE: Objection to form.

1 BY MR. DROLET:

2 Q It's okay, Mr. Lipoff. I don't mean to be
3 assertive or conflictive, but I'm just -- I'm just trying
4 to interact with you with respect to what you just said.

5 A Yeah.

6 Q You can answer.

7 A I understand, and --

8 Q Take your time. No rush.

9 A As I said, you asked -- you asked me
10 specifically about this line. I'm sorry. I'm looking
11 for it again.

12 Q Take your time, Mr. Lipoff.

13 A Yeah, yeah. Line -- Line -- Line 51, and
14 my -- my answer was -- is I do not believe that that line
15 would constitute a definition, where a definition might
16 be regarded as limiting it to just a cable -- a cable or
17 satellite provider.

18 I think the -- describing it as such as means
19 that for this line, two examples of a content provider
20 are a cable or satellite operator, but I don't see
21 anywhere in my declaration where I -- I took an attempt
22 to further describe them. And where the content provider
23 appears in the challenge claims, it's not limited to a
24 cable or satellite provider. It just says "receiving
25 from a content provider."

1 Q So I just want to make clear, because in your
2 previous response -- and I don't want to put words in
3 your mouth -- I thought you said the spec, specification,
4 gave alternatives. If I said that incorrectly, tell me.
5 I'm just trying to make sure what I -- what I heard.

6 A Well, as, you know, the -- my declaration did
7 not attempt to come up with construction for content
8 provider. My answer is simply that I don't agree that
9 Line 51 is -- is a definition for a content provider,
10 because content provider is used in multiple places, both
11 in the specification and in the claims. And in other
12 places, in no place in the specification of the claims
13 does it attempt to limit a content provider to being just
14 a cable operator or a satellite operator.

15 MR. MCBRIDE: Form.

16 BY MR. DROLET:

17 Q Bear with me. Bear with me. I'm doing a
18 search on the specification to verify that.

19 Your statement is that -- can you repeat your
20 last statement, Mr. -- Mr. Lipoff again concerning --

21 A Yeah, I -- I'm sorry. I -- I -- I'm not sure
22 where to start. But let me -- let me go back to what I
23 think I said. I said the scope of my work did not
24 involve me coming up with a construction for content
25 provider.

1 But you specifically asked me about whether or
2 not Line 51, where it states a content provider can be,
3 such as a cable or satellite operator, whether that would
4 represent a definition of a content provider.

5 And my answer is: My understanding from
6 Line 51 is that is simply an example of a content
7 provider. And if there was nothing further in the claim
8 language that limited a content provider to being just a
9 cable or satellite provider and, moreover, content
10 provider appears in different places in the specification
11 and in no place in the specification am I aware of does
12 it define a content provider as being limited to a cable
13 or satellite operator.

14 Q So let's look at claim 9 on the -- on the --
15 on this. Can you read Claim 9 for me, Mr. Lipoff?

16 A Yes, I can. So, previously, we were looking
17 just at Claim 1. But Claim 9 says the method of Claim 1
18 where the content provider is a cable operator or a
19 satellite television operator.

20 And that -- that particular claim, as opposed
21 to Claim 1 that we were looking at before, is -- is
22 specific with respect to describing the content provider
23 as a cable operator or a satellite television operator.

24 Q Bear with me.

25 So Number 9 further -- Number 9 reads, as you

1 read, the method of Claim 1, wherein the content provider
2 is a cable television operator or a satellite television
3 operator.

4 A Yes.

5 Q So let me contrast that and go back to
6 Column 2, Line 51, Line -- no, no. Column 2, Line 51.
7 There you go. Right there.

8 So Line 51, "a content provider, such as a
9 cable or satellite operator"; is that correct? Is that
10 how it reads, Mr. Lipoff?

11 A You read it correctly, yes.

12 Q So that definition is further limited -- now
13 go back to -- well, before we leave here. See content
14 provider is a cable or satellite operator.

15 Let's go back -- let's go back now to -- to
16 Claim 9. Claim 9 reads -- go back to Claim 1, wherein
17 the content provider is --

18 MR. DROLET: Put that on my screen, but make
19 sure it's correct.

20 BY MR. DROLET:

21 Q Number 9 reads, "The method of Claim 1,
22 wherein a content provider is a cable television operator
23 or a satellite television operator, period." Is that how
24 it reads?

25 A You read it correctly, yes.

1 Q Thank you.

2 So -- but if I refer to the response you gave
3 earlier, I just want to make sure I'm clear on the
4 record, in the scope of your claim of construction, you
5 are not asked to provide definition for content provider;
6 is that how -- what I understand?

7 A That -- that's correct. In the scope of my
8 work, I did not provide any explicit constructions for
9 any claim term.

10 Q To the provider.

11 A But I want to be clear, the previous
12 examination, you were referring me to Element 1A, which
13 content provider is -- is not limited in any respect to a
14 cable or satellite provider. It only is explicit in
15 Claim 9.

16 Q Well, my job -- I'm not going to argue with
17 you. I'm only going to admit -- I'm only going to
18 suggest that the definition, as it exists verbatim in
19 Column 2, Line 51, is further limited by the Claim 9
20 language.

21 MR. MCBRIDE: Objection; form.

22 A Yeah, so I -- I -- I would continue to repeat,
23 just to be clear on the record, that I don't recognize
24 the specification on Line 51 as defining content
25 provider, merely providing examples, but I would agree

1 that Claim 9 does read where the content provider is a
2 cable television operator or a satellite television
3 operator.

4 BY MR. DROLET:

5 Q Thank you, Mr. Lipoff.

6 So staying on Element 1A, as you read it
7 previously -- so bear with me a second.

8 So on Claim 1A, Mr. Lipoff, "A
9 computer-implemented method comprising: Receiving, from
10 a content provider, a request for at least one media
11 stream for playback on a broadcast media channel, wherein
12 the -- wherein at least one media stream includes a
13 plurality of multimedia items of different types,
14 semicolon." Did I read it correctly?

15 A Yes, you did.

16 Q Okay. So we're going to switch a little bit
17 here to your use of the references with this as a
18 backdrop. And I apologize for going back and forth. I
19 just wanted to frame what we're seeing here in
20 Element 1A: "A content provider, requesting at least one
21 media stream for playback on a broadcast media channel,
22 wherein at least one media stream includes a plurality of
23 multimedia items of different types, semicolon."

24 So in that context of 1A, I want to now look
25 at Avellan and discuss with you several things concerning

1 Avellan events, if that's okay. So let's -- let's pull
2 up Avellan.

3 A Okay.

4 Q So while -- while they're pulling Avellan
5 up -- Avellan up, Mr. Lipoff, can you help me understand
6 why you chose that reference, Avellan?

7 A Well, it has -- so I'm referring to my
8 declaration where I described it, which I -- I think
9 provides an answer to your question as to why I -- I
10 chose it.

11 In my declaration, I describe Avellan on --
12 starting at Paragraph 84, and Avellan is basically
13 providing the same functionality as the -- as the various
14 patents at issue with the 074, in particular, which is
15 broadcasting multimedia over a broadcast channel, which
16 is what the patents are about.

17 It -- providing the same function and,
18 moreover, it has an architecture -- as I show in Figure 1
19 of Avellan that I reproduce in Paragraph 86 of my
20 declaration, it has an architecture very similar to the
21 074 patent, where there is a source for Internet cloud at
22 the bottom similar to -- I've got to look at the 074
23 here. Very similar to Figure 1 of the 074, where there
24 is a media-amplified cloud that corresponds to the --
25 what's indicated with the blue arrow here in this figure

1 from Avellan. It has infrastructure in the middle which
2 corresponds to the Mediaplug and the MUX in Figure 1 of
3 the -- of the 074 patent, which is described as what
4 exists at the cable head end, and it also describes some
5 end user devices in Figure 1 of the -- of the patent.
6 They're called Set Top boxes. There's end user devices
7 shown in Figure 1 of Avellan indicated by the green.

8 So as a similar architecture performs the same
9 function of broadcasting multimedia on a broadcast
10 channel, playing it back to end user devices, and I
11 believe as I demonstrated in my declaration and the
12 accompanying Petition, satisfies each of the claim
13 elements of -- reads on each of the claim elements of
14 Claim 1 -- 1 through -- through 20.

15 Q Okay. Can you tell me, in your words, what is
16 Avellan teaching? What's it doing? How is it --

17 A Well, I think -- yeah, I think the words that
18 I have in my declaration are pretty clear. In
19 Paragraph 85 of my declaration for the 074, I say it's a
20 communication system that can broadcast information from
21 a web server over a broadcast device to a multitude of
22 user computers.

23 And then I go on to say how it does that. It
24 uses -- accesses the Internet, has a virtual browser just
25 like the 074. It has a satellite system, which the

1 satellite reads on Claim 9, as well, since it has a
2 satellite. Even though that's not a requirement in
3 Claim 1, it also supports Claim 9.

4 It broadcasts the media on a broadcast
5 channel. That's a function of the gateway. So it has
6 all the different elements of -- of the -- of the
7 challenge claims in Avellan.

8 And I used it as either a primary reference,
9 a -- an anticipation reference in case of Ground 1 or I
10 used it as a obviousness reference in the case of
11 Grounds 2 through 8 and all cases of the 074.

12 Q So help me understand the -- how this works.

13 So my understanding, correct me if I'm wrong,
14 my understanding is that you've got some W terminals or
15 terminals that are receiving images, correct, images from
16 another virtual browser; correct?

17 MR. MCBRIDE: Object to the form.

18 BY MR. DROLET:

19 Q All right. So, Mr. -- Mr. Lipoff, instead of
20 having a mechanical engineer explain to you what I think
21 it is, I want you to explain to me how this works.

22 A Okay. Again, I'm going to refer to my
23 declaration because I spent some time thinking about how
24 to characterize that. So let me see if there is
25 something in my declaration that I want to -- I want to

1 add to.

2 So Paragraph 85, I'll paraphrase a little bit
3 here. It provides for user computers to access the
4 Internet and the private clouds through a virtual browser
5 of the gateway. The browser software is virtual, so it
6 actually resides at the gateway. It's a remote client of
7 the gateway.

8 Then, continuing in Paragraph 86, "A user at
9 Computer 104, that's the part that's the green arrows of
10 the figure, can request a media stream from either the
11 Internet or the private network cloud, which is indicated
12 in blue. The gateway platform indicated in red processes
13 the request. It obtains the content, and it uses the
14 virtual browser that's at the gateway, and then converts
15 that to a form that's suitable for display on the -- the
16 Devices 104, 106.

17 And continuing in Paragraph 87 of my report,
18 just let me -- again, to paraphrase there, that the --
19 those -- those pages can be either still images or
20 continuously varying images, can be live-streaming feeds.
21 And so that's basically how it works.

22 With respect to Figure 1, the -- the
23 infrastructure in the middle, which is -- is something
24 that the operator would -- would -- would have control
25 over is providing that broadcast multimedia content to

1 devices shown in green in Figure 1.

2 Q Yes, sir. I'm going to direct your attention
3 to look at Avellan. Let's pull up Avellan, that itself.

4 A Okay.

5 Q Let's go to Column 2.

6 A All right. Give me a minute here to get that
7 hard copy. It's a lot easier for me to look at the hard
8 copy.

9 Q Okay.

10 A Okay. I've got that here somewhere.

11 Q Mr. Lipoff, just take your time. So as you
12 open it up, I definitely want to -- just to focus on --
13 we'll start our conversation on -- in Column 2. We'll
14 start on Line 58, and it'll go to Column 3, but we'll --
15 we'll -- I'll give you a moment to get there.

16 A Yeah, I see -- I see that. Column 2, Line 58.
17 Yep, I'm there.

18 Q Okay. I just want you to read that section.
19 When you're ready, we'll go to the next section on the
20 next page, and then we'll talk about it once you've read
21 it.

22 A Okay. Just a minute.

23 Q Yes, sir.

24 A Okay. I've read down to --

25 Q Next column.

1 A -- to Column 3, Line 6.

2 Q Oh, you have, okay.

3 A Yeah, yeah.

4 Q Let's talk about that.

5 Now that you've read it and you refreshed your
6 memory as to what Avellan's doing, what's actually
7 happening in Avellan, then, in your -- in your words, in
8 your opinion?

9 MR. MCBRIDE: Object to the form.

10 A I --

11 BY MR. DROLET:

12 Q Okay. So the section of the specification of
13 Avellan, which you rely upon, you and I have had a chance
14 to look at this one section, and I'm asking Mr. Lipoff
15 for his assessment of what the specification is
16 disclosing or teaching us; is that fair?

17 A Yes. I think I understand your -- your
18 question, and I -- I would say with respect to the --
19 this citation to Avellan in Column 2 and continuing to
20 Column 3, I think it's -- I think what I describe in my
21 declaration and I previously entered in the record, I
22 think it's consistent with -- with this.

23 I don't know that I would -- would modify it
24 or change anything that I said previously. I don't think
25 there's anything really to add to what's already in my

1 declaration.

2 Q Well, based on what you're reading right now,
3 how do the images get transmitted to, in Avellan, the
4 104 -- 104 and the laptop, the terminal, dummy terminal?

5 MR. MCBRIDE: Counsel, I -- I -- I'm going to
6 object to the form. Are you referring to
7 specifically this passage or Avellan as a whole?

8 MR. DROLET: I'm trying to have a discussion
9 with Mr. Lipoff concerning what Avellan teaches with
10 respect to specification and the actual patent
11 itself. The section describes the methodology in
12 which Avellan transmits data and what it is
13 transmitting, so I'm having a discussion with
14 Mr. Lipoff.

15 MR. MCBRIDE: Objection to form.

16 MR. DROLET: I was answering your question,
17 Counsel.

18 BY MR. DROLET:

19 Q So, Mr. Lipoff, I'll strike that.

20 So since you just read the section I talked
21 about -- so can you read the first sentence in Line 58,
22 starting at Line 58, starting with the website?

23 A Okay. "To retain the functionality of the
24 website in both a broadcast and unicast mode, the gateway
25 computer creates a tag file, e.g., using X and Y

1 coordinates, the location of the various action points,
2 e.g., selectable links, text boxes, et cetera, of the web
3 page and identifies a type of action point at each
4 location."

5 Q Thank you.

6 Can you read the beginning of that, starting
7 "the website" above Line 58?

8 A "The website image captures the graphical
9 features of the website."

10 Q Correct. So what you just read to me right
11 now, can you describe what this is doing?

12 A Yes. I -- I think so. Again, I -- I think
13 it's consistent with what I described earlier in -- in my
14 declaration as to how I characterize Avellan.

15 Avellan is -- is basically -- and I just want
16 to go back and -- and look at the figure again so I can
17 match up with what's in here.

18 So Avellan is basically describing some
19 infrastructure that is at the content provider. In the
20 case of Avellan, it's satellite, but just generically a
21 content provider, that has got a virtual browser located
22 as part of that infrastructure that takes Internet
23 content and converts it to a form that, by using the
24 virtual browser, converts it to a form that can be sent
25 to the -- the individual terminal devices, 104, 106, so

1 that the output of this virtual browser can be displayed
2 on these end user devices, 104 and 106.

3 The portion that you asked me to read in
4 Avellan does some additional things, which were relative
5 to some of the other claim elements, where it talks about
6 in addition to sending the images that are created by the
7 virtual browser, it also sends some tag files, which can
8 be used for some inner activity, but that was not
9 relevant to Claim 1. It was relevant to some of the
10 other claims in the patent that required some inner
11 activity, but not -- not relevant to Claim 1.

12 Q Thank you, Mr. Lipoff.

13 And I know that you want to be consistent with
14 your declaration. My intent is not to -- to have you
15 contradict anything you've written.

16 My intent here is for us to -- to understand
17 what Avellan teaches, correct, and that's why I want to
18 focus on the specification and what Avellan says.

19 So in the sections we just read and we looked
20 at in Avellan, the first sentence, I'll read it again:
21 "The website images capture the graphical features of the
22 websites, period."

23 "To retain the functionality of the website in
24 both the broadcast and unicast modes." In Avellan that's
25 all it teaches, both modes, so everything Avellan teaches

1 is this.

2 MR. MCBRIDE: Object to the form.

3 MR. DROLET: I'm having a discussion. I
4 haven't even asked the question yet.

5 A So --

6 BY MR. DROLET:

7 Q "The gateway computer creates a tag file,
8 which maps (e.g., using x and y coordinates) the location
9 of various action points (e.g., selectable links, text
10 boxes, et cetera) of the web page and identifies the type
11 of action point at each location, period."

12 A Okay.

13 Q So that section that I read verbatim, is that
14 exactly as I -- as it's written, Mr. Lipoff, in Avellan?

15 A So I want to -- I want to answer your
16 question. So I would agree that you correctly read
17 Lines 59 through 60 of Avellan, but I would reject any
18 representation that this is the full and the entire scope
19 of what Avellan teaches.

20 I would suggest that the summary that I have
21 in my declaration is broader than just what's on Line 59
22 and 60. And, in fact, on that same Column 2 of Avellan
23 that we've been looking at, the -- Avellan describes
24 Line 49, what I have summarized in my declaration,
25 starting at Line 49.

1 "The gateway server images that web page from
2 the network, compresses the unicast data, and transmits
3 the compressed unicast data over the broadcast device.
4 The unicast data is then sent using a high speed
5 bandwidth protocol so it's received on the receiving
6 computer substantially in real time."

7 So this is -- that particular section of
8 Avellan that I just read, starting in Column 2, Line 49,
9 is more generally what Avellan is doing.

10 The portion that you pointed me to, starting
11 on Line 59, is some additional functionality that allows
12 some broadcast that allows some inner activity, but I
13 would disagree that that represents a sum and the whole,
14 Line 59 through 60 represents a sum and the whole of what
15 Avellan teaches.

16 Q Mr. Lipoff, I just read 49 through -- through
17 57. I'm going to ask you again to -- read that section
18 which prefaces --

19 THE STENOGRAPHER: You cut out.

20 MR. DROLET: I'm sorry.

21 THE STENOGRAPHER: You cut --

22 MR. DROLET: Can you hear me okay?

23 THE STENOGRAPHER: Now we can.

24 MR. DROLET: I apologize.

25

1 BY MR. DROLET:

2 Q Mr. Lipoff, I apologize. I'll say it again
3 slower.

4 I'm going to suggest -- I just read the
5 section in Avellan, from 49 down, including the sections
6 we just reviewed. I believe they're -- they're --
7 they're -- they're -- they don't conflict. The section
8 you just mentioned talks about transmission protocol;
9 correct?

10 A The section that I read -- sorry. Was there
11 an objection?

12 Q No, sir, not from me.

13 A Okay. Okay. Okay. Sorry. I heard a glitch
14 on the -- so what I -- what I read in Count 49 is more
15 broader -- more general than the section starting -- than
16 the portion starting at Line 59. The portion starting at
17 Line 59 is directed towards the functionality of the
18 website.

19 The portion starting from Line 49 through 55
20 is more generally talking about what Avellan teaches, and
21 it comports with and aligns with what I have in my
22 declaration of my description of Avellan.

23 Q All right. Again, do you -- I want you to
24 look at Line 47. 47. Let me know when you're there.
25 Column 2.

1 A Okay. I mean, I see that. I see what's
2 highlighted on the screen, yes.

3 Q I'm going to ask you to read it to yourself
4 again, because I believe your statement is not accurate.

5 MR. MCBRIDE: Objection; form.

6 MR. DROLET: We're having a discussion here.
7 We want to understand.

8 MR. MCBRIDE: You're having a discussion,
9 Counsel. You can ask questions. That's what this
10 is for.

11 BY MR. DROLET:

12 Q So from 47, first sentence, it reads,
13 "Instead, the browser requests the single desired web
14 page from the gateway server, period." Is that how it
15 reads?

16 A You read that correctly, yes.

17 Q So the second you just mentioned, I'll read
18 and make sure I understand I'm reading it correctly.

19 "The gateway server images that web page from
20 the network, compresses the unicast data, and transmits
21 the compressed unicast data over the broadcast device."
22 Did I read that correctly?

23 A I believe you read that correctly, yes.

24 Q So this statement -- does this statement
25 conflict with Lines 57, starting at 57 on Column 2 to the

1 first part on Column 3 of Avellan?

2 A I --

3 MR. MCBRIDE: Object to the form.

4 A Again, I'm not sure I fully understand the
5 question. But the section that you have been pointing me
6 to, starting on Line -- Column 2, Line -- Line 43, is
7 specific to one of the modes of Avellan called the
8 unicast mode.

9 There is also a broadcast mode of Avellan, and
10 I would suggest that the description that I have, the
11 summary of Avellan, which is basically what -- what
12 contains the main points I relied upon, which are in my
13 declaration, are -- cover both the broadcast mode and
14 various different aspects of the -- of the unicast mode.

15 In both cases, you do have the virtual browser
16 imaging, the Internet content and transmitting it over
17 the satellite, but they operate differently in the
18 broadcast and the unicast mode.

19 And what I have summarized in my declaration
20 are the main points of what I relied upon in applying
21 Avellan to the -- to the claims, so it's not limited to
22 just as unicast mode. It also includes all the aspects
23 and modes of Avellan, including the broadcast mode, which
24 is described in that same Column 2 earlier.

25 MR. DROLET: Go back to Avellan, please.

1 Scroll down.

2 BY MR. DROLET:

3 Q Okay. On Line 59 --

4 A Okay. I'm there.

5 Q Okay. So I'm going to read 59, the first full
6 sentence, and you let me know if I've read it correctly.

7 "To retain the functionality of the website in
8 both the broadcast and unicast modes, the gateway
9 computer creates a tag file which maps (e.g., using x and
10 y coordinates) the location of various action points
11 (e.g., selectable links, text boxes, et cetera) of the
12 web page and identifies the type of action point at each
13 location."

14 Did I read that correctly?

15 A I believe you did, yes.

16 Q Do you agree this applies to both broadcast
17 and unicast modes as written in the specification?

18 A I -- I agree that in both the broadcast and
19 the unicast modes, one of the -- one of the capabilities
20 is to create a tag file, yes.

21 Q Okay. Let me keep on reading.

22 "The tag file is sent to the user computer
23 over one of a" polarity [sic] -- "plurality of Tag
24 Communication Channels and is synchronized with image
25 file at the user computer, period." Is that correct?

1 A That's correct.

2 Q "Accordingly, as the image file is displayed
3 to the user at the" -- and I'm now going to the top of
4 Column 3 -- "user computer, the actions taken by the user
5 can be transmitted to the gateway server over a return
6 channel on the broadcast device. The gateway server can
7 then reproduce the user's actions on the website at the
8 network." Did I read that correctly?

9 A Yes, you did.

10 Q Did I mention -- you do mention during your
11 description here of how Avellan functions. What -- what
12 component in Avellan is the content provider?

13 A In Avellan, the content provider is the
14 infrastructure identified in -- in red in Figure 1, the
15 annotated Figure 1 in my declaration. That's what's --
16 that's what's broadcasting the multimedia items to the
17 end user.

18 Q Sorry. I'm looking at the -- the patent right
19 now. Can you see the whole figure?

20 MR. MCBRIDE: Counsel, we've been going for a
21 little bit over an hour. Can we do a comfort break,
22 if it's okay with you? It sounds like you're moving
23 on to something different than what you were asking
24 before.

25 MR. DROLET: No. I'm still -- I'm still on

1 this. Just -- I'll be 5 -- 5 minutes. Is that
2 okay, Counsel?

3 MR. MCBRIDE: 5 minutes, sure.

4 MR. DROLET: 5 minutes. 5 minutes.

5 BY MR. DROLET:

6 Q Okay. So what's the content provider here?

7 A So you have -- you have highlighted just the
8 gateway. The infrastructure that belongs to the content
9 provider would also include the Satellite 102.

10 So that entire pathway would correspond to
11 what's in the 074 patent. As being the -- the 074 patent
12 in Figure 1, it would correspond to the Mediaplug and the
13 MUX at the head end MSO because the 074 patent says the
14 Mediaplug could also be located at the -- at the server
15 provider.

16 So what's indicated in red here, including
17 the -- the satellite, would be the infrastructure that
18 the content provider is using in order to broadcast the
19 multimedia content to the end user computers.

20 Q Okay. So what is Figure 102 in Avellan?

21 A I'm sorry. Figure 1 in Avellan?

22 Q I'm sorry. The reference numeral -- Reference
23 Number 102.

24 A Oh, 102 is a -- I think that's identified as
25 the satellite. But I should -- I should check to make

1 sure. Let me look at Avellan and make sure I'm correctly
2 describing it in the same way they are.

3 Let's see. So in Avellan, Column 3, they
4 describe Figure 1. They call 102 a broadcast device.
5 Later on, I -- well, the icon in Figure 1 also shows as a
6 satellite, and then in Column -- I'm looking at Avellan
7 here. In Column 4, they refer to Device 102, again, as
8 Line 25. They call it Satellite 102.

9 And then let's see. Looking at Avellan,
10 Column 36, they call it -- so they call 102 a satellite
11 or a broadcast device. They use both terms to refer to
12 it.

13 Q So if I understand you correctly, right now,
14 what we've -- what I've highlighted here is what you
15 think is collectively the content provider, is that
16 correct, 102, 132, 130? Is that my -- is that your -- is
17 that your understanding of what --

18 MR. MCBRIDE: Object to the form.

19 A So the content provider as is used in the
20 claims is providing some function. It doesn't
21 necessarily say it's a single network element, but that
22 infrastructure that's highlighted on the screen now in
23 Figure 1 would represent the kinds of things that the
24 content provider is said to do in -- in -- in the claims.
25 And so the content provider functionality would be

1 included in what's highlighted here on the screen.

2 BY MR. DROLET:

3 Q Which is Reference Number 102, 132, 134; is
4 that correct?

5 A Yeah, they -- everything you have highlighted
6 on the screen here, which I indicated in my -- in my
7 declaration shown by -- by the red arrow in Figure 1.

8 Q We'll save this as a -- as a separate exhibit
9 showing the shaded section.

10 (Exhibit 3 was marked for identification.)

11 MR. DROLET: And thank you for -- for
12 abiding -- for indulging there, Mr. McBride.

13 We can take a 10-minute comfort break at this
14 time.

15 MR. MCBRIDE: That sounds great.

16 MR. DROLET: 10 minutes everyone?

17 THE WITNESS: 10 minutes.

18 THE VIDEOGRAPHER: Going off the record at
19 12:41 p.m.

20 (Recess.)

21 THE VIDEOGRAPHER: We are back on the record
22 at 1:30 p.m.

23 BY MR. DROLET:

24 Q Great.

25 Mr. Lipoff, we left off with the -- let's show

1 the last exhibit we had that shows the -- the Figure 1.
2 It's the area that we're concerned with or that we were
3 mentioning. There you go.

4 Okay. So part of this functionality, as I
5 understand it, and, again, you tell me, this blue box
6 represents the functionality of the content provider; is
7 that correct?

8 MR. MCBRIDE: Objection; form.

9 BY MR. DROLET:

10 Q What does this blue box represent, Mr. Lipoff?

11 A This represents the -- the infrastructure of
12 the content provider.

13 Q Okay. Understood.

14 Okay. In -- in that box, there's zero latency
15 gateway server on zero latency cache. Can you explain
16 what those -- what those are?

17 A Well --

18 Q In your own words. I'm not trying to put you
19 on the spot. I'm just trying to understand the
20 functionality.

21 A Yeah, I understand. I just want to -- don't
22 want to repeat anything that I've already said about it.

23 So at a high level -- Paragraph 86 of my
24 declaration, I describe the -- the gateway platform as
25 130, which is, I think, what you're pointing to. They

1 receive the request. They obtain information content
2 from the networks, and they process it using the -- the
3 virtual browser, and then they broadcast the output of
4 the virtual browser on the broadcast media channel.

5 Q Where is the request coming from?

6 A Their -- their request is coming from the --
7 well, it's -- it's -- it's being generated by the content
8 provider internally. It's in response to -- there's some
9 triggers that are -- that are -- that are outside the
10 infrastructure, but the -- the request is -- is coming
11 from the content provider.

12 Q Okay.

13 MR. HERNANDEZ-MONDRAGON: What -- what's the
14 trigger?

15 BY MR. DROLET:

16 Q You said there's a trigger that the content
17 provider receives?

18 A Well, the way the Avalon system is described
19 as -- as working, the -- I'll call them -- I'll call them
20 end users. It's -- in this figure, it's the -- the end
21 user devices at 104 -- I guess that's 106. The stuff up
22 at the top in green in my -- in my represen- -- that is
23 making some requests, which are coming up into the --
24 into the system.

25 And that's triggering various things happening

1 inside the -- the infrastructure, the -- the -- the stuff
2 that's shown in red, which causes it to make requests for
3 the media stream and then send -- broadcast that media
4 stream back down to the devices.

5 But the -- the -- the claim is kind of silent
6 about what it is that actually causes this -- this
7 request for the media stream. So -- and in Avellan, it
8 happens to be that there are some outside triggers.
9 Avellan also describes that there is -- there is some
10 other stuff we didn't discuss last time, I think
11 Column 9, where -- where it's -- it's -- it's basically
12 gathering information from websites like CNN, which is
13 not something that's necessarily in response to the
14 devices at 104. It's gathering stuff from websites that
15 are commonly accessed.

16 But anyhow, the -- the request is being
17 generated inside the content provider's infrastructure
18 that's shown in red in my -- in my exhibits.

19 Q So the -- 104 -- and there's a distinction in
20 104 and 106; right? You've got 104, the dummy terminals,
21 user -- user at the end users. And then it looks like
22 106 is either remote or a virtual browser; right?

23 MR. MCBRIDE: Objection to form.

24 BY MR. DROLET:

25 Q Well, I'm -- I'm trying to have a conversation

1 with respect to what -- the reference numbers here on
2 Figure 1.

3 A Yeah, I don't remember how they distinguished
4 104 from 106. 104 is a user computer. Let me see if I
5 can find in Avellan why they have 106 separately. I
6 don't remember why.

7 Q Yeah, we'll look at that in a second.
8 So is there a web request here somewhere going
9 on?

10 MR. MCBRIDE: Objection; form.

11 BY MR. DROLET:

12 Q Mr. Lipoff, basing your knowledge of Avellan,
13 is there a web request?

14 MR. MCBRIDE: Objection; form.

15 BY MR. DROLET:

16 Q Is there an HTTP request involved in this
17 transmission protocol?

18 MR. MCBRIDE: Objection; form.

19 A So I -- so I believe I -- I do cite to -- in
20 some of the grounds as to what's actually happening, but
21 at least with respect to the communications between the
22 Internet cloud and the service provider's infrastructure,
23 that's -- that's HTTP request that are -- yeah, so we're
24 looking at the 074 patent, I believe, and -- and
25 Ground 7, which is Element 19A.

1 Yeah, let me just see. Yeah, and -- and
2 Ground 7 in Element 19A on my declaration, I cite to --
3 let's see what Ground 7 -- I cite to Avellan and also
4 Suzuki. I'd have to go look at my declaration to see.

5 BY MR. DROLET:

6 Q We can show that.

7 A Yeah, show where that is. But -- but, yeah,
8 Ground 7, I do -- I do provide evidence that shows that
9 there is an HTTP live stream.

10 Q Okay. And that's going to the -- the 134
11 reference number?

12 A Sorry. I need to look at the --

13 Q Figure?

14 A The figure. Yeah, 134 does retrieve
15 information from the Internet cloud. The infrastructure
16 in blue is the Internet cloud, and the -- the Internet
17 cloud would -- communications with the Internet cloud
18 would be via HTTP. And I think the -- let's see if I can
19 find that for you.

20 Q Sure. No problem. Yeah, so the reason I
21 mentioned the -- since we're here, Mr. Lipoff, you've got
22 three maps up at the bottom if you look in the
23 specification. The first two are 104s. The third, on
24 the right, is 106. You concur with that?

25 A Yeah, I -- I -- I agree. I just -- as I said

1 before, I don't remember how they distinguish 106 from
2 104.

3 Q Right.

4 A But they're -- I guess they're all 104's, and
5 then there's also 106 pointing to something else in --
6 let me -- let me look in Avellan and see how they
7 describe it.

8 Oh, the 106 is the virtual browser. I'm
9 sorry. Yeah, so 10- -- 10- -- they're all 104 devices,
10 and it just happens in the -- it just happens, in
11 addition, on the right-hand 104 end user device, they
12 just happen to designate a portion of the screen. They
13 call it 106, and that's the virtual browser that -- or I
14 think, more accurately, it's -- it's the output coming
15 from the virtual browser, which is located at the -- the
16 red infrastructure. But it is -- it's what -- what's
17 being displayed from the virtual browser. That's my
18 understanding.

19 Q Can you walk me through -- if -- if I
20 understand, the 104 is the end user, correct, 104?

21 A Yes. Yes, I believe that's correct.

22 Q If the 104 is the end user and they want to
23 look at YouTube, what's the -- what's the -- what's
24 the -- what's the flow back?

25 A So Avellan discloses -- I think we talked

1 about this -- both a broadcast mode and also a unicast
2 mode. And in the instances where the information that
3 the end user is looking for happens to be stored inside
4 the -- the red infrastructure, it's -- the user, end user
5 will access what's already been stored, which is then
6 broadcast to -- over the satellite Figure 1 to the end
7 user.

8 It also describes a -- a mode in which the
9 information has not been previously stored in the gateway
10 cache, in which case the content provider's
11 infrastructure will go back to the blue Internet cloud
12 down at the bottom, and we'll -- we'll get a cite
13 that's -- I think they described it as the less popular
14 site, so one that would not ordinarily be -- be stored
15 and cached.

16 Q Maybe I can help you, Mr. Lipoff.

17 What if, for the first time, someone in 104
18 looks at the website that hasn't been accessed yet, what
19 happens?

20 A Well, there are a couple different modalities
21 that are described in Avellan. And I'm just looking to
22 make sure that I -- I answer your question.

23 So one of the modalities that's described in
24 Column 10 of Avellan on -- starting at Line 25, it says,
25 "The broadcast channel 120 synchronizes the information

1 transmitted. Periodically or as desired, based on user
2 profiles, the gateway may push the cache to multiple
3 users."

4 So there is an instance where the user
5 actually isn't doing anything. He's just getting the
6 information pushed to them.

7 Then there are some other modalities that are
8 described in the -- in Avellan where the information that
9 the end user is looking for has not been previously
10 retrieved or stored, in which case the content provider's
11 infrastructure in red there will then go to the Internet
12 cloud in blue and will actually get the -- will get the
13 content that's been requested.

14 So there -- there are a couple different
15 modalities that relate to both the -- the unicast and
16 broadcast mode --

17 Q So let's talk --

18 A -- that involve --

19 Q Let's talk about unicast for a second.

20 So in the scenario we just talked about, there
21 was a user for the first time in Avellan, okay, what's
22 the role of the 106 remote or virtual browser?

23 A The --

24 MR. MCBRIDE: Objection; form.

25 A Yeah, the virtual browser has the -- the same

1 role in all operations, as I understand it. The virtual
2 browser is functionality that's maintained in that red
3 infrastructure that it is responsive to information
4 coming from the Internet cloud, which would typically be
5 HTTP websites, and it converts it to a form that is
6 compressed and sent over the high-speed links that's
7 displayed on the end user computers.

8 So the virtual browser is basically imaging
9 the web pages that have been -- been captured by the
10 content provider's infrastructure and converting it to
11 image form that can be sent to the end user devices 104
12 so the end user device can see on their screen something
13 that looks like what they would see if they were
14 connecting to the Internet with a conventional browser,
15 not a virtual browser.

16 BY MR. DROLET:

17 Q Okay. Do you have this -- this figure in
18 front of you? I want to show you something else, but I
19 know there's something else for you. Do you have that
20 handy in a written form anywhere?

21 A I do, yes.

22 Q Okay. So let's -- we're going to go to
23 Avellan, Column 3 in the specification, and hopefully
24 this will shed light on Column 3.

25 A Okay.

1 Q Okay. So I know you deal with a lot of
2 different things, Mr. Lipoff, I just want to have a
3 conversation with you concerning -- I guess we'll look at
4 the first paragraph there. Right there. And take a look
5 at your -- your graph or your figure.

6 A Yeah, I'm looking at it.

7 Q So you see the screen where I have the
8 highlighted blue?

9 A Just give me a second and let me find that.
10 Yes, I do. Okay. That's around Line 34. Yep.

11 Q Can you read that, please?

12 A "Thus, the user computers 104 can be a dumb
13 terminal which runs the browser 106."

14 Q What does that mean?

15 MR. MCBRIDE: Objection; form.

16 A Can you say --

17 BY MR. DROLET:

18 Q Tell us what Avellan's teaching us here.

19 A Yeah, I -- I believe I can. The browser 106,
20 virtual browser 106 is disclosed in Avellan as something
21 that is functionality that does not reside on the end
22 user computers.

23 Instead, it resides back in the -- the content
24 provider's infrastructure, but what I understand the
25 "runs the browser" means that there is communications

1 from the end user computer that is received by the -- the
2 browser. And it's -- the browser located infrastructure
3 is responsive to what the end user computers may be --
4 may be communicating back to it.

5 Q So how does the browser work?

6 MR. MCBRIDE: Object to the form.

7 A It -- it -- I think I explained that. The
8 browser works by taking in content that it digests from
9 the Internet cloud, and -- which would typically be HTTP
10 traffic, and it then converts that to images, which can
11 then be transmitted over the -- the broadcast channel to
12 the end user computer.

13 BY MR. DROLET:

14 Q Oh, okay. So the 106 virtual or dumb -- I'm
15 sorry. 106, which is called here virtual browser, the
16 system graphically displayed -- it takes the display,
17 uses the system, and then goes to the dumb terminal with
18 the graphical representation on the screen, with what's
19 on 106; is that correct?

20 MR. MCBRIDE: Form.

21 A Yeah. So just to be clear, I'm not sure, you
22 know, if I follow. The virtual browser is something that
23 is located at -- at the gateway server. The -- so, you
24 know, Avellan is disclosing in Column 4 -- and I think
25 maybe in some other places, Line 21, the virtual browser

1 106 is located at the gateway.

2 The figure that we've been looking at which
3 shows 106 as a window, as I would -- I would describe it
4 on user computer 104, is meant to represent what the
5 virtual browser is sending to the user device as 104.

6 So the virtual browser is -- as I described
7 before, is digesting content from the Internet cloud,
8 typically HTTP traffic which would be a website because
9 it indicates, like, Yahoo and Netflix and Google, what'll
10 typically be serving on HTTP, it's digesting it, it's
11 interpreting it as a virtual browser, outputting images,
12 which are then transmitted to the end user device as 104.

13 BY MR. DROLET:

14 Q Sure. Yes, sir, images. Correct. Yes, I
15 agree.

16 MR. MCBRIDE: Objection; form.

17 A There are -- there are -- there are content
18 which is represented by either a still image or a
19 sequence of image or a variety of different images.

20 But, yeah, the -- at least -- at the very
21 least, it's interpreting and sending some images, yes.

22 BY MR. DROLET:

23 Q So just to be clear, what you just explained
24 to me is that the 106, which is the virtual or remote
25 browser, is the actual browser interacting with the

1 Internet through the cache in the system, correct, like,
2 for instance, say YouTube; then 106 sends a graphical
3 representation of that, it's an image, to 104?

4 MR. MCBRIDE: Objection to form.

5 A Yeah.

6 BY MR. DROLET:

7 Q Or I apologize. I'm paraphrasing. I was
8 trying to follow what you were telling me, Mr. Lipoff.

9 A Yeah.

10 Q Yes?

11 A I -- I -- I believe insofar as what you said,
12 it's correct. But to be very clear, what -- what's
13 actually being sent from the virtual browser to the end
14 user is not just images because there is -- there is -- I
15 believe Avellan also discloses Element 18 of the 074
16 patent, which includes audio files.

17 So while it is correct that it is sending
18 images, it -- it appears to be sending a variety of
19 multimedia images, plus -- plus audio. Claim 18 is
20 something that I -- I cover in Ground 1.

21 Q So when a user in 104 types in YouTube or
22 something for the first time, what's -- what -- what is
23 the end user receiving back from the virtual browser?

24 A It is -- it is -- the end user is receiving
25 content that they can see or hear at their end user

1 device that, for all practical purposes, appears to be
2 the end -- to the end user as the same thing they would
3 see if they had a conventional computer talking directly
4 to the Internet, not talking through the content
5 provider's infrastructure.

6 Q Well, you said virtually -- or I'm sorry.
7 Almost. But it's receiving images; correct?

8 A Images --

9 MR. MCBRIDE: Object to the form.

10 A -- audio, multimedia, receiving content
11 from -- that -- in the Avellan system, what the end user
12 sees on Devices 104 is content that a -- would look just
13 like and sound just like what an end user would see if
14 they were using a conventional computer with an internal
15 browser that was connected directly to the Internet,
16 not -- not using the Avellan system that is going
17 directly to the Internet using a conventional browser.

18 BY MR. DROLET:

19 Q And so the end user, 104, sends out a request,
20 type in YouTube or whatever, and it gets back one
21 response; is that correct?

22 MR. MCBRIDE: Objection to form.

23 A Yeah, as I tried to indicate before, Avellan
24 has a bunch of modalities, some of them do not require
25 the end user to make a request that goes back to the

1 Internet.

2 In some cases, the information is in a
3 broadcast mode. Where the information is going to a
4 large number of computers, that information is pushed to
5 the end user's device without actually having to make
6 that request. But there is a modality where the user
7 does make a request.

8 BY MR. DROLET:

9 Q And -- and is this standard HTTP protocol?

10 MR. MCBRIDE: Objection; form.

11 A Well, so the traffic between the content
12 provider's infrastructure in red and the Internet cloud
13 would -- would be -- typically would be HTTP protocol
14 because Avellan is disclosing that there is an Internet
15 cloud. But, moreover, it's showing that there are
16 websites like Yahoo, Netflix, Google, YouTube, CNN, which
17 I think would be understood to be speaking HTTP protocol
18 as it communicates with the -- the end user's
19 infrastructure, the gateway servers.

20 BY MR. DROLET:

21 Q What's the -- what's the transfer protocol
22 between the -- 134 and 10- -- 104, the dummy -- the dummy
23 terminal? Do you know?

24 A The -- they're --

25 MR. MCBRIDE: Objection; form. Objection to

1 scope.

2 A Yeah, generally speaking, it's -- it's
3 something that would be compatible with the -- with the
4 dumb terminal, but there -- there is some disclosure,
5 where it can be a HTTP live stream as -- as at least one
6 of the options of the -- of the 074 patent, and I have
7 some citations in Ground 7 for Element 19.

8 Let me just see what I'm citing to. Ground 7,
9 Element 19. Yeah, so I have a combination of Matthews
10 and Avellan. I don't remember, without looking back in
11 my declaration, which I will do if you want me to, as to
12 whether or not it's relying upon -- yeah, so I think
13 there, I was relying upon Matthews for the -- the HLS
14 live stream.

15 I don't -- I should go back and look at my
16 declaration to see if I also cited to something in
17 Avellan. I think Avellan for sure is sending an MPEG
18 stream. And whether it's coded as HLS, I have to go back
19 and look.

20 BY MR. DROLET:

21 Q All right. I appreciate that. I'm not trying
22 to get you; I'm just trying to understand.

23 So with respect to communication protocols,
24 right, the -- the HTTP protocol with the broad -- what's
25 the HTTP protocol for the broadcast standard?

1 A I'm sorry. I didn't understand the question,
2 or maybe I didn't hear it properly. Could you just
3 repeat it one more time?

4 Q Again, I'm a mechanical engineer trying to
5 pretend in your world.

6 So with respect to the HTTP protocol, what's
7 the broadcast standard?

8 MR. MCBRIDE: Objection; form.

9 A Yeah, we're talking about, I think, two
10 different things. The -- HTTP protocol is a protocol
11 that exists typically between a conventional, not a
12 virtual browser, but a conventional browser in an end
13 user's computer and the Internet. And it -- it -- it
14 consists of a variety of commands that are sent to a
15 website that cause the website to provide content that
16 the -- the conventional browser will render on the screen
17 of a conventional computer.

18 It's not a broadcast standard, per se.
19 There -- there are -- there are things like HLS, which is
20 HTTP live stream, which is used for broadcasting stuff,
21 but that's -- that's not -- not HTTP, per se. It's a --
22 it's a -- it's a protocol that uses HTTP, but it's not --
23 it's not HTTP, per se.

24 BY MR. DROLET:

25 Q I appreciate that.

1 So that's -- that's the -- the protocol
2 between the dummy terminal and 102; correct?

3 A Well, the -- the -- the broadcast in Avellan
4 is -- is what's occurring -- it's what's coming out of
5 the Satellite 102, and it's the -- the various streams,
6 which I think in the figure that we have up there are
7 labeled 120, 122, and 124. I'll -- I just want to be
8 clear.

9 Q Thank you.

10 A I'm looking at -- I want to be clear. I'm
11 looking at Avellan to see what they call them.

12 Oh, okay. Yeah, so they refer to them as
13 links. Some of them are one-way, and some of them are
14 two-way links.

15 Q Okay. Thank you.

16 So that's -- that's standard, then?

17 MR. MCBRIDE: Form.

18 A Well, I'm sorry. I'm not sure what you mean
19 by "standard." It's in the Avellan system. The
20 information that's going to the end user devices 104,
21 which is basically the output of the -- of the virtual
22 browser, that -- that is going over these links, 120,
23 122, and 124.

24 BY MR. DROLET:

25 Q Thank you for that, and I appreciate your

1 patience.

2 I guess what I'm trying to understand is
3 that -- that communication protocol is not the HTTP --
4 HTTP broadcast, then, from 102 to 104 because it's a
5 dummy terminal?

6 MR. MCBRIDE: Objection to form.

7 A No. No, that's not correct.

8 BY MR. DROLET:

9 Q Okay. Explain.

10 A So what's -- what's going over these links is
11 the output of the virtual browser, which is not
12 necessarily HTTP. Instead, it's what the virtual browser
13 is outputting, which is in the form of images, which are
14 then coded and are actually sent to the end user
15 terminal.

16 So it's not -- it's not the same -- it's not
17 the same HTTP that is going from the Internet cloud to
18 the content provider's infrastructure. These -- the
19 information going from the Internet cloud to the content
20 provider's infrastructure is HTTP, but it's being
21 interpreted by the virtual browser, and it's being sent
22 in a different form, which is the output of the virtual
23 browser, which is not HTTP, to the -- to the end user
24 device as 104.

25 Q So is it -- is it compatible, or does it work

1 like HLS?

2 A I think we're -- we're mixing -- we're mixing
3 different things. HLS is a transmission standard, so it
4 doesn't look like anything. It's a way of sending
5 information from one way to the other.

6 What the end user computer in Avellan 104 sees
7 on their screen is meant to be indifferent to whether or
8 not the end user was actually using conventional computer
9 with a conventional browser, talking directly to the
10 Internet sites.

11 So through the mechanisms that are described
12 in Avellan, the end user sitting at 104, when they look
13 at that screen, they can't tell the difference between
14 what they're seeing on that screen and Avellan versus
15 what they would see if they had a conventional computer
16 using conventional browser connected directly to the
17 Internet speaking HTTP.

18 Q Again, forgive my ignorance. Is it like a
19 remote PC type of scenario?

20 MR. MCBRIDE: Objection; form.

21 A Yeah, I'm not sure what a remote PC means.
22 The -- Avellan discloses that it can -- it doesn't need
23 to be an intelligent device. Avellan discloses it could
24 be as simple as a dumb terminal.

25

1 BY MR. DROLET:

2 Q Thank you.

3 Okay. Let's switch over to our claim language
4 in our patent. As we're doing that, give me -- give me
5 5 seconds, please.

6 A I'm sorry. Is there a question pending for
7 me?

8 Q No, no. I apologize, Mr. Lipoff. I'm
9 switching to another exhibit, and I apologize.

10 A Okay.

11 Q Just give me a second here while I do that.

12 A Oh, okay. Sure.

13 MR. DROLET: Oh, our patent. So our patent.

14 MR. HERNANDEZ-MONDRAGON: Okay.

15 MR. DROLET: And go to the claims.

16 BY MR. DROLET:

17 Q Mr. Lipoff, while we're pulling up this
18 other -- the claim set here, just a question: So this
19 HLS that you mentioned, how -- and, again, apologize for
20 mixing apples and oranges here. How does that correlate
21 with HTT -- HTTP live streaming, or does it?

22 A Well, HLS is an abbreviation for HTTP live
23 streaming.

24 Q Oh, it is.

25 A Yeah. It's an abbreviation for HTTP live

1 streaming. It's a protocol for sending multimedia over
2 many different communication channels between a
3 transmitter and a -- a receiver in such a way that you
4 can accommodate the quality of the channel so that HLS
5 involves the receiver talking back to the transmitter and
6 negotiating the type of stream to send it, whether it
7 should be sent at a higher quality or a lower quality, so
8 that if you're over a poor channel, such as the one
9 you're -- you're using, Mr. Drolet, to occasionally talk,
10 if there's a problem with it, HLS will direct the
11 multimedia stream to slow down and be more robust so that
12 it has more likelihood to get through. But if you're
13 over a very high-quality channel, it'll do the opposite.
14 It'll ramp up and provide a better image and a better
15 multimedia stream in that event.

16 So HLS is a protocol that controls the
17 streaming of live multimedia in such a way as to give the
18 end user the best possible experience despite the fact
19 that some channels may not be perfect.

20 Q Thank you for that.

21 So I just want to make sure I understand. You
22 mentioned bandwidth and quality. So bandwidth will --
23 will -- will fluctuate. It'll affect the quality. Is
24 that -- did I understand that?

25 MR. MCBRIDE: Object to the form.

1 A Yeah, I -- I'm not sure. You're referring --
2 are you referring to something that's in my declaration?
3 Or if not, I'll attempt to answer it just generally. But
4 are you -- are you referring to something specific in my
5 declaration?

6 BY MR. DROLET:

7 Q I am. I'm trying to absorb everything you're
8 telling me. So you just -- you just mentioned that
9 the -- depending upon quality, right, of transmission, so
10 the HTTP live streaming and broadcast is going to
11 fluctuate or -- maybe I misunderstood.

12 A Yeah, so I was responding to specifically what
13 you asked me about H -- HLS, which is also called HTTP
14 live streaming. I think the -- the only place that I
15 reference that in the 074 patent is with respect to
16 Ground 7, which is Element 19.

17 And -- and I'm referring to some of the
18 teachings that are in -- in the Matthews reference,
19 combining it with Avellan, to read on Claim 19. And as I
20 explained, what HLS does, is HLS is a way of sending
21 multimedia, typically video, but it could be any form of
22 multimedia, over different channel types. And it's
23 specifically designed to adapt the multimedia to the
24 nuances of a particular channel type.

25 So, for example, if you're sending video to a

1 cell phone and that cell phone happens to be very close
2 to the cell site, you typically have a very good high
3 bandwidth connection, and HLS will recognize that and
4 will create a media stream that's as high as it possibly
5 could, as high quality as it possibly could to give you a
6 good experience.

7 If you take that same cell phone and get in
8 your car and drive and you get a long distance away from
9 the cell site, you're still requesting the same media,
10 but now you're doing it over a weaker signal, and the
11 ability for the end user to enjoy that video stream when
12 that signal is weak might be compromised if it's sending
13 it at the same rate.

14 So what HLS does, is HLS provides a way for
15 the end user device, in this case a cell phone, to
16 negotiate and talk to the source, the sender of the
17 multimedia, to reduce the quality of it, reduce the speed
18 so that the end user will -- will still be able to watch
19 the video, even though it's not quite as sharp, but at
20 least it won't hesitate or break up when you're a long
21 way away from the cell site.

22 Q Thank you, Mr. Lipoff.

23 So HLS is a broadcast protocol?

24 A HLS is a protocol that's used between two
25 devices which need to be in two-way contact with each

1 other. Because it needs to -- it needs to receive the
2 multimedia content, but it also needs to send control
3 information back to the source of the multimedia content
4 to tell it to either speed up or slow down.

5 Q Okay. Thank -- thank you for that.

6 So -- so the HLS is not a broadcast protocol
7 or it is a broadcast protocol?

8 MR. MCBRIDE: Objection; form.

9 BY MR. DROLET:

10 Q Is HLS a broadcast protocol?

11 A I would -- I would not -- I wouldn't conflate
12 those two things together. They're -- they're kind of
13 apples and oranges.

14 Q Okay.

15 A HL- -- HLS is a protocol that's used over
16 delay, over -- over channels that could have impairments
17 such as delay in order to receive and digest multimedia,
18 especially video.

19 Q Thank you. Thank you.

20 So I'll turn your attention now to what's on
21 your screen now. Stop there. I know we -- we're here
22 earlier, so we're going to go back to the 1A element
23 here.

24 So you see what's highlighted in blue?

25 A I -- I do. I just want to clarify. We're

1 still talking about the 074, the 349 IPR?

2 Q Yes, sir.

3 A Is that right?

4 Q Yes.

5 A Okay.

6 Q So this element, or sub element, "receiving,
7 from a content provider."

8 In Avellan, where is that happening?

9 A So that Element 1A is being executed inside
10 the content provider's infrastructure, where the content
11 provider is being responsive to wanting to send
12 information over the -- the broadcast channel. And that
13 claim continues. What it wants to send is a media stream
14 that includes a plurality of multimedia items.

15 Q So content provider is receiving -- what's it
16 receiving?

17 A I'm sorry. Is there a question?

18 Q Yeah. The sub element, "receiving, from
19 content provider," okay, who is the receiver?

20 A The -- the receiving, it's not calling for a
21 device called a receiver. It's -- as I understand it,
22 it's -- it's basically saying that it needs to be
23 responsive to a request to provide a media stream, and
24 it's -- as I understand, what Avellan is teaching, the
25 infrastructure that's identified in -- in my declaration

1 with that red arrow is -- is performing -- is reading on
2 this claim, because it is -- it is responsive to requests
3 for media stream. And it's then -- providing that, it's
4 playing it back on a broadcast media channel. So I -- I
5 believe that the infrastructure halfway, including the
6 gateway and the satellite, which is -- it would typically
7 be located on the premises of -- of a satellite operator,
8 which Avellan discloses that, would be the content
9 provider.

10 Q So the content provider, I think --

11 MR. DROLET: Is it possible to get both -- two
12 exhibits on the screen at the same time or not, Lee?
13 Lacey?

14 THE VIDEOGRAPHER: No, I -- I don't believe
15 so.

16 MR. DROLET: Okay.

17 THE WITNESS: I -- I am -- I am looking at it
18 in my declaration if -- if -- you know, if you --

19 BY MR. DROLET:

20 Q I'm just trying to make it easy for everyone
21 here. So bear with me as I try to do something on my
22 side to see if it works, all right?

23 A Okay.

24 Q Okay. Can you see the screen okay,
25 Mr. Lipoff?

1 A I can. Yes, I can.

2 Q Yeah, I'm just trying to, you know, connect
3 the dots, so to speak. Most likely you did several
4 months ago, and I apologize for it being slow.

5 So, again, "receiving, from a content
6 provider," what we discussed earlier, what's in blue, is
7 carrying out the functionality of a content provider; is
8 that correct?

9 A I believe --

10 MR. MCBRIDE: Object to the form.

11 MR. DROLET: I'm sorry?

12 MR. MCBRIDE: Objection; form.

13 MR. DROLET: So I'm not sure how you want me
14 to ask this. I'm just trying to understand.

15 BY MR. DROLET:

16 Q So, Mr. Lipoff, I'm trying to correlate the
17 claim language to Avellan; right?

18 A Yes. I -- I believe that the infrastructure
19 that's highlighted in -- in blue here in your figure,
20 indicated with the red arrow in my declaration, is the
21 infrastructure of the content provider, and it is
22 performing the -- Avellan is disclosing -- what that's
23 doing is reading on Element 1A.

24 Q So what's in blue is -- is receiving from a
25 content -- I'm sorry. The content provider is receiving

1 something, a request, right, for at least one media
2 stream. Who is requesting it?

3 A What the -- yeah, so as I said, Avellan
4 discloses a bunch of different modalities. There is one
5 modality where the end user is asking for something that
6 has not already been pushed to his own device, in which
7 case that will end up going from the end user's computer
8 to the content provider's infrastructure and perhaps back
9 to the Internet cloud, and it'll be retrieved.

10 But Avellan also discloses a broadcast mode
11 where information such as -- on commonly used websites
12 like CNN, BBC, that -- that -- that information will have
13 been -- will have been sent to the end user's devices
14 without necessarily the end user requesting it.

15 So the request in this case that's being
16 generated internal for -- in that broadcast mode,
17 internal to that -- that area you showed it in Figure 1,
18 because the end user, in this particular modality, is not
19 necessarily asking for something. It's being sent to
20 the -- the end user's device without it having being
21 requested.

22 Q So if you're requesting a request for at least
23 one media stream, and you mentioned earlier about how, if
24 you're looking at the figure on the left-hand side, how
25 the interaction between the virtual remote browser 106

1 interacts with, ultimately, the cloud and also interacts
2 by sending images to 104. So what media stream is being
3 sent -- or I'm sorry. Strike that. Strike that. Strike
4 that.

5 Who is -- who is requesting the media stream,
6 or what's requesting the media stream?

7 MR. MCBRIDE: Form.

8 MR. HERNANDEZ-MONDRAGON: Youtube.

9 A So is there a question?

10 BY MR. DROLET:

11 Q Yes. My question is: A request for a media
12 stream, where is that coming from?

13 A So the request for the media stream is
14 happening inside the content provider's infrastructure,
15 and it's fetching it either from the cache, if it's
16 already been stored; or, in the unicast mode of Avellan
17 where it's not stored, it's going back to the Internet
18 cloud, and it's pulling it out of the Internet cloud.
19 But there -- there are two different modalities in --
20 in -- in Avellan.

21 Q So let's -- let's go to each modality, then.

22 In unicast, what's the flow? Content provider
23 you mentioned already is in the blue, right, it's
24 receiving? The request is from -- from where?

25 A Well, so in both cases --

1 MR. MCBRIDE: I'm going to object on this. I
2 think there's sort of a meandering of questioning
3 here. I mean, the whole purpose of this is so you
4 can ask questions about his declarations and his
5 opinions, and it seems like nothing so far has been
6 tethered to that in this section.

7 MR. DROLET: I disagree. His interp- -- his
8 interpretation of Avellan is crucial, and we're
9 looking specifically --

10 MR. MCBRIDE: Well, then you can ask him about
11 his declaration. I mean, I'm really puzzled here.
12 You've been asking a lot of meandering, strange
13 questions that I have to continually object to
14 because it's not fair what you're asking.

15 So, I mean, I can't force you to ask about the
16 declaration, but this is what that's about. That's
17 the entire purpose of this -- of this deposition.

18 MR. DROLET: Let me keep on going here to make
19 sure I understand his interpretation of Avellan,
20 okay?

21 BY MR. DROLET:

22 Q So, again, getting back to where I left off
23 here, the -- in unicast mode, correct, content provider
24 is in the blue, the request is coming from where?

25 MR. MCBRIDE: Objection; form.

1 A In all instances, the request is coming
2 from -- the request to retrieve something is happening
3 inside what you have shaded up here on the screen, which
4 I will describe as the content provider's infrastructure.
5 The -- the request is being made to pull content out of
6 the infrastructure.

7 BY MR. DROLET:

8 Q So the request is received and being made all
9 from the blue area, internal?

10 A The -- the request -- as it's described in
11 Claim 1, a request for a media stream is -- would be some
12 instructions, which are happening inside this shaded
13 area, making a request on that infrastructure, in
14 particular, the gateway servers, to provide that -- that
15 media stream.

16 So the request is basically the same as to
17 whether it's in the broadcast or unicast mode. It turns
18 out that when you're in the unicast mode, there -- there
19 may be some external triggers, like the end user doing
20 something, which cause the request to be generated inside
21 that figure, but the request, as used in Element 1A,
22 which is the request for one media stream is happening
23 inside that -- that blue-shaded area that you have on the
24 screen.

25 Q And the functionality of actually taking

1 content from the cloud, where is that represented in the
2 claim?

3 MR. MCBRIDE: Objection; form.

4 A There -- there is nothing in -- there is
5 nothing in Claim 1A that we've been looking at that --
6 that -- that describes any interactions with the Internet
7 cloud. There -- there is functionality in Avellan that
8 does, but there is no identification in any of the
9 elements of Claim 1 of anything other than the content
10 provider and the broadcast media channel that I -- I can
11 see.

12 BY MR. DROLET:

13 Q Just to make sure I understand what you're
14 teaching me here, Claim 1 does not rely, as shown in
15 Figure 1, interaction with the Internet cloud or with
16 what's shown as private MPLS cloud; is that what you're
17 teaching me? Is that correct?

18 A I don't see any of the limitations in Claim 1
19 that -- make sure I'm being accurate here. Well -- so
20 let -- let me be clear, because Element 1A [sic] talks
21 about obtaining the content corresponding to multimedia
22 items from at least one source offering the content in at
23 least one format.

24 So you -- Element 1A [sic] could be satisfied
25 either by having previously fetched information from the

1 Internet cloud, which is residing on the cache, or it
2 could be satisfied by pulling information from the
3 Internet cloud. So either one of those would -- would
4 satisfy Element 1A [sic]. But -- 1B. I'm sorry. We
5 were talking about just 1A before.

6 So the -- the request, though, is the request
7 to provide the -- the media stream, which is not going
8 back to the Internet cloud. The media stream is going
9 from the content provider to the end user.

10 So in Element 1A, there is no interaction with
11 the Internet cloud. 1B could go either way. In some
12 instances, in Avellan, there is a modality where you are
13 requesting something that's not previously been stored,
14 and it might need to go back to the Internet cloud, and
15 then you pull it into the -- the infrastructure or it
16 could have it already stored there.

17 But Element 1 -- Claim 1, all the elements
18 don't -- don't require any interaction with Internet
19 cloud.

20 Q Thank you.

21 MR. MCBRIDE: Hey, Rob, we've been going for
22 about an hour. Would it be possible to do a break
23 now?

24 MR. DROLET: Sure. Another 10 minutes?

25 MR. MCBRIDE: Yeah. Works for us.

1 MR. DROLET: Mr. Lipoff, is that good for you?

2 MR. MCBRIDE: That work for you?

3 THE WITNESS: Yeah, 10 minutes is good with
4 me. I have 2:30. So pick up at 2:40?

5 MR. DROLET: Yeah.

6 THE VIDEOGRAPHER: Okay. We'll go off the
7 record at 2:32 p.m.

8 (Recess.)

9 THE VIDEOGRAPHER: We are back on the record
10 at 2:43 p.m.

11 MR. DROLET: Can I speak now?

12 BY MR. DROLET:

13 Q All right. Mr. Lipoff, we're going to attempt
14 another split screen, as we did earlier. We're going to
15 look at the other figure in Avellan, and I appreciate
16 your patience. I'm just trying to understand for
17 reference.

18 MR. HERNANDEZ-MONDRAGON: And the one before
19 there?

20 MR. DROLET: And then the other -- oh, the
21 patent's going to go in both places, except
22 Column 13 on the right-hand side.

23 MR. HERNANDEZ-MONDRAGON: You want column 13?

24 MR. DROLET: Yeah, on the right-hand side.
25 Bear with us.

1 MR. HERNANDEZ-MONDRAGON: Column 13?

2 MR. DROLET: Column 13, and then we'll start
3 with where it says Figure 2. Right there. Right
4 there. Okay. There we go. Perfect.

5 BY MR. DROLET:

6 Q All right. Mr. Lipoff, can you see the
7 screen?

8 A I -- I can. It's --

9 Q Better now?

10 A Yeah. That's a little better, yeah. Thank
11 you.

12 Q Move down if we have to.

13 Okay. Again, I'm just trying to understand.
14 You mentioned previously that Avellan discloses two modes
15 of operation: unicast and broadcast; correct?

16 A Yes, I did.

17 Q So in Column 13 --

18 A Column 13.

19 Q Yeah, on the right-hand side.

20 MR. DROLET: Go up. Go up. I need to start
21 where it says Figure 2. There we go. Right there.

22 Okay. And on the left-hand side, just go down
23 a little bit so I can see the top. It says, "View
24 in a web page." No. On the left-hand side. There
25 we go. Thank you. I'm waiting for Mr. Lipoff just

1 to -- to read.

2 BY MR. DROLET:

3 Q I'm waiting for you to read, Mr. Lipoff. I'm
4 just -- if you're ready for me, I'll go. But -- do you
5 need time to review what we're showing on the screen
6 right now?

7 A I -- I see the figure. Is there something
8 else you want me to look at?

9 Q The figure. And then on the right-hand side,
10 there'll be Column 13 in Avellan, where it describes both
11 unicast and broadcast modes and their functionalities.

12 A Yeah. Yes, I see that.

13 Q So we'll start on Column 13, Line 31 -- or 21.
14 I'm sorry. Very first step: "First, in step 200, the
15 system recognizes that a web page option has been
16 selected by a user at the browser 106."

17 A Yeah. I see that language, yes.

18 Q Next -- next, "step 202, the browser 106
19 determines if the desired web page (based on the domain
20 name for the web page) is stored locally at the memory or
21 storage device of the computer 104." Yes?

22 A I -- I see that.

23 Q So if -- next, "If the site is not stored at
24 the computer 104, the browser 106 (in unicast mode) at
25 step 204 connects to the gateway server via the browser

1 106 and the satellite 102. At step 206, the gateway
2 server 134 checks the cache 136 for the requested
3 information and, if not found, searches for the closest
4 point of access (such as a data center) to the desired
5 web page on the cloud 150, 152. The gateway server 134
6 then connects to the site over the cloud 150, 152 and
7 renders the site.

8 At step 208, the server 134 creates a
9 compressed video format of the web page. The compressed
10 video format may include all of the page's graphical
11 information and data from different sources in a single
12 video signal representing the image of the web page. The
13 data may include Java, html, flash, or other programs
14 known to those of skill in the art. Also at step 208,
15 the server 134 creates a tag file which maps the desired
16 website. The tag file may include positions of the
17 scroll bar click, prompt locations, and any other action
18 points of the web page. As mentioned above, the tag file
19 retains the functionality of the website on the
20 browser 106. The tag file may be periodically updated at
21 the gateway server 134 and the computer 104 as the web
22 page at the network 150, 152 changes, so that both views
23 of the page are synchronized. The system can optionally
24 store the compressed video format and the tag file in the
25 gateway cache 136 at the gateway server 134."

1 MR. DROLET: Scroll down a little bit on the
2 left-hand side. No. I'm sorry. Left-hand side.

3 BY MR. DROLET:

4 Q Okay. "At step 210, the tag file data is then
5 transmitted to the computer 104 using the Tag
6 Communication Channel 124, and the compressed video data
7 is transmitted to the computer 104 using the DBVcc 122.
8 The tag file is preferably transmitted to the user
9 computer 104 with the compressed video data, so that the
10 information is synchronized. At step 212, the
11 browser 106 receives the compressed video data and the
12 tag file from gateway server 134 and displays the web
13 page."

14 Did I read it verbatim, how it's written in
15 the specification, Mr. Lipoff?

16 A I -- I believe you did, yes.

17 Q So this is the one mode, which is the unicast
18 mode, where you described earlier where first it
19 checks --

20 MR. DROLET: Scroll up on the left-hand side.

21 BY MR. DROLET:

22 Q First it's checking 104, right, at step 200 on
23 computer 104 as it's listed in the figure on the left; is
24 that correct?

25 MR. MCBRIDE: Objection; form.

1 A Yeah.

2 BY MR. DROLET:

3 Q Okay.

4 A The Figure 2 shows computer 104.

5 Q Okay. So this whole process begins with 104,
6 either -- whether I'm in broadcast mode or unicast mode?

7 A I'm sorry. I didn't hear the question.

8 Q I'm looking at the method step as it's
9 disclosed and taught in Avellan, and I'm just asking --
10 I'm reading the specification and the -- and the figure,
11 and it appears that this whole method starts with someone
12 or something viewing a web -- view a web page -- sorry --
13 on computer 104 at step 200; is that correct?

14 A Yeah, I -- that's correct, but I -- I'm very
15 confused. Our -- are you referring to -- your question's
16 referring to something that I have in my -- my
17 declaration or -- or something that I opined upon? I'm
18 not -- I'm not clear --

19 Q Your interpretation of -- of Avellan is that
20 it reads on our -- our -- on the -- on the 074 patent,
21 and you laid out the different elements.

22 We're looking at each different element, and
23 I'm trying to understand your understanding of the source
24 reference, which is -- this is Avellan. And this goes
25 to, again, your declaration but your understanding of

1 what the specification is teaching and disclosing. So
2 that's why we're reviewing this right now.

3 A Yeah, so I think maybe it would be helpful to
4 look at what I said I'm relying upon. There's a lot of
5 stuff in Avellan that involves doing things that I'm not
6 necessarily relying upon for these -- these various
7 claims. So, you know, we've been looking at Claim 1,
8 Element 1A, and I -- I -- I indicate pretty clearly what
9 it is that I'm relying upon.

10 Q Where is it?

11 A You know, in order to answer your question, so
12 I think it would be very helpful to refer back to -- to
13 my declaration and where -- where in my declaration I --
14 I refer to the Petition.

15 Q Sure.

16 A I have quite -- quite a bit of detail about
17 what specific aspects of Avellan that I'm relying upon.
18 And, you know, you're taking me into the things that I --
19 I don't necessarily -- unless you can show me that I
20 referenced these in my declaration, I -- I don't know
21 that I can, you know, really help you understand what my
22 opinions are.

23 So, I mean, if you'd like, we can -- we can go
24 to what I have to say about Element 1A, and I have each
25 of the designations to Avellan that I relied upon.

1 Q Yeah, so I want to be helpful to the process,
2 and I'm willing to jump over to your declaration and
3 reference that. That'd be helpful for moving forward.

4 I just want to make sure I was making sure
5 that we discussed what you mentioned earlier about
6 unicast mode and broadcast mode, okay?

7 Are you not relying on this for your -- your
8 interpretation of the -- of your declaration of the -- of
9 the claim?

10 A There -- there is -- there is lots of stuff in
11 Avellan that involves various different modalities and
12 capabilities. But for the purposes of dealing with
13 Claim 1, I made very specific designations to what I'm
14 relying upon, and I -- I don't recall, unless you can
15 show me otherwise, that I was relying upon anything here
16 in this figure that you have up on the screen.

17 I was relying upon Figure -- Figure 1, and I
18 did make designations to it. But you're asking me about
19 modalities and capabilities in Avellan that have a
20 variety of things, some of which have nothing to do with
21 the -- the claim terms, and you're pointing me to certain
22 sections of Avellan where there is -- there is just a
23 narrow description of one modality that's not intended to
24 be complete of everything with respect to that modality.

25 So it -- it -- I'm not sure how it's helpful

1 for me to explain my opinion with respect to Claim --
2 Claim 1 and 1A in particular.

3 Q So you're not relying on Figure 2 for -- for
4 your assessment of 1 -- of Element 1 or should I say
5 Claim 1?

6 A I -- I don't recall making any reference to
7 Figure 2. If you -- if you want to correct me and show
8 me that I'm wrong, I'd be happy to do that.

9 But at least with respect to Element --
10 Claim 1, I think the entirety of Claim 1, and it may be
11 some of the other claims as well. I don't recall ever
12 referring to Figure 2.

13 Q Okay. Thank you.

14 Let's look at your declaration now. Give me a
15 minute while I reshuffle my papers, but I do want to make
16 it helpful for -- for you as well, so we'll do that.

17 A Yeah. So I should note that with respect to
18 the 074 and just -- just for some level set here, with
19 respect to the 074 and, in fact, for all my declarations,
20 I -- I start off by saying, with respect to Claim 1,
21 Paragraph 110, based on the citations of the patent and
22 the accompanying explanations, it's my opinion that
23 Avellan anticipates all those claims that I have listed
24 there.

25 But as I note, I don't specifically separately

1 opine on Element 1A. I start off with 1D. So because
2 I'm adopting what's in the Petition, I think it would be
3 helpful if I went through Element 1A as it's stated in
4 the Petition because that's what I'm relying upon for my
5 opinion.

6 So I'm -- I'm shifting to Page 16 of the
7 Petition where the designations were made in Avellan for
8 1A, and I think that would be -- I think that would be
9 helpful in order to answer your questions with respect to
10 what I'm relying upon in Avellan for 1A.

11 Q And I appreciate that, and I want to be -- I
12 want to be productive in our time here.

13 Just so I understand, you started off with 1D
14 because you relied on the Petition's position on those
15 other sub elements of 1 -- of Claim 1?

16 A Yeah. For Claim 1A, 1B, and 1C, I don't
17 separately, in my actual declaration, opine on -- on
18 them.

19 I do have some specific detail in my -- in my
20 declaration on Element 1D. But for the other elements, I
21 indicate that I'm adopting the citations -- excuse me,
22 adopting the citations that are in the Petition.

23 Q Understood. So I think it would be helpful
24 for D and 1F?

25 A And --

1 Q Understood. So it would be helpful if we go
2 to your declaration and look at your -- your
3 interpretation of at least those elements that you -- you
4 did asses; is that correct?

5 A Yeah, yeah. If you want to start at the
6 beginning, you could start with the Petition on
7 Element 1A, or we can go wherever you like.

8 Q Well, I don't want to go to Petition because,
9 if I understand you correctly right now, you just told me
10 that you relied on the Petition's position on
11 Elements 1A, 1B, 1C at a minimum; correct?

12 A Correct.

13 Q And then -- so your -- your assessment, going
14 forward, you -- you then focused on Elements D and E;
15 correct?

16 A I actually don't think I separately opined on
17 1E. I think it was just 1 -- 1D in my -- in Ground 1.

18 Q Sure. I guess we could -- we could -- let's
19 look at your declaration. Give me a second while I
20 paper -- paper shuffle, okay?

21 A Okay. So just --

22 Q We'll take this -- these exhibits off, and
23 then we'll go to your declaration.

24 A All right. So you tell me where you want to
25 start. My declaration, Ground 1, is on Page 32, and the

1 Petition, and it -- my declaration on -- with respect to
2 Ground 1 begins by saying, "Based on the citations in the
3 Petition," and then Paragraph 111 of my declaration
4 immediately starts with Element 1D. So it's silent about
5 the 1A that I'm relying upon the citations that are in
6 the Petition for 1A.

7 So if you want to go to -- again, if you want
8 to talk about 1A, I would recommend you -- you asked me
9 about the -- the citations for Avellan that are in
10 Element 1A, which are in the Petition, and it begins on
11 Page 16 of the Petition.

12 Q Yes, sir. I think we'll stick with your
13 declaration. I think that is most useful right now for
14 our time.

15 A Okay. Sure. Whatever -- whatever you like.

16 Q Well, yeah, yeah, I think that'd be good.

17 Okay. Let's look at -- start on Page 28 of
18 your declaration.

19 A Page 28, okay.

20 MR. DROLET: Go up one.

21 MR. MCBRIDE: Counsel, is that Page 20 of the
22 PDF or 20 at the bottom of the page?

23 MR. DROLET: Yeah. Thank you.

24 MR. MCBRIDE: The cover page is --

25 MR. DROLET: Number 28 on the page. So, yeah,

1 top of the page.

2 THE WITNESS: Okay.

3 BY MR. DROLET:

4 Q You want to go through the previous pages to
5 see the intro?

6 A Yeah, I see that. This is where I'm providing
7 an overview of the prior art and -- with respect to
8 Avellan, yep.

9 Q Okay.

10 A Okay.

11 Q So just -- just question: This same type of
12 analysis and assessment, I guess you're just being
13 efficient, did you do the same kind of analysis for
14 the -- the other two patents as well?

15 MR. MCBRIDE: Form.

16 A I did cite to Avellan in the other two
17 patents. I don't recall whether this section that we're
18 looking at is identical because there may have been some
19 aspects of Avellan that were specific to, like, the 002
20 has two-way capability in it. I -- I might have included
21 that. I don't know. I'd have to compare them.

22 BY MR. DROLET:

23 Q No worries.

24 Did you -- did you rely on the Petition for
25 sections of your assessment like you did in this -- in

1 this -- your declaration here?

2 A Well, so what you have up on the screen is a
3 overview of -- of Avellan. It's not meant to be
4 inclusive of every specific disclosure where I actually
5 go through the grounds and the elements. I cite to
6 portions of Avellan that may -- not inconsistent with
7 what's up on the screen, but may have some additional
8 detail that are not on -- not in this particular section,
9 because this is just an overview.

10 Q Yes, sir. I appreciate that.

11 So just like in this, the 074 patent where you
12 relied on the Petition's position and analysis on certain
13 sub elements, did you do the same reliance in your
14 assessment for the 002 and 441 patent?

15 A If I understand your question, there were
16 instances for the other patents where I -- I -- I
17 indicated I -- I was relying upon the citations that were
18 in the Petition, and I didn't have anything to add in my
19 declaration. I just -- where I -- I -- I had content in
20 my declaration that was above and beyond the Petition, it
21 was to support various aspects of technology that counsel
22 asked me to opine upon to help the board understand what
23 was going on and, in some cases, support some of the
24 motivations to combine.

25 But I -- I never -- in any of my opinions, I

1 never offered anything that was counter to the citations
2 or the Petition. But, in some cases, I -- I cited some
3 additional information and provided my own technical
4 expertise in addition to what was in the Petition.

5 Q I appreciate that, Mr. Lipoff. Thank you.

6 MR. DROLET: Counsel, can we get copies of
7 those Petitions that were shared with Mr. Lipoff in
8 order for him to -- for his declaration? Well, I'll
9 follow up tomorrow, but just making sure you knew we
10 wanted them.

11 MR. MCBRIDE: The Petition is there.

12 MR. DROLET: I'm sorry? These are the same
13 Petitions as filed? Did he receive a different
14 Petition draft?

15 MR. MCBRIDE: The -- what I heard him say is
16 that he's relying upon the passage as cited. So I
17 don't know what you need or if you're entitled to
18 it, but you can make a request.

19 MR. DROLET: Thank you.

20 BY MR. DROLET:

21 Q All right. So let's look at the screen here.
22 So walk me through this, Mr. Lipoff. It says,
23 "The browser software 106 resides at the gateway 134."

24 A Gateway 1 -- okay. Yeah. That's correct,
25 yes.

1 Q And is that referring to the figures in
2 Avellan?

3 A Yeah. The -- as shown in -- in Figure --
4 Figure 1 in Avellan, which is in the -- in the
5 declaration. It's on Page 29.

6 Q Okay.

7 A Yes.

8 Q Bear with me. I need to get that -- that
9 black square off.

10 MR. HERNANDEZ-MONDRAGON: On the bottom.

11 Sorry.

12 BY MR. DROLET:

13 Q Okay. So then after your citation says
14 "because the browser software resides at the gateway,"
15 can you explain that, "because the browser software
16 resides at the gateway"?

17 A Yeah, so I'm actually citing to -- quoting
18 specific language that's in Avellan, and the -- the
19 gateway in -- in Avellan, as shown in Figure 1, are those
20 Items 130, 134.

21 What it's saying is the -- the browser is --
22 the browser functionality of taking the HTTP content that
23 came from the Internet and converting it into a media
24 stream that's broadcast to the devices, that actual
25 functionality, that software, that capability is resident

1 in Item 134, the gateway server, and it is not located at
2 user computers 104, is what it's saying.

3 Q Well, 104 is -- remember, 104 is the dummy
4 terminals.

5 A 104 is the end user terminals --

6 Q Right.

7 A -- which -- which could be dummy terminals.
8 They could be more, but they're -- they're -- at the
9 very, very least, they're -- they're not performing the
10 normal browsing function that the virtual browser 106 is
11 performing.

12 The virtual browser 106, as indicated by
13 what's on the screen, is actually at the gateway, and
14 it -- it's not asking for the browser functionality to
15 exist at 104. It's -- it's -- because it's at the
16 gateway, it can use a very powerful computer -- that's
17 what this cite says -- and can there- -- therefore
18 provide very high-speed connections and can -- can
19 rapidly render pages without -- without significant
20 delays, with low latency.

21 Q Right. So I want to make sure, because it
22 seems to me -- again, correct me -- correct me here.
23 "The browser software 106 resides at the gateway 134."

24 Okay. "The browser software 106 resides at
25 gateway 134, and is configured to run as a virtual

1 browser."

2 Okay. All right. So is there
3 browser-to-browser communication, then? You've got a
4 browser at 106 --

5 MR. MCBRIDE: Form.

6 BY MR. DROLET:

7 Q Okay. Is there browser-to-browser
8 communication?

9 A There is --

10 MR. MCBRIDE: Object to the form.

11 A There is no disclosure in Avellan, nor
12 anything I'm opining upon or anything I opined upon, that
13 says that there is another browser other than the -- this
14 one remote browser 106.

15 BY MR. DROLET:

16 Q Okay. Let's look at Paragraph 85, then.

17 MR. DROLET: Go -- go up to 85.

18 MR. HERNANDEZ-MONDRAGON: This is 85.

19 MR. DROLET: Okay. I'm sorry. Oh, okay.

20 Gotcha. Okay. Scroll down. I'm sorry.

21 BY MR. DROLET:

22 Q Virtual browser, okay.

23 I'm just making sure, so there's two -- two
24 browsers; correct?

25 A No.

1 Q One in the --

2 A All -- there is -- if you see somewhere where
3 I indicate there's two browsers, please point it out to
4 me. But I only identify one browser in Paragraph 85.

5 Q And your statement is it resides in gateway
6 server 134?

7 A Yeah. There -- there is one browser
8 identified in Avellan, which is a virtual browser 106,
9 and Avellan discloses that that -- that resides at the
10 gateway. It says it's -- it says -- I'm just quoting
11 from Avellan. The virtual --

12 Q All right. So it's on 134. Is that a special
13 app to communicate to 106?

14 MR. MCBRIDE: Object to the form.

15 A I don't -- I didn't use that terminology.
16 It's -- it's a virtual browser which interprets what it
17 gets from the websites, and it converts it to a media
18 stream that's sent to the end user devices 104.
19 That's -- that's what it is.

20 BY MR. DROLET:

21 Q The -- the media stream, if I recall, are
22 those series of images, correct, graphical
23 representations of what's on the -- the -- the virtual
24 browser; is that correct?

25 A The -- the media streams are identified in --

1 in Figure 1 as Items 120, 122, and 124, and they
2 represent content that, when viewed on the end user
3 computer as 104, appears to be coming from a conventional
4 browser that's in the machine. But, in fact, it's
5 actually coming from the virtual browser 106 that's at
6 the gateway.

7 Q Okay. Thank you for that.

8 So explain to me how the -- the Reference
9 Number 104, then -- or maybe it's not explained here.
10 Because remember before we talked about someone being on
11 one of those 104 dummy remote terminals and typing in
12 YouTube how Figure 2 started; right? How -- how is that
13 kind of laid out here, or is it even referenced here?

14 A So at Paragraph 86 of my overview of Avellan
15 says, "A user at computer 104 can request media streams
16 either from the Internet or from the private network
17 cloud." So as I said before, Avellan provides a couple
18 of different modalities. If the information --

19 Q Gotcha.

20 A Yeah, the information can come from either
21 place.

22 Q So the media stream could be from like a
23 YouTube.com?

24 A It -- it -- the media stream can -- the
25 representation of the media stream that the end user sees

1 on end user computer 104 would be the same representation
2 that would come from a yahoo.com. It's not necessarily
3 formatted as HTTP. But to the user at 104, it looks as
4 though it's exactly what they would see if they were
5 using a conventional computer connected directly to the
6 Internet without the -- the Figure 1 infrastructure.

7 Q Right. But at 104, the -- someone is typing
8 in YouTube.com or something; correct? The action starts
9 at 104; right?

10 A The -- yeah, this particular summary of
11 Avellan describes one of the ways in which it works where
12 a user at 104 could actually say "I want to see" -- I
13 think you use the example yahoo.com. "I want to see
14 yahoo.com."

15 So that would be at least one way in which
16 Avellan discloses you could -- the end user could see the
17 content that's representative of what's on Yahoo, even
18 though they're not talking directly to Yahoo.

19 Q Are there other ways that Avellan teaches how
20 to do that?

21 A Nothing that -- see if I cite here.

22 Q Okay.

23 A I think that -- well, so going down to
24 Paragraph 87, describing this broadcast mode -- and I
25 don't know if I have the full citation from Avellan. But

1 in Column 8 of Avellan, with respect to this 87, it does
2 describe how the gateway is continuously capturing these
3 images, which have not necessarily been -- been requested
4 by the end user.

5 So there -- there is some operation of the
6 Avellan system described in Paragraph 87, which is
7 further detailed in Avellan itself about going to some
8 websites, very popular ones that have information like
9 CNN, which would then capture --

10 Q Can you do me a favor? Could you please read
11 that, 87, for me, please?

12 A What do you want me to do? I'm sorry.

13 Q Could you read the -- what you wrote in
14 Paragraph 87, please?

15 A You want me to read the entire paragraph?

16 Q Please.

17 A Okay. Or do you want me to just --

18 MR. MCBRIDE: Objection to form.

19 A -- read the last sentence?

20 BY MR. DROLET:

21 Q I just need -- I need to digest it. Could you
22 please just read it for me?

23 A Okay. I'll read the entire Paragraph 87.

24 Q Thank you.

25 A "Avellan further discloses that 'web pages

1 often have information that is rendered over a period of
2 time, such as a video, streaming information, or an
3 animated display. Accordingly, the gateway server 134
4 continuously captures images of the web page until it
5 detects a repeating pattern of information in the web
6 page.'" Referring to Exhibit 1003, Column 5, Line 5
7 through Column 5, Line 10. "Thus, gateway server 134
8 will be certain to capture all the information on the web
9 page, even if that information continues over a period of
10 time." Referencing Exhibit 1003, Column 5, Line 10
11 through Column 5, Line 12. "Avellan explicitly adds that
12 'suitable sites for the broadcast mode are news sites
13 like CNN, BBC, newspaper, live streaming television
14 feeds, movies, music downloads, or ESPN,'" citing to
15 Exhibit 1003, Column 8, Lines 18 through 21.

16 Q Okay. Thank you for that.

17 So -- so the websites themselves are the --
18 are the actual stream that's being sent?

19 MR. MCBRIDE: Objection; form.

20 BY MR. DROLET:

21 Q So --

22 A I'm not sure which -- I don't think the word
23 "website" appears here. I think web pages do. But I'm
24 not sure what you were asking me. Were you asking me
25 something about --

1 Q I'm asking about if you understand
2 Paragraph 86, media streams. Does media streams, in your
3 interpretation, the --

4 MR. DROLET: Go back down to 87.

5 A Okay.

6 BY MR. DROLET:

7 Q Media capture -- no. So it says, "Thus,
8 gateway server 134 will be certain to capture all the
9 information on the web page."

10 Is that -- is that what -- what it's capturing
11 there? Is that what it's talking about, media stream?

12 A So --

13 MR. MCBRIDE: Objection; form.

14 A So I think we're talking about different
15 things here. So in Paragraph 87, the second sentence
16 says, "The gateway server 134 continuously captures
17 images of the web page." So as Avellan further discloses
18 and previously mentioned, the images of the web page are
19 being created by the virtual browser 106, and the gateway
20 server is capturing the images of the web page, which are
21 being produced by the virtual browser 106, and it then
22 goes on to say "until it detects a repeating pattern."

23 But anyhow, it -- the gateway server is
24 capturing the images of the web page. We haven't --
25 there's nothing here so far about the media stream.

1 Media stream is something that happens later -- it
2 happens as other things that are -- that Avellan is
3 doing. But in this Paragraph 87, it's just talking about
4 capturing the -- and storing the images in the gateway
5 server.

6 BY MR. DROLET:

7 Q Thank you. Thank you for your patience.

8 MR. DROLET: Can we look at 86 real quick?

9 BY MR. DROLET:

10 Q So in 86, what's the media stream, then?

11 A Let me go back to 86.

12 MR. DROLET: Screen 2, yeah.

13 A 86. Okay. "From the Internet or private
14 network cloud." So those particular media streams, as
15 opposed to other ones that might exist, but the first
16 sentence in my Paragraph 86 talks about media streams
17 from the Internet. So that would be the blue cloud down
18 at the bottom that I -- that I annotated in Figure 1.
19 The media stream referred to in that paragraph is what's
20 coming from the Internet cloud.

21 BY MR. DROLET:

22 Q I'm trying to find that right now. We're in
23 your declaration. I'm trying to find your --

24 A Oh, it's on Page -- Page 29 --

25 Q Right there.

1 A -- in my declaration. Page 29, yes.

2 Q Okay.

3 A So it -- that Paragraph 87 is specifically
4 referring to what's coming from the Internet cloud that's
5 being ingested into or feeding into the gateway servers.

6 Q Okay.

7 A There are other media streams in Avellan, but
8 that particular one is the one that's coming from the
9 Internet cloud.

10 Q Gotcha.

11 Okay. So from there, it goes --

12 MR. DROLET: Go up on -- on -- on this chart a
13 little bit.

14 BY MR. DROLET:

15 Q So from there, it goes back out to the 104s
16 as -- as a series of images? Is that what's happening?

17 A Yeah, so let -- let me, again, refer to the
18 declarations so I can --

19 Q Right.

20 A -- be clear about it. So Paragraph 85 refers
21 to providing for the use -- the user computers to access
22 the content of the Internet through the virtual browser,
23 and so -- to see if I go further. Virtual browser, blah,
24 blah, blah.

25 86, end user computer 104. And then we go

1 right to Figure 1, and so I don't think I specifically
2 talk about -- I don't have any texts that shows -- that
3 talks about the actual streams that are coming out of the
4 satellite 102.

5 But with respect to -- with respect to
6 Figure 1 that I have annotated and the text, yes, in
7 answering your question, the content that's coming out of
8 the gateway server would be sent to end user devices 104
9 after it's been processed by the virtual browser 106.

10 Q Thank you for that. I appreciate that.

11 MR. DROLET: So scroll down a little bit in
12 this Paragraph 86. We're still on your declaration.
13 Thank you.

14 THE WITNESS: Okay.

15 BY MR. DROLET:

16 Q Okay. So "Referring to Avellan's Figure 1."
17 Okay. "At computer 104 ... can request media stream."
18 So 104 is requesting media streams. "Either Internet or
19 private network," okay, "for playback."

20 "For playback." What does that mean, "for
21 playback"?

22 A So in this -- in this respect, for playback to
23 the subject of this sentence. For playback to the user
24 at user computer 104.

25 So the media streams that come from the

1 Internet are in a different form than what's actually
2 being sent to end user computer 104.

3 What comes from the Internet is being digested
4 by the virtual browser 106, and it's being transcoded or
5 transformed into what's being sent to the user
6 computer 104.

7 And so playback is referring to playing back
8 from the gateway virtual browser to the end user computer
9 via the -- the satellite connection.

10 Q So is this playback to actually push play? Is
11 it for the end user to push play to -- to -- to
12 effectuate the playback?

13 A The -- I -- I don't know how to answer that
14 question. The -- I think this -- this sentence is pretty
15 clear. The -- the end user can request the media stream
16 which comes from the -- the end user has no connection to
17 the -- the Internet. So the end user can only receive
18 content to the Internet that's going through the gateway.

19 And so the gateway stores it, the end user can
20 request it be played back so the end user can view it on
21 their screen, and they can enjoy the same experience of
22 actually having browsing Yahoo as if they were talking
23 directly to Yahoo with a conventional computer.

24 Q Okay. Let's keep going down, then, 87. Is
25 that the end of 87? Yeah, okay.

1 A Yeah. And I'm sorry. I should just -- just
2 go back. The entirety of Paragraph 86 that we didn't
3 read, I think, kind of makes that clear. It says, "The
4 gateway receives the" --

5 Q Go back. Go back.

6 A Yeah, okay. Paragraph 86, again, we read off
7 to "playback," but then it continues: "That gateway
8 platform 130," which is the stuff in red arrow,
9 designated, "receives the request, obtains the content
10 from the networks, processes it using the disclosed
11 browser software, and then it broadcasts the requested
12 media on a broadcast media channel."

13 I read that verbatim. But to just go on,
14 because it's referring to end user computer 104 at the
15 top of Paragraph 86, I think it would be understood that
16 the broadcast of the requested media or the broadcast
17 media channel is being directed to computer 104.

18 Q And what protocol is that? Is that HTTP?

19 A It -- Avellan does not disclose that as being
20 HTTP. Because it's being transformed by the virtual
21 browser into some form that's different from what it got
22 from the Internet, the assumption would be that Avellan
23 itself is not disclosing HTTP, that there are some other
24 claim limitations where HTTP was an issue where I use
25 combinations.

1 Q Great. Thank you.

2 MR. DROLET: Okay. Keep going.

3 Let me take a 5-minute -- can I bother you for
4 a 5-minute comfort break real quick?

5 THE WITNESS: Sure. That's good for me.

6 MR. MCBRIDE: Can we do 8 or 10 minutes?

7 THE WITNESS: Yeah, I'm fine. So what is it?
8 It's 3:34. How about we pick up at 3:40?

9 MR. DROLET: Perfect.

10 MR. MCBRIDE: Can we do 10 minutes, Rob? Is
11 that okay? Or at least pick up at 5:45?

12 MR. DROLET: My bladder thanks you.

13 THE VIDEOGRAPHER: All right. Going off the
14 record at 3:34, Pacific.

15 (Recess.)

16 THE VIDEOGRAPHER: All right. We are back on
17 the record at 3:47 p.m., Pacific.

18 BY MR. DROLET:

19 Q Thank you for your patience, Mr. Lipoff, in
20 educating me. Thank you. Thank you. I know you've been
21 very thorough in explaining this very patiently, and I --
22 I appreciate that. Thank you.

23 I'd like to switch right now referencing
24 everything we've spoken about and look at the 074 patent
25 and just kind of get all these concepts we just spoke

1 about, how -- how it's -- how it's being applied here to
2 the -- to the 074. So let's pull that up.

3 MR. HERNANDEZ-MONDRAGON: You want me to pull
4 up the patent?

5 MR. DROLET: Yeah, 074 patent. So let's look
6 at the figures. You just want -- yeah, is that --
7 yeah, Figure 1 is fine.

8 MR. HERNANDEZ-MONDRAGON: You want me to
9 rotate it?

10 MR. DROLET: Please.

11 MR. HERNANDEZ-MONDRAGON: That okay?

12 MR. DROLET: Yeah. Is that the best figure
13 for us to look at?

14 MR. HERNANDEZ-MONDRAGON: Yeah, that's what he
15 said the media areas.

16 BY MR. DROLET:

17 Q Okay. All right. So I know this is
18 simplified, Mr. Lipoff, and it's been a while, I know,
19 since you've looked at this. Did you want to look at
20 this a little bit, all the figures first, before I start
21 asking questions or take a minute to look at the -- at
22 the -- at the patent? It's up to you.

23 A Well, so I'm not sure where you're going to
24 go, but I just will mention that my -- in my declaration,
25 I do have a summary of my understanding of the 074

1 patent, at least of the -- the portions of it that I
2 thought were important that I relied upon. So --

3 Q Okay.

4 A -- on Page -- Page 22 of my --

5 Q Let's go.

6 A Page 22 of my declaration, and I included that
7 Figure 1 in --

8 Q Okay. Good. That would be helpful, then.

9 A Okay.

10 Q Okay. Okay.

11 MR. DROLET: So scroll down a little bit or
12 make it bigger so I can see the words, as well, so
13 he can see it as well. And we'll go -- I'm sorry.
14 The verbiage below.

15 BY MR. DROLET:

16 Q So here, the -- the MSL facility for
17 Mediaplug 110, that was the blue area we spoke about
18 earlier, is that correct, the -- the -- the --

19 MR. MCBRIDE: Objection to form.

20 BY MR. DROLET:

21 Q Okay. So explain to me the Media -- the
22 Mediaplug. Is that the actual infrastructure for
23 Avellan?

24 A We're looking at the 074 patent, so it's --
25 it's got its own architecture with different names and

1 different things. But in Paragraph 73 of my declaration,
2 I describe my understanding of what the Mediaplug is and
3 what it does. Would you like me to go through that
4 or --

5 Q Please.

6 A Yeah. So Paragraph 73, I say that the patent
7 discloses a Mediaplug that is in communications with the
8 cloud, cloud 101, which would -- would -- it's -- it's
9 communications with it, as the figure shows, through the
10 Internet.

11 So Mediaplug talks to the Internet, the
12 Internet talks to the media cloud. Media -- Mediamplyfy,
13 I guess, is how it's called in the 074, which would be
14 the thing that would -- that would have the Yahoo, for
15 example, on it.

16 Anyhow, Paragraph 73, the Mediaplug
17 communication for the cloud 101 through Internet 105 and
18 quoting specifically to the -- the patent. The Mediaplug
19 can reside at the MSO facility -- that is, the MSO is the
20 cable operator -- or -- or not, I guess.

21 But reading from my declaration, it can be --
22 it can reside at the MSO facility to receive all the
23 radio and TV programming, that the cable operator can
24 then multiplex, re-encode, and distribute from the
25 multiplexer to a series of subscriber units with Set Top

1 boxes.

2 So Figure 1 shows that the Mediaplug talks to
3 the Internet. The Internet talks to the media -- the
4 Mediamply Cloud. That is websites. The Mediaplug
5 then, on the other side, talks to the multiplexer 120 at
6 the cable operator's facility.

7 And then, continuing on in my declaration, it
8 provides content to subscribers' Set Top boxes, which are
9 the subscriber devices, to the right 130, 131, and it
10 does it through a -- in this example here, it does it
11 through a connection 125, which is identified as a cable
12 fiber to the home, multicast, unicast unit.

13 Q Okay. Okay. So the -- so the -- the media --
14 the Mediaplug is -- is the content provider in your
15 assessment here?

16 A I think in the case of Avellan -- I'm sorry.
17 In the case of the 074 patent, the content provider is
18 the MSO. Also -- I think also called -- 074 also calls
19 them the cable operator. Yeah, yeah, Mediaplugged. I'm
20 looking at my Paragraph 30 -- 73, quoting -- quoting from
21 a -- the Mediaplug can reside at MSO facility used by
22 cable operators. So 074 uses MSO and cable operator to
23 both refer to what I understand to be the content
24 provider.

25 Q Okay. Okay. Okay.

1 MR. DROLET: Scroll down a little bit for me.

2 BY MR. DROLET:

3 Q All right. Let's talk about this here.

4 Okay. And here, we've got -- 75, can you
5 explain 75 for me, Paragraph 75?

6 A Yeah. Paragraph 75 is referring to Figure 2.
7 Figure 2 is -- is an additional detail about the --
8 what's inside the Mediaplug. So it's -- it's showing --
9 well, to be clear, Figure 2 is showing some of the same
10 stuff that was in Figure 1.

11 But starting from the net firewall switch and
12 the multicast-02, multicast-01, and caching, that's
13 attempting to show the internals of what's inside the
14 Mediaplug before it connects to the -- the MPEG MUX,
15 which is also shown in Figure 1.

16 And in Paragraph 75, I say: The hardware
17 components of the Mediaplug have three servers. It
18 includes a caching unit, which I highlighted in blue, and
19 the caching unit contains storage and contains the
20 molding media files and the format required by the cable
21 operator.

22 It then says, "The caching unit can encode and
23 transcode," that is transform, "the media files it
24 downloads from the cloud." In this case, the cloud being
25 the Internet. And it communicates with two multicast

1 units 215 and 220, allowing the multicast units to either
2 pull or obtain information from it. "It" the case being
3 the -- the caching servers.

4 So what -- what I think I -- I quoted here in
5 Paragraph 75 is a description of how the Mediaplug works.
6 The content goes in the caching server, the multicast
7 units' old content from the caching server, and they feed
8 it into the MPEG MUX; and the MPEG MUX, in turn, sends it
9 over the cable system as shown in Figure 1 to the Set Top
10 boxes.

11 Q And is there -- is there a corresponding MPEG
12 MUX box and -- and catalog?

13 A There is a corresponding infrastructure in
14 Avellan, which -- let me get my copy of it.

15 Q Your copy?

16 A Yeah. There is corresponding infrastructure,
17 which is performing some of the same functions. There is
18 a -- a gateway server with a cache. There is a satellite
19 as opposed to a cable, means of -- of transmitting the
20 information, and corresponding to the Set Top boxes.
21 There is -- end user computer is 104, all of which I -- I
22 think are all within the scope of the claims.

23 Q So you know the distinct units like a caching
24 unit and then I guess the multicaster, they are distinct,
25 though, in -- in the 074; correct?

1 MR. MCBRIDE: Objection; form.

2 A I'm sorry. I didn't hear the last part of
3 your -- your question. They're distinct in what?

4 BY MR. DROLET:

5 Q They're distinct. The only function is their
6 distinct physical units, though; correct?

7 MR. MCBRIDE: Objection to form.

8 BY MR. DROLET:

9 Q So I'm trying to understand -- let's go back
10 to -- right there. The multicast-02 and multicast-01 are
11 distinct units in the caching; correct?

12 MR. MCBRIDE: Objection to form.

13 A Yeah, I -- yeah, I'm not sure what you mean by
14 distinct units. The Figure 2 of the 074 patent as
15 reproduced in my declaration show three elements in the
16 Mediaplug: CACHING 210, multicast-01 215, and
17 multicast-02 220. They -- they show those three boxes.

18 BY MR. DROLET:

19 Q And the three servers?

20 A I'm sorry. What was your question?

21 Q So I show in Figure 2 "the hardware components
22 of the Mediaplug 110 includes three servers"; right?

23 A Media -- I don't know if -- I don't recall
24 whether the 074 calls them servers. It might. Let me --
25 let me take a look and see. I -- and -- and what I have

1 in my declaration, I -- I didn't identify them beyond
2 caching unit, and there is some form of -- let me look at
3 the 074 if you'd like and see if -- if it uses the term
4 "server." I don't remember. It might.

5 MR. HERNANDEZ-MONDRAGON: Did somebody
6 transform them?

7 A So I see -- I see it using it in -- in one of
8 the figures, Figure 11. Let me -- I'm all confused here.
9 Let me make sure I have the right document in front of
10 me. I've got a lot of paper here I'm playing with right
11 at the moment.

12 BY MR. DROLET:

13 Q Sure.

14 A Yeah, yeah. So it uses Figure 11. Let's see
15 if it uses it in the text. Yeah, so it does say -- it
16 does say -- and I'm looking quickly here. There may be
17 other places. But Column 4 of the 074, it does say
18 Mediaplug 110 can be a computer or server or set of
19 servers. So it does refer to them in the text as a
20 server. I -- I don't -- I didn't use that terminology in
21 my declaration, but the 074 does call them servers.

22 Q Thank you.

23 MR. DROLET: All right, Mr. Lipoff. Thank you
24 so much. And thank you for -- for indulging us to
25 go ahead and end here and then do a short, short

1 wrap-up tomorrow.

2 MR. MCBRIDE: Counsel, what -- what is your --
3 what's your plan? What's your plan with regard to
4 passing the witness? I have questions I'd like to
5 ask. Am I allowed to ask now? I mean, I'd prefer
6 because there -- there is stuff that I've written
7 down that's fresh in my head.

8 MR. DROLET: Sure. Go ahead.

9 MR. MCBRIDE: Okay. Well -- well, I mean,
10 alternatively, we can do it tomorrow.

11 MR. DROLET: Let's go --

12 MR. MCBRIDE: Let's -- let's do it -- are you
13 going to do it tomorrow? Are you -- are you
14 committing to coming back tomorrow? Because you
15 haven't passed him to me.

16 So, I mean, I don't want to -- that's -- as a
17 matter of form, you need to pass him to me. I mean,
18 I would prefer to do it after you're done.

19 MR. DROLET: Okay. All right, then.

20 MR. MCBRIDE: Okay. So am I -- am I right
21 that you are -- you're not passing the witness now;
22 you'll pass him tomorrow?

23 MR. DROLET: I -- I'm -- make sure I
24 understand your -- your question to me: I'm saying
25 we're going to reserving two hours tomorrow to

1 continue with other things to finish up. You wanted
2 to go ahead and ask your questions because they're
3 fresh on your mind and you have them written down.
4 And so --

5 MR. MCBRIDE: Sorry. I think you -- I think
6 you misunderstood. I apologize.

7 My understanding, and correct me if I'm wrong,
8 is that you are not done with the witness.

9 MR. DROLET: Correct.

10 MR. MCBRIDE: You're going to come back
11 tomorrow. You may ask questions. But either way,
12 tomorrow is when you'll be passing him to me; is
13 that correct?

14 MR. DROLET: Yeah. Correct.

15 MR. MCBRIDE: Okay. Then I -- then, yeah, I
16 need to wait until -- until tomorrow. So that --
17 that's fine. So it'll be 10 o'clock Mr. Lipoff's
18 time?

19 THE WITNESS: Sounds good to me, yes.

20 MR. MCBRIDE: Okay.

21 THE VIDEOGRAPHER: And, Counsel, before we go
22 off the record, because I'm not with you guys
23 tomorrow either. Do either of you require a video
24 of today's deposition at this time?

25 MR. MCBRIDE: I do not.

1 MR. DROLET: We do.

2 MR. MCBRIDE: Is there a -- is there a way to
3 get a rough transcript, or is it just the video is
4 the best way?

5 THE VIDEOGRAPHER: Two separate. I've got to
6 ask for video, so --

7 MR. MCBRIDE: Okay. If a video is going to be
8 prepared for Counsel, I'll take one as well.

9 THE VIDEOGRAPHER: Yeah, I'm not sure. Lacey,
10 do you know if there is a standing order?

11 THE STENOGRAPHER: I have that I'm supposed to
12 produce a rough draft today, and then it's a 3-day
13 expedite for a final.

14 MR. MCBRIDE: That's fine with us.

15 THE STENOGRAPHER: So you want, Mr. McBride, a
16 rough draft and then the expedited, also?

17 MR. MCBRIDE: I think for now, if I get the
18 video, because it sounds like it's being prepared
19 for Mr. Drolet anyway, and then if there is a rough
20 that you can do before tomorrow, great. If not, I
21 don't -- I don't need the video.

22 THE VIDEOGRAPHER: And then, Rob, do you need
23 that standard delivery, or do you need that
24 expedited?

25 MR. DROLET: Standard. The rough, fantastic,

1 and then three-day expedite.

2 THE VIDEOGRAPHER: Okay. So we can end
3 today's deposition and go off the record at 4:0- --
4 at 4:06 p.m., Eastern Time.

5 (Off the record.)

6 MR. DROLET: Mr. Lipoff's Declaration 074
7 patent --

8 THE STENOGRAPHER: Is Exhibit 4.

9 (Exhibit 4 was marked for identification.)

10 (The videotaped Zoom deposition was adjourned
11 at 4:06 p.m., PST.)
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CERTIFICATE OF OATH

STATE OF FLORIDA)
COUNTY OF WALTON)

In my capacity as a Notary Public of the State of Florida, I certify that on the 2nd day of September 2025 at 10:22 a.m., PST, STUART LIPOFF personally appeared before me and took an oath for the purpose of giving testimony in the matter of Stingray Group Inc. and Stingray Music USA, Inc. v. Dr. Edwin A. Hernandez-Mondragon, Case IPR Numbers 2025-00349, 2025-00350, 2025-00351.

Personally Known: _____

Produced Identification: X

Dated this, the 5th day of September, 2025.



LACEY JADE LINK, RPR, FPR, LCR
Notary Public - State of Florida
My Commission No. HH 480206
Expires: February 14, 2028

CERTIFICATE OF REPORTER

STATE OF FLORIDA)

COUNTY OF WALTON)

I, Lacey Jade Link, RPR, FPR, LCR, Stenographic Court Reporter and Notary Public, State of Florida, certify that I was authorized to and did stenographically report the foregoing videotaped Zoom deposition of STUART LIPOFF; and that the foregoing pages, 1 through 156, are a true and complete record of my stenographic notes.

I FURTHER CERTIFY that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in this action.

Dated this, the 5th day of September, 2025.



LACEY JADE LINK, RPR, FPR, LCR

&	57:1,16,21	10,123,074 1:8	104's 84:4
& 2:2	60:18,23 61:2,5	3:8	104s 83:23
0	61:7,14,14 62:3	10,524,002 1:10	138:15
002 44:3 45:16	62:9 63:22 64:1	1003 135:6,10	105 145:17
125:19 126:14	68:9,11 75:14	135:15	106 63:16 67:25
00350 44:3	75:15 76:12,21	101 145:8,17	68:2 80:21
45:16	77:4,5,23 78:7	102 76:9,20,23	81:20,22 82:4,5
01 147:12	79:1 82:2 85:6	76:24 77:4,7,8	83:24 84:1,5,8
149:10,16	91:20 107:17	77:10,16 78:3	84:13 86:22
02 147:12	110:11 111:9,14	96:2,5 97:4	88:13,19,20
149:10,17	111:15,18	116:1 139:4	89:14,15,19
074 19:5 46:8,10	112:17,17 119:7	104 63:9,16 66:4	90:1,3,24 91:2
48:1,3,9,18	120:13,17 121:2	66:4 67:25 68:2	107:25 115:16
60:14,21,22,23	121:4,4,5,10,10	80:21 81:14,19	115:18,24 116:1
61:3,19,25	121:20 122:15	81:20,20 82:4,4	116:20 117:11
62:11 76:11,11	122:15 123:17	84:2,9,11,20,20	127:23 129:10
76:13 82:24	123:17,25 124:2	84:22 85:17	129:12,23,24
91:15 94:6	127:24 128:4,19	87:11 88:12	130:4,14 131:8
101:15 104:1	132:1 133:6	90:4,5,12 91:3	131:13 132:5
118:20 121:18	137:18 139:1,6	91:21 92:12,19	136:19,21 139:9
121:19 126:11	139:16 143:7	93:22 96:20	140:4
142:24 143:2,5	144:7 146:2	97:4,24 98:6,12	10:20 4:2
143:25 144:24	147:10,15 148:9	108:2 115:21,24	10:21 1:17
145:13 146:17	156:11	116:21 117:5,7	10:22 155:8
146:18,22	1.0 34:21 35:1,6	117:9,22,23	11 150:8,14
148:25 149:14	1.1 35:8	118:4,5,13	11,140,441 1:12
149:24 150:3,17	10 16:25 24:6	129:2,3,3,5,15	110 121:21
150:21 154:6	39:2 78:13,16	131:18 132:3,9	144:17 149:22
	78:17 84:9,9	132:11,15 133:1	150:18
1	85:24 93:22	133:3,7,9,12	111 124:3
1 3:3,4,4,8,10	112:24 113:3	138:25 139:8,17	11:17 39:12
4:12 48:15,18	135:7,10 142:6	139:18,24 140:2	11:29 39:15
56:17,17,21	142:10 152:17	140:6 141:14,17	11:30 39:5
		148:21	

12 135:11 120 2:8 85:25 96:7,22 132:1 146:5 122 96:7,23 117:7 132:1 124 96:7,23 117:6 132:1 125 146:11 12:41 78:19 13 113:22,23 114:1,2,17,18 115:10,13 130 77:16 79:25 128:20 141:8 146:9 131 146:9 132 77:16 78:3 134 78:3 83:10 83:14 93:22 116:2,5,8,15,21 116:25 117:12 127:23 128:20 129:1,23,25 131:6,12 135:3 135:7 136:8,16 136 116:2,25 14 155:23 15 18:21 150 116:5,6,22 152 116:5,6,22 154 3:3,12 155 3:4	156 3:4 156:11 16 3:3 122:6 124:11 17 39:5 18 91:15,19 135:15 19 8:11 36:1 94:7,9 101:16 101:19 1968 27:25 1974 27:6 28:3 1976 8:20 24:4 1980 8:11,12,15 8:17,25 27:12 1980s 34:14 1983 27:12 19a 82:25 83:2 1:30 78:22 1a 49:1 50:13 51:13,17,19 58:12 59:6,8,20 59:24 103:22 104:9 106:23 110:21 111:5,20 111:24 112:4,5 112:10 119:8,24 121:2 122:1,3,8 122:10,16 123:7 123:11 124:5,6 124:8,10 1b 49:1 50:13 112:4,11 122:16 123:11	1c 49:1 122:16 123:11 1d 122:1,13,20 123:17 124:4 1e 123:17 1f 122:24 2 2 1:16 3:9 32:10 35:10 48:13,14 52:5,9,11 57:6,6 58:19 62:11 64:5,13,16 65:19 69:22 70:8 71:25 72:25 73:6,24 114:3,21 118:4 121:3,7,12 132:12 137:12 147:6,7,9 149:14,21 2.0 35:8 20 61:14 124:21 124:22 200 115:14 117:22 118:13 2010 31:23 32:10,14 2015 24:8 202 115:18 2020 17:9 20:5 2022 17:9 2025 1:16 4:3 155:7,18 156:19	2025-00349 4:16 19:4 155:12 2025-00350 4:16 155:13 2025-00351 4:16 155:13 2028 155:23 204 115:25 205 7:8 206 116:1 208 116:8,14 21 89:25 115:13 135:15 210 117:4 149:16 212 117:10 215 148:1 149:16 22 45:18 144:4,6 220 148:1 149:17 25 8:8 77:8 85:24 28 124:17,19,25 2877 7:8 29 128:5 137:24 138:1 2:30 113:4 2:32 113:7 2:40 113:4 2:43 113:10 2nd 4:3 155:7
---	--	--	--

3	48 3:8,9 46:1 480206 155:22 49 69:24,25 70:8 70:16 71:5,14 71:19 4:0 154:3 4:06 1:17 154:4 154:11	6	84 60:12 85 61:19 63:2 130:16,17,18 131:4 138:20 86 60:19 63:8 79:23 132:14 136:2 137:8,10 137:11,13,16 138:25 139:12 141:2,6,15 87 63:17 133:24 134:1,6,11,14 134:23 136:4,15 137:3 138:3 140:24,25 89109 7:9
3 3:10 35:8,10 64:14 65:1,20 73:1 75:4 77:3 78:10 87:23,24 153:12 3,000 26:17 3.1 35:9 30 146:20 31 115:13 32 123:25 3200 2:3 32221 155:21 156:22 33301 2:8 34 88:10 349 104:1 349074 18:18 35 29:2 350 45:16 36 77:10 3:34 142:8,14 3:40 142:8 3:47 142:17	5 5 3:3 76:1,1,3,4 76:4 99:5 135:6 135:6,7,10,11 142:3,4 50 16:11 52:9,12 51 52:24 53:1 54:13 55:9 56:2 56:6 57:6,6,8 58:19,24 515 2:8 55 71:19 57 70:17 72:25 72:25 58 64:14,16 66:21,22 67:7 59 69:17,21 70:11,14 71:16 71:17 74:3,5 5:45 142:11 5th 155:18 156:19	60 65:1 60 69:17,22 70:14 609 2:3 68 44:4 68,000 37:2 6800 37:2 6809 37:2 69 28:1 691-0260 2:9 7 7 82:25 83:2,3,8 94:7,8 101:16 713 2:4 73 19:3,5 145:1 145:6,16 146:20 75 147:4,5,5,6 147:16 148:5 751-2368 2:4 77 19:5 77002 2:3 78 3:10 8 8 36:6 62:11 134:1 135:15 142:6 8,954,600 3:9 80 17:1 8080 37:6 80s 24:4	9 18:19,21 19:6 56:14,15,17,25 56:25 57:16,16 57:21 58:15,19 59:1 62:1,3 81:11 90s 36:1 954 2:9 a a.m. 1:17 4:2 39:12,15 155:8 aatriallaw.com 2:4 abbreviation 99:22,25

abiding 78:12 ability 39:18 102:11 able 25:4 35:21 40:11 42:7 43:9 43:16,22 102:18 aboard 22:17 above 67:7 116:18 126:20 absorb 101:7 academic 27:2 27:10,17 29:5 accept 23:21 access 17:4 40:25 63:3 85:5 116:4 138:21 accessed 81:15 85:18 accesses 61:24 accommodate 30:12 100:4 accompanying 61:12 121:22 accordance 22:7 account 25:12 accuracy 40:12 accurate 43:1 49:2 72:4 111:19 accurately 84:14 achievement 27:10	acquired 12:14 action 67:1,3 69:9,11 74:10 74:12 116:17 133:8 156:16,17 actions 75:4,7 activities 25:2 27:18 36:8 37:17 activity 68:8,11 70:12 actual 11:4 17:4 29:16 66:10 90:25 122:17 128:24 135:18 139:3 144:22 actually 8:2,19 9:23 18:14,15 19:16 20:6 21:3 22:6 24:1,19,22 35:14,17 37:4 43:25 49:4 63:6 65:6 81:6 82:20 86:5,12 91:13 93:5 97:14 98:8 110:25 123:16 126:4 128:17 129:13 132:5 133:12 140:1,10 140:22 adapt 30:13 101:23 add 26:5 63:1 65:25 126:18	added 42:14 addition 35:17 68:6 84:11 127:4 additional 14:21 15:18 23:23 42:14 68:4 70:11 126:7 127:3 147:7 address 7:6,10 adds 135:11 adjourned 154:10 adl 24:5 administration 27:7 admit 58:17 adopting 122:2 122:21,22 ads 12:15 advanced 20:24 23:1 advice 11:20 affect 100:23 affiliations 4:23 affirm 5:9 ago 9:5 12:11 17:12,13 24:2,6 24:7 43:9 106:4 agree 55:8 58:25 69:16 74:16,18 83:25 90:15	agreed 42:13 agreement 5:5 agreements 18:10 38:3,3 ahead 6:2,20 49:20,20 50:6,6 150:25 151:8 152:2 air 22:5 al 4:14 alarm 31:9 alavi 2:2 algorithms 37:8 aligns 71:21 allowed 27:20 35:21 38:2 151:5 allowing 148:1 allows 70:11,12 alternative 42:8 44:16 alternatively 151:10 alternatives 55:4 amateur 20:24 22:22 23:1 amateurs 23:5 america 13:17 amount 13:21 31:13,14 amplified 60:24 anaipakos 2:2
---	--	--	--

analysis 16:2 45:24 125:12,13 126:12 animated 135:3 annotated 75:15 137:18 139:6 ansi 38:19 answer 11:14 17:22 40:11 43:22 45:2 54:6 54:14 55:8 56:5 60:9 69:15 85:22 101:3 119:11 122:9 140:13 answering 66:16 139:7 anticipates 121:23 anticipation 62:9 anytime 39:19 anyway 153:19 apartment 17:3 aperture 32:24 apologize 10:10 33:24 47:15 59:18 70:24 71:2 91:7 99:8,9 99:19 106:4 152:6 app 131:13 appeal 1:2	appear 53:10 appearances 2:1 4:23 appeared 155:8 appears 54:23 56:10 91:18 92:1 118:11 132:3 135:23 apples 99:20 103:13 application 29:11 44:21,23 applied 143:1 applies 74:16 apply 28:8 45:24 applying 14:20 73:20 appreciate 94:21 95:25 96:25 113:15 122:11 126:10 127:5 139:10 142:22 approval 14:20 approve 21:4,6 approximately 32:10 apps 11:3 architecture 10:6,16 37:20 60:18,20 61:8 144:25	architectures 9:20 area 9:3 11:22 29:23 79:2 107:17 110:9,13 110:23 144:17 areas 9:11,13 10:14 11:11 143:15 argue 58:16 arrow 60:25 78:7 105:1 106:20 141:8 arrows 63:9 art 29:23 35:25 41:10 42:9,18 43:8 44:6,17 116:14 125:7 arthur 8:1,5,15 8:19 24:3 asked 12:21 14:17 15:25 21:9 44:16,19 54:9,9 56:1 58:5 68:3 69:4 101:13 124:8 126:22 asking 10:11 15:14 45:10,12 46:10 47:22 53:23 65:14 75:23 107:5,19 109:12,14 118:9 120:18 129:14	135:24,24 136:1 143:21 aspect 9:16 43:9 aspects 41:18 42:21 43:15 73:14,22 119:17 125:19 126:21 assembly 36:25 37:10 assertive 54:3 asses 123:4 assessment 43:5 47:16 50:1 65:15 121:4 123:13 125:12 125:25 126:14 146:15 assignment 10:23 assist 47:19 associated 13:7 28:9 32:16 42:14 association 12:18 13:17 assumption 141:22 attach 21:9 attached 13:22 18:18 27:15 attempt 54:21 55:7,13 101:3 113:13
--	--	--	--

attempted 45:23 attempting 147:13 attend 35:24 attended 36:3 36:10 attention 64:2 103:20 attorney 2:5,10 156:14,16 audio 4:9 30:3 30:21 46:24 50:24 91:16,19 92:10 authorized 156:8 avalon 80:18 avellan 3:9,10 59:25 60:1,2,4,5 60:6,11,12,19 61:1,7,16 62:7 64:3,3 65:7,13 65:19 66:3,7,9 66:12 67:14,15 67:18,20 68:4 68:17,18,20,24 68:25 69:14,17 69:19,22,23 70:8,9,15 71:5 71:20,22 73:1,7 73:9,11,21,23 73:25 75:11,12 75:13 76:20,21 77:1,3,6,9 81:7	81:9 82:5,12 83:3 84:6,25 85:21,24 86:8 86:21 87:23 88:20 89:24 91:15 92:11,16 92:23 93:14 94:10,17,17 96:3,11,19 98:6 98:12,14,22,23 101:19 104:8,24 105:8 106:17,22 107:3,10 108:16 108:20 109:8,19 111:7 112:12 113:15 114:14 115:10 118:9,19 118:24 119:5,17 119:25 120:11 120:19,22 121:23 122:7,10 124:9 125:8,16 125:19 126:3,6 128:2,4,18,19 130:11 131:8,9 131:11 132:14 132:17 133:11 133:16,19,25 134:1,6,7,25 135:11 136:17 137:2 138:7 141:19,22 144:23 146:16 148:14	avellan's 65:6 88:18 139:16 award 15:18 aware 6:10 56:11 b b 30:7 bachelor's 27:23,24,25 44:7 back 18:14 31:23 34:21 36:19 39:14 40:12,17 46:2 46:21 47:25 50:5 51:7 55:22 57:5,13,15,15 57:16 59:18 61:10 67:16 73:25 78:21 81:4 84:24 85:11 88:23 89:4 91:23 92:20,25 94:10 94:15,18 100:5 103:3,22 105:4 107:8 108:17 109:22 112:8,14 113:9 119:12 136:4 137:11 138:15 140:7,20 141:2,5,5 142:16 149:9	151:14 152:10 backdrop 59:18 background 27:2 band 32:21,22 32:23 33:4 bandwidth 31:2 31:6,10,13,13 31:16,20,22,25 32:21 33:3,18 70:5 100:22,22 102:3 banks 15:4 bar 116:17 based 7:21 8:5 15:7 43:20 44:19,24 66:2 86:1 115:19 121:21 124:2 basically 10:5 14:14 43:10 60:12 63:21 67:15,18 73:11 81:11 87:8 96:21 104:22 110:16 basing 82:12 basis 10:22 bay 30:10 bbc 107:12 135:13 bear 19:8 48:3 55:17,17 56:24 59:7 105:21
--	---	--	---

113:25 128:8 bearing 49:16 beginning 46:1 48:23 67:6 123:6 begins 30:11 118:5 124:2,10 behalf 1:15 5:3 19:22 believe 32:17 34:6 54:14 61:11 71:6 72:4 72:23 74:15 82:19,24 84:21 88:19 91:11,15 105:5,14 106:9 106:18 117:16 belongs 76:8 best 6:17,20 100:18 143:12 153:4 better 33:25 100:14,14 114:9 114:10 beyond 126:20 150:1 bidder 15:15,20 bigger 42:24 144:12 billed 40:10 billing 40:13 binders 18:25 bit 12:17 27:16 31:17 37:11	39:21 42:24 59:16 63:2 75:21 114:23 117:1 119:16 138:13 139:11 143:20 144:11 147:1 black 128:9 bladder 142:12 blah 138:23,24 138:24 blue 60:25 63:12 79:5,10 83:16 85:11 86:12 88:8 103:24 106:6,19 106:24 108:23 109:24 110:9,23 137:17 144:17 147:18 board 1:2 25:22 126:22 body 36:12 bother 142:3 bottom 19:6 60:22 83:22 85:12 124:22 128:10 137:18 boulevard 2:8 box 14:8 37:23 79:5,10,14 148:12 boxes 13:9 14:9 37:3 61:6 67:2	69:10 74:11 146:1,8 148:10 148:20 149:17 breaching 18:9 break 6:14,15 39:1,2,18 75:21 78:13 102:20 112:22 142:4 breakdown 9:14 breaks 6:12 briefly 8:16 broad 16:13 18:3 47:14 94:24 broadcast 12:17 22:3,10 30:15 51:21 52:17 59:11,21 60:15 61:9,20,21 62:4 63:25 66:24 68:24 70:3,12 72:21 73:9,13 73:18,23 74:8 74:16,18 75:6 76:18 77:4,11 80:3,4 81:3 85:1 85:6,25 86:16 89:11 93:3 94:25 95:7,18 96:3 97:4 101:10 102:23 103:6,7,10 104:12 105:4	107:10,16 110:17 111:10 114:15 115:11 118:6 120:6 128:24 133:24 135:12 141:12 141:16,16 broadcasters 12:18 broadcasting 60:15 61:9 75:16 95:20 broadcasts 62:4 141:11 broader 69:21 71:15 broke 50:24 broken 49:1 browser 61:24 62:16 63:4,5,14 67:21,24 68:1,7 72:13 73:15 80:3,4 81:22 84:8,13,15,17 86:22,25 87:2,8 87:14,15 88:13 88:19,20,25 89:2,2,5,8,15,22 89:25 90:5,6,11 90:25,25 91:13 91:23 92:15,17 95:12,12,16 96:22 97:11,12 97:21,23 98:9
---	--	---	---

98:16 107:25 115:16,18,24,25 116:20 117:11 127:23 128:14 128:15,21,22 129:10,12,14,23 129:24 130:1,3 130:3,4,7,7,13 130:14,22 131:4 131:7,8,16,24 132:4,5 136:19 136:21 138:22 138:23 139:9 140:4,8 141:11 141:21 browsers 130:24 131:3 browsing 129:10 140:22 building 9:23 bunch 22:23 92:24 107:4 business 7:6,15 7:20,23 8:18,20 9:1 27:7 35:14 35:15 50:16 businesses 9:9	28:14,25 29:18 30:14,17 34:15 34:18 35:10,11 37:19,22,23 41:19 42:3 52:15,20 53:7 53:11 54:16,16 54:20,24 55:14 56:3,9,12,18,23 57:2,9,14,22 58:14 59:2 61:4 145:20,23 146:6 146:11,19,22,22 147:20 148:9,19 cablelabs 34:19 35:3 cache 79:15 85:10 86:2 91:1 108:15 112:1 116:2,25 148:18 cached 85:15 caching 147:12 147:18,19,22 148:3,6,7,23 149:11,16 150:2 call 22:16 23:12 24:18 36:2 77:4 77:8,10,10 80:19,19 84:13 96:11 150:21 called 5:14 12:19 21:24 22:22 26:13 31:21 32:24	34:15,21 35:1 37:19 38:16 45:17 61:6 73:7 89:15 101:13 104:21 145:13 146:18 calling 104:20 calls 17:19 146:18 149:24 cambridge 8:6 camera 4:6 canada 14:10 34:19 capabilities 28:17 74:19 120:12,19 capability 30:18 31:25 125:20 128:25 capacity 13:24 155:6 capture 68:21 134:9 135:8 136:7,8 captured 87:9 captures 67:8 135:4 136:16 capturing 134:2 136:10,20,24 137:4 car 102:8 card 33:1 career 16:24	carrying 106:7 case 1:7,9,11 4:16 17:16 20:10 30:14 33:20 62:9,10 67:20 85:10 86:10 102:15 107:7,15 146:16 146:17 147:24 148:2 155:12 cases 9:23,24,25 14:4,22 15:16 15:17,24 18:13 20:13 30:4,8 35:3 62:11 73:15 93:2 108:25 126:23 127:2 catalog 148:12 cause 49:8 95:15 110:20 causes 81:2,6 cell 11:25,25 30:9 102:1,1,2,7 102:9,15,21 cellular 28:25 center 116:4 certain 22:18 23:4 25:12 120:21 126:12 135:8 136:8 certificate 3:3,4 21:25 155:1 156:1
c			
c 32:22 38:19,19 38:22 cable 11:1,2,3 11:25 12:12,15 13:9 14:8 28:12			

certifications 27:19 certified 23:15 certify 22:6 23:13 155:7 156:8,13 cetera 67:2 69:10 74:11 chairman 24:24 challenge 54:23 62:7 challenged 48:24 chance 65:13 change 65:24 changes 16:3 116:22 channel 30:6,7 30:15 34:16 51:21 52:17 59:11,21 60:15 61:10 62:5 75:6 80:4 85:25 89:11 100:4,8 100:13 101:22 101:24 104:12 105:4 111:10 117:6 141:12,17 channels 74:24 100:2,19 103:16 characterization 42:13 characterize 62:24 67:14	chart 138:12 charter 12:16 charts 49:4 check 32:16 76:25 checking 18:15 117:22 checks 116:2 117:19 chief 14:7,11 chose 60:6,10 circa 27:24 circuit 9:12,13 9:15,18 12:5 14:14 15:8 16:7 circuits 9:20 17:5 citation 65:19 128:13 133:25 citations 94:7 121:21 122:21 122:22 124:2,5 124:9 126:17 127:1 cite 82:19 83:2,3 85:12 125:16 126:5 129:17 133:21 cited 94:16 127:2,16 citing 94:8 128:17 135:14 civil 6:4	claim 45:7,11,18 46:3,13,23 47:2 48:12,18 49:24 50:1 51:6,7,8 56:7,14,15,17 56:17,17,20,21 57:1,16,16,16 57:21 58:4,9,15 58:19 59:1,8 61:12,13,14 62:1,3,3 68:5,9 68:11 81:5 91:19 99:3,18 101:19 104:13 105:2 106:17 110:11 111:2,5 111:9,14,18 112:17 119:7 120:9,13,21 121:1,2,5,10,10 121:20 122:15 122:16 141:24 claims 41:14,25 46:7,15,15 47:19 48:22,24 54:23 55:11,12 62:7 68:10 73:21 77:20,24 99:15 119:7 121:11,23 148:22 clarify 103:25 class 20:24 22:12,13,13,14	22:15 classes 22:24 clear 9:17 48:20 55:1 58:3,11,23 61:18 89:21 90:23 91:12 96:8,10 111:20 118:18 138:20 140:15 141:3 147:9 clearly 6:18 119:8 click 26:23 116:17 client 10:18 14:6,18 15:14 19:23 21:8,8 63:6 clients 10:4 11:2 11:10,24 12:12 12:13 17:21 34:23 37:21 38:5 close 30:9 102:1 closest 116:3 cloud 42:3 60:21,24 63:11 82:22 83:15,16 83:17,17 85:11 86:12 87:4 89:9 90:7 93:12,15 97:17,19 107:9 108:1,18,18 111:1,7,15,16
---	---	--	---

112:1,3,8,11,14 112:19 116:5,6 132:17 137:14 137:17,20 138:4 138:9 145:8,8 145:12,17 146:4 147:24,24 clouds 63:4 club 38:10 cnn 81:12 93:16 107:12 134:9 135:13 code 7:9 36:19 37:4,15 38:10 38:14,17 43:4 44:24 coded 94:18 97:14 coding 37:1 collapse 22:15 collectively 77:15 column 52:5,9 52:11 57:6,6 58:19 64:5,13 64:14,16,25 65:1,19,20 69:22 70:8 71:25 72:25 73:1,6,24 75:4 77:3,6,7,10 81:11 85:24 87:23,24 89:24 113:22,23 114:1	114:2,17,18 115:10,13 134:1 135:6,7,10,11 135:15 150:17 combination 9:19 27:17 31:16 94:9 combinations 141:25 combine 126:24 combining 101:19 comcast 12:12 12:15 13:1,7 come 14:17 15:9 16:7 47:25 55:7 132:20 133:2 139:25 152:10 comes 26:4 140:3,16 comfort 6:14 39:1,2,18 75:21 78:13 142:4 coming 55:24 80:5,6,10,23 84:14 87:4 96:4 108:12 109:24 110:1 132:3,5 137:20 138:4,8 139:3,7 151:14 commands 95:14 commission 20:23 155:22	committees 25:21 committing 151:14 common 10:8 12:4 commonly 81:15 107:11 communicate 131:13 communicates 93:18 147:25 communicating 89:4 communication 61:20 74:24 94:23 97:3 100:2 117:6 130:3,8 145:17 communicatio... 9:11,12 11:24 12:4,5 20:23 23:2 28:4,6 30:6 32:7 33:2 36:14 37:9 82:21 83:17 88:25 145:7,9 companies 9:7 11:25 12:8,24 13:14 15:4,5,25 41:20 company 7:20 8:2,5,22 16:20	compare 125:21 compatible 94:3 97:25 complete 120:24 156:11 complex 10:4 component 10:21 75:12 components 16:4 147:17 149:21 comports 71:21 compressed 70:3 72:21 87:6 116:9,9,24 117:6,9,11 compresses 70:2 72:20 compression 31:15,21 comprising 59:9 compromised 102:12 computer 43:12 44:7,22 52:14 59:9 63:9 66:25 69:7 70:6 74:9 74:22,25 75:4 82:4 89:1,12 90:4 92:3,14 95:13,17 98:6,8 98:15 107:7 115:21,24 116:21 117:5,7
---	---	---	---

117:9,23 118:4 118:13 129:16 132:3,15 133:1 133:5 138:25 139:17,24 140:2 140:6,8,23 141:14,17 148:21 150:18 computers 61:22 63:3 76:19 87:7 88:12,22 89:3 93:4 129:2 138:21 concentration 28:3 concept 31:5 concepts 43:17 142:25 concerned 79:2 concerning 55:20 59:25 66:9 88:3 concur 83:24 conduct 50:16 conducted 4:5 4:17,18 conference 24:24 29:3,4 conferences 24:24 25:20 26:1 36:4 38:12 confidentiality 18:9	configured 129:25 conflate 103:11 conflated 29:25 conflict 71:7 72:25 conflictive 54:3 confused 25:10 118:15 150:8 connect 106:2 connected 92:15 98:16 133:5 156:16 connecting 87:14 connection 4:7 30:10,11 102:3 140:9,16 146:11 connections 129:18 connects 115:25 116:6 147:14 consider 9:6 11:12,18 42:8 43:3,20 consideration 30:5 considered 40:21 42:17 43:2 considers 24:19 consistent 65:22 67:13 68:13	consists 95:14 consortium 11:3 34:15,18 constitute 54:15 constructing 47:19 construction 45:7,12,19 46:4 46:13 47:3 50:2 55:7,24 58:4 constructions 58:8 construe 46:14 construing 46:7 46:23 47:2 consultant 10:13 35:2,7 consulting 7:21 8:18,20,21,22 9:1,4,16 10:18 29:10 consumer 7:23 11:22 25:23 26:10,14,18 28:22 29:3,4 37:3 contact 102:25 contains 73:12 147:19,19 content 41:19 41:19 42:3,4 51:20 52:15,19 53:2,7,9,16 54:19,22,25	55:7,9,10,13,24 56:2,4,6,8,9,12 56:18,22 57:1,8 57:13,17,22 58:5,13,24 59:1 59:10,20 63:13 63:25 67:19,21 67:23 73:16 75:12,13 76:6,8 76:18,19 77:15 77:19,24,25 79:6,12 80:1,7 80:11,16 81:17 85:10 86:10,13 87:10 88:23 89:8 90:7,17 91:25 92:4,10 92:12 93:11 95:15 97:18,19 103:2,3 104:7 104:10,10,15,19 105:8,10 106:5 106:7,21,25,25 107:8 108:14,22 109:23 110:4,5 111:1,9,21,22 112:9 126:19 128:22 132:2 133:17 138:22 139:7 140:18 141:9 146:8,14 146:17,23 148:6 148:7
--	--	--	--

context 49:13 59:24 continually 109:13 continue 4:9 23:12 58:22 152:1 continued 23:9 35:2 44:11 continues 104:13 135:9 141:7 continuing 23:13 24:14,18 24:22 25:13 36:2 63:8,17 65:19 146:7 continuous 23:7 continuously 63:20 134:2 135:4 136:16 contradict 68:15 contrast 57:5 contribute 26:3 contributions 38:4 control 27:21 63:24 103:2 controlled 31:7 controls 100:16 conventional 87:14 92:3,14 92:17 95:11,12	95:16,17 98:8,9 98:15,16 132:3 133:5 140:23 convergence 28:15 conversation 64:13 81:25 88:3 converting 87:10 128:23 converts 63:14 67:23,24 87:5 89:10 131:17 cooperate 6:25 coordinates 67:1 69:8 74:10 copies 18:24 19:1 127:6 copy 26:13 49:17 64:7,8 148:14,15 corp 8:16 corporation 7:13,25 8:4,10 8:13 9:3 correct 7:15,16 7:17 10:15 11:6 11:7 12:7 16:16 19:14,16 20:7 21:14,15 27:6 44:21 49:12 50:20 52:20 57:9,19 58:7 62:13,15,16	67:10 68:17 71:9 74:25 75:1 77:16 78:4 79:7 84:20,21 89:19 90:14 91:1,12 91:17 92:7,21 96:2 97:7 106:8 109:23 111:17 114:15 117:24 118:13,14 121:7 123:4,11,12,15 127:24 129:22 129:22 130:24 131:22,24 133:8 144:18 148:25 149:6,11 152:7 152:9,13,14 correctly 25:5 34:3 41:1 57:11 57:25 59:14 69:16 72:16,18 72:22,23 74:6 74:14 75:8 77:1 77:13 123:9 correlate 99:20 106:16 correspond 76:10,12 corresponding 111:21 148:11 148:13,16,20 corresponds 60:24 61:2	cost 16:1,8 counsel 4:22,25 5:6 17:23 18:2 18:25 38:25 39:7 45:7,22 46:3,17 47:5 50:7,17 66:5,17 72:9 75:20 76:2 124:21 126:21 127:6 151:2 152:21 153:8 156:14,16 count 71:14 counter 127:1 county 155:4 156:4 couple 13:14 36:21 37:1 52:1 85:20 86:14 132:17 course 25:15 courses 24:12 24:22 25:8 35:25,25 coursework 35:20 36:18 court 1:20 4:20 4:24 18:23 19:21 20:10 156:7 cover 73:13 91:20 124:24 covid 17:1,7,10
--	---	--	--

cox 12:16 34:18 35:3 create 74:20 102:4 created 31:19 68:6 136:19 creates 66:25 69:7 74:9 116:8 116:15 credit 33:1 criteria 41:22 42:14 crucial 109:8 cruise 22:18 ct 26:16 cto 14:12 ctsoc 26:14,14 26:16 currency 23:10 current 23:8 24:13 currently 6:7 7:12 8:10 20:19 cut 13:4 46:24 47:5,11 70:19 70:21 cuts 9:10 cv 13:21 18:18 18:19 20:18 26:20,22 27:14 34:6	d d 8:1,5,15,19 24:3 40:4 122:24 123:14 dash 20:5 data 28:6 30:3 30:22 31:1 32:1 32:1,8 66:12 70:2,3,4 72:20 72:21 116:4,11 116:13 117:4,6 117:9,11 date 1:16 27:6 40:5,10 dated 155:18 156:19 dates 20:3 32:16 daubert 20:16 day 153:12 154:1 155:7,18 156:19 days 40:18 dbvcc 117:7 deal 88:1 dealing 29:7 36:12 41:18 120:12 dealt 11:4 dec 40:20 december 20:2 40:17 decisions 41:3,7	declaration 3:12 6:6 19:1,4 19:5 20:2,8,9,12 26:21 27:15 32:18 39:24 40:17,21,23,25 41:3,5 46:10 49:5,16 50:12 54:21 55:6 60:8 60:11,20 61:11 61:18,19 62:23 62:25 65:21 66:1 67:14 68:14 69:21,24 71:22 73:13,19 75:15 78:7 79:24 83:2,4 94:11,16 101:2 101:5 104:25 105:18 106:20 109:11,16 118:17,25 119:13,13,20 120:2,8 121:14 122:17,20 123:2 123:19,23,25 124:1,3,13,18 126:1,19,20 127:8 128:5 137:23 138:1 139:12 143:24 144:6 145:1,21 146:7 149:15 150:1,21 154:6	declarations 13:22 16:23 20:7 43:24 45:15,21 48:23 109:4 121:19 138:18 define 53:1,5,24 56:12 defined 53:16 defines 53:20 defining 58:24 definitely 64:12 definition 29:22 52:19 54:15,15 55:9 56:4 57:12 58:5,18 definitions 42:8 44:17 47:18 degree 27:3,8,8 27:24,25 44:7 degrees 27:9,23 delay 28:18,18 30:4 103:16,17 delays 30:18 129:20 deliver 29:7 35:12 delivered 30:15 30:17 delivering 13:7 29:13 30:6 delivery 27:22 28:9,16,19,25 41:18 44:9
---	---	--	---

153:23 demonstrated 61:11 dep 40:19 department 14:19 depending 31:14 101:9 depends 4:6 20:8 deployed 16:14 deploying 13:25 deposed 5:21 18:23 20:13 deposition 1:14 4:4,13,18 5:22 19:19 40:19 41:4 50:16 109:17 152:24 154:3,10 156:10 describe 18:11 41:1,9 45:6 54:22 60:11 65:20 67:11 77:4 79:24 84:7 90:3 110:4 134:2 145:2 described 42:19 60:8 61:3 67:13 73:24 80:18 85:13,21,23 86:8 90:6 98:11 110:10 117:18 134:6	describes 61:4 66:11 69:23 81:9 85:8 111:6 115:10 133:11 describing 34:2 54:18 56:22 67:18 77:2 133:24 description 42:18,19 43:2,7 71:22 73:10 75:11 120:23 148:5 design 9:12,14 9:15,18,18,19 9:19,20,20 10:2 10:5,8 12:5 14:1 14:15,17,23 15:10,24 16:3,8 21:4,6,11 designate 84:12 designated 141:9 designations 119:25 120:13 120:18 122:7 designed 30:22 37:3 101:23 designs 9:25 15:24 16:5 17:6 36:22 desired 72:13 86:1 115:19 116:4,15	despite 100:18 detail 119:16 122:19 126:8 147:7 detailed 134:7 details 18:4 detects 135:5 136:22 deteriorate 30:12 determine 41:10 determines 115:19 develop 28:8 34:20 35:8 37:24 developed 14:24 28:12 34:25 38:1 developing 29:24 development 10:24 14:15 17:5,5 28:24 34:7,11 35:4 38:13 42:15 deviating 22:8 device 61:21 70:3 72:21 75:6 77:4,7,11 84:11 87:12 90:5,12 92:1 93:5 97:24 98:23 102:15 104:21 107:6,20	115:21 devices 38:21 43:11 61:5,6,10 63:16 64:1 67:25 68:2 80:21 81:4,14 84:9 87:11 92:12 96:20 102:25 107:13 128:24 131:18 139:8 146:9 devoted 16:22 dictionary 29:22 difference 98:13 different 10:7 11:2,5 12:14 16:13 21:16 22:2,21,24 25:2 28:17,17 35:22 36:4,11,14,21 37:1,13 38:5 41:15 49:1 51:23 53:20,24 56:10 59:13,23 62:6 73:14 75:23 85:20 86:14 88:2 90:19 95:10 97:22 98:3 100:2 101:22 107:4 108:19 116:11 118:21 118:22 120:11
---	--	--	---

127:13 132:18 136:14 140:1 141:21 144:25 145:1 differently 73:17 differs 44:5 digest 30:23 38:20 103:17 134:21 digested 140:3 digesting 90:7 90:10 digests 89:8 digital 13:6 direct 3:3 5:16 23:20 64:2 100:10 directed 71:17 141:17 directly 92:3,15 92:17 98:9,16 133:5,18 140:23 disagree 70:13 109:7 disclose 141:19 disclosed 18:16 19:18 88:20 118:9 141:10 discloses 84:25 91:15 98:22,23 105:8 107:4,10 114:14 131:9 133:16 134:25	136:17 145:7 disclosing 65:16 89:24 93:14 106:22 119:1 141:23 disclosure 94:4 126:4 130:11 discovered 42:2 discuss 59:25 81:10 discussed 41:17 106:6 120:5 discussion 49:25 66:8,13 69:3 72:6,8 display 63:15 89:16 135:3 displayed 68:1 75:2 84:17 87:7 89:16 displays 117:12 disqualified 20:14 distance 102:8 distinct 148:23 148:24 149:3,5 149:6,11,14 distinction 81:19 distinguish 84:1 distinguished 82:3 distribute 145:24	divulging 18:10 docsis 28:12,14 34:2,4,8,11,21 34:22 35:1,5,6,8 35:8,8,9,10,10 document 150:9 documents 19:2 doing 8:25 10:14,19 14:14 16:11 25:16 31:21 55:17 61:16 65:6 67:11 70:9 86:5 99:4 102:10 106:23 110:19 119:5 137:3 domain 115:19 dots 106:3 downloads 135:14 147:24 downstream 28:16 dozens 28:8 dr 1:5 2:12 4:15 5:2 155:11 draft 127:14 153:12,16 drive 30:11 102:8 driven 44:24 drives 37:15 drm 13:14,14 drolet 2:7,7 3:3 5:1,2,17,20	17:23,25 18:6 21:19 32:4,12 33:9,11,21 38:25 39:7,9,16 40:8 45:4 46:20 47:1,7,12,23 48:11,16 50:17 50:19 51:5,11 51:12 52:22 53:13,19,22 54:1 55:16 57:18,20 59:4 62:18 65:11 66:8,16,18 69:3 69:6 70:20,22 70:24 71:1 72:6 72:11 73:25 74:2 75:25 76:4 76:5 78:2,11,16 78:23 79:9 80:15 81:24 82:11,15 83:5 87:16 88:17 89:13 90:13,22 91:6 92:18 93:8 93:20 94:20 95:24 96:24 97:8 99:1,13,15 99:16 100:9 101:6 103:9 105:11,16,19 106:11,13,15 108:10 109:7,18 109:21 110:7
---	--	--	---

111:12 112:24 113:1,5,11,12 113:20,24 114:2 114:5,20 115:2 117:1,3,20,21 118:2 124:20,23 124:25 125:3,22 127:6,12,19,20 128:12 130:6,15 130:17,19,21 131:20 134:20 135:20 136:4,6 137:6,8,9,12,21 138:12,14 139:11,15 142:2 142:9,12,18 143:5,10,12,16 144:11,15,20 147:1,2 149:4,8 149:18 150:12 150:23 151:8,11 151:19,23 152:9 152:14 153:1,19 153:25 154:6 duly 5:14 dumb 88:12 89:14,17 94:4 98:24 dummy 66:4 81:20 93:22,22 96:2 97:5 129:3 129:7 132:11	e e 38:20 40:4 123:14 e.g. 66:25 67:2 69:8,9 74:9,11 earlier 6:16 28:12 34:1 58:3 67:13 73:24 103:22 106:6 107:23 113:14 117:18 120:5 144:18 early 36:1 earn 24:20 25:3 25:25 earned 25:17,21 27:11 easier 64:7 east 2:8 eastern 36:1 154:4 easy 49:23 50:14 51:5 105:20 educating 142:20 education 23:13 24:15,18,22 25:13,17 28:7 35:19 42:5 44:11 educational 36:2	edwin 1:5 2:12 4:15 155:11 effectively 8:23 14:12 effectuate 140:12 efficient 125:13 efforts 36:17 either 6:21 18:23 19:19 20:13 28:8 29:7 62:8 63:10,19 81:22 90:18 103:4 108:15 111:25 112:3,11 118:6 132:16,20 139:18 148:1 152:11,23,23 electric 15:4 electrical 27:5 27:24 44:21 electronic 26:12 26:16 electronics 7:23 9:8 11:22 25:23 26:10 29:3,4 element 51:13 58:12 59:6,20 77:21 82:25 83:2 91:15 94:7 94:9 101:16 103:22 104:6,6 104:9,18 106:23 110:21 111:20	111:24 112:4,10 112:17 118:22 119:8,24 121:4 121:9 122:1,3 122:20 123:7 124:4,10 elements 23:21 49:1,3 50:13,22 61:13,13 62:6 68:5 111:9 112:17 118:21 122:15,20 123:3 123:11,14 126:5 126:13 149:15 employed 7:12 employee 7:14 8:23 156:14,15 employer 7:25 encode 145:24 147:22 encompass 42:21 43:17 engaged 14:2 engagements 18:20 19:7 engineer 14:12 20:21,21 22:10 62:20 95:4 engineering 10:9 14:18 23:11 27:5,25 28:1 44:20,22 enjoy 102:11 140:21
--	---	---	--

entered 65:21 entertainment 11:22 12:7,10 12:16,23 13:3,8 13:18 entire 69:18 76:10 109:17 134:15,23 entirety 45:20 121:10 141:2 entitled 127:17 enunciate 6:17 equipment 22:5 equivalent 44:7 errata 3:4 especially 103:18 espn 135:14 esquire 2:2,7 essentially 10:1 43:12 et 4:14 67:2 69:10 74:11 european 13:13 event 100:15 events 60:1 eventually 13:9 evidence 83:8 exactly 69:14 133:4 exam 23:19,22 24:1 examination 3:3 5:16 58:12	examinations 23:2,3 example 13:6 37:18 52:14 53:6 56:6 101:25 133:13 145:15 146:10 examples 53:12 53:15 54:19 58:25 except 113:21 exclude 43:6 excluded 20:15 excluding 10:20 exclusively 35:7 40:13 excuse 122:21 executed 104:9 exercise 49:8 exhibit 3:7,8,9 3:10,12 48:13 48:14,15 78:8 78:10 79:1 99:9 135:6,10,15 154:8,9 exhibits 3:6 81:18 105:12 123:22 exist 129:15 137:15 existing 15:6 16:1 exists 58:18 61:4 95:11	expedite 153:13 154:1 expedited 153:16,24 expensive 16:4 experience 11:15 16:13 42:6 43:3 44:8 44:12,20,20 100:18 102:6 140:21 expert 18:20 19:7 20:10,12 20:15 expertise 9:3,10 11:10,16,19 12:2 16:15 35:18 43:20 127:4 expires 155:23 explain 21:21 29:20 62:20,21 79:15 97:9 121:1 128:15 132:8 144:21 147:5 explained 89:7 90:23 101:20 132:9 explaining 46:21 142:21 explanations 121:22	explicit 58:8,14 explicitly 135:11 extended 37:6 external 110:19 extra 23:1 extreme 14:5,17 31:12
			f
			facility 144:16 145:19,22 146:6 146:21 fact 37:18 69:22 100:18 121:19 132:4 fair 6:22 8:18 13:21 16:17 24:8 65:16 109:14 fairly 11:21 26:12 31:13 familiar 29:9 37:5 38:15 48:9 familiarity 42:19 fantastic 153:25 far 9:4 10:18 16:19 31:25 32:7,8,8 46:14 109:5 136:25 fast 47:16,24 favor 134:10

fcc 20:25 21:13 21:21,24 22:7 22:11,20,21 23:2,6,9 features 14:1 67:9 68:21 february 155:23 federal 19:21 20:10,22 federation 13:11,12 feed 148:7 feeding 138:5 feeds 63:20 135:14 fetched 111:25 fetching 108:15 fi 28:25 fiber 146:12 fiberoptics 15:9 field 9:6 10:11 35:18 figure 3:10 60:18,23,25 61:2,5,7 63:10 63:22 64:1 67:16 75:14,15 75:19 76:12,20 76:21 77:4,5,23 78:7 79:1 80:20 82:2 83:13,14 85:6 87:17 88:5 90:2 96:6 106:19 107:17	107:24 110:21 111:15 113:15 114:3,21 115:7 115:9 117:23 118:4,10 120:16 120:17,17 121:3 121:7,12 128:3 128:4,19 132:1 132:12 133:6 137:18 139:1,6 139:16 143:7,12 144:7 145:9 146:2 147:6,7,9 147:10,15 148:9 149:14,21 150:8 150:14 figures 128:1 143:6,20 150:8 file 66:25 69:7 74:9,20,22,25 75:2 116:15,16 116:18,20,24 117:4,8,12 filed 40:17 127:13 files 68:7 91:16 147:20,23 final 153:13 financially 156:17 find 82:5 83:19 88:9 137:22,23 fine 6:24 142:7 143:7 152:17	153:14 finish 152:1 finished 14:19 firewall 147:11 firm 4:21 firmware 29:15 first 5:14,22 7:4 22:13,14,15 46:7 48:18 51:14,18 52:10 52:12,12 66:21 68:20 72:12 73:1 74:5 83:23 85:17 86:21 88:4 91:22 115:14,14 117:18,22 137:15 143:20 flash 116:13 florida 1:21 2:8 155:3,7,22 156:3,7 flow 84:24 108:22 fluctuate 100:23 101:11 fluent 36:25 focus 49:11 64:12 68:18 focused 123:14 follow 89:22 91:8 127:9 followed 41:9	follows 5:15 force 109:15 foregoing 156:9 156:10 forget 23:12 forgive 98:18 forgot 44:14 form 17:19 21:18 32:3,11 40:7 44:25 46:19 47:20 52:21 53:3,25 55:15 58:21 62:17 63:15 65:9 66:6,15 67:23,24 69:2 72:5 73:3 77:18 79:8 81:23 82:10,14,18 86:24 87:5,11 87:20 88:15 89:6,20 90:16 91:4 92:9,22 93:10,25 95:8 96:17 97:6,13 97:22 98:20 100:25 101:21 103:8 106:10,12 108:7 109:25 111:3 117:25 125:15 130:5,10 131:14 134:18 135:19 136:13 140:1 141:21
--	---	---	--

144:19 149:1,7 149:12 150:2 151:17 formal 44:11 format 111:23 116:9,10,24 147:20 formatted 133:3 formed 8:3,16 forming 7:24 fort 2:8 forth 28:5 50:5 59:18 forward 47:24 49:22 120:3 123:14 forwarding 47:16 found 116:3 four 17:13 19:7 fox 13:10 fpr 1:19 155:21 156:6,22 frame 19:25 59:19 fresh 151:7 152:3 front 42:12 87:18 150:9 frozen 46:25 full 7:2 52:12,12 69:18 74:5 133:25	fully 73:4 function 60:17 61:9 62:5 77:20 129:10 149:5 functional 16:15 functionalities 16:14 115:11 functionality 60:13 66:23 68:23 70:11 71:17 74:7 77:25 79:4,6,20 87:2 88:21 106:7 110:25 111:7 116:19 128:22,25 129:14 functions 22:11 36:24 37:10 75:11 148:17 funding 14:21 further 18:4 30:11 54:22 56:7,25 57:12 58:19 134:7,25 136:17 138:23 156:13	gateway 62:5 63:5,6,7,12,14 66:24 69:7 70:1 72:14,19 74:8 75:5,6 76:8 79:15,24 85:9 86:2 89:23 90:1 93:19 105:6 110:14 115:25 116:1,5,21,25 116:25 117:12 127:23,24 128:14,16,19 129:1,13,16,23 129:25 131:5,10 132:6 134:2 135:3,7 136:8 136:16,19,23 137:4 138:5 139:8 140:8,18 140:19 141:4,7 148:18 gathering 81:12 81:14 general 11:9 20:23 21:24 22:11,16,25 32:19 71:15 generally 9:6,11 25:2 29:9 30:2 42:13 70:9 71:20 94:2 101:3	generated 80:7 81:17 107:16 110:20 generation 35:5 37:20,23 generically 67:20 getting 35:18 86:5 109:22 give 5:10 43:23 53:15 64:6,15 88:9 99:4,4,11 100:17 102:5 121:14 123:19 given 46:2 50:13 giving 6:9 52:19 155:9 glitch 71:13 go 4:10 6:2,20 12:25 14:21 15:8 25:14 27:2 32:8,16 36:19 46:8,13,21 48:11,22 49:20 49:20,22 50:6,6 51:7,11,25 52:1 52:4,9 55:22 57:5,7,13,15,15 57:16 61:23 64:5,14,19 67:16 73:25 79:3 83:4 85:11 86:11 87:22 94:15,18 99:15
	g		
	gain 25:7 27:20 game 39:23 gas 33:1		

103:22 108:21 112:11,14 113:6 113:21 114:4,20 114:20,21,22,25 115:4 119:23 123:1,7,8,23 124:7,20 125:4 126:5 130:17,17 136:4 137:11 138:12,23,25 141:2,5,5,13 143:24 144:5,13 145:3 149:9 150:25 151:8,11 152:2,21 154:3 god 5:11 godfrey 2:13 4:19 gods 6:25 goes 89:17 92:25 118:24 136:22 138:11 138:15 148:6 going 6:4,11,12 6:13 17:18 18:14 19:15 39:11,12 40:12 48:11 49:3 50:5 51:24,25 52:7 58:16,17,17 59:16,18 62:22 64:2 66:5 70:17 71:4 72:3 74:5 75:3,20 78:18	82:8 83:10 87:22 92:16 93:3 96:20,22 97:10,17,19 101:10 103:22 107:7 108:17 109:1,18 112:7 112:8,21 113:13 113:14,21 123:13 126:23 133:23 134:7 140:18,24 142:2 142:13 143:23 151:13,25 152:10 153:7 good 4:1 5:1,18 6:23 30:10 39:4 39:6,7,8,9 102:2 102:6 113:1,3 124:16 142:5 144:8 152:19 goodness 24:2 google 26:23 90:9 93:16 gotcha 130:20 132:19 138:10 government 21:8 governors 25:22 graph 88:5 graphical 67:8 68:21 89:18 91:2 116:10 131:22	graphically 89:16 great 78:15,24 142:1 153:20 green 61:7 63:9 64:1 80:22 ground 62:9 82:25 83:2,3,8 91:20 94:7,8 101:16 123:17 123:25 124:2 grounds 62:11 82:20 126:5 group 1:4 4:14 155:10 groups 25:1 guess 5:25 13:17 17:9 20:4 21:20 26:9,21 80:21 84:4 88:3 97:2 123:18 125:12 145:13,20 148:24 guidance 46:17 46:18 guys 50:9 152:22 h h 101:13 halfway 105:5 hand 5:8 84:11 107:24 113:22 113:24 114:19	114:22,24 115:9 117:2,2,20 handy 50:3 87:20 happen 50:2 84:12 happened 44:2 happening 65:7 80:25 82:20 104:8 108:14 110:2,12,22 138:16 happens 81:8 84:10,10 85:3 85:19 102:1 137:1,2 happy 121:8 hard 9:22 18:24 18:25 19:13 26:13 49:17 64:7,7 hardware 36:22 43:11 147:16 149:21 html 37:15 38:15 head 61:4 76:13 151:7 hear 6:23 47:8 50:25 70:22 91:25 95:2 118:7 149:2 heard 4:8 45:1,9 47:21 55:5
--	---	--	---

71:13 127:15 heavily 11:18,21 heavy 31:1 held 22:14 help 5:11 15:15 60:5 62:12 85:16 119:21 126:22 helped 39:24 helpful 48:22,25 49:4,7,15,25 50:22 119:3,12 120:1,3,25 121:16 122:3,9 122:23 123:1 144:8 helping 36:9 hernandez 1:5 2:12 4:15 5:2 51:10 80:13 99:14 108:8 113:18,23 114:1 128:10 130:18 143:3,8,11,14 150:5 155:12 hesitate 102:20 hey 112:21 hh 155:22 hi 5:1,19 high 30:19 31:11,11,13 32:21,21 33:3 37:12 41:12 70:4 79:23 87:6	100:13 102:2,4 102:5 129:18 higher 100:7 highest 27:3,9 highlight 3:11 highlighted 72:2 76:7 77:14 77:22 78:1,5 88:8 103:24 106:19 147:18 hired 10:13 34:14,20 37:24 hiring 10:15 hl 103:15 hls 94:13,18 95:19 98:1,3 99:19,22 100:4 100:10,16 101:13,20,20 102:3,14,14,23 102:24 103:6,10 103:15 hold 17:18 20:19,22 22:20 51:6,8 home 7:10,18 35:12 146:12 honest 6:9 hopefully 6:24 87:23 hour 75:21 112:22 hours 40:5,9 151:25	house 14:24 houston 2:3 html 116:13 htp 82:16 htt 99:21 http 82:23 83:9 83:18 87:5 89:9 90:8,10 93:9,13 93:17 94:5,24 94:25 95:6,10 95:20,21,22,23 97:3,4,12,17,20 97:23 98:17 99:21,22,25 101:10,13 128:22 133:3 141:18,20,23,24 human 30:23	ieee 25:19,22 26:10,17 28:22 29:3 36:7 ifpi 13:12 ignorance 10:11 98:18 image 67:8 74:24 75:2 87:11 90:18,19 91:3 100:14 116:12 images 62:15,15 63:19,20 66:3 68:6,21 70:1 72:19 89:10 90:11,14,19,21 91:14,18,19 92:7,8 97:13 108:2 131:22 134:3 135:4 136:17,18,20,24 137:4 138:16 imagine 10:13 29:14 30:25 imaging 73:16 87:8 immediately 124:4 impairments 103:16 implemented 52:14 59:9 implied 45:13
		i	
		icon 77:5 identical 125:18 identification 48:14,15 78:10 111:8 154:9 155:16 identified 42:4 75:14 76:24 104:25 131:8,25 146:11 identifies 67:3 69:10 74:12 identify 46:6 131:4 150:1	

important 144:2	78:6 106:20	117:10 127:3	147:13
improving	126:17 129:12	132:18,20 134:8	insofar 91:11
28:23	indicates 34:7	135:1,2,5,8,9	instance 14:6
include 12:12	90:9	136:9 148:2,20	35:23 44:22
42:17 43:15	indifferent 98:7	informs 11:19	86:4 91:2
76:9 116:10,13	individual	infrastructure	instances 14:16
116:16	37:21 49:3	14:2 29:17 32:8	20:11,12 85:2
included 20:3	67:25	61:1 63:23	110:1 112:12
28:15,17 34:19	individually	67:19,22 75:14	126:16
78:1 125:20	35:3	76:8,17 77:22	institute 13:12
144:6	indulging 78:12	79:11 80:10	institution 41:2
includes 51:22	150:24	81:1,17 82:22	41:7
59:12,22 73:22	industries 9:2	83:15 84:16	instruct 17:22
91:16 104:14	11:17,23 12:3,8	85:4,11 86:11	instruction
147:18 149:22	13:5	87:3,10 88:24	43:12
including 11:3	industry 11:2	89:2 92:5 93:12	instructions
71:5 73:23	11:13,15,18	93:19 97:18,20	45:6 46:2
76:16 105:5	12:12 13:15,16	104:10,25 105:5	110:12
inclusive 126:4	17:25 24:25	106:18,21 107:8	integrated 16:6
incoming 38:20	27:20 28:21	108:14 110:4,6	integration 16:6
inconsistent	36:8 37:19,22	110:13 112:15	intel 37:6
126:6	information	133:6 144:22	intelligent 98:23
incorporate	7:22 9:8 11:22	148:13,16	intended 120:23
15:11	17:20 31:7 33:1	ingested 138:5	intent 68:14,16
incorporated	36:13 47:2	initial 15:23	interact 54:4
37:8	61:20 80:1	23:10 34:13	interacting
incorrectly 55:4	81:12 83:15	inner 68:8,10	90:25
index 3:1,6	85:2,9,25 86:6,8	70:12	interaction
indicate 92:23	87:3 93:2,3,4	input 10:9 37:22	107:25 111:15
119:8 122:21	96:20 97:19	inputs 43:13	112:10,18
131:3	98:5 103:3	inside 81:1,17	interactions
indicated 26:19	104:12 107:11	85:3 104:9	111:6
60:25 61:7	107:12 111:25	108:14 110:3,12	interacts 108:1
63:11,12 76:16	112:2 116:3,11	110:20,23 147:8	108:1

interested 34:24 156:17 internal 92:14 107:16,17 110:9 internally 80:8 internals 147:13 international 13:11 29:4 internet 4:6 6:25 13:2 27:21 28:2,11 35:12 44:9 60:21 61:24 63:4,11 67:22 73:16 82:22 83:15,16 83:16,17 85:11 86:11 87:4,14 89:9 90:7 91:1 92:4,15,17 93:1 93:12,14 95:13 97:17,19 98:10 98:17 107:9 108:17,18 111:6 111:15 112:1,3 112:8,11,14,18 128:23 132:16 133:6 137:13,17 137:20 138:4,9 138:22 139:18 140:1,3,17,18 141:22 145:10 145:11,12,17 146:3,3 147:25	interp 109:7 interpretation 109:8,19 118:19 120:8 123:3 136:3 interpreted 97:21 interpreting 90:11,21 interprets 131:16 intrinsic 46:6 47:17 intro 125:5 investigations 16:23 involve 55:24 86:18 involved 11:2 12:2,9,25 15:23 25:1,16 27:18 28:4,23 29:2 35:2 36:9 38:12 82:16 involvement 34:10,13 35:19 involves 100:5 119:5 120:11 involving 18:4 ip 12:1 15:9 ipr 4:16,16,16 19:4,19 20:9 44:3,3 45:16 104:1 155:12	ipr's 20:5 ipr2025-00350 1:9 ipr2025-00351 1:11 ipr2025-349 1:7 iprs 40:6,10 issue 60:14 141:24 issued 21:24 22:20 it'd 49:25 it'll 6:24,24 26:24 50:22 64:14 100:13,14 100:23 107:9 152:17 itc 19:21 item 129:1 items 51:23 59:13,23 75:16 104:14 111:22 128:20 132:1	job 58:16 joined 8:19 journal 26:2,11 journals 26:10 jump 17:18 120:2
			k
			keep 23:7 24:12 74:21 109:18 140:24 142:2 keeping 18:3 kilobyte 33:13 33:13 kilobytes 33:7 kind 9:21 12:3 13:18 15:21,23 16:14 25:7 27:23 29:24,25 31:12 34:2 47:14,15,15 50:8 81:5 103:12 125:13 132:13 141:3 142:25 kinds 77:23 knew 127:9 know 6:7,14,15 12:8 13:1 14:20 15:21 16:10 19:20 20:1,1,5 20:17 21:5 24:16 25:14 26:20 29:21
		j	
		j 1:19 jack 7:5 jade 155:21 156:6,22 java 37:16 116:13 javascript 37:16 38:15	

39:21 42:3 43:21 44:20,23 45:25 48:9 55:6 65:23 68:13 71:24 74:6 87:19 88:1 89:22,24 93:23 103:21 105:18 106:2 119:7,11 119:18,20,21 125:21 127:17 133:25 140:13 142:20 143:17 143:18 148:23 149:23 153:10 knowledge 27:19 41:23 82:12 known 116:14 155:15	48:12 49:12,24 56:8 58:20 99:3 106:17 115:17 128:18 laptop 66:4 large 1:21 15:3 93:4 las 2:8 7:8 17:3 38:10 lately 26:7 latency 79:14,15 129:20 lauderdale 2:8 law 23:23 layer 28:15 lcr 1:19 155:21 156:6,22 lead 24:25 leadership 25:24 leave 57:13 lee 2:13 4:19 105:12 left 8:14 24:5 78:25 107:24 109:22 114:22 114:24 117:2,2 117:20,23 legacy 15:7 legal 45:6,11,17 45:18,20 46:3 letters 50:13 level 37:10,12 41:10,12 42:5	79:23 121:18 levels 16:6 28:18 36:21 license 20:23,24 21:13,21,21,25 22:12,14,16,20 23:9,14,24 24:16,16,21 26:4 38:3 licensed 20:21 24:7 licenses 20:18 21:16,23 23:6 23:11 light 87:24 likelihood 100:12 likely 106:3 limit 55:13 limitations 32:8 32:9 111:18 141:24 limited 17:6 20:15 38:7 54:23 56:8,12 57:12 58:13,19 73:21 limiting 53:9,10 54:16 line 3:2 52:12 52:24 53:1 54:10,13,13,13 54:14,19 55:9 56:2,6 57:6,6,6	57:8 58:19,24 64:14,16 65:1 66:21,22 67:7 69:21,24,25 70:8,11,14 71:16,17,19,24 73:6,6,6 74:3 77:8 85:24 88:10 89:25 115:13 135:6,7 135:10,11 lines 69:17 72:25 135:15 link 1:19 4:21 155:21 156:6,22 links 67:2 69:9 74:11 87:6 96:13,14,22 97:10 lipoff 1:14 3:2 3:12 4:13 5:6,8 5:13,19 7:5 18:7 19:12 20:6 36:16 39:3,17 48:4,17 50:11 50:22 51:14 52:7,11,23 54:2 54:12 55:20 56:15 57:10 59:5,8 60:5 62:19 64:11 65:14 66:9,14 66:19 68:12 69:14 70:16
I			
I 2:7 labeled 51:19 96:7 laboratory 17:4 lacey 1:19 4:21 39:9 48:13 105:13 153:9 155:21 156:6,22 laid 118:21 132:13 language 37:10 38:16,19,22			

71:2 78:25 79:10 82:12 83:21 85:16 88:2 91:8 99:8 99:17 102:22 105:25 106:16 113:1,13 114:6 114:25 115:3 117:15 127:5,7 127:22 142:19 143:18 150:23 155:8 156:10 lipoff's 152:17 154:6 list 18:20 25:11 48:24 listed 40:22 117:23 121:23 listen 25:18 litigation 10:20 10:23 16:19,22 17:8,15,16 18:5 18:19 litigations 17:21 little 8:1,5,15,19 19:13 24:3 27:16 39:1,21 42:24 59:16 63:2 75:21 114:10,23 117:1 138:13 139:11 143:20 144:11 147:1	live 63:20 83:9 94:5,14 95:20 99:21,22,25 100:17 101:10 101:14 135:13 living 17:2 23:18 llc 2:7 local 25:6 locally 115:20 located 67:21 76:14 84:15 89:2,23 90:1 105:7 129:1 location 7:15 67:1,4 69:8,11 74:10,13 locations 15:3 116:17 log 22:6 logic 36:24 long 6:25 8:7,9 24:2 102:8,20 longer 17:3 24:17 look 14:22 16:1 43:24 48:25 49:10,15,24 51:24 56:14 59:24 60:22 64:3,7 65:14 67:16 71:24 77:1 82:7 83:4 83:12,22 84:6	84:23 88:3,4 92:12 94:15,19 98:4,12 113:15 115:8 119:4 121:14 123:2,19 124:17 127:21 130:16 137:8 142:24 143:5,13 143:19,21 149:25 150:2 looked 20:4 41:5,14 68:19 143:19 looking 18:18 19:3 26:19 27:6 37:21 40:12 44:1,4,13 45:15 48:17 51:8 54:10 56:16,21 69:23 75:18 77:6,9 82:24 85:3,21 86:9 88:6 90:2 94:10 96:10,11 105:17 107:24 109:9 111:5 118:8,22 119:7 125:18 144:24 146:20 150:16 looks 81:21 85:18 87:13 133:3 lost 14:11	lot 10:14 16:13 29:14 64:7 88:1 109:12 119:4 150:10 lots 120:10 louder 6:21 low 16:6 31:10 129:20 lower 100:7 m machine 132:4 made 15:19 19:22 110:5,8 120:13 122:7 magazine 26:2 26:11,17 magna 14:8 mails 38:20 main 2:3 73:12 73:20 maintain 30:19 maintained 87:2 maintaining 22:4 major 10:23 make 6:19 26:5 41:1 42:24 45:8 51:5 55:1,5 57:18 58:3 72:18 76:25 77:1 81:2 85:22 92:25 93:5,7 100:21 105:20
---	---	--	--

109:18 111:13 111:19 120:4,18 121:15 127:18 129:21 144:12 150:9 151:23 makes 141:3 making 5:20 80:23 110:13 120:4 121:6 127:9 130:23 manage 37:24 management 13:7 14:20,21 16:15 manufacturing 15:25 maps 69:8 74:9 83:22 116:15 marathon 6:13 marked 48:14 48:15 78:10 154:9 massachusetts 8:6 20:22 23:17 23:18,25 24:10 24:14 master 27:4,7 master's 27:9 match 67:17 material 11:4 materials 40:20 40:22 matter 4:13 18:11 19:21	41:15,24 42:1 151:17 155:10 matters 20:6 matthews 94:9 94:13 101:18 maximum 12:19 mba 27:7,11 mcbride 2:2 5:3 5:3 17:18 18:2 21:18 32:3,11 33:8,10,15 39:8 39:10 40:1,7 44:25 46:19 47:5,20 50:7,18 50:21 51:2 52:21 53:3,18 53:25 55:15 58:21 62:17 65:9 66:5,15 69:2 72:5,8 73:3 75:20 76:3 77:18 78:12,15 79:8 81:23 82:10,14,18 86:24 88:15 89:6,20 90:16 91:4 92:9,22 93:10,25 95:8 96:17 97:6 98:20 100:25 103:8 106:10,12 108:7 109:1,10 109:25 111:3 112:21,25 113:2	117:25 124:21 124:24 125:15 127:11,15 130:5 130:10 131:14 134:18 135:19 136:13 142:6,10 144:19 149:1,7 149:12 151:2,9 151:12,20 152:5 152:10,15,20,25 153:2,7,14,15 153:17 mcns 34:15,16 mean 51:3 54:2 72:1 88:14 96:18 109:3,11 109:15 119:23 139:20 149:13 151:5,9,16,17 meandering 109:2,12 means 54:18 88:25 98:21 148:19 meant 90:4 98:7 126:3 mechanical 62:20 95:4 mechanism 25:15 mechanisms 25:25 98:11 media 4:12 9:8 10:25 11:21	12:7,9,21,22 28:6 29:20,24 30:2,4,12,16,20 31:1,19 32:2 51:20,21,22 52:16,17 59:10 59:11,12,21,21 59:22 60:24 62:4 63:10 80:4 81:3,3,7 102:4,9 104:13,23 105:3 105:4 107:1,23 108:2,5,6,11,13 110:11,15,22 111:10 112:7,8 128:23 131:17 131:21,25 132:15,22,24,25 136:2,2,7,11,25 137:1,10,14,16 137:19 138:7 139:17,18,25 140:15 141:12 141:12,16,17 143:15 144:21 145:12,12 146:3 146:13 147:20 147:23 149:23 mediamplify 145:12 146:4 mediaplug 61:2 76:12,14 144:17 144:22 145:2,7 145:11,16,18
--	--	--	--

146:2,4,14,21 147:8,14,17 148:5 149:16,22 150:18 mediaplugged 146:19 medication 6:8 meet 26:6 44:12 member 25:19 25:22 members 26:17 memory 65:6 115:20 mention 34:2 75:10,10 143:24 mentioned 6:16 9:5,18 10:15,16 11:8 12:6,11 15:2 16:18 17:14 21:13 28:12 29:15,18 29:19 34:1 43:8 49:25 71:8 72:17 83:21 99:19 100:22 101:8 107:23 108:23 114:14 116:18 120:5 136:18 mentioning 79:3 merely 58:25 messages 38:21 method 52:14 56:17 57:1,21	59:9 118:8,11 methodology 66:11 methods 5:7 michael 2:2 5:3 microcomputers 36:23 microprocess... 36:23 middle 7:4 15:1 61:1 63:23 milestones 15:20 military 33:3 mind 152:3 minimize 50:5 minimum 24:20 26:6 123:11 minute 39:2 64:6,22 78:13 121:15 142:3,4 143:21 minutes 76:1,3 76:4,4 78:16,17 112:24 113:3 142:6,10 misunderstood 101:11 152:6 mix 13:20 16:9 24:19 25:1 mixing 98:2,2 99:20 mixture 9:21	mmcbride 2:4 modalities 10:7 85:20,23 86:7 86:15 92:24 107:4 108:19 120:11,19 132:18 modality 93:6 107:5,18 108:21 112:12 120:23 120:24 mode 66:24 73:8,9,13,14,18 73:22,23 85:1,2 85:8 86:16 93:3 107:10,16 108:16 109:23 110:17,18 115:24 117:17 117:18 118:6,6 120:6,6 133:24 135:12 modem 13:9 28:12 30:17 35:10 modems 11:1 modes 68:24,25 73:7,23 74:8,17 74:19 114:14 115:11 modify 65:23 molding 147:20 moment 9:5 12:11 18:14	43:8,23 47:11 64:15 150:11 mondragon 1:5 2:12 4:15 51:10 80:13 99:14 108:8 113:18,23 114:1 128:10 130:18 143:3,8 143:11,14 150:5 155:12 monitor 15:19 monthly 26:16 months 14:13 106:4 morning 4:1 5:1 motion 20:16 30:21 motivations 126:24 motorola 37:2 mouth 55:3 move 114:12 moved 23:19 24:6 movies 135:14 moving 75:22 120:3 mpeg 28:15 35:22 94:17 147:14 148:8,8 148:11 mpls 111:16 msee 28:3
---	---	---	--

msl 144:16 mso 76:13 145:19,19,22 146:18,21,22 mstv 12:19 multicast 146:12 147:12 147:12,25 148:1 148:6 149:10,10 149:16,17 multicaster 148:24 multimedia 27:21 28:2,5,10 28:19 29:1,8,13 29:25 30:20 31:5 34:16,16 36:12 41:19 42:2,20 44:8,24 51:22 59:13,23 60:15 61:9 63:25 75:16 76:19 91:19 92:10 100:1,11 100:15,17 101:21,22,23 102:17 103:2,3 103:17 104:14 111:21 multiple 16:6 55:10 86:2 multiplex 145:24	multiplexer 145:25 146:5 multitude 61:21 music 1:4 13:13 13:15 30:3 135:14 155:11 mux 61:2 76:13 147:14 148:8,8 148:12	134:21,21 151:17 152:16 153:21,22,23 needed 39:17 needs 38:20 103:1,1,2 104:22 negotiate 102:16 negotiating 100:6 net 147:11 netflix 90:9 93:16 network 13:8 28:10 37:20 63:11 70:2 72:20 75:8 77:21 116:22 132:16 137:14 139:19 networks 34:17 36:15 80:2 141:10 nevada 7:9 20:21 23:17,20 23:23,24 24:6,7 24:11,15,19 25:6,11 never 20:16 21:11,11 22:18 126:25 127:1 new 14:14 15:5 15:10 16:7	news 135:12 newsletter 26:13 newspaper 135:13 ngna 37:20 noncredit 35:25 normal 129:10 normally 30:22 north 36:1 notary 1:20 155:6,22 156:7 note 4:4 121:17 121:25 notes 156:12 notice 47:7 noticed 42:10 novice 22:25 nuances 101:24 number 4:12 22:2 24:20 25:12 37:13 40:9 52:9 56:25 56:25 57:21 76:23 78:3 83:11 93:4 124:25 132:9 numbers 82:1 155:12 numeral 51:14 51:18 76:22
	n		
	n 38:19 name 4:19 5:19 7:2,4,4,5 8:3 115:20 names 144:25 narrow 32:23 33:4 120:23 national 12:18 nature 7:19 necessarily 77:21 81:13 97:12 107:14,19 119:6,19 133:2 134:3 necessary 42:17 need 6:12,14,15 21:20,20 22:11 24:20 30:5 32:5 39:19 42:6 83:12 98:22 102:25 112:14 114:20 115:5 127:17 128:8		

o	obtained 22:2	59:16 60:1,3	140:24,25 141:6
o'clock 152:17	obtaining	61:15 62:22	142:2,11 143:11
oath 3:3 155:1,9	111:21	64:4,9,10,18,22	143:17 144:3,8
object 44:25	obtains 63:13	64:24 65:2,12	144:9,10,10,21
50:8 62:17 65:9	141:9	66:23 69:12	146:13,13,25,25
66:6 69:2 73:3	obviousness	70:22 71:13,13	146:25 147:4
77:18 89:6 92:9	62:10	71:13 72:1 74:3	151:9,19,20
100:25 106:10	occasionally	74:4,5,21 75:22	152:15,20 153:7
109:1,13 130:10	100:9	76:2,6,20 79:4	154:2
131:14	occurring 96:4	79:13,14 80:12	olas 2:8
objection 17:19	offered 33:17	83:10 86:21	old 148:7
17:19 21:18	127:1	87:17,22,25	once 15:18
32:3,11 33:8,10	offering 111:22	88:1,10 89:14	64:20
33:15 40:7	office 1:1 7:18	96:12,15 97:9	ones 18:22
46:19 47:20	officer 14:7	99:3,10,12,14	19:17 134:8
52:21 53:3,18	oh 24:2 49:22	103:5,14 104:5	137:15
53:25 58:21	51:11 65:2	104:19 105:16	ongoing 18:13
66:15 71:11	76:24 84:8	105:23,24,24	online 26:11,22
72:5 79:8 81:23	89:14 96:12	109:20 113:6	37:14
82:10,14,18	99:12,13,24	114:4,13,22	open 43:24 44:3
86:24 88:15	113:20 130:19	117:4 118:3,5	64:12
90:16 91:4	137:24	120:6 121:13	operate 73:17
92:22 93:10,25	okay 5:5,24	123:20,21	operating 22:6
93:25 95:8 97:6	7:24 8:25 17:9	124:15,17,19	operation
98:20 103:8	19:11,15 20:14	125:2,9,10	114:15 134:5
106:12 109:25	24:10 27:16	127:24 128:6,13	operations 87:1
111:3 117:25	33:24,24 35:13	129:24 130:2,7	operator 22:17
134:18 135:19	35:16 38:25	130:16,19,19,20	52:16,20 53:8
136:13 144:19	39:2,2,19,20	130:22 132:7	54:20 55:14,14
149:1,7,12	45:5 46:9 47:4,8	133:22 134:17	56:3,13,18,19
obtain 80:1	48:2,7 49:14,18	134:23 135:16	56:23,23 57:2,3
148:2	51:19,24 52:2,6	136:5 137:13	57:9,14,22,23
	52:10,14,18,23	138:2,6,11	59:2,3 63:24
	53:15 54:2	139:14,16,17,19	105:7 145:20,23

146:19,22 147:21 operator's 146:6 operators 34:15 35:11 41:20 42:3 53:11 146:22 opine 122:1,17 126:22 opined 118:17 123:16 130:12 opining 130:12 opinion 14:23 65:8 121:1,22 122:5 opinions 32:17 33:18 109:5 119:22 126:25 opportunities 36:3 opposed 56:20 137:15 148:19 opposite 31:12 100:13 option 115:15 optionally 116:23 options 94:6 oranges 99:20 103:13 order 15:20 22:10 23:24 24:9,21 37:16	38:1 42:6 43:22 45:22 76:18 103:17 119:11 122:9 127:8 153:10 ordinarily 85:14 ordinary 41:10 41:22 42:9,18 43:8,19 44:6,17 organization 12:19 organizations 12:14 15:3 16:16 25:7 37:13 organize 36:9 organizers 25:20 originally 23:18 35:6 originate 13:3 outbreakers 14:9 output 68:1 80:3 84:14 96:21 97:11,22 outputs 43:14 outputting 90:11 97:13 outside 14:22 34:24 80:9 81:8 overall 9:19 10:6 15:9 16:3	overview 125:7 126:3,9 132:14 own 7:24 9:1 13:3,7,8 14:18 14:19,24 38:19 38:21,21 79:18 107:6 127:3 144:25 owner 1:6,15 2:10,12 41:6 43:18 owner's 41:2 42:10,22 <p style="text-align: center;">p</p> p.e. 2:7 p.m. 1:17 78:19 78:22 113:7,10 142:17 154:4,11 pacific 142:14 142:17 packet 28:6 30:18 packets 28:10 page 3:2,7 18:19 18:21 19:3,5,6,7 19:14 45:18 64:20 67:3 69:10 70:1 72:14,19 74:12 114:24 115:15 115:19,20 116:5 116:9,12,18,22 116:23 117:13	118:12 122:6 123:25 124:11 124:17,19,21,22 124:24,25 125:1 128:5 135:4,6,9 136:9,17,18,20 136:24 137:24 137:24 138:1 144:4,4,6 page's 116:10 pages 37:15 63:19 87:9 125:4 129:19 134:25 135:23 156:11 paid 15:21 paper 9:24 15:10 17:6 19:20 26:1 123:20,20 150:10 papers 24:23 29:5,6 121:15 paradise 7:8 paragraph 44:4 45:18 46:1,1 60:12,19 61:19 63:2,8,17 79:23 88:4 121:21 124:3 130:16 131:4 132:14 133:24 134:6,14 134:15,23 136:2 136:15 137:3,16
--	--	---	---

137:19 138:3,20 139:12 141:2,6 141:15 145:1,6 145:16 146:20 147:5,6,16 148:5 paraphrase 63:2,18 paraphrasing 42:11 91:7 part 17:21 18:5 22:21 28:14 41:16 43:6 63:9 67:22 73:1 79:4 149:2 participants 4:7 34:20 38:2,7 participate 25:18 36:5 participation 25:6 38:3 particular 15:15 56:20 60:14 70:7 101:24 107:18 110:14 121:2 126:8 133:10 137:14 138:8 parties 1:18 4:10,22 15:12 34:25 156:14,15 partnership 8:3 8:16	party 14:23 pass 23:3 151:17,22 passage 66:7 127:16 passed 151:15 passing 151:4 151:21 152:12 past 35:18 50:9 patent 1:1,2,6,8 1:10,12,15 2:7 2:10,12 3:8,9,9 18:19 19:5 41:2 41:6 42:10,22 43:18 44:3 45:16 46:8,15 48:1,3,9,18 49:11,12 51:6,8 51:9 53:10 60:21 61:3,5 66:10 68:10 75:18 76:11,11 76:13 82:24 91:16 94:6 99:4 99:13,13 101:15 118:20 121:21 126:11,14 142:24 143:4,5 143:22 144:1,24 145:6,18 146:17 149:14 154:7 patent's 113:21 patents 41:11 41:13,16 42:2,7	60:14,16 125:14 125:17 126:16 pathway 76:10 patience 97:1 113:16 137:7 142:19 patiently 142:21 pattern 135:5 136:22 pc 98:19,21 pdf 19:3,6 124:22 pe 21:2,4,6,9 23:14,15,25 pending 99:6 people 10:15 people's 9:25 percent 16:25 17:1 percentage 9:14 16:21 perfect 39:17 42:25 43:1 100:19 114:4 142:9 perform 36:23 37:9 performance 15:20 performing 22:10 45:24 105:1 106:22 129:9,11 148:17	performs 61:8 period 14:13 16:10 19:25 24:17 25:3 28:20 40:2 57:23 68:22 69:11 72:14 74:25 135:1,9 periodically 86:1 116:20 person 14:14 41:22 42:9,18 43:7,19 44:6,11 44:17 personally 155:8,15 petition 19:2 50:12 61:12 119:14 122:2,4 122:7,22 123:6 123:8 124:1,3,6 124:10,11 125:24 126:18 126:20 127:2,4 127:11,14 petition's 122:14 123:10 126:12 petitioners 1:4 2:5 5:4 petitions 127:7 127:13 phillips 46:14 46:17
--	---	---	--

phone 11:25 30:9 102:1,1,7 102:15 phonetic 14:9 phono 13:12 phonographic 13:12 php 38:16 physical 149:6 physically 25:14 physics 28:1 pick 39:5 113:4 142:8,11 picture 30:20 pictures 30:3,21 30:21,21 place 1:18 4:10 32:20 33:3,5 55:12 56:11 101:14 132:21 places 52:1 53:9 55:10,12 56:10 89:25 113:21 150:17 plan 151:3,3 platform 63:12 79:24 141:8 play 46:2 140:10,11 playback 51:21 52:17 59:11,21 139:19,20,21,22 139:23 140:7,10 140:12 141:7	played 140:20 playing 61:10 105:4 140:7 150:10 please 4:4 5:8 6:7,14,19,20 7:2 7:3 18:11 20:17 20:18 51:2,14 52:13 73:25 88:11 99:5 131:3 134:10,11 134:14,16,22 143:10 145:5 pllc 2:2 plurality 51:22 59:13,22 74:23 104:14 plus 91:19,19 point 30:7 67:3 69:11 74:12 116:4 131:3 pointed 70:10 pointing 73:5 79:25 84:5 120:21 points 12:7 24:20,21 25:3,7 25:12,17,21,25 67:1 69:9 73:12 73:20 74:10 116:18 polarity 74:23 poor 100:8	popular 85:13 134:8 portals 38:5 portion 38:14 48:18 68:3 70:10 71:16,16 71:19 84:12 portions 126:6 144:1 position 122:14 123:10 126:12 positions 116:16 possible 100:18 105:11 112:22 possibly 102:4,5 power 15:4 34:6 powerful 129:16 practical 92:1 practice 8:4,14 8:24 29:10 pre 28:2 preceding 53:5 predominantly 35:9,10 prefaces 70:18 prefer 151:5,18 preferably 117:8 preliminary 41:2,6 premises 105:7 prepare 39:22 39:24 40:19	prepared 20:2 41:5 153:8,18 preparing 41:3 41:4 present 2:11 4:22 8:10,17 24:23 presentation 31:17 presented 29:6 president 28:21 28:21 36:8 pretend 95:5 pretty 30:22 34:12 61:18 119:8 140:14 prevent 6:9 previous 7:25 17:15 55:2 58:11 125:4 previously 16:18 41:17 56:16 59:7 65:21,24 85:9 86:9 111:25 112:13 114:14 136:18 primary 62:8 principles 45:11 45:17,20 print 26:11 printed 26:20 prior 7:24 125:7
--	--	---	---

private 8:4,14 8:24 63:4,11 111:16 132:16 137:13 139:19 privileged 17:20 prob 16:24 probably 10:22 16:10,24,25 18:21 36:6 problem 47:10 83:20 100:10 problems 13:25 proceed 4:25 proceedings 3:1 21:8 process 6:3 41:9 80:2 118:5 120:1 processed 139:9 processes 16:15 63:12 141:10 processing 27:21 31:14,18 44:8 processor 37:6 processors 37:1 37:7 procure 15:5 procurement 10:3,15 15:2,22 procuring 10:4 produce 153:12 produced 36:6 136:21 155:16	product 16:1,3 17:4,5 36:22 productive 122:12 products 37:9 professional 8:22 20:20,21 23:11 profiles 86:2 program 36:23 programmed 37:15 38:22 programming 37:11 38:18 145:23 programs 37:12 116:13 progress 15:19 project 14:19 37:19,24 projects 13:4 14:3 28:8 prompt 116:17 properly 95:2 proposal 10:6 15:11,13 prosecution 2:7 protocol 27:21 70:5 71:8 82:17 93:9,13,17,21 94:24,25 95:6 95:10,10,22 96:1 97:3 100:1 100:16 102:23	102:24 103:6,7 103:10,15 141:18 protocols 9:20 10:24 11:5 28:4 28:9,24 29:7,11 29:16 36:13 42:20 43:10,10 43:11 44:9 94:23 prototypes 9:24 provide 7:21 9:4 10:1,25 11:10 11:19 30:18 37:13,22 38:9 43:22 58:5,8 83:8 95:15 100:14 104:23 110:14 112:7 129:18 provided 13:9 15:17 18:25 20:11,12 25:18 32:17 45:21 46:17 127:3 provider 13:2,2 13:13 51:20 52:15,19 53:2,9 53:16 54:17,19 54:22,24,25 55:8,9,10,13,25 56:2,4,7,8,9,10 56:12,18,22 57:1,8,14,17,22	58:5,10,13,14 58:25 59:1,10 59:20 67:19,21 75:12,13 76:6,9 76:15,18 77:15 77:19,24,25 79:6,12 80:8,11 80:17 104:7,11 104:15,19 105:9 105:10 106:6,7 106:21,25 108:22 109:23 111:10 112:9 146:14,17,24 provider's 81:17 82:22 85:10 86:10 87:10 88:24 92:5 93:12 97:18,20 104:10 107:8 108:14 110:4 providers 12:1 12:1 41:19 42:4 53:7 provides 8:22 60:9 63:3 102:14 132:17 146:8 providing 9:1 10:1,8 14:8 53:6 58:25 60:13,17 63:25 77:20 105:3 125:6
--	--	---	---

138:21 pst 1:17 154:11 155:8 ptab 19:21 ptab's 41:7 public 1:20 19:22 155:6,22 156:7 publications 26:24,25 publicly 19:18 publish 26:12 published 19:20 26:2,7,9 pull 26:24 48:12 60:1 64:3 110:5 112:15 143:2,3 148:2 pulled 47:19 pulling 60:4 99:17 108:18 112:2 pure 36:2 purely 13:17 purpose 22:19 38:23 109:3,17 155:9 purposes 92:1 120:12 push 86:2 140:10,11 pushed 26:17 86:6 93:4 107:6	put 19:10 43:18 48:3 55:2 57:18 79:18 puzzled 109:11 q qualify 25:2 quality 4:5,6 10:25 30:19 31:11 100:4,7,7 100:13,22,23 101:9 102:5,17 quantify 9:22 question 18:3 18:17 21:12 33:17 34:9 44:14 45:2,3 46:12 47:6,14 47:14 60:9 65:18 66:16 69:4,16 73:5 85:22 95:1 99:6 99:18 104:17 108:9,11 118:7 119:11 125:11 126:15 139:7 140:14 149:3,20 151:24 question's 118:15 questioning 109:2 questions 6:4 10:12 21:2	49:21 72:9 109:4,13 122:9 143:21 151:4 152:2,11 quick 137:8 142:4 quickly 50:8 150:16 quite 12:17 37:11 102:19 119:16,16 quoted 148:4 quoting 128:17 131:10 145:18 146:20,20 r radio 20:23,24 21:25 22:4,11 22:16,22,22 23:5 145:23 radiofrequenc... 23:4 radiofrequency 22:8 raise 5:8 ramp 100:14 randomly 44:2 range 12:25 33:7,14 rapidly 129:19 rate 102:13 rates 32:9	rather 49:5 read 19:9 41:7 41:12,24,25 42:7 45:22,25 51:13,17 52:10 56:15 57:1,11 57:25 59:1,6,14 64:18,20,24 65:5 66:20,21 67:6,10 68:3,19 68:20 69:13,16 70:8,16,17 71:4 71:10,14 72:3 72:16,17,22,23 74:5,6,14 75:8 88:11 101:19 115:1,3 117:14 134:10,13,15,19 134:22,23 141:3 141:6,13 reading 66:2 72:18 74:21 105:1 106:23 118:10 145:21 readings 22:6 reads 56:25 57:10,16,21,24 61:13 62:1 72:12,15 118:20 ready 64:19 115:4 real 70:6 137:8 142:4
--	--	--	--

really 65:25 109:11 119:21 reason 22:2 49:10 83:20 recall 18:15 120:14 121:6,11 125:17 131:21 149:23 receive 52:15 80:1 103:1,17 127:13 140:17 145:22 received 45:7 70:5 89:1 110:8 receiver 100:3,5 104:19,21 receives 80:17 117:11 141:4,9 receiving 51:19 54:24 59:9 62:15 70:5 91:23,24 92:7 92:10 104:6,15 104:16,18,20 106:5,24,25 108:24 recent 36:6 recently 5:24 14:6 26:9 40:18 recess 39:13 78:20 113:8 142:15 reciprocity 23:20	recognize 58:23 102:3 recognizes 115:15 recommend 17:22 124:8 recommendati... 37:25 record 4:2,11,23 7:3 39:12,14 58:4,23 65:21 78:18,21 113:7 113:9 142:14,17 152:22 154:3,5 156:11 recorded 4:9 recording 4:5,9 13:16 records 40:13 recruit 36:9 red 63:12 75:14 76:16 78:7 81:2 81:18 84:16 85:4 86:11 87:2 93:12 105:1 106:20 141:8 reduce 16:8 31:20,22 102:17 102:17 reduction 16:2 refer 43:23 50:15 58:2 62:22 77:7,11 96:12 119:12,14	138:17 146:23 150:19 reference 50:1,3 50:21 60:6 62:8 62:9,10 76:22 76:22 78:3 82:1 83:11 101:15,18 113:17 118:24 120:3 121:6 132:8 referenced 53:19 119:20 132:13 references 19:2 59:17 referencing 50:11 135:10 142:23 referred 137:19 referring 19:12 58:12 60:7 66:6 101:1,2,4,17 118:15,16 121:12 128:1 135:6 138:4 139:16 140:7 141:14 147:6 refers 138:20 refreshed 65:5 regard 29:5 151:3 regarded 54:16 regarding 45:7	registered 20:20 regularly 26:12 36:5 reject 69:17 relate 86:15 related 19:1 relates 22:21 relative 44:12 68:4 156:13,15 relevant 42:6 68:9,9,11 reliable 30:7 reliance 126:13 relied 46:7 73:12,20 119:25 122:14 123:10 126:12 144:2 rely 65:13 111:14 125:24 relying 94:12,13 119:4,6,9,17 120:7,14,15,17 121:3 122:4,10 124:5 126:17 127:16 remember 24:18 47:18 82:3,6 84:1 94:10 129:3 132:10 150:4 remote 4:17 25:16 63:6 81:22 86:22 90:24 98:19,21
--	--	--	--

107:25 130:14 132:11 remotely 4:18 31:7 render 95:16 129:19 rendered 135:1 renders 116:7 renew 23:14,15 25:4 renewal 25:3,6 26:5,6 repeat 6:19,20 44:15 45:9 55:19 58:22 79:22 95:3 repeating 135:5 136:22 rephrase 6:21 32:5 47:6 replace 15:6 replacing 16:5 report 20:10,12 21:9 63:17 156:9 reported 1:19 reporter 1:20 3:4 4:20,24 156:1,7 reports 10:1 represen 80:22 represent 56:4 77:23 79:10 90:4 132:2	representation 43:18 69:18 89:18 91:3 132:25 133:1 representations 9:25 43:12 131:23 representative 18:22 19:24 133:17 represented 90:18 111:1 representing 4:19 5:2 116:12 represents 70:13,14 79:6 79:11 reproduce 60:19 75:7 reproduced 149:15 request 10:5 15:11,13 51:20 52:16 59:10 63:10,13 80:1,5 80:6,10 81:7,16 82:8,13,16,23 92:19,25 93:6,7 104:23 107:1,15 107:22 108:11 108:13,24 109:24 110:1,2 110:5,8,10,11 110:13,16,20,21	110:22 112:6,6 127:18 132:15 139:17 140:15 140:20 141:9 requested 86:13 107:21 116:2 134:3 141:11,16 requesting 59:20 102:9 107:2,14,22 108:5,6 112:13 139:18 requests 72:13 80:23 81:2 105:2 require 23:1,9 31:2 92:24 112:18 152:23 required 22:1,1 22:3,17 23:6 68:10 147:20 requirement 23:13 24:15 26:6 62:2 requirements 23:24 31:6 requires 31:12 resend 38:20 reserving 151:25 reshuffle 121:15 reside 88:21 145:19,22 146:21	resident 128:25 resides 63:6 88:23 127:23 128:14,16 129:23,24 131:5 131:9 residing 112:1 resignation 14:7 resolution 31:11 respect 4:15 18:17 31:25 32:13,18 37:12 45:11 54:4 56:22 58:13 63:22 65:18 66:10 82:1,21 94:23 95:6 101:15 120:24 121:1,9,17,19 121:20 122:9 124:1 125:7 134:1 139:5,5 139:22 respond 15:12 43:13 responded 15:12 responding 101:12 response 41:2 42:10,22 55:2 58:2 80:8 81:13 92:21
---	--	--	--

responses 15:15 41:6 responsibility 14:13 responsive 87:3 89:3 104:11,23 105:2 restate 47:6 restrictions 31:24 32:13 retain 66:23 68:23 74:7 retains 116:19 retrieve 83:14 110:2 retrieved 86:10 107:9 return 75:5 review 14:18,25 15:14,24 40:22 115:5 reviewed 29:5 33:19 71:6 reviewing 9:24 28:23 119:2 riaa 13:17 rich 10:25 28:6 29:19,24 30:20 30:25 32:1,2 right 4:1 5:8,19 6:8,11 16:19 19:10 20:19 22:7 23:4 33:13 39:11,23 44:23	48:8 50:1 52:18 57:7 62:19 64:6 66:2 67:10 71:23 75:18 77:13 81:20,22 83:24 84:3,11 88:4 94:21,24 101:9 104:3 105:22 106:17 107:1 108:23 113:13,22,24 114:3,3,6,19,21 115:6,9 117:22 119:2 123:9,24 124:13 127:21 129:6,21 130:2 131:12 132:12 133:7,9 137:22 137:25 138:19 139:1 142:13,16 142:23 143:17 146:9 147:3 149:10,22 150:9 150:10,23 151:19,20 rights 13:6 38:6 38:7 rl 2:7 rldpatents.com 2:9 road 7:8 rob 2:9 5:2,20 112:21 142:10 153:22	rob's 46:25 robert 2:7 robust 100:11 rogers 34:18 role 34:7 36:7 38:13 86:22 87:1 roman 51:13 rotary 38:10 rotate 143:9 rough 153:3,12 153:16,19,25 rpr 1:19 155:21 156:6,22 rules 22:7,21 23:2 run 129:25 runs 88:13,25 rush 54:8	76:9,17,25 77:6 77:8,10 85:6 96:5 105:6,7 116:1 139:4 140:9 148:18 satellites 32:22 33:4,5 satisfied 111:24 112:2 satisfies 61:12 satisfy 112:4 save 78:8 saw 40:20,20 saying 44:11 50:25 51:4 104:22 121:20 124:2 128:21 129:2 151:24 says 19:6 26:22 54:24 56:17 68:18 76:13 85:24 114:3,21 114:23 127:22 128:13 129:17 130:13 131:10 131:10 132:15 136:7,16 141:3 147:22 scenario 86:20 98:19 science 27:5 44:7,22 scope 33:8,10 33:15 41:25
		s 7:13 8:13,16 32:24 38:19 satellite 31:24 32:7,9,14,19,25 33:2,12,19 41:20 52:16,20 53:7,11 54:17 54:20,24 55:14 56:3,9,13,19,23 57:2,9,14,23 58:14 59:2 61:25 62:1,2 67:20 73:17	

53:18 55:23 58:4,7 69:18 94:1 148:22 screen 19:10,14 42:24 48:4 49:2 49:5 57:18 72:2 77:22 78:1,6 84:12 87:12 88:7 89:18 95:16 98:7,13 98:14 103:21 105:12,24 110:3 110:24 113:14 114:7 115:5 120:16 126:2,7 127:21 129:13 137:12 140:21 scripting 38:16 scroll 74:1 116:17 117:1,20 130:20 139:11 144:11 147:1 se 95:18,21,23 search 26:23 55:18 searches 116:3 second 22:12,15 27:25 35:4 47:11 52:23 59:7 72:17 82:7 86:19 88:9 99:11 123:19 136:15	seconds 99:5 section 45:17 64:18,19 65:12 65:14 66:11,20 69:13 70:7,17 71:5,7,10,15 73:5 78:9 109:6 125:17 126:8 sections 68:19 71:5 120:22 125:25 securely 38:4 security 31:8 see 8:11 12:20 16:2 19:13 34:5 42:23,25 47:8 48:19,20 51:15 54:20 57:13 62:24 64:16,16 72:1,1 75:19 77:3,9 82:4 83:1 83:3,4,18 84:6 87:12,13 88:7 91:25 92:3,13 94:8,16 96:11 98:15 103:24 105:22,24 111:11,18 114:6 114:23 115:7,12 115:17,22 125:5 125:6 131:2 133:4,12,13,16 133:21 138:23 144:12,13	149:25 150:3,7 150:7,14 seeing 42:1 59:19 98:14 seeking 14:14 seems 16:14 109:5 129:22 seen 4:7,8 sees 92:12 98:6 132:25 segment 11:13 select 15:15 selectable 67:2 69:9 74:11 selected 115:16 selling 13:14 semicolon 51:14 51:18 59:14,23 semiconductor 11:23 send 15:13 38:21 81:3 100:6 103:2 104:11,13 sender 102:16 sending 32:25 36:13 68:6 90:5 90:21 91:17,18 94:17 98:4 100:1 101:20,25 102:12 108:2 sends 68:7 91:2 92:19 148:8	sense 6:19 senses 30:23 sensitive 28:18 30:5 sent 31:19 67:24 70:4 74:22 87:6 87:11 91:13 95:14 97:14,21 100:7 107:13,19 108:3 131:18 135:18 139:8 140:2,5 sentence 52:10 52:12 66:21 68:20 72:12 74:6 134:19 136:15 137:16 139:23 140:14 separate 11:15 23:22 78:8 153:5 separately 82:5 121:25 122:17 123:16 september 1:16 4:3 155:7,18 156:19 sequence 90:19 series 37:2,7 131:22 138:16 145:25 serve 24:23,24 server 38:16 61:21 70:1
---	---	--	---

72:14,19 75:5,6 76:14 79:15 89:23 115:25 116:2,5,8,15,21 116:25 117:12 129:1 131:6 135:3,7 136:8 136:16,20,23 137:5 139:8 148:6,7,18 150:4,18,20 servers 93:19 110:14 138:5 147:17 148:3 149:19,22,24 150:19,21 service 10:25 11:25 12:1,19 13:1,2 22:22 28:18 30:19 36:13 82:22 services 2:7 7:21 8:22 34:17 35:12 37:14 serving 90:10 set 13:9 14:8 37:3,23 61:6 99:18 121:18 145:25 146:8 148:9,20 150:18 sets 13:25 several 5:24,25 11:2,17 15:2 18:13 25:20	59:25 106:3 shaded 78:9 110:3,12,23 shared 18:5 127:7 sharp 102:19 shed 87:24 sheet 3:4 shifting 122:6 ship 22:17,18 short 150:25,25 shorter 19:25 40:2 show 60:18 78:25 83:6,7 87:18 119:19 120:15 121:7 147:13 149:15 149:17,21 showed 107:17 showing 48:8 78:9 93:15 115:5 147:8,9 shown 61:7 64:1 78:7 81:2,18 111:14,16 128:3 128:19 147:15 148:9 shows 77:5 79:1 83:8 90:3 118:4 139:2 145:9 146:2 shuffle 123:20	sic 74:23 111:20 111:24 112:4 side 11:24 12:17 12:21,22 13:18 15:22 27:4 38:16 49:17 105:22 107:24 113:22,24 114:19,22,24 115:9 117:2,2 117:20 146:5 sign 15:19 38:2 signal 102:10,12 116:12 signature 155:21 156:22 significant 31:2 129:19 silent 81:5 124:4 similar 60:20,22 60:23 61:8 simple 30:2,2 98:24 simplified 143:18 simply 55:8 56:6 single 72:13 77:21 116:11 sir 7:1 13:23 16:12,12 29:12 29:14 64:2,23 71:12 90:14 104:2 124:12	126:10 site 85:14 102:2 102:9,21 115:23 116:6,7 sites 98:10 135:12,12 sitting 98:12 size 22:18 skill 13:25 41:10 41:22 42:9,18 43:8,19 44:6,17 116:14 slow 100:11 103:4 106:4 slower 71:3 small 17:2 32:24 societies 35:19 society 25:23,24 26:15,18 28:22 software 42:15 42:15,21 43:11 43:16 63:5 127:23 128:14 128:15,25 129:23,24 141:11 solemnly 5:9 solve 13:25 somebody 11:4 41:23 42:6 150:5 somewhat 37:5 sorry 25:10 33:9 33:16,23,24
--	--	---	--

34:9 40:3 42:23 44:1,14 45:1 46:11,24 47:21 48:5,8 49:19,21 50:24 51:1,2 54:10 55:21 70:20 71:10,13 75:18 76:21,22 83:12 84:9 89:15 92:6 95:1 96:18 99:6 104:17 106:11 106:25 108:3 112:4 115:14 117:2 118:7,12 127:12 128:11 130:19,20 134:12 141:1 144:13 146:16 149:2,20 152:5 sort 22:8 109:2 sound 31:11 39:6 92:13 sounds 16:12 39:4 75:22 78:15 152:19 153:18 source 60:21 102:16 103:3 111:22 118:23 sources 46:6 116:11 speak 6:17 106:3 113:11	speaking 93:17 94:2 98:17 spec 55:3 special 131:12 specialized 11:12 specific 11:13 35:20 43:4 44:21 46:11 56:22 73:7 101:4 119:17 120:13 122:19 125:19 126:4 128:18 specifically 12:9 13:24 14:2 44:19 45:15 46:23 54:10 56:1 66:7 101:12,23 109:9 121:25 138:3 139:1 145:18 specification 41:13 47:17,18 51:25 52:1,11 52:18 53:1,6,16 53:20,23 55:3 55:11,12,18 56:10,11 58:24 65:12,15 66:10 68:18 74:17 83:23 87:23 117:15 118:10 119:1	specifications 11:5 28:13,15 speed 70:4 87:6 102:17 103:4 129:18 spent 40:1 62:23 split 113:14 spoke 142:25 144:17 spoken 25:25 142:24 spot 79:19 square 128:9 stab 18:3 stakeholders 7:22 9:6 stamp 21:4,6,9 standard 45:18 46:3 93:9 94:25 95:7,18 96:16 96:19 98:3 153:23,25 standards 24:25 28:21 34:8,21 34:22,25 35:1,5 35:11,22 36:8 44:12 46:14 standing 153:10 stands 26:14 34:16 start 36:19 55:22 64:13,14 114:2,20 115:13 121:20 122:1	123:5,6,25 124:17 143:20 started 8:2 122:13 132:12 starting 52:11 60:12 66:22,22 67:6 69:25 70:8 70:10 71:15,16 71:16,19 72:25 73:6 85:24 147:11 starts 118:11 124:4 133:8 state 1:21 4:22 7:2 35:25 155:3 155:6,22 156:3 156:7 stated 122:3 statement 8:18 16:17 55:19,20 72:4,24,24 131:5 states 1:1 23:16 23:17 56:2 station 22:4 30:10 stations 33:1 stay 6:24 staying 59:6 stenographer 5:5 70:19,21,23 153:11,15 154:8 stenographic 1:20 156:6,12
---	--	---	---

stenographica... 156:9	108:5,6,12,13 110:11,15,22	147:10 151:6	suite 2:3,8 34:25
step 115:14,14 115:18,25 116:1 116:8,14 117:4 117:10,22 118:8 118:13	112:7,8 128:24 131:18,21 132:22,24,25 135:18 136:11 136:25 137:1,10 137:19 139:17 140:15	sub 104:6,18 122:15 126:13 subchapter 7:13 subject 30:17 41:15,24 42:1 139:23	sum 70:13,14 summarized 69:24 73:19 summary 69:20 73:11 133:10 143:25
steps 43:13	streaming 28:16 28:19,25 30:14 30:16 35:22 63:20 99:21,23 100:1,17 101:10 101:14 135:2,13	subjects 36:12 subroutines 37:8 subscriber 145:25 146:9 subscribers 146:8	supply 37:22 support 10:3,21 10:23 15:2,18 15:22 16:22 17:8 37:13,16 38:1,9,19 126:21,23
stick 51:6 124:12	streams 96:5 131:25 132:15 136:2,2 137:14 137:16 138:7 139:3,18,25	subsequent 28:7 subsequently 12:13 substantially 70:6 substitute 42:5 substitution 16:4	supported 28:18 supports 62:3 supposed 153:11
stingray 1:4,4 4:14 155:10,11	street 2:3 strike 45:5 46:22 66:19 108:3,3,3	subsequent 28:7 subsequently 12:13 substantially 70:6 substitute 42:5 substitution 16:4	sure 24:16 26:5 33:16,23 41:1 45:2,8 50:18 55:5,21 57:19 58:3 72:18 73:4 76:3 77:1,1 83:20 85:22 89:21 90:14 94:17 96:18 98:21 99:12 100:21 101:1 106:13 109:19 111:13,19 112:24 119:15 120:4,4,25
stop 19:15 103:21	stringray 5:4 stuart 1:14 3:2 3:12 4:13 5:13 7:4 155:8 156:10	sufficient 25:3 41:23 suggest 58:18 69:20 71:4 73:10 suggesting 28:23 48:24 50:14,21 suggestion 48:21 50:2 suitable 63:15 135:12	
storage 115:21 147:19	studios 13:10 stuff 19:2 80:21 81:1,10,14 95:20 119:5 120:10 141:8		
store 116:24			
stored 85:3,5,9 85:14 86:10 108:16,17 112:13,16 115:20,23			
stores 140:19			
storing 137:4			
strange 109:12			
stream 51:20,22 52:17 59:11,12 59:21,22 63:10 81:3,4,7 83:9 94:5,14,18 95:20 100:6,11 100:15 102:4,11 104:13,23 105:3 107:2,23 108:2			

123:18 124:15 127:9 129:21 130:23 135:22 135:24 142:5 143:23 149:13 150:9,13 151:8 151:23 153:9 suzuki 83:4 swear 4:24 5:6,9 switch 15:8 59:16 99:3 142:23 147:11 switching 99:9 sworn 5:15 synchronized 74:24 116:23 117:10 synchronizes 85:25 system 15:5,6,7 15:10 29:17 31:8 34:2 61:20 61:25 80:18,24 89:16,17 91:1 92:11,16 96:19 115:15 116:23 134:6 148:9 systems 9:19 10:5 12:4 27:22 29:7 33:19 38:11 42:15	t t 32:24 table 19:7 20:4 tag 66:25 68:7 69:7 74:9,20,22 74:23 116:15,16 116:18,20,24 117:4,5,8,12 take 4:10 6:12 6:14 14:5 15:25 18:3 23:22 24:1 24:11,12 25:8 25:13,15 30:5 39:1,18 54:8,12 64:11 78:13 88:4 102:7 123:22 142:3 143:21 149:25 153:8 taken 75:4 takes 67:22 89:16 talk 10:17 17:15 23:5 27:16 30:25 39:21 48:1 49:3 50:3 64:20 65:4 86:17,19 100:9 102:16 124:8 139:2 147:3 talked 66:20 84:25 86:20 132:10	talking 31:1,3 31:23 32:1 33:13 50:9 71:20 92:3,4 95:9 98:9 100:5 104:1 112:5 133:18 136:11 136:14 137:3 140:22 talks 68:5 71:8 111:20 137:16 139:3 145:11,12 146:2,3,5 taught 118:9 tci 12:15 34:18 teach 36:18 teaches 66:9 68:17,25,25 69:19 70:15 71:20 133:19 teaching 61:16 65:16 88:18 104:24 111:14 111:17 119:1 teachings 101:18 team 14:24 34:24 technical 10:9 23:23 25:20,24 26:1 27:4,8 34:24 41:23 127:3	technician 22:25 technology 7:21 7:23 9:8,11 11:16,19,23 13:15 14:7 15:8 23:3 26:14,18 28:4,22 32:19 34:3 126:21 telecom 7:22 9:7 telephone 20:23 21:25 22:11,16 television 22:4 56:19,23 57:2,2 57:22,23 59:2,2 135:13 tell 19:14 20:18 32:13 34:10 52:4 55:4 61:15 79:5 88:18 98:13 103:4 123:24 telling 31:8 91:8 101:8 temperature 31:9 ten 19:24 24:7 term 29:20 58:9 150:3 terminal 66:4,4 67:25 88:13 89:17 93:23 94:4 96:2 97:5 97:15 98:24
--	---	--	---

terminals 32:25 37:3 62:14,15 81:20 129:4,5,7 132:11	114:25 121:13 124:23 127:5,19 132:7 134:24 135:16 137:7,7 139:10,13 142:1 142:19,20,20,22 150:22,23,24	26:19 28:11 29:21,24 33:17 34:15 40:11 41:12,17 42:11 42:12,15,16,20 43:1,1,17,21 44:1,5 45:9,14 45:23 47:5,21 47:25 50:7,7,8 50:11,14 53:5 54:18 55:23 60:8 61:17,17 62:20 65:17,20 65:20,22,24 67:12,12 76:24 77:15 79:25 81:10 83:18 84:14,25 85:13 89:7,24 93:17 94:12,17 95:9 96:6 98:2 101:14 105:10 109:2 119:3,12 121:10 122:2,8 122:8,23 123:16 123:17 124:12 124:13,16 133:13,23 135:22,23 136:14 139:1 140:14 141:3,15 146:16,18 148:4 148:22 152:5,5 153:17	thinking 6:4 41:21 62:23 third 14:23 22:12 35:4 83:23 thorough 142:21 thought 6:3 42:5 43:19 51:3 55:3 144:2 thread 12:4 three 13:4 14:13 17:12,13,13 83:22 147:17 149:15,17,19,22 154:1 time 1:17 4:2 5:20 6:18 7:16 12:16 16:22 19:25 21:3 22:14,23 23:14 24:2 26:4 28:20 30:8 31:18 34:18 35:4 40:1 40:16,24,24 54:8,12 62:23 64:11 70:6 78:14 81:10 85:17 86:21 91:22 95:3 105:12 115:5 122:12 124:14 135:2,10 152:18 152:24 154:4
terminology 131:15 150:20	thanks 142:12		
terms 29:23 77:11 120:21	that'd 120:3 124:16		
test 23:10,19	theory 9:12		
testified 5:15 18:23 21:7	thermostat 31:8		
testifying 19:22	thing 11:8 16:23 22:9 92:2 145:14		
testimony 5:9 6:9 20:13 155:10	things 10:14,18 11:9 12:25 13:20 16:9 22:2 23:8 24:19 25:11 26:3 29:14 31:1,2,21 36:18 38:6,8 50:15 59:25 68:4 77:23 80:25 88:2 95:10,19 98:3 103:12 119:5,18 120:20 136:15 137:2 145:1 152:1		
tethered 109:6			
texas 2:3			
text 6:16 67:2 69:9 74:11 139:6 150:15,19			
texts 139:2			
thank 5:20 10:10 13:19,23 13:23 21:1 27:1 27:13 30:24 35:16 36:16 38:24 39:17 41:8 46:5 50:17 58:1 59:5 67:5 68:12 78:11 96:9,15,25 99:2 100:20 102:22 103:5,5,19,19 112:20 114:10			
	think 9:5 11:14 12:11 13:21 16:17 18:2,21 20:3 24:15,16		

times 5:24 6:1 today 6:9 10:22 22:25 34:20 35:1,11 153:12 today's 152:24 154:3 together 11:3 29:25 103:12 told 35:20 123:9 tomorrow 127:9 151:1,10,13,14 151:22,25 152:11,12,16,23 153:20 took 14:12 23:18 54:21 155:9 top 13:9 14:8 35:20 37:3,23 61:6 75:3 80:22 114:23 125:1 141:15 145:25 146:8 148:9,20 total 31:17 40:9 touch 12:7 touched 44:18 towards 71:17 trademark 1:1 traffic 89:10 90:8 93:11 training 23:7,7 27:17 transcode 147:23	transcoded 140:4 transcript 153:3 transfer 32:9 93:21 transferring 32:1 transform 147:23 150:6 transformed 140:5 141:20 transmission 32:19 71:8 82:17 98:3 101:9 transmissions 31:24 32:10,14 32:22,23 33:12 transmit 31:2 transmits 66:12 70:2 72:20 transmitted 66:3 75:5 86:1 89:11 90:12 117:5,7,8 transmitter 100:3,5 transmitters 22:5 transmitting 31:6 66:13 73:16 148:19 transportation 15:4	trial 1:2 tried 92:23 trigger 80:14,16 triggering 80:25 triggers 80:9 81:8 110:19 true 156:11 truth 5:10,11,11 try 6:4,5 105:21 trying 6:2 33:25 54:3 55:5 66:8 79:18,19 81:25 91:8 94:21,22 95:4 97:2 101:7 105:20 106:2,14 106:16 113:16 114:13 118:23 137:22,23 149:9 tsp 35:23 turn 103:20 148:8 turns 110:17 tutorials 36:3 tv 12:19 14:8 28:16,25 30:14 37:23 145:23 two 21:23,23 23:17 24:17 26:10 27:9 36:7 44:8 53:6,12 54:19 83:23 95:9 96:14 102:24,25 103:12 105:11	108:19 114:14 125:14,16,20 130:23,23 131:3 147:25 151:25 153:5 type 16:23 18:11 30:2 43:4 44:23 67:3 69:10 74:12 92:20 98:19 100:6 101:24 125:11 types 11:5,9 16:13 21:16 51:23 53:6 59:13,23 91:21 101:22 typically 22:1 31:12 87:4 89:9 90:8,10 93:13 95:11 101:21 102:2 105:6 typing 132:11 133:7
u			
ultimately 22:15 108:1 under 8:3 22:20 understand 6:3 21:20 25:5,9 32:6 33:25 34:3 41:15,24,25 42:7 43:9,16			

47:16,22 53:8 54:7 58:6 60:5 62:12 65:17 68:16 72:7,18 73:4 77:13 79:5 79:19,21 84:20 87:1 88:24 94:22 95:1 97:2 100:21,24 104:21,24 106:14 109:19 111:13 113:16 114:13 118:23 119:21 122:13 123:9 126:15,22 136:1 146:23 149:9 151:24 understanding 6:5 27:20 29:10 31:3 41:21 45:10 56:5 62:13,14 77:17 84:18 118:23,25 143:25 145:2 152:7 understood 6:22 21:12,12 33:22 45:23 46:16 47:13 53:14 79:13 93:17 122:23 123:1 141:15 unicast 66:24 68:24 70:2,3,4	72:20,21 73:8 73:14,18,22 74:8,17,19 85:1 86:15,19 108:16 108:22 109:23 110:17,18 114:15 115:11 115:24 117:17 118:6 120:6 146:12 unit 4:12 7:8 146:12 147:18 147:19,22 148:24 150:2 united 1:1 units 145:25 148:1,1,7,23 149:6,11,14 university 25:14 unnecessary 49:8 unreliable 36:14 unstable 47:8 updated 116:20 upload 38:4 usa 1:4 155:11 use 23:4 35:11 49:4 53:4 59:17 77:11 129:16 131:15 133:13 138:21 141:24 150:20	used 21:5,7 22:12,18 28:13 28:24 32:25 35:14 53:9 55:10 62:8,10 68:8 77:19 95:20 102:24 103:15 107:11 110:21 146:21 useful 124:13 user 31:17 61:5 61:6,10,22 63:3 63:8 68:2 74:22 74:25 75:3,4,4 75:17 76:19 80:21 81:21,21 82:4 84:11,20 84:22 85:3,4,4,7 86:1,4,9,21 87:7 87:11,12 88:12 88:22 89:1,3,12 90:4,5,12 91:14 91:21,23,24,25 92:2,11,13,19 92:25 93:6 96:20 97:14,23 98:6,8,12 100:18 102:11 102:15,18 107:5 107:14,18 110:19 112:9 115:16 117:8 129:2,5 131:18 132:2,15,25	133:1,3,12,16 134:4 138:21,25 139:8,23,24 140:2,5,8,11,15 140:16,17,19,20 141:14 148:21 user's 75:7 93:5 93:18 95:13 107:7,13,20 users 80:20 81:21 86:3 uses 61:24 63:13 89:17 95:22 146:22 150:3,14 150:15 using 30:23 44:9 46:13 66:25 67:23 69:8 70:4 74:9 76:18 80:2 92:14,16,17 98:8,16 100:9 117:5,7 133:5 141:10 150:7 utilized 21:3
v			
v 1:5 4:14 32:24 155:11 variation 30:16 varied 32:20 33:2 varies 14:4 31:14			

variety 10:7 25:11 28:17 36:4,11,14 90:19 91:18 95:14 120:20 various 15:19 26:24 28:24 29:22 41:18 43:13 60:13 67:1 69:9 73:14 74:10 80:25 96:5 119:6 120:11 126:21 vary 30:8 31:6 varying 63:20 vegas 7:8 17:3 38:10 vendors 37:22 verbatim 58:18 69:13 117:14 141:13 verbiage 144:14 verify 55:18 veritext 4:19,21 versed 35:21 version 26:21 37:6 versus 98:14 vice 28:21,21 36:8 video 4:9,12 6:17 28:19 30:3 30:14,21 31:11 101:21,25	102:11,19 103:18 116:9,10 116:12,24 117:6 117:9,11 135:2 152:23 153:3,6 153:7,18,21 videographer 2:13 4:1,20 39:11,14 46:25 78:18,21 105:14 113:6,9 142:13 142:16 152:21 153:5,9,22 154:2 videotaped 1:13 154:10 156:9 view 38:6,7 114:23 118:12 140:20 viewed 132:2 viewing 118:12 viewpoint 6:6 views 116:22 vintage 32:20 virtual 61:24 62:16 63:4,5,14 67:21,24 68:1,7 73:15 80:3,4 81:22 84:8,13 84:15,17 86:22 86:25 87:1,8,15 88:20 89:14,15 89:22,25 90:5,6 90:11,24 91:13	91:23 95:12 96:21 97:11,12 97:21,22 107:25 129:10,12,25 130:22 131:8,11 131:16,23 132:5 136:19,21 138:22,23 139:9 140:4,8 141:20 virtually 4:5 92:6 voice 12:1 15:8 28:19 33:5 vsat 33:6 vsats 32:24 w w 40:4 62:14 wait 152:16 waiting 48:5 114:25 115:3 walk 84:19 127:22 walton 155:4 156:4 want 6:19 15:17 15:17 19:9 34:5 41:1 45:2,25 47:6 49:6,7,7,10 49:11,11,22,24 50:4,4,15 51:16 52:1,4 55:1,2 58:3,11 59:24 62:21,25,25	64:12,18 67:15 68:13,17 69:15 69:15 71:23 72:7 79:21,22 84:22 87:18 88:2 94:11 96:7 96:10 100:21 103:25 106:13 113:23 115:8 120:1,4 121:7 121:15 122:11 122:12 123:5,8 123:24 124:7,7 125:4 129:21 133:12,13 134:12,15,17 143:3,6,8,19 151:16 153:15 wanted 15:5,8 59:19 127:10 152:1 wanting 104:11 wants 104:13 warner 12:16 34:18 35:4 watch 102:18 way 6:11,24 19:18 28:1 32:22 49:22 50:14 53:17,24 77:2 80:18 96:13,14 98:4,5 100:3,17 101:20 102:14,21,25
--	--	--	---

112:11 125:20 133:15 152:11 153:2,4 ways 53:21 133:11,19 we've 44:18 69:23 75:20 77:14 90:2 111:5 112:21 119:7 142:24 147:4 weak 102:12 weaker 102:10 web 37:14,15 43:20 44:19,24 61:21 67:2 69:10 70:1 72:13,19 74:12 82:8,13 87:9 114:24 115:15 115:19,20 116:5 116:9,12,18,21 117:12 118:12 118:12 134:25 135:4,5,8,23 136:9,17,18,20 136:24 webinars 25:14 25:18 36:4,6,10 website 38:2,5,9 38:11,13 66:22 66:24 67:7,8,9 68:21,23 71:18 74:7 75:7 85:18	90:8 95:15,15 116:16,19 135:23 websites 68:22 81:12,14 87:5 93:16 107:11 131:17 134:8 135:17 146:4 went 8:4 122:3 when's 21:3 wi 28:25 willing 120:2 window 90:3 witness 4:8,25 5:12,14 17:24 18:20,25 19:7 20:15 39:4 47:10 78:17 105:17 113:3 125:2 139:14 142:5,7 151:4 151:21 152:8,19 word 53:4 135:22 words 42:12 47:21 55:2 61:15,17 65:7 79:18 144:12 work 6:11 7:17 9:7,16,18 10:3,7 10:21 11:1,18 11:21 12:18 16:11,19 17:5,6 17:8,15 19:25	25:7 28:5 34:13 35:17 37:11 40:15 55:23 58:8 89:5 97:25 113:2 worked 8:1,5,15 13:4,6,10,11,13 13:16 15:2 18:12 19:16 28:7,11 29:10 34:23 40:5,13 40:16 working 8:2,7,9 14:6 22:3 24:3 35:7,7 40:1 80:19 works 62:12,21 63:21 89:8 105:22 112:25 133:11 148:5 world 26:14,16 33:25 95:5 worldwide 28:13 worries 47:24 125:23 wrap 151:1 write 37:4,7 38:10 writing 26:1 36:19 38:13 43:4 written 26:8 37:14 38:17	49:12 51:17 68:15 69:14 74:17 87:20 117:14 151:6 152:3 wrong 62:13 121:8 152:7 wrote 40:24 43:25 44:10,13 134:13 wyde 40:2,4 x x 66:25 69:8 74:9 155:16 y y 40:4 66:25 69:8 74:10 yahoo 90:9 93:16 133:17,18 140:22,23 145:14 yahoo.com. 133:2,13,14 yeah 6:23 7:4 8:15 10:20 12:22,24 17:7 17:11,13,24 18:13 19:11,13 19:17 21:23 23:17 24:9 29:21 32:15 34:8,10,16 36:19,21 39:9
--	--	---	--

40:24 42:23	148:16 149:13
43:21 45:1,14	149:13 150:14
46:25 47:7	150:14,15
51:15,15 52:4,8	152:14,15 153:9
53:4 54:5,13,13	year 5:25 20:3
55:21 58:22	29:6
61:17 64:16	yearly 23:7
65:3,3 78:5	24:11
79:21 82:3,7,23	years 8:8 12:15
83:1,1,7,7,14,20	16:11 17:12,13
83:25 84:9	19:25 24:6,7,17
86:25 88:6,19	29:2 36:7 44:8
89:21 90:20	yep 19:14 39:4
91:5,9 92:23	64:17 88:10
94:2,9,12 95:9	125:8
96:12 98:21	youtube 84:23
99:25 101:1,12	91:2,21 92:20
104:18 106:2	93:16 108:8
107:3 112:25	132:12
113:3,5,24	youtube.com
114:10,10,19	132:23 133:8
115:12,17 118:1	z
118:14 119:3	z80 37:5
120:1 121:17	zero 79:14,15
122:16 123:5,5	zip 7:9
124:16,16,23,25	zoom 1:13,18
125:6 127:24	2:2,7,11 4:18
128:3,17 131:7	5:6 154:10
132:20 133:10	156:9
137:12 138:17	
140:25 141:1,6	
142:7 143:5,6,7	
143:12,14 145:6	
146:19,19 147:6	

FLORIDA RULES OF CIVIL PROCEDURE

Rule 1.310

(e) Witness Review. If the testimony is transcribed, the transcript shall be furnished to the witness for examination and shall be read to or by the witness unless the examination and reading are waived by the witness and by the parties. Any changes in form or substance that the witness wants to make shall be listed in writing by the officer with a statement of the reasons given by the witness for making the changes. The changes shall be attached to the transcript. It shall then be signed by the witness unless the parties waived the signing or the witness is ill, cannot be found, or refuses to sign. If the transcript is not signed by the witness within a reasonable time after it is furnished to the witness, the officer shall sign the transcript and state on the transcript the waiver, illness, absence of the witness, or refusal to sign with any reasons given therefor. The deposition may then be used as fully as though signed unless the court holds that the reasons given for the refusal to sign require rejection of

the deposition wholly or partly, on motion under
rule 1.330(d)(4).

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ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
THE ABOVE RULES ARE CURRENT AS OF APRIL 1,
2019. PLEASE REFER TO THE APPLICABLE STATE RULES
OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

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