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UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
CASE IPR2025-00351
PATENT 11,140,441

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

VS.

EDWIN A. HERNANDEZ-MONDRAGON,

Patent Owner.

_____ /

Zoom Teleconference
Miami, FL 33131
Thursday, December 4, 2025
10:00 A.M. - 4:47 P.M.

DEPOSITION OF DR. EDWIN A. HERNANDEZ-MONDRAGON

Taken before MARIA FERNANDEZ, RPR, FPR-C and
Notary Public for the State of Florida at Large,
pursuant to Notice of Deposition filed in the above
cause.

1 APPEARANCES: 2 On behalf of the Petitioner: 3 RL DROLET 4 515 E. Las Olas Boulevard, Suite 120 5 Fort Lauderdale, FL 33301 6 BY: ROBERT L. DROLET, ESQ. 7 rob@rldpatents.com 8 9 On behalf of Patent Owner: 10 ALAVI & ANAIPAKOS, PLLC 11 609 Main Street, Suite 3200 12 Houston, TX 77027 13 BY: MICHAEL McBRIDE, ESQ. 14 mmcbride@aatriallaw.com 15 16 REPORTED BY: 17 Maria Fernandez, RPR, FPR-C 18 Veritext Legal Solutions 19 2 South Biscayne Boulevard, Suite 2250 20 Miami, FL 33131 21 22 23 24 25 Page 2	1 Thereupon: 2 EDWIN A. HERNANDEZ-MONDRAGON, 3 A witness named in the notice heretofore filed, 4 being of lawful age and having been first duly 5 sworn, testified on his oath as follows: 6 THE WITNESS: I do. 7 DIRECT EXAMINATION 8 BY MR. McBRIDE: 9 Q Good morning, Dr. Hernandez. 10 A Good morning. 11 Q All right, thank you for joining the 12 deposition today and for setting up the Veritext 13 Exhibit Share. 14 If at any point you have difficulties or 15 trouble with that, please let us know so that we can 16 address those concerns and the technology promptly. 17 I see Mr. Drolet raising his hand. 18 MR. McBRIDE: If you can pump up the volume 19 on your side a little bit for me. 20 (Recess taken.) 21 BY MR. McBRIDE: 22 Q Is that a little bit better at all? 23 Any better right now? 24 I'll try to speak loudly. If at any point 25 you can't hear me or, you know, the microphone doesn't Page 4
1 INDEX 2 3 Dr. Edwin A. Hernandez-Mondragon 4 Examination Page 5 Direct By Mr. McBride 4 6 7 8 EXHIBITS MARKED FOR IDENTIFICATION 9 10 Exhibit 1 US Patent 10,123,074 B2 49 11 Exhibit 2 Patent Owner Response 55 12 Exhibit 3 Supplemental Declaration 73 13 Exhibit 4 Petition for Inter Partes 123 14 Review of U.S. Patent 15 10,123,074 16 Exhibit 5 U.S. Patent 8,954,600 B2, 141 17 2/10/15 18 19 20 21 22 23 24 25 Page 3	1 seem to be working as well as it should, let me know 2 and I'm happy to repeat my questions. 3 Does that resolve every current concern 4 right now? 5 A Yes. 6 Q All right. So, Dr. Hernandez, you 7 understand that an IPR has been instituted as to 8 US Patent Number 10,123,074, US Patent Number 9 10,524,002 and US Patent Number 11,140,441, correct? 10 A That's my understanding, yes. 11 Q And you are the sole named inventor on those 12 challenged patents, correct? 13 A I am. 14 Q And you are the sole owner of the challenged 15 patents, correct? 16 A Correct. 17 Q You have not sold any rights to the 18 challenged patents to any third party, correct? 19 A Correct. 20 Q Now, you have served as an expert consultant 21 in patent litigations before, correct? 22 A Yes. 23 Q And you have even testified as an expert 24 witness in patent litigations, correct? 25 A Correct. Page 5

1 Q Do you get paid when you serve as an expert 2 consultant or expert witness? 3 A Yes. 4 Q And how, typically, do you get paid? 5 A It depends. If it's done through an agency, 6 it may be higher, it may be 700 to 800 an hour. But 7 when I do it directly, it's 475 to 525 an hour. 8 Q Now, when you serve as an expert consultant 9 or expert witness in -- we'll call them "other 10 litigations," are you ever paid an amount based upon 11 the overall damages? 12 A I don't recall one. 13 Q Typically, in litigation, you'd agree that 14 an independent expert witness or consultant gets a, 15 you know, a rate payment that's independent of any 16 collection of any party, correct? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: As an expert witness, you have 19 sometimes compensation; sometimes you don't have 20 compensation. I have cases where I haven't been 21 compensated because the client didn't have funds, 22 at the end of the day. And regardless of that, I 23 have to see through the lens of an expert and 24 analyze the facts and the evidence as an expert, 25 independently of if I'm getting paid or not. Page 6	1 the lens of an expert, a technical expert, independent 2 of compensation. 3 Q So if I understand you right, your 4 compensation, when you serve as an expert witness or 5 consultant, has always been based upon an hourly rate; 6 is that fair? 7 A Well, the hourly rate is kind of how you 8 measure the time that you spend on a case. Like, as 9 you're -- you're getting paid to see the case and the 10 evidence with the lens of a technical expert. 11 So my objective is to look at the -- with 12 the lens of a technical expert every single one of 13 these cases, and invalidate or validate the evidence, 14 independently of the payment. 15 Q But your payment, though -- again, we're 16 just talking about the payment you receive typically, 17 is based on an hourly rate; is that fair? 18 A Like, again, like, it's -- it's a per-hour 19 basis in some cases. But most cases -- like I said, 20 in some cases I have not been paid per hour, because I 21 have not been paid at all. 22 Q Okay. 23 A So then it was for free, but I did it 24 regardless. In some cases I've been compensated years 25 later, after many, many attempts to collect payments. Page 8
1 BY MR. McBRIDE: 2 Q And as an expert witness or expert 3 consultant, typically, such an expert would not be 4 paid an amount that's based upon the overall success 5 of the case; is that correct? 6 MR. DROLET: Objection to form. 7 THE WITNESS: The expert is -- has to see 8 the facts as with the lens of an expert, 9 independently of any payment. 10 BY MR. McBRIDE: 11 Q Okay. Well, let me -- let me take a 12 different tack on this. 13 In your experience, do expert witnesses and 14 consultants get a percentage of the jury award? 15 A For IPR cases? 16 Q For general litigation or IPR cases. 17 A I don't know. No, I haven't spoken to many 18 experts that tell me they got compensated like that. 19 I have no idea. 20 Q In your experience, you have not been 21 compensated in that way; is that fair? 22 A I don't think it was, except for the cases 23 that -- when I went -- when I went to jury trial, I 24 never got compensated for any success fee. But, like 25 I said, as an expert you have to see the cases with Page 7	1 So basically I went to trial and I 2 subsidized the entire litigation for a client. And I 3 still have to, you know, do my job, which is look at 4 the case with the lens of an expert. I'm going to 5 apply my technical expertise independent of payment. 6 Like in this case, it's basically applied 7 with the lens of an expert, look at the evidence, and 8 give an analysis, independent of any payment. 9 Q What percentage of your income do you 10 attribute to your work as an expert in patent 11 litigations? 12 A Right now it has been declining, more like 13 to a 30 percent or 20 percent of my income. 14 Q What's the other percentage of your income 15 based on? What -- where did that income come from? 16 A Licensing and other type of consultant jobs. 17 Q Okay. Now, you advertise yourself as an 18 expert in the field of multimedia delivery; is that 19 fair? 20 A Among other fields, multimedia delivery is 21 one of my expertise. 22 Q And you have a personal website for your 23 expert consulting business; is that correct? 24 A Yes, I have a personal website for that, and 25 all the other things that I do besides expert witness. Page 9

1 Q And does your personal website for your 2 expert consulting business list the challenged patents 3 as one of your qualifications? 4 A It lists as the patents I have issued. Of 5 course it has to be listed, those over there, on the 6 website. On the website, it's 7 edwinhernandez.com/patents. You have all the patents 8 that I have been inventor or coinventor of. 9 Q Okay. And I'm not sure I understood that 10 answer. Let me -- let me try a different way. 11 In your list of qualifications for why you 12 are an expert in the field of multimedia, do you list 13 your challenged patents? Do you list each challenged 14 patent? 15 A I don't recall that I list the patents as my 16 expertise. The patents are listed in the -- in a 17 separate section called "Patents." 18 And like I said, on my website, it has a 19 different page called "Patents." I don't think in the 20 expertise page of the website, the patents are listed 21 at all. 22 Q So it -- so it sounds like they're on the 23 website, but maybe not under a specific heading. Is 24 that what you are saying? 25 A They are under different titles. So if you Page 10	1 So it is part of the evaluation process, you 2 consider all those factors to hire an expert. So as I 3 do, I would expect -- like I said, I couldn't speak on 4 behalf of -- of the client, because I've -- I've never 5 really -- like, my review on that part of the 6 situation, but I will say that my client will consider 7 all those aspects for their hiring process. 8 Q Have you testified in a case involving 9 multimedia distribution? 10 A For multimedia distribution, I don't think 11 so -- I don't recall right now, but -- so multimedia 12 aspects, yes. For the BlueRadio's case had a little 13 multimedia streaming components for audio. 14 Q Have you ever represented to a jury that -- 15 strike that. 16 Have you ever offered the fact that you have 17 patents issued in the field of multimedia distribution 18 as a basis for your qualifications to a jury? 19 A I don't recall that point being that. I 20 think it was more about Bluetooth, that case for the 21 jury. 22 Q Do you think a jury would consider someone 23 with patents in the field of multimedia distribution 24 to be more qualified to testify on such a case? 25 MR. McBRIDE: Objection. Form. Page 12
1 go to the website, it's edwinhernandez.com/patents. 2 It has a list of patents. And expertise is separate. 3 So its -- expertise is mostly things that 4 are bullet points of wireless communications, cable 5 TV, some artificial intelligence, things that I have 6 been involved with, projects and consulting for 7 third-party companies, or I've done research for 8 individually, and things like that. But the patents 9 has a different section and the expertise for expert 10 witness has a different section. 11 Q Oh, okay. So in -- in your opinion, do -- 12 would a perspective client consider -- consider you to 13 be more qualified to work on a multimedia case given 14 the challenged patents? 15 A I don't know. It depends on the client. I 16 don't know what the client will think. 17 Q Well, do you think that the fact that you 18 have patents issued in the field of multimedia 19 delivery is relevant to your qualifications as an 20 expert in that field? 21 A Well, that's possibly one of the things that 22 a customer would evaluate. I do that evaluation from 23 my prospective as well. I review what kind of 24 expertise has a person had, especially in the 25 industry, what kind of customers they have. Page 11	1 THE WITNESS: I don't know what -- the thing 2 the jury receives, the jury instructions, I don't 3 know what the jury instruction will say. So it 4 depends. If it's listed there, I guess they 5 would have to consider that. 6 BY MR. McBRIDE: 7 Q Are you currently in any discussions with 8 any third parties to license the challenged patents? 9 A Yes, I was. 10 Q And who was that with? 11 A Google. 12 Q Did Google purchase a license to the 13 challenged patents? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: No, they have not. 16 BY MR. McBRIDE: 17 Q Did you offer a license to Google for the 18 challenged patents? 19 A They received an offer for all the 20 portfolios, including the challenged patents. 21 Q And in ballpark terms, how much, in terms of 22 a reasonable royalty, were you seeking from Google? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: That was a few cents per 25 phone. It's like pennies per phone, basically. Page 13

1 BY MR. McBRIDE: 2 Q And do you have an idea, an estimation, of 3 how many phones Google sells? 4 MR. DROLET: Objection. Form. 5 THE WITNESS: No, I don't. I guess the 6 issue is that they don't sell phones, so then 7 that's a dispute because -- of Googles and cell 8 phones -- so it would be the overall entire 9 market for all the companies that sell phones: 10 Samsung, LG, everybody that -- LG, I guess, is 11 not that, but everybody that has some sort of 12 market share that uses the Google Android 13 technologies. 14 And that will be -- so that's -- that's a 15 different -- we haven't gone that far to make 16 that analysis, so I'm not totally sure how to 17 answer that question, given the fractional market 18 in the phone sector. 19 BY MR. McBRIDE: 20 Q Okay. So if I understand your -- the amount 21 that you were seeking was a few pennies per phone that 22 uses Android; is that fair? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Yes, that's -- this is Android 25 and the Android auto system. Page 14	1 So I would have to review that again, given 2 the fact that the fractional market, when this 3 negotiation was in place, was not taken into 4 consideration. So the fractionalization makes 5 the licensing a little bit more complicated. 6 But, again, it's -- all -- all of those 7 calculations are put on hold until I know exactly 8 if these proceedings terminate the claims or 9 leave some claims alive, or we have to file for 10 more patents, which -- which are related in other 11 fields, like the MediaOS Echo System that is -- 12 is -- it's a different -- it's a different 13 technology as well. 14 BY MR. McBRIDE: 15 Q Well, if the challenged patents survive the 16 IPR process, would you expect that a reasonable 17 royalty from Google or use of the patents in Android 18 phones would be something north of \$10 million; is 19 that -- 20 MR. DROLET: Objection. Form. 21 THE WITNESS: Like, again, it's -- it's -- 22 those amounts would have to be recalculated 23 because it's not -- Google only provides -- from 24 my understanding, Google provides the platform, 25 but it does only sell Google -- Google Pixel Page 16
1 BY MR. McBRIDE: 2 Q And in terms of calculating that out, would 3 that have been over \$10 million in a royalty from 4 Google? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: Well, the total market, then 7 it would be divided by about 300 different 8 companies. So that's -- that would be the 9 calculation more precisely. 10 But like I said, I haven't done that 11 calculation, per se, because we're -- I -- I 12 don't feel it was responsible for me to continue 13 those negotiations having this IPR filed, I don't 14 think. So those negotiations were put on hold 15 until this -- this IPR is completed. 16 BY MR. McBRIDE: 17 Q Okay. So if you were to take all of the 18 Android phones that you believe would be relevant to a 19 license at a few cents per phone, would that amount be 20 greater than \$10 million in the aggregate? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: Like, again, it will -- it 23 will require some caps, some -- there were some 24 royalty calculations there that have some caps 25 per year, caps for certain things. Page 15	1 phones. They don't sell phones. 2 So the ones who actually sell the phones are 3 over 300 companies and -- and that 4 fractionalization was not considered in any -- in 5 any of the negotiations. And it was about to be 6 considered when this litigation started and this 7 IPR proceeding was obviously put in place. 8 BY MR. McBRIDE: 9 Q And so it sounds like if the patents were to 10 survive the IPR, you would be seeking royalty from 11 dozens of companies; is that fair? 12 A Well, we will have to review the claim chart 13 to see exactly if they -- the surviving claims have 14 any -- any potential value to those companies. I have 15 not done that analysis yet. 16 Q Well, we're talking about Google, and the 17 fact that you believe that a reasonable royalty from 18 Google would be a few cents per Android phone. 19 So are there several different companies 20 that offer Android phones? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: Like I said, like -- because 23 of the fractionalization, Google will be a minor 24 percentage of the equation, as -- as far as I 25 understand. I have not done that analysis. That Page 17

1 requires more analysis to see exactly what the 2 degree of -- or discovery, like -- like in this 3 case, right, you have to do some discovery. 4 So that determination has not been done. 5 And I have no idea exactly what the value is, 6 given the fact that the fractional market of 7 different phone providers. 8 BY MR. McBRIDE: 9 Q Do you have a sense how many Android phones 10 are sold in the United States? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: In the United States, there 13 are not that many Android phones, actually. 14 Android phones only represents, I believe, less 15 than 30 percent of the market. 16 BY MR. McBRIDE: 17 Q 30 percent of the phone market? 18 A 30 percent of the phone market are -- as I 19 understand it, and that's because iPhones are 20 prevalent in the United States market. 21 Q Okay. So what you'd expect from the 22 aggregate payment for Android phone use of the 23 challenged patents would be a substantial payment; is 24 that fair? 25 MR. DROLET: Objection. Form. Page 18	1 A Well. 2 Q -- to challenged patents? 3 A Yes, I think you -- you -- in the parallel 4 litigation, this was part of the discovery. You 5 received that. You're well aware that that's under a 6 Non-Disclosure Agreement with Google. 7 And I believe all the terms on that 8 agreement and whatever they replied to those e-mails 9 are in your possession, and those are under 10 confidentiality provisions. 11 Q Okay. So you mentioned a second ago that 12 those negotiations were derailed because of this IPR 13 pursuance; is that correct? 14 A I'm sorry about that. Again -- I'm sorry, 15 what did you say? 16 Q You said a second ago that the negotiations 17 you were having with Google for a license to the 18 challenged patents was derailed because of this IPR 19 process; is that correct? 20 MR. DROLET: Objection. Form. 21 THE WITNESS: It was derailed because of 22 this entire process, IPR, litigation, everything. 23 So then obviously I don't feel it is responsible 24 for me to start more negotiations when it's not 25 clear what's going on with anything. Page 20
1 THE WITNESS: I don't -- I don't know. I -- 2 I would expect some payment. I -- I don't think 3 it's going to be substantial as the -- those 4 negotiations never fortified. And it's unclear 5 whether they're going to fortify or not. It's -- 6 BY MR. McBRIDE: 7 Q Well, in your negotiations with Google, did 8 you put a number down of how much you believe that 9 they could pay you to resolve any potential claims 10 against them for the challenged claims? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: Well, I don't know if this 13 procedure is going to be public. We believe it 14 is. And those are under confidential -- 15 confidentiality provisions, under the NDA with 16 Google, so I -- I don't know if this is going to 17 create a problem for me, if I start divulging 18 more information. 19 And in fact, all this NDA with Google, which 20 you have copies of, are -- encompass part of this 21 proceeding. 22 BY MR. McBRIDE: 23 Q So without getting into any specific 24 confidential information, did you offer, you know, or 25 ask for an amount from Google -- Page 19	1 BY MR. McBRIDE: 2 Q So you would expect those negotiations to 3 start up again with Google if the challenged patents 4 were to survive the IPR process; is that fair? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: Well, obviously, when you have 7 a patent like that, your objective is to seek 8 partnerships or to seek some sort of business 9 development under those patents. 10 So to my knowledge, I don't know what's 11 going to happen, to be honest. It's speculative. 12 But obviously every inventor wants to capitalize 13 on their inventions. 14 BY MR. McBRIDE: 15 Q Well, let me ask from your perspective, 16 would you want to restart the negotiations with Google 17 if the challenged patents were to survive this IPR 18 process? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: I don't know. I don't know at 21 this moment. 22 BY MR. McBRIDE: 23 Q You don't know whether you would want to go 24 seek money for your patents if they were to survive 25 the IPR process? Page 21

1 MR. DROLET: Objection. Form. 2 THE WITNESS: I think you will know that -- 3 that Google is going to hire a firm like you. 4 It's going to make me go through all this hell 5 again. So, obviously, it's a question that I 6 have to reconsider seriously. 7 Because inventors, just by showing up to the 8 door of Google, and say, Hey, look, I have these 9 patents, they don't receive you with open arms. 10 They hire people like you and -- and they put you 11 through hell. 12 So then it's not -- it's something I have to 13 reconsider, seriously. I -- I don't know if I 14 will even pursue anything anymore. I -- at this 15 moment, I have no idea. 16 BY MR. McBRIDE: 17 Q You mentioned putting you through hell. Who 18 is putting you through hell? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: The attorneys. They have a 21 lot of -- it's -- it's -- I'm an inventor. I'm a 22 creator. I help people with their patents and 23 litigation so they can defend themselves or -- or 24 get things right. And just being immersed in 25 litigation with 380 entries on the record is -- Page 22	1 Stingray petitioners; is that correct? 2 MR. DROLET: Objection. Form. 3 THE WITNESS: That's exactly right. The 4 Stingray petitioner filed for this IPR. 5 BY MR. McBRIDE: 6 Q You filed -- filed that lawsuit, correct? 7 A I -- there was no choice but doing that. 8 There was no responsive from the client to do an 9 amicable resolution after three years, or almost 10 four years of knowing about these patents. Maybe -- 11 they knew about these patents in 2017, so then it's 12 been seven years. 13 Q Dr. Hernandez, do you believe that Stingray 14 does not have the right to defend itself from your 15 claims of patent infringement? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: Everybody has the right to 18 defend themselves. I think that's -- that's 19 their right. I think there are ways to do that 20 and there are ways -- 21 BY MR. McBRIDE: 22 Q And one of the ways to do that is through 23 the IPR process, correct? 24 A I -- I think that's -- that's some of the 25 ways people do it especially when -- when you're Page 24
1 is nothing that I -- I think I anticipated. 2 And that drains the value to create more 3 things, to create startups. Like you saw on my 4 website, a lot of startups, all that process of 5 creation has been destroyed and delayed 6 completely because of the time this litigation 7 consumes. 8 So, therefore, not only do I have litigation 9 in Florida, but also we have this IPR, which is 10 consumer resources. And -- and other inventors, 11 writers keep inventing and creating more 12 technologies instead of being attacked in 13 multiple fronts. 14 I think that's borderline why I think 15 this -- this -- I will -- I will call that hell, 16 because invention -- inventors, we are not 17 interested in pursuing this type of matter. 18 We're just creators. We create things for people 19 and we want people to appreciate our inventions, 20 or at least use them in certain ways. 21 MR. McBRIDE: Objection. Nonresponsive. 22 BY MR. McBRIDE: 23 Q Dr. Hernandez, when you're referring to 24 litigation, you're referring to the case that you 25 filed in the Southern District of Florida against the Page 23	1 dealing with small inventors and small -- small 2 companies, then, yeah, of course you want to train the 3 resources. 4 MR. McBRIDE: Objection. Nonresponsive. 5 BY MR. McBRIDE: 6 Q The law provides for an IPR process for 7 people accused of patent infringement, correct? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: I believe there's some updates 10 on the regulatory. I disagree with you. I think 11 there's letters from the PTAB that describe that, 12 after a certain amount of time that the 13 petitioner has known about the patents. There's 14 several expectations, so that happens in this 15 case and -- 16 BY MR. McBRIDE: 17 Q Dr. Hernandez, are you angry or upset that 18 the PTAB has instituted review of your patents? 19 MR. DROLET: Objection. Form. 20 Argumentative. 21 THE WITNESS: No, I'm not. I'm just saying 22 the facts. I'm just -- I'm just stating the 23 facts. Those are the facts. 24 BY MR. McBRIDE: 25 Q One of the facts that you said, though, a Page 25

1 second ago was your belief that this is putting you 2 through hell; is that fair? 3 A Well, this U.S. attorney has -- have filed 4 390 entries on the docket, so you practice -- you must 5 practice like crazy. So I think that's, right there, 6 plus this litigation so then -- so we have an IPR on 7 this. So I will say those two things encompass a 8 major hurdle for small companies and inventors. 9 Q Dr. Hernandez, is it true that the patent 10 claims are stayed pending the IPR process? 11 MR. DROLET: Objection. Form. 12 BY MR. McBRIDE: 13 Q Are you aware of that? 14 A The patents -- but there's a trade secret, 15 also, a trade secret case, with 26 trade secrets, I 16 believe. They are in dispute that they are going to 17 go to trial in March, and I think -- that's my 18 understanding. 19 MR. McBRIDE: Objection. Nonresponsive. 20 BY MR. McBRIDE: 21 Q Dr. Hernandez, you made a comment a second 22 ago that this IPR process is putting you through hell. 23 You believe that? 24 A I didn't say that. 25 Q Can you explain what you were trying to say, Page 26	1 under -- to see if they were part of the patent pool. 2 Q And part of those negotiations, they would 3 have paid you some amount of royalty, is that fair, if 4 they had licensed the challenged patents? 5 A They -- they have certain rules. Again, 6 it's under some NDA that I had to sign with both. I'm 7 not at liberty to disclose the terms of those NDAs, 8 especially the amounts. 9 Q Without asking for the specific amounts, 10 your attempt to license the challenged patents to 11 Acacia, you were expecting to get some amount of money 12 in return; is that fair? 13 A Well, that's one of the reasons why I didn't 14 do it, right? 15 MR. McBRIDE: Objection. Nonresponsive. 16 BY MR. McBRIDE: 17 Q When you went to Acacia to license the 18 challenged patents, your expectation was to try to get 19 money from Acacia; is that fair? 20 A It's to try to monetize, that's fair. 21 Q Other than Acacia and MPEG LA, have you 22 tried to monetize the challenged patents in any other 23 way? 24 A Yeah, I -- I basically have a startup called 25 MEVIA, LLC that has a product that basically is the Page 28
1 then? 2 A I said the litigation process and the 390 3 entry dockets on the record for a trade secret case is 4 part of this nightmare of work that small companies 5 have a very hard time to -- to process. 6 Q And, again, Dr. Hernandez, you're referring 7 to a litigation that you chose to file against 8 multiple defendants; is that correct? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: That's -- that's the 11 litigation that triggered this IPR, of course. 12 BY MR. McBRIDE: 13 Q Other than Google, are you currently in 14 discussions with any third parties to license the 15 challenged patents? 16 A No. 17 MR. DROLET: Objection to form. 18 THE WITNESS: No, I'm not in any 19 discussions. 20 BY MR. McBRIDE: 21 Q In the last five years, have you been in any 22 discussions with any third parties to license the 23 challenged patents? 24 A Yes. I think I've -- I had tried to 25 approach Acacia Research and the MPEG LA Alliance to Page 27	1 technology in place that creates interactive streams. 2 And -- and that's still being encompassed 3 into the MEVIA web's architecture to create 4 interactive streams with the -- the MEVIA operating 5 system and the MEVIA portfolio, which is the patents 6 that are -- are here. 7 But at the same time, there are more trade 8 secrets, there are more software that's outside the 9 scope of the patents that brings value to the startup. 10 Q Do you believe that the challenged patents 11 are important to the media product? 12 MR. DROLET: Objection. Form. 13 THE WITNESS: They're -- they're a valuable 14 asset for the product. I think that's still to 15 be defined in terms of the business plan. But in 16 principle, I think they -- they're an asset class 17 that brings value to any startup, intellectual 18 property. 19 BY MR. McBRIDE: 20 Q Do you have an -- an estimation of how much 21 value the challenged patents bring to the MEVIA 22 product? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: No, the MEVIA product, I'm 25 trying to relaunch it right now as part of the Page 29

1 MEVIA OS architecture, and that is not yet clear. 2 It is still to be defined. 3 BY MR. McBRIDE: 4 Q Now, in the underlying litigation, you have 5 a few Stingray Group, Inc. of infringement of 6 challenged patents; is that correct? 7 A Yes. 8 Q And in that litigation, you've offered an 9 expert report on damages calculating what you believe 10 to be a reasonable royalty for Stingray Group's 11 alleged infringement of the challenged patents, 12 correct? 13 A That's correct. 14 Q And for both past and future damages, you 15 have determined from your own expertise that Stingray 16 Group would owe "roughly" \$150 million for allegedly 17 practicing on the challenged patents; is that correct? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: That's completely false. 20 BY MR. McBRIDE: 21 Q How is that false, sir? 22 A That's on the trade secrets I own. 23 Q You haven't authored an opinion in the 24 patent case in which you have said that the total 25 damages for patent infringement for Stingray would be Page 30	1 seeking over \$100 million from Stingray in the patent 2 case that you filed; is that fair? 3 A The case is stayed so, therefore, I don't -- 4 I don't think that's -- that's -- I mean, it's -- that 5 report has -- and beside that, like I said, it is 6 under the protective order, that report. 7 And I don't know how to answer that, because 8 you're -- I thought we were under the protective order 9 for that report. And the court has not signed the 10 protective order, the letters of the protective order. 11 Q Dr. Hernandez, prior to the Court's stay of 12 the patent claims, were you seeking over \$100 million 13 from the Stingray defendants in the underlying 14 litigation -- strike that. I'll ask a better 15 question. 16 Prior to the Court's stay of the 17 litigation -- strike that again. 18 Prior to the Court's stay of the patents 19 claim in the underlying litigation, were you seeking 20 from Stingray Group over \$100 million for the alleged 21 infringement of the challenged patents? 22 A I don't know exact amount, but I know that 23 in the cease and desist letter, I -- which is 24 published on the complaint, I was asking for 25 60-something million dollars, corresponding Page 32
1 roughly \$63.22 million from 2018 to 2024? 2 MR. DROLET: Objection. Form. 3 THE WITNESS: I don't recall the exact 4 numbers, but it's multiplying the number of 5 subscribers times a few cents per subscriber. 6 And the same math they claim they have 7 520 million subscribers, with maybe 600 million 8 subscribers, so that's the math. 9 BY MR. McBRIDE: 10 Q For past damages, that math is about 11 \$63 million; is that fair? 12 MR. DROLET: Objection. Form. 13 THE WITNESS: I believe that was under 14 protective order, but if you would like to 15 violate the protective order, of course. 16 BY MR. McBRIDE: 17 Q I'm asking if you have opinions in the case 18 on how much you are seeking from Stingray? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: Like I said, that document was 21 filed under the protective order, and I think 22 that you're -- you're in violation of that 23 protective order. 24 BY MR. McBRIDE: 25 Q Dr. Hernandez, it's a fact that you are Page 31	1 encompassing the trade secrets and the patents. 2 Q Are you saying that you don't know how much 3 money you're seeking from Stingray Group for patent 4 infringement in a damages report that you, yourself, 5 authored and served? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: I was not prepared for -- to 8 review the report. I only prepared to review my 9 declarations for the -- 10 (Simultaneous speakers.) 11 BY MR. McBRIDE: 12 Q -- does it sound right to you and correct 13 that the amount that plaintiffs are seeking in the 14 underlying litigation from Stingray Group for patent 15 infringement is in excess of \$100 million? 16 A I don't have an answer for that. 17 Q Do you have any reason to doubt that that's 18 what you, yourself, are seeking in that case? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: Like -- again, like, I'm not 21 going to violate the protective order. 22 BY MR. McBRIDE: 23 Q I'm not asking you to violate the protective 24 order, sir. 25 MR. DROLET: Is there a question? Page 33

1 BY MR. McBRIDE: 2 Q Is there a ballpark amount that you are 3 seeking from Stingray Group for alleged patent 4 infringement of the challenged patents in the 5 underlying litigation? 6 A Yeah, it's pennies to the dollar per 7 subscriber, that's what I am seeking for. That's 8 pretty much the same amount that I described before, 9 which is under NDA with Google and it's under the 10 protective order for this case. 11 Q I'm not talking about Google, sir. I'm 12 talking about Stingray Group. You understand that 13 Stingray Group is separate from Google, correct? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: Well, I have to do a fair and 16 reasonable royalty offer, so then whatever is 17 offered to one is to be offered to everybody. 18 MR. McBRIDE: Objection. Nonresponsive. 19 BY MR. McBRIDE: 20 Q You are seeking over \$100 million in the 21 underlying litigation from Stingray Group for patent 22 infringement. True or false? 23 A I don't recall the number. It's -- I'm not 24 sure if it is that -- that's -- that's the number. I 25 think it was 100 plus million for trade secrets. I'm Page 34	1 patent technology in the challenged patents? 2 MR. DROLET: Objection. Form. 3 THE WITNESS: I have no idea. I have not 4 done that research. 5 BY MR. McBRIDE: 6 Q Well, are the companies that you believe are 7 offering products similar to the product that Stingray 8 Group is offering that you are using a patent 9 infringement? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: I have not done that 12 investigation. I'm not prepared to answer you 13 that. 14 BY MR. McBRIDE: 15 Q Now, you authored your own expert 16 declaration in these IPR proceedings, correct? 17 A Correct. 18 Q Did you make any attempt to obtain a 19 declaration from an independent expert as part of 20 these IPR proceedings? 21 A Yeah, I tried. 22 Q And who did you attempt to obtain a 23 declaration from with regard to the IPR proceedings? 24 MR. DROLET: Objection. Form. 25 THE WITNESS: I spoke with counsel that one Page 36
1 not sure if that's the right amount for patents. 2 Q Do you have any reason to believe that a 3 request for over \$100 million from Stingray Group for 4 patent infringement of the challenged patents would be 5 wrong or incorrect, or unfair or unreasonable? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: Like, again, I simply applied 8 the financial expert multiplication, number of 9 subscribers, times a reasonable royalty, that's 10 the number. It's not something that came out of 11 any magical hat. It's just a multiplier times 12 the number of subscribers. 13 It's exactly the same math that MPEG LA 14 does. It's exactly the same mathematics and 15 it's -- it's laid out in my report for all the 16 different comparables that do this type of 17 licensing deals and why those licensing deals are 18 comparables. 19 And simply multiplying millions of 20 subscribers times a small amount of cents per 21 subscriber, gives you always a large amount of 22 money. 23 BY MR. McBRIDE: 24 Q Is it possible that other companies than the 25 ones we've talked about today, could be using your Page 35	1 is a very large amount of money for the 2 responses, and they had their own people that 3 they were going to use, but it was simply not 4 affordable. 5 BY MR. McBRIDE: 6 Q In the underlying litigation, you've engaged 7 Mr. Michael Howard as an expert consultant; is that 8 correct? 9 A Michael Howard is a co-reviewer. He does 10 co-reviews. 11 Q Is he not an expert in the field of 12 multimedia distribution? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: I don't know. I have not 15 asked him if he can write a report. My 16 understanding is his focus is in co-reviews and 17 providing co-reviews. 18 BY MR. McBRIDE: 19 Q So you didn't ask him if he would be writing 20 a report for these IPR proceedings; is that fair? 21 A He doesn't write reports. I think it's -- 22 that's my understanding. 23 Q In the underlying litigation, you've also 24 engaged Dr. Belivor Ajit (phonetic) as an expert 25 consultant, correct? Page 37

1 MR. DROLET: Objection to form. 2 THE WITNESS: Yes. Dr. Belivor is also 3 another expert that's assisting in the co-review 4 part. 5 BY MR. McBRIDE: 6 Q Did you make an attempt to have Dr. Ajit 7 offer any opinions in these IPR proceedings? 8 MR. DROLET: Object to form. 9 THE WITNESS: I have no idea right now. 10 BY MR. McBRIDE: 11 Q You don't recall trying or not trying to 12 have Dr. Ajit offer an expert report in these IPR 13 proceedings? 14 A Let's say that I could not afford him. 15 Q Is Dr. Ajit a field -- an expert in the 16 field of multimedia delivery -- 17 MR. DROLET: Objection. Form. 18 BY MR. DROLET: 19 Q -- or is he a source code review expert? 20 MR. DROLET: Objection form. 21 THE WITNESS: He does co-reviews and does, 22 also does MPEG patents. So he has a lot of MPEG 23 patents. My understanding, he's an expert in the 24 field. And I still owe him money from -- for 25 this case. Page 38	1 A Of course. The same situation. I didn't 2 have budgets for that. 3 Q Now, I understand that you have access to 4 Exhibit Share -- actually, strike that. 5 Let me -- let me kind of revisit some of 6 these things. 7 Dr. Hernandez, are you proud of the 8 challenged patents? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: I believe that pride is not of 11 value. 12 BY MR. McBRIDE: 13 Q Well, let me ask it a different way. 14 You believe that you are entitled to the 15 issued patents because you believe that you have a 16 novel invention; is that correct? 17 A I think the USPTO has dictated that those 18 patents are novel, like the prosecution history 19 describes. 20 MR. McBRIDE: It's nonresponsive. 21 THE WITNESS: And that's what my 22 understanding is. 23 BY MR. McBRIDE: 24 Q My question is, do you personally believe 25 that you invented something novel and new? Page 40
1 BY MR. McBRIDE: 2 Q You say you owe him money. Is that because 3 of work he's done in the past that he has not been 4 paid for? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: He has been paid, like, almost 7 80 percent to 90 percent of his bill. Still 8 making payments to finalize his payments. 9 BY MR. McBRIDE: 10 Q But the reason you did not ask Dr. Ajit to 11 author an expert report in these IPR proceedings is 12 because of cost reasons; is that fair? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: Simply because I cannot 15 afford -- I couldn't afford him at the time this 16 report was due. 17 BY MR. McBRIDE: 18 Q In the underlying litigation, you've also 19 engaged Dr. Borko Furht as an expert witness; is that 20 correct? 21 A Yes. 22 Q Did you make any attempt to have Mr. -- 23 sorry. 24 Did you make any attempt to have Dr. Furht 25 offer any opinions in these IPR proceedings? Page 39	1 A I only refer to the USPTO issuance of the 2 patents and followed those directions. 3 Q So are you saying that you have no idea 4 whether you invented something novel and new? 5 A I don't say that. The USPTO says that. 6 Q And if the USPTO says that your patents are 7 not actually novel or new, how would you feel about 8 that? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: If the USPTO rejects it, then 11 I guess -- that's not the first time it has 12 happened to me. 13 BY MR. McBRIDE: 14 Q When you -- do you attend any sort of 15 multimedia conventions or forums? 16 A Recently? 17 Q In the last five years, let's say. 18 A I reviewed some papers for IEEE magazine for 19 the IEEE conferences. I constantly review papers for 20 them. But I haven't -- I don't attend the conference, 21 per se, except for CES and the Mobile World Congress. 22 And obviously there's always the streaming 23 technologies of my interests, both at CES and the 24 Mobile World Congress. 25 And I think I had attended, like, the Page 41

1 Windows Music Fest. The Miami Music Festival, as 2 well, would have, like, a little music streaming and 3 music delivery platforms back in 2013 to 2014. 4 And a couple of other conferences that 5 always have some sort of a subject matter, something 6 with streaming. 7 Q And is it fair to say that you're, at least 8 in your mind, well-known in the field of multimedia 9 distribution? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: Yes. I've been cited -- well, 12 ECLA CORP, the corporation that commercializes 13 these technologies, has been cited in different 14 worldwide market reviews. So when they do the 15 market analysis, they cite our platform as one of 16 the players -- at least in the last couple of 17 years. 18 BY MR. McBRIDE: 19 Q So would it be fair to say, then, that the 20 industry at large is aware of the challenged patents 21 and that you're an inventor of the challenged patents? 22 MR. DROLET: Objection. Form. 23 THE WITNESS: I don't think they are that 24 knowledge to the detail of patents. They know 25 that there's some technology out there, that -- Page 42	1 A Yes. 2 Q And if I were to pull up some of that 3 marketing material, would I find that you've listed 4 the challenged patents in such materials? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: Yes, some materials will have 7 the -- the names of the challenged patents as 8 part of the media product and the platform, and 9 basically the business opportunity for a cable 10 operator or -- or a media company to use them. 11 BY MR. McBRIDE: 12 Q So I think I missed the last part. Why do 13 you put the challenged patents in the marketing 14 materials for media? 15 MR. DROLET: Objection. Form. 16 THE WITNESS: Because that's part of the 17 assets that are listed there. Just like I used 18 to have the trademark for AmplifyReach, Mevia 19 Amplify trademark, and things like that. So just 20 to tell the world, look, there's some IP here. I 21 don't know, maybe that sounds -- sounds better 22 for market. 23 MR. McBRIDE: Why don't we go ahead and take 24 about a ten-minute break, and then we can sort of 25 pick up, if that's okay. Page 44
1 those media distribution that -- I guess, if you 2 dig deeper as a researcher, you will know that it 3 has some patents and some software, some demos, 4 apps, and things like that, that are commercially 5 available. 6 But I'm not sure they tie the patents to me, 7 or they think that I am an inventor of those 8 patents. I have no idea. But it's mostly market 9 research, so I'm not sure they are that -- they 10 are going that depth in technicality. 11 BY MR. McBRIDE: 12 Q When you meet with these people in the 13 industry at forums and conventions and similar 14 occasions, do you hold yourself out as an inventor of 15 multimedia patents? 16 A I don't. I never speak about myself. 17 Q You never speak about yourself? 18 A Not at -- at those conventions. I just go 19 and observe what people do. I never -- maybe -- but I 20 don't try to pay for an appearance or things like 21 that. That's -- that's not my -- that's not my type. 22 I'm -- personally, I prefer to -- to stay behind the 23 scenes. That's my personality. 24 Q Well, have you developed marketing material 25 for your media platform? Page 43	1 (Recess taken.) 2 BY MR. DROLET: 3 Q Welcome back from break, Dr. Hernandez. 4 During the break, did you talk to anyone about these 5 proceedings? 6 A Nope. 7 Q Did you have any conversations with 8 Mr. Drolet? 9 A No. 10 Q Now, earlier you had mentioned that a few 11 years back you had written Stingray Group a letter 12 asking for over \$50 million to resolve the dispute 13 that eventually became the underlying litigation. Do 14 you recall that? 15 MR. DROLET: Objection. Form. 16 THE WITNESS: Yeah, actually the -- the 17 relationship comes back from 2017, when the 18 patents were patent applications. 19 I spoke with Mr. Lloyd Feldman from 20 Stingray, and he had basically a couple of 21 conference calls with his VP of technology. And 22 after that, nothing happens. 23 So that letter that you're describing was in 24 2021, after the trail of tickets were found. 25 Page 45

1 BY MR. McBRIDE: 2 Q And that letter, I think it was April of 3 2021, you were seeking \$50 million from Stingray; is 4 that fair? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: It was a certain amount to 7 settle the trade secret/patent dispute. And it 8 was just a number to -- to start some negotiation 9 of some sort. 10 BY MR. McBRIDE: 11 Q And how much of the \$50 million did you 12 attribute to the patent infringement claim? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: I -- I didn't make an analysis 15 of that. I just figured some percentage total. 16 I don't know what part is what. There were -- 17 there was only, I believe, one or two patents 18 issued at the time. 19 BY MR. McBRIDE: 20 Q Do you think that the amount of a license 21 would be more now, being that there's a third 22 challenged patent? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: No, it's just the parameters 25 for that were more of a guesstimate. The Page 46	1 MR. DROLET: Objection. Form. 2 THE WITNESS: Stingray is a publicly-traded 3 company in the Toronto Stock Exchange. Because 4 they're in the Toronto Stock Exchange, all their 5 revenues are public, and that's what it is based 6 on. 7 BY MR. McBRIDE: 8 Q That would be the revenue amount, but what 9 about the 12 percent number that you have. 10 MR. DROLET: Objection. Form. 11 BY MR. McBRIDE: 12 Q Where did that come from? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: That I don't recall precisely, 15 but I think it was basically based on some trade 16 secret matters that I think I read before. I 17 don't recall. I honestly don't recall. 18 BY MR. McBRIDE: 19 Q I would like to introduce -- so let me pull 20 up Exhibit Share. Give me a second to get it 21 processed. 22 My understanding is that the three 23 challenged patents all share the same specification; 24 is that correct? 25 A That's correct. Page 48
1 parameters today are more -- taking into 2 consideration all the factors that are in 3 their -- in my expert report from the -- from the 4 perspective of comparables, more in-depth 5 analysis, and being fully objective in terms of, 6 Okay, these are the amounts that people pay for, 7 like, similar technologies. 8 BY MR. McBRIDE: 9 Q What data points did you use to come up with 10 your request for \$50 million that you made to Stingray 11 Group in April of 2021? 12 MR. DROLET: Objection. Form. 13 THE WITNESS: I think it was -- if I recall 14 correctly, it was in the complaint, and it was 15 12 percent of the -- what I thought were the 16 profits calculation, or something like that, 17 based on the public record information. 18 I don't recall precisely what was the 19 metric, but I believe it was something like that. 20 It's laid out in the letter, actually. I don't 21 recall the letter precisely, but the letter 22 describes why. 23 BY MR. McBRIDE: 24 Q And so 12 percent of Stingray's revenues, 25 where did you get that number from? Page 47	1 Q Okay. So if we just use, for example, the 2 '074 patent specification, you understand that that is 3 relevant to all three of the challenged patents, 4 correct? 5 A Yes. 6 MR. McBRIDE: Okay. I'm going to introduce 7 what I'm marking as Exhibit 1 to today's 8 deposition. This is the '074 patent. 9 (Exhibit 1 marked.) 10 BY MR. McBRIDE: 11 Q I believe it will show up in your Exhibit 12 Share tab. 13 A Yes, it's downloading. Give it a second. 14 Q Okay. Pull it up when -- when it finally 15 downloads, and let me know when you're ready. 16 A It's here. Let me make sure that I can 17 scroll down. 18 Yes, it's fully downloaded. 19 Q Okay. Can you please scroll down to where 20 the claims begin. More specifically, we'll start with 21 Claim 1 of the '074 patent. 22 And let me know when you're there. 23 A Yes, I see here Claim 1, yes. 24 Q Okay. I see references to assembling a 25 media stream. And that specifically would be - 1(a), Page 49

1 (b), (c), (d) -- it looks like element 1(e), 2 "Assembling at least one media stream." 3 Do you see that? 4 A "At least one media stream." Yeah. "At 5 least one media stream using the temporal sequence of 6 screen captures." 7 Q Could you provide me maybe an explanation of 8 how the media stream is assembled in step 1(e)? 9 A I think that's in my report. If you pulled 10 the report, I explain that in the report. 11 Q Well, before we dive into your report, can 12 you just generally answer a few questions? Is it 13 correct that, in step 1(e), the media stream is being 14 assembled? 15 MR. DROLET: Objection. Form. 16 THE WITNESS: I see, "Assembling at least 17 one media stream using the temporal sequence of 18 screen captures." That's what the claim says, 19 and the claim speaks for itself. 20 BY MR. McBRIDE: 21 Q Okay. Element 1(b) refers to "Obtaining 22 content from at least one source." Do you see that? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Yeah. No, it says, "Obtaining 25 content corresponding to the plurality of Page 50	1 the organized skill in the art, and the -- the claim 2 is self-explanatory. 3 Q Okay. Would you, as a Person of Ordinary 4 Skill In The Art, interpret the claims to require that 5 the media stream be obtained from at least one data 6 source? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: That's what the claim says. 9 BY MR. McBRIDE: 10 Q Okay. 11 A I don't know where -- where -- where that's 12 in the claim. 13 Q Well, that's what I'm asking you is, from 14 here, you would agree that element 1(b) talks about, 15 "Obtaining content corresponding to the plurality of 16 multimedia items from at least one source"; is that 17 fair? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: That's exactly what it says, 20 "Offering the content in at least one first 21 format." So you have to read that in its 22 entirety. 23 BY MR. McBRIDE: 24 Q Is obtaining content the same thing as 25 obtaining a media stream? Page 52
1 multimedia items from at least one source, 2 offering the content in at least one first 3 format." 4 BY MR. McBRIDE: 5 Q Is the media stream that's assembled in 6 element 1(e) obtained from the -- at least one source? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: What do you mean? It 9 doesn't -- it says, "Obtaining content 10 corresponding to the plurality of multimedia 11 items." 12 BY MR. McBRIDE: 13 Q Well, does the media stream have to exist in 14 the -- at least one source in Claim 1? 15 MR. DROLET: Objection. Form. 16 THE WITNESS: That's -- I mean, the claim 17 speaks by itself. 18 BY MR. McBRIDE: 19 Q Okay. So what the claim language says for 20 control; is that fair? 21 A I'm sorry, what did you say? 22 Q So what the claim language says is what the 23 claims fairly cover; is that correct? 24 A Yes. So the interpretation of the claim 25 is -- is from the ordinary meaning of a personal or Page 51	1 MR. DROLET: Objection. Form. 2 THE WITNESS: "Obtaining content 3 corresponding to the plurality of multimedia 4 items from at least one source or from the 5 content in at least one first format," speaks by 6 itself. It doesn't say anything else but that. 7 BY MR. McBRIDE: 8 Q Okay. So there's no obtaining a media 9 stream from the first source? 10 MR. DROLET: Objection. 11 BY MR. McBRIDE: 12 Q There's no obtaining a media stream from at 13 least one source? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: It doesn't say -- I don't 16 know. Where is that? 17 BY MR. McBRIDE: 18 Q Do you see that in Claim 1? 19 A Yes -- 20 MR. DROLET: Objection. 21 THE WITNESS: -- I see "one media stream" 22 several places, but it's not element 1(b), as 23 you're describing. 24 BY MR. DROLET: 25 Q Now, C, element 1(c), says, "Rendering a web Page 53

1 page by a browser using the content." 2 Do you see that? 3 A Yes. 4 Q In terms of rendering, is there any specific 5 special meaning that you believe, as a person skilled 6 in the art, the term "rendering" has to the '074 7 patent? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: I believe that's in my report, 10 so I'll refer to my report because I did that 11 analysis there more in depth. 12 BY MR. DROLET: 13 Q Well, before we get to your report, do you 14 believe that the term "rendering" has a more specific 15 meaning than just rendering? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: Rendering has a meaning 18 exactly as a Person of Ordinary Skill In The Art 19 will interpret. "Rendering a web page by a 20 browser using the content has" -- the claim 21 speaks by itself. 22 BY MR. McBRIDE: 23 Q Okay. Let's go ahead and I'm going to pull 24 up the response, so give me a second to add that. 25 Okay. Let me know when you will see Page 54	1 Q Who is the patent owner of the '074 patent? 2 A Myself. 3 Q And this is titled the Patent Owner 4 Response, correct? 5 A It's the Patent Owner Response, but this is 6 basically drafted by counsel. 7 Q And did you review this response that was 8 drafted by your counsel before it was submitted to the 9 Patent Trial and Appeal Board? 10 A I believe I reviewed the -- most of it, yes. 11 Q Is there any portion that you believe is 12 incorrect? 13 A No, everything is correct. I think 14 everything is correct. I wouldn't think otherwise. 15 Q Is there any portion of the Patent Owner 16 Response that you don't understand or you didn't 17 understand when you reviewed it? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: I don't remember it by memory, 20 so you will have to point me to what you are 21 referring to, because I don't remember that. 22 BY MR. McBRIDE: 23 Q Well, when you reviewed it, do you recall 24 reaching any portion of the Patent Owner Response that 25 you did not understand as the patent owner? Page 56
1 Exhibit 2, will be -- which is your response to the 2 '074 petition. 3 (Exhibit 2 marked.) 4 THE WITNESS: I have Exhibit 2, it says 5 Patent Owner Response, but it's -- well, it's the 6 inventor response, but this is what it was 7 drafted by my attorneys. 8 BY MR. McBRIDE: 9 Q You understand that Exhibit 2 is the Patent 10 Owner Response to the challenged patents; is that 11 correct? 12 A That's my understanding. That's what the 13 attorney drafted. 14 Q Do you believe the attorneys are correct in 15 their assessment? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: The attorney -- 18 BY MR. McBRIDE: 19 Q Did you review the Patent Owner Response 20 that your lawyer allegedly drafted? 21 A Well, I reviewed that but, again, it is more 22 of a lawyer language on this subject matter. 23 My objective is to simply prepare the 24 declaration attached to or referred by this Patent 25 Owner Response document. Page 55	1 A I do not recall from -- there were three 2 patent responses, three declarations of -- you will 3 have to refresh my memory to remember if that 4 situation occurred, but my memory doesn't recall any 5 part where I had this concern. 6 Q Let's go ahead and start kind of going 7 through the response, starting with -- let me find the 8 page -- go ahead and turn to page 25. Let me know 9 when you're at page 25. 10 A Hold on. Okay. Page 25. 11 Q In the paragraph that starts with the word, 12 "First," there's a sentence that says that, 13 "Petitioners treat web pages as media streams, which 14 is clearly incorrect, as this method is constrained to 15 show only to media visually appearing on the webpage." 16 Do you see that? 17 A That's what it says, "Petitioners treat web 18 pages as media streams, which is clearly incorrect, as 19 this method is constrained to show only to media 20 visually appearing on the page." 21 Q The reference to "this method," does that 22 refer to the Avellan's teaching or the '074 teaching? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Basically it speaks about the 25 petitioner treat web pages is incorrect. Page 57

1 MR. McBRIDE: Objection. Nonresponsive. 2 BY MR. McBRIDE: 3 Q Let me be clearer. 4 Do you see the phrase "this method" in the 5 sentence we've just gone over. Do you see that 6 reference? 7 A I see the reference. 8 Q What does "this method" refer to? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: I don't recall precisely. 11 Maybe -- if we go to my report to paragraph 98, 12 paragraph 115, and we'll remember what it is for. 13 BY MR. DROLET: 14 Q Well, we'll get to your report in a little 15 bit. 16 Are you unable to answer whether the phrase, 17 "This method" refers to the method of Avellan or to 18 the method of the '074 patent"? 19 MR. DROLET: Objection to form. 20 THE WITNESS: Again, I need to see 21 Exhibit 2039, paragraphs 98 and 115, to see what 22 is -- it is all about. 23 BY MR. McBRIDE: 24 Q Give me a quick second. 25 All right. We're going to come back to that Page 58	1 paragraph 98 and 115 of my report -- or my 2 declarations. 3 BY MR. McBRIDE: 4 Q In the '074 patent, are media streams 5 generated from web pages? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: I -- what do you mean by that? 8 BY MR. McBRIDE: 9 Q Are web pages used in the process of 10 assembling on media stream in the '074 patent? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: I believe that the petitioners 13 treat web pages as -- as media streams, so that's 14 what this says. 15 But, again, we have to review the 16 declaration, paragraph 98 and 115, to recall -- 17 to refresh my memory on what -- what I was -- 18 what is this is about. Right now, I don't 19 remember. 20 BY MR. McBRIDE: 21 Q The '074 patent, Claim 1, talks about 22 rendering a web page, correct? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Claim 1 has one element that, 25 if I remember correctly, it's not this one. So Page 60
1 in a second. I'm making a note. 2 All right. So then looking at the paragraph 3 that starts -- well, let me -- let me ask you. You 4 say that, "Petitioner treats web pages as media 5 streams." What do you mean by that? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: That's what -- probably, like, 8 the attorney wrote based on what I wrote on the 9 declaration, so I have to see the declaration to 10 refresh my memory. I don't remember what's in 11 paragraph 98 and paragraph 115. 12 BY MR. McBRIDE: 13 Q So sitting here today, you don't know what 14 it means when you wrote -- or when the response wrote 15 "Petitioners treat web pages as media streams;" is 16 that fair? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: I would have to review what I 19 wrote in my report. 20 BY MR. McBRIDE: 21 Q Well, why do you think petitioners treats 22 web pages as media streams? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Because probably petitioners 25 did. I don't know. I can't remember what's in Page 59	1 this one is not about rendering the web page. 2 This is about receiving from a content provider, 3 I request, da, da, da. This is not about the 4 same. This is a different claim. 5 BY MR. McBRIDE: 6 Q I'm sorry, Claim 1, as a whole, has an 7 element of rendering a web page, correct? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: That will be element 1(d), if 10 you -- if I remember, 1(d) or 1(e). I don't 11 remember exactly, but it's not -- this is - this 12 is the discussion from 1(a). I don't know why 13 you bring 1 -- a different element to this 14 discussion. I don't think this -- this refers to 15 that. That's a different thing. That's a 16 different element. 17 MR. McBRIDE: Objection. Nonresponsive. 18 BY MR. McBRIDE: 19 Q Is there an element in the '074 patent that 20 involves rendering a webpage? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: There's an element that start 23 with rendering, but it's not 1(a). 24 BY MR. McBRIDE: 25 Q Okay. And that rendering process that Page 61

1 you're referring to recites rendering a webpage, 2 correct? 3 MR. DROLET: Objection. Form. 4 THE WITNESS: Well, rendering a webpage 5 is -- like it says here, a web page is -- is not 6 a media stream. It's obvious. I think that's -- 7 so I guess -- 8 MR. McBRIDE: Nonresponsive. 9 THE WITNESS: -- claim -- I haven't 10 finished. 11 BY MR. McBRIDE: 12 Q I think my question was -- 13 A -- it is rendering -- 14 (Simultaneous speakers.) 15 Q Is the element that refers to rendering, 16 does it refer to rendering a web page? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: That's not in this -- in this 19 segment of the discussion. 20 MR. McBRIDE: Objection. Nonresponsive. 21 BY MR. McBRIDE: 22 Q Sir, in Claim 1 of the '074 patent, is there 23 an element that recites rendering a web page? 24 MR. DROLET: Objection. Form. 25 THE WITNESS: There is an element that Page 62	1 the web page at a given time, and at least two 2 adjacent screen captures illustrate a dynamic 3 change of at least a portion of the content over 4 time." 5 BY MR. McBRIDE: 6 Q Is it fair that the following element 1(e) 7 discusses assembling at least one media stream using 8 the temporal sequence as screen captures? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: Well, the claims speak by 11 itself, so there's a rendering, 1 -- 1(c), 12 element 1(c). There's element 1(d), and followed 13 by element 1(e) in that sequence of the method of 14 claim, but the order of execution doesn't need to 15 be in that order precisely. 16 BY MR. McBRIDE: 17 Q Okay, I understand that point. 18 So looking at elements 1(c) through 1(e), 19 web pages are used to generate the media stream; is 20 that fair? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: The claims says that 23 "assembling at least one media stream using the 24 temporal sequence of the screen captures." 25 That's what element 1(b),(c), (d), (e) -- element Page 64
1 starts with that. I would have to revise -- 2 again -- let me just review the patent again, 3 because I don't remember which one is it. 4 BY MR. McBRIDE: 5 Q Take your time. The patent is Exhibit 1 to 6 today's deposition. 7 A Yes, I'm reviewing that. Give me one 8 second. 9 Yes, so you have element 1(c), that reads, 10 "Rendering a web page by a browser using the content." 11 So that was element 1(c). It is not element 1(a). 12 Q What happens in the '074 patent, Claim 1, 13 after the web page is rendered? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: The claims speaks by 16 themselves and is not -- it does not have to 17 happen in order, I believe. So it could -- any 18 of the -- any of the other elements can occur. 19 BY MR. McBRIDE: 20 Q The element 1(d) refers to "Generating a 21 temporal sequence of screen captures of the rendered 22 web page," correct? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: That's what it says there, 25 "where each screen capture defines all content of Page 63	1 1(e) says. 2 BY MR. McBRIDE: 3 Q So where does the temporal sequence screen 4 captures come from? 5 MR. DROLET: Objection to form. 6 (Simultaneous speakers.) 7 THE WITNESS: Well, it comes from the prior 8 generation of the temporal sequence of the screen 9 captures, what is 1(a), (b), (c) -- (a), (b), 10 (c), (d), (e). So 1(d) could be that one or it 11 could be a different state where 1(d) was 12 executed for a different web page. It depends on 13 how this is being executed in time. 14 BY MR. McBRIDE: 15 Q What is being screenshot in Claim 1 of the 16 '074 patent? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: There's no screenshot in the 19 claim. Where is that? 20 BY MR. McBRIDE: 21 Q What is being screened captured in Claim 1 22 of the '074 patent? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: The claim is made by itself. 25 Basically it says, "Generating a temporal Page 65

1 sequence of the screen captures of the rendered 2 web page where each screen capture define all the 3 content of the web page at a given time." 4 It continues as the claim reads on element 5 1(c). 6 BY MR. McBRIDE: 7 Q So the media stream is assembled using a 8 temporal sequence of screen captures. Those screen 9 captures are of the rendered web page. Fair? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: Assembling at least one media 12 screen using the temporal sequence of screen 13 captures is a possibility of that sequence of 14 events. 15 BY MR. McBRIDE: 16 Q Does the '074 patent talk about any other 17 sequence of screen captures than the sequence of 18 screen captures of the rendered web page? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: Well, the thing is, that a 21 method of claim, it doesn't need to be instituted 22 in order, so it could be the prior web page, it 23 it could be the next web page. It doesn't -- I 24 mean, you cannot limit the order. 25 Page 66	1 captures." 2 Q And that refers back to the phrase, "A 3 temporal sequence of screen captures" found in element 4 1(d)," correct? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: So 1(d) has the temporal 7 sequence of the screen captures, correct. 8 BY MR. McBRIDE: 9 Q Okay. So the reference in 1(e) to, 10 "Assembling the at least one media stream using the 11 temporal sequence of screen captures," refers back to 12 the temporal sequence of screen captures discussed in 13 element 1(d), correct? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: The claim speak by itself, so 16 I think if you read it that way, I mean, it is -- 17 it is obvious that you're generating a temporal 18 sequence of the screen captures in element 1(d). 19 And then assembling of the at least one media 20 stream using the temporal sequence of screen 21 captures could be referring to the same temporal 22 sequence of screen captures, or it could be the 23 prior web page that had a temporal sequence of 24 the screen captures. 25 It's -- the order that you're pointing to, Page 68
1 BY MR. McBRIDE: 2 Q I don't believe anyone is trying to limit 3 the order in my question. I'm simply asking, is there 4 any other reference you see in Claim 1 of a temporal 5 sequence of screen captures that's not generated from 6 the screen captures of the rendered webpage? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: The same word used in the 9 temporal sequence of the screen captures is using 10 1(a), (b), (c), (d), as well as 1(d). (d) and 11 (e) have the same word, using the temporal 12 sequence of screen captures, are both used in 13 those two elements of Claim 1. 14 BY MR. McBRIDE: 15 Q And the -- let me ask a question here. You 16 understand what antecedent basis is in patent law, 17 correct? 18 MR. DROLET: Objection to form. 19 THE WITNESS: Antecedent basis. What is 20 that? 21 BY MR. McBRIDE: 22 Q In element 1(e) I see a reference to "the 23 temporal sequence of screen captures." 24 Do you see that? 25 A "Generating a temporal sequence screen Page 67	1 that it appears that you're pointing to, is not 2 required. 3 BY MR. McBRIDE: 4 Q Now I think we're on the same page here. 5 You reference that screen captures of the rendered web 6 page, whether it's the prior rendered web page or a 7 previously rendered web page; is that what you said? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: Yeah, you can have a loop, for 10 example, a four loop, calling this a method 11 claim, and it could be in different orders. 12 So depending on -- on how you do this, you 13 can have multiple threads executing the different 14 elements and then you have, like, a joint method. 15 It depends on how you do the implementation of 16 the software, right? That's more like a software 17 implementation. But, again, the claim itself, it 18 speaks by itself. 19 BY MR. McBRIDE: 20 Q Is there any portion of the claim that 21 speaks to generating a temporal sequence of screen 22 captures as something other than a rendered web page? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: That's a -- so the temporal 25 sequence of screen captures of the rendered web Page 69

1 page, that's what it says. 2 BY MR. McBRIDE: 3 Q And there's no reference you see to 4 generating a temporal sequence of screen captures as 5 something other than a rendered web page; is that 6 fair? 7 MR. DROLET: Objection. Objection. Form. 8 THE WITNESS: Well, the claim speaks by 9 itself, so that's the only place where that 10 language is being used on this claim, element 11 1(e) -- sorry -- 1(d). Sorry. 12 BY MR. McBRIDE: 13 Q A few more questions and then we'll turn to 14 your declaration. I -- I promise. I understand you 15 want to turn to that. 16 I lost it. Hold on. 17 So in -- on page 25 of the Patent Owner 18 Response, there's a reference to, "this method is 19 constrained to show only to media visually appearing 20 on the web page." 21 What do you mean by visually -- or media 22 visually appearing on the web page? 23 MR. DROLET: Objection. Form. 24 THE WITNESS: Again, I will have to recall 25 what I wrote in -- in my declaration, because Page 70	1 course, that's the whole context of the -- of the 2 petition response, right? So then you need to 3 see the declaration to see what it says. 4 BY MR. McBRIDE: 5 Q But you wrote the declaration, correct? 6 A The declaration, yes, but I don't -- didn't 7 memorize it. 8 Q And are you saying that this argument that's 9 on page 25 that we've been talking about, you don't 10 know what that is? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: No, I said -- 13 BY MR. McBRIDE: 14 Q Did you write that? 15 A Okay. 16 MR. DROLET: Objection. Form. 17 THE WITNESS: My report, Exhibit 2039, 18 paragraph -- paragraph 90 -- what was it? 19 BY MR. McBRIDE: 20 Q 98, 115? 21 A Yeah, whatever is -- is there. Yeah, 98 and 22 115. Yeah, I think we -- I need to review my 23 declaration to recall what is that related to. 24 Q Okay. So if I were to go through the Patent 25 Owner Response and try to understand the arguments of Page 72
1 it's related to the declaration so I don't recall 2 exactly what Avellan was describing. 3 So if we can go to the declaration, it would 4 be much easier on me to answer your question. 5 BY MR. McBRIDE: 6 Q All right. And I'm -- I'm getting a sense 7 that the arguments in the Patent Owner Response really 8 don't stand on their own, that you need to rely on the 9 expert declaration you submitted; is that fair? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: I believe that most of the 12 patent owner responses and the patent petitioners 13 rely on some declaration for an expert, so I 14 don't see why this should be any different. 15 BY MR. McBRIDE: 16 Q Well, I'm puzzled because I'm asking 17 questions about language that appears in the Patent 18 Owner Response itself, and it doesn't seem that you, 19 as the patent owner, know what you were saying on its 20 own, and I'm just wondering why that's the case? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: I didn't say what you said I 23 just said. It was my attorney that wrote that. 24 I just wrote the declaration and referred to the 25 paragraph that he was citing. And then, of Page 71	1 the Patent Owner Response, really what you're saying 2 is that the arguments that you're aware of are going 3 to be in the declaration; is that fair? 4 MR. DROLET: Objection. Form. 5 BY MR. McBRIDE: 6 Q I mean, Dr. Hernandez, this is a little bit 7 unusual. I mean, I've never been in a situation where 8 a patent owner doesn't understand the arguments that 9 they put in the Patent Owner Response. 10 I'm happy to go to the declaration but it 11 seems like -- I'm worried that there's a deliberate 12 attempt to slow down the process here. 13 So, I mean, how do you want to proceed? Are 14 you able to answer questions about the Patent Owner 15 Response on its own? 16 MR. DROLET: Objection. Form. 17 Argumentative. 18 THE WITNESS: I just state the fact that it 19 refers to Exhibit 2039, 98 -- paragraph 98 and 20 155, and I want to see those paragraphs to answer 21 your question. 22 MR. DROLET: Okay. All right. I'm going to 23 introduce your declaration. 24 Hold up. 25 (Exhibit 3 marked.) Page 73

1 BY MR. McBRIDE: 2 Q Okay. It should appear as Exhibit 3 in a 3 second, in the cabinet. 4 A Okay. 5 Q Now, I understand that you're unable to 6 answer the question of what the Patent Owner Response 7 argument meant without consulting paragraphs 98 and 8 115. It's paragraphs 98 and 115. 9 MR. DROLET: Is there a question? 10 MR. McBRIDE: I'm directing your witness to 11 turn to paragraphs 98 and 115, based upon prior 12 representations. 13 MR. DROLET: Thank you. 14 THE WITNESS: Okay. 15 BY MR. McBRIDE: 16 Q Okay. So looking at Exhibit 2 on page 25, 17 what does it mean when the patent owner wrote that, 18 "Petitioners treat web pages as media streams, which 19 is clearly incorrect, as this method is constrained to 20 show only to media visually appearing on the web 21 page." 22 A So I think, from what I remember here, that 23 it is important to note that a media stream, or one 24 media stream for playback refers, for example, to jazz 25 channel. Page 74	1 recall correctly, it refers to, let's see. Hold on. 2 I think I described that. It doesn't search. Let me 3 search for that. I think I described that before. 4 So I refer to paragraph 114 as well, where I 5 said that, "POSITA will understand that rendering of a 6 'web-page' starts by connecting a web-site, validating 7 the content and then creating a visual representation 8 of that content using web resources such as images, 9 and other multimedia referenced on the web page." 10 So you have to differentiate, basically that 11 a web page has a specific way of being retrieved, and 12 the media stream is a totally different way of being 13 retrieved, therefore, they cannot be equal. 14 So petitioner fails to show that a web page 15 is a one media stream, because obviously a web page 16 is, as described here, a sequence of web resources 17 that create -- that you can visually see as a web 18 page. 19 Q Dr. Hernandez, in the '074 patent, is a 20 media stream retrieved from the data source? 21 MR. DROLET: Objection. Form. 22 BY MR. McBRIDE: 23 Q Do you see that language? 24 A The one media stream, as you can see here 25 from the -- the one media stream is -- basically the Page 76
1 So what is a jazz channel? A jazz channel 2 is a sequence of music files that correspond to a 3 plurality of multimedia items that are part of the 4 jazz channel. 5 The second one is that you have to obtain 6 that -- the reference to get the content corresponding 7 to the plurality of multimedia items. So the jazz 8 channel is a one media stream for playback, whereas a 9 web page is obviously not. 10 So basically when we go to paragraph 89 -- 11 sorry, 98 here, it's a one-media stream for playback. 12 It has to be interpreted as a plain and ordinary 13 meaning, where it's not a web page. 14 So I think petitioner is pointing to web 15 pages as one media streams to make their petition, 16 which is incorrect. 17 MR. McBRIDE: Objection. Nonresponsive. 18 BY MR. McBRIDE: 19 Q So page 25, we talked about a second ago, 20 says that, "This method is constrained to show only to 21 media visually appearing on the web page." 22 What does the phrase "this method" refer to? 23 To the method described in Avellan or the method 24 described in the '074 patent? 25 A No, no, no. This -- I think in 1(a), if I Page 75	1 issue here is that petitioner points to web pages as 2 media streams. 3 MR. McBRIDE: Objection. Nonresponsive. 4 BY MR. McBRIDE: 5 Q I'm asking you, sir, in the patent claim 6 that you wrote, Claim 1 of the '074 patent, did you 7 write that the media stream is retrieved from a data 8 source? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: I don't -- can you point me to 11 that? I don't recall that. Can you show it to 12 me? 13 BY MR. McBRIDE: 14 Q Sir, I'm asking you, based upon your 15 knowledge of the Claim 1 that you wrote, did you write 16 that the data -- sorry -- that the media stream is 17 retrieved from a data source? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: Where is that? 20 BY MR. McBRIDE: 21 Q That's my question. Is that in the claim? 22 MR. DROLET: Objection. Form. 23 THE WITNESS: I don't remember. 24 BY MR. McBRIDE: 25 Q You don't remember if it's in the claim. Page 77

1 Take a look at Claim 1. Do you see that in Claim 1? 2 A Okay, let's go back to Claim 1. 3 Where is that? I'm in Claim 1. 4 Q Do you see that in Claim 1, yes or no? 5 MR. DROLET: Objection to form. 6 BY MR. McBRIDE: 7 Q Do you see that in Claim 1, yes or no? 8 MR. DROLET: Objection to form. 9 THE WITNESS: I don't know what you're 10 talking about. I mean, like, where? 11 BY MR. McBRIDE: 12 Q Dr. Hernandez, is it your position that 13 Claim 1 of the '074 patent requires retrieving a media 14 stream from a data source? 15 MR. DROLET: Objection to form. 16 BY MR. McBRIDE: 17 Q Yes or no? 18 A It doesn't say that, so no. 19 Q The information that's obtained from the 20 data source in Claim 1, what kind of information is 21 that? 22 MR. DROLET: Objection to form. 23 THE WITNESS: As it says, "obtaining content 24 correspondence to the plurality multimedia items 25 from at least one source." Page 78	1 HTML, the web page. 2 Q And as part of your evaluation of Avellan in 3 this case, did you familiarize yourself with the CNN 4 web page? 5 A The one today, I don't know what happened at 6 the time of that invention, but I suspect it has a 7 little Flash -- require a Flash, Adobe Flash to play 8 the pages, which is referenced in my report, I 9 believe, as exhibit -- 10 Q I mean, is it your position that web pages 11 do not have multimedia items associated with them? 12 MR. DROLET: Objection. Form. 13 BY MR. McBRIDE: 14 Q I'm trying to understand your position, 15 Dr. Hernandez. 16 So is it your position that a web page like 17 CNN would not have multimedia items corresponding to 18 them? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: It does not in fact. It has 21 simply reference to the multimedia items, but it 22 does not -- a multimedia item is a complete file 23 where you can play it with like with Adobe Flash 24 player. That's why you need Adobe Flash, because 25 the one that actually obtains the multimedia item Page 80
1 BY MR. McBRIDE: 2 Q Would those multimedia items be referenced 3 to a web page? 4 MR. DROLET: Objection. Form. 5 THE WITNESS: No. Web pages are different 6 than multimedia items. Multimedia items are, 7 like I said, music files, video files, multimedia 8 items. A web page is not a multimedia item. 9 BY MR. McBRIDE: 10 Q Would a web page have multimedia items? 11 MR. DROLET: Objection to form. 12 THE WITNESS: That's different. You have -- 13 basically you need -- you have the HTML that 14 could contain reference to multimedia items, but 15 you need JavaScript to play it. You need the 16 special players, like Flash to play it. You need 17 the special tools to play that. 18 I mean, that it contains that, that doesn't 19 mean it is obtained. It's just a reference to a 20 HTML, but it is not obtained. 21 MR. McBRIDE: Objection. Nonresponsive. 22 BY MR. McBRIDE: 23 Q You understand that Avellan references the 24 CNN web page, correct? 25 A It references the CNN web page, correct, the Page 79	1 is the Adobe Flash player on a web page, not the 2 web page itself. 3 The web page simply references as to the, 4 let's say to a song or something inside the web 5 page, so you have to basically use a one request 6 to obtain the web page, and assume that you have 7 Adobe Flash, like in paragraph 159 of my report, 8 where you need to have a web player to play that 9 thing, that's referenced by CNN. 10 MR. McBRIDE: Objection. Nonresponsive. 11 BY MR. McBRIDE: 12 Q You seem to be differentiating between 13 content of a web page and multimedia items; is that 14 fair that you're making a distinction between those 15 two things? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: Actually, if you refer to my 18 report, I basically describe the whole sequence 19 on obtaining as part of, I will say is paragraph 20 122, for example, in my report. Again, paragraph 21 155 describe the process of obtaining, it looks 22 like it is there. Paragraph 110 basically 23 recites that element 1(b) is the obtaining 24 content. 25 Then this is a -- I'm paraphrasing here, at Page 81

1 the end of the paragraph, this is part of a 2 request to obtain content, which is a separate 3 request that is used for rendering for web page. 4 So you have -- the obtaining request is 5 separate from the rendering of a web page itself. 6 So then you have two separate complete requests, 7 and it doesn't matter what the web page contains. 8 Those are two separate requests. 9 BY MR. McBRIDE: 10 Q Does the idea that there are two separate 11 requests, is that something that you're saying the 12 '074 patent requires? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: The '074 patent teaches that, 15 teaches that the obtaining of content is a 16 separate request that is used for obtaining the 17 plurality of multimedia items and the rendering 18 of the web pages is a completely different 19 process, so then you have to request. 20 BY MR. McBRIDE: 21 Q Okay. So your position is that the '074 22 patent, Claim 1, requires a separate request for 23 obtaining content, corresponding multimedia items, and 24 a separate request for rendering a web page by a 25 browser; is that what you're saying? Page 82	1 BY MR. McBRIDE: 2 Q Where does it says that a request is 3 required for rendering a web page by a browser using 4 the content? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: Because web pages uses the 7 HTTP protocol, which is part of the RFC. I think 8 this is the RFC -- I don't recall what -- here, 9 RFC is for the -- for example, the RFC 2112 10 refers to the MIME types. So that RFC would 11 refer back to the HTTP protocol mechanism where 12 the protocol describe the use of HTTP request to 13 obtain web pages. 14 BY MR. McBRIDE: 15 Q Is your belief that the claims require a 16 specific request for rendering a web page a 17 distinction that you're drawing for why Avellan 18 allegedly does not disclose element 1(c)? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: I think it's clear from my 21 report that the obtaining step -- again obtaining 22 a step is -- like in paragraph 56 of my report. 23 Then you argue, the petitioner argues that the 24 captured web pages also become one media stream 25 for playback and a plurality of multimedia items. Page 84
1 MR. DROLET: Objection to form. 2 THE WITNESS: No. The element 1 of 3 obtaining does not need to be a request. It 4 could be like a file obtain -- it could be a 5 local file on the file system that is obtained, 6 so you don't have to have a request. The web 7 page obviously needs a request because that's how 8 HTTP works. 9 BY MR. McBRIDE: 10 Q Is there any reference to separate requests 11 in elements 1(b) or 1(c) of Claim 1? 12 MR. DROLET: Objection. Form. 13 THE WITNESS: I don't understand your 14 question. 15 BY MR. McBRIDE: 16 Q It's a pretty easy question, sir. 17 Do you see any reference that you wrote in 18 elements 1(b) or 1(c) of Claim 1 of the '074 patent 19 that requires different requests? 20 MR. DROLET: Objection. Form. 21 THE WITNESS: One is obtaining content, that 22 could have a request or not. The other one 23 requires a request. Obviously they are two 24 distinct steps. 25 Page 83	1 So you point to the web page to provide both 2 when the '002, the '074, the '441 patent teaches 3 that, retrieving and obtaining are separate from 4 rendering and are not the same. 5 So then -- and it describes how Claim 8 6 describes that distinction basically in more 7 detail by the detecting a change on a web page, 8 simply retrieve the web page again, but you don't 9 have to retrieve the plurality of multimedia 10 items on a separate request; therefore, that 11 clearly shows that there are two separate steps 12 that are not related. 13 MR. McBRIDE: Objection. Nonresponsive. 14 BY MR. McBRIDE: 15 Q Dr. Hernandez, you would agree that the act 16 of rendering a web page is different than the act of 17 obtaining content corresponding to a plurality of 18 multimedia items, correct? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: There -- the obtaining content 21 step, like paragraph 56 describes, is different. 22 So the obtaining basically and, again, going back 23 to my report, on paragraph 57, then I described 24 Avellan only shows the capture of images from a 25 web page. Page 85

1 If the web page has a video or audio, 2 assuming that you have a web player now, and it 3 needs to be on auto-played, so it can play the 4 video, because otherwise you need to click on the 5 web page to play the video. I think we both 6 agree that that's how this works. 7 Then in contrast, the '002 patent or the 8 '074 patent or the '441 patent handles this by 9 separating the web capture from obtaining the 10 multimedia items. So then those are two separate 11 steps that Avellan does not disclose. 12 BY MR. McBRIDE: 13 Q Dr. Hernandez, does the '074 patent 14 specifically say anything about separating the 15 plurality of multimedia items from a web page? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: Yes, it does. 18 BY MR. McBRIDE: 19 Q Where does that language specifically appear 20 in Claim 1? 21 A It's obtaining and rendering are two 22 completely separate steps; otherwise, there would be 23 no need for the obtaining because it would be part of 24 the rendering process. 25 Q We agree that rendering is different than Page 86	1 87, when you have content from multimedia items 2 that is probably, like, audio/x-mpegurl. So then 3 you have a MIME type that is HTML or text/html on 4 one side and you have a different type, a content 5 type which is retrieved from the plurality of 6 multimedia items. 7 BY MR. McBRIDE: 8 Q What draws the distinction between a web 9 page and multimedia items? That's essentially what 10 you are doing; is that fair? 11 MR. DROLET: Objection to form. 12 THE WITNESS: What we are saying is that the 13 web page is completely different from the 14 plurality of multimedia items, clearly. 15 BY MR. McBRIDE: 16 Q Can the plurality of multimedia items be 17 related to the web page? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: It could be referenced by the 20 web page, but that doesn't mean that they're 21 obtained. 22 BY MR. McBRIDE: 23 Q So just to be clear, a web page can 24 correspond and refer to multimedia items; is that 25 fair? Page 88
1 obtaining content, but you said that there is a 2 separation of the obtained content from the rendering 3 of the web page. 4 MR. DROLET: Objection. Form. 5 BY MR. McBRIDE: 6 Q Is that what you're alleging, that there's a 7 requirement of an additional step that somehow content 8 obtained has to be separated out from anything that's 9 being rendered? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: The rendering of a web page, 12 like I say here on 57, requires rendering, 13 capturing the images from the web page itself. 14 The obtaining of the multimedia items could 15 be a local request to a file obtained locally in 16 the server, the computer that is running this 17 method, or could be obtained remotely from 18 another source. It's indistinct. 19 But the obtaining of the multimedia items, 20 you're obtaining multimedia items that are 21 basically from one MIME type. And basically, if 22 you go to my report on paragraph 85, describes 23 what the MIME types are for a web page. This is 24 text/html in paragraph 86. And basically that's 25 completely distinct to, like it says in paragraph Page 87	1 MR. DROLET: Objection. Form. 2 THE WITNESS: It could reference them, but 3 they cannot be obtained because obtained requires 4 showing them. So the fact that you obtained 5 them, that basically just -- you get the text so 6 the HTML text will have a pointer to where this 7 multimedia item will reside, and you require a 8 different player, like an Adobe Flash Player to 9 actually do the additional step from the browser 10 to review view it. 11 Whereas the '074 patent does not require any 12 Adobe Flash Player. The web page can still have 13 multimedia items. It could still have this 14 reference to Adobe Flash. 15 But the obtaining step contains a separate 16 set of multimedia items that are not related to 17 the ones that you are describing from the web 18 page, because the web page is one request 19 separate from the obtaining request. 20 BY MR. McBRIDE: 21 Q You keep coming back to the second request 22 thing. Where does it require a separate request in 23 the '074 patent, sir? 24 MR. McBRIDE: Objection. Form. 25 THE WITNESS: I think a POSITA will know Page 89

1 that by just looking at the claim language. It 2 is just obvious. 3 BY MR. McBRIDE: 4 Q So there's no actual language in the claim 5 '074 patent that requires separate requests. You're 6 just making that as -- you believe that would be how 7 the claims should be construed; is that fair? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: No. It's completely false. I 10 think paragraph 111 shows that the patent itself, 11 the specification, teaches that if you split the 12 multimedia item from the web page, then you're 13 capable of overlapping the web page screen over 14 the multimedia item because they both retrieve 15 different steps, or you can replace the web page 16 on top of the multimedia item, or you can replace 17 the web page for the multimedia item itself, so 18 you are flexible now. You can do overlap because 19 those steps happen at different -- separately. 20 BY MR. McBRIDE: 21 Q Okay. I'm not seeing a single line in '074 22 patent that requires separate requests. You agree 23 that that language does not explicitly appear, 24 correct? 25 A That's embedded -- basically when you render Page 90	1 your opinion is that the '074 patent requires a 2 separate request for multimedia items and a separate 3 request for the web page; is that fair? 4 MR. DROLET: Objection. Form. 5 THE WITNESS: It is clear because a 6 multimedia items basically -- 7 BY MR. McBRIDE: 8 Q Let me jump in. 9 A I haven't finished the answer. 10 (Simultaneous speakers.) 11 Q I'm not asking whether it is true or not. 12 A No, I haven't finished the question. 13 Q Let me ask the question again. 14 In Avellan it would be a request for a web 15 page that includes embedded multimedia items; is that 16 your understanding of Avellan? Yes or no. 17 A It could -- it could do that as long as 18 there's some interaction later by the user over the 19 tag files. 20 Q And in your -- 21 A So it can click on the play button of the 22 multimedia item video player, web player that is 23 embedded as usually on a web page like an Adobe Flash 24 Player. 25 Q And in your opinion, that is not enough to Page 92
1 a web page, you need to get HTML, and the HTML 2 references -- that's a process of rendering. So it 3 would be redundant to -- the obtaining is an 4 additional step because the rendering will encompass 5 all this retrieval of HTML and the multimedia items. 6 So then obviously you need an additional 7 step, which is the obtaining, to separate the 8 multimedia items only, and you separate the web page 9 with whatever you want to reference there. 10 You want to reference whatever you want 11 there, that's fine, but the multimedia items are pure 12 and retrieved either locally or from a separate web 13 source, like a cloud provider. 14 Q Your opinion is that Avellan does not 15 separate multimedia items from the web page that's 16 been rendered; is that fair? 17 A My opinion is that Avellan can only retrieve 18 items that are embedded as part of a web page only. 19 It cannot do any separation unless -- if the 20 multimedia item is not part of the web page, it cannot 21 be shown. It cannot be used at all. And that's 22 assuming that it has a playback button and there's a 23 way to play it. 24 Q Avellan would be a request for a web page 25 that would have embedded multimedia items with it, but Page 91	1 satisfy the leverage of Claim 1, because in your 2 opinion, Claim 1 of the '074 patent, requires a 3 separate request for a web page and a separate request 4 for the multimedia items; is that fair? 5 A That's two separate requests. The obtaining 6 happens separately so you get the multimedia items 7 without any compression at all. Basically, like if 8 you recall here, then the plurality of multimedia 9 items, I think are in my report. 10 Q You mentioned compression. Why does it 11 matter whether the multimedia items are obtained in 12 the compressed or uncompressed form? 13 A Because you lose quality. You lose quality. 14 You lose a lot of the quality there. So basically, 15 like, the objective of the system is to provide cable 16 TV quality broadcasting in multiple formats. 17 So -- because then you obtain the multimedia 18 item separately, let's say there the multimedia item 19 is in 4K, then you can broadcast in 4K. Whereas in 20 Avellan, because it has a very compressed channel, 21 then any embedded Adobe player that contains that 22 content are already destroyed because of the nature of 23 the download link. 24 So then, obviously, it's a much less -- it's 25 a bad experience for the user. And, in fact, I think Page 93

1 in -- I described that about the user experience on 2 paragraph 129 of my report. 3 Q So in your opinion, the '074 patent claims 4 require the multimedia items that are obtained from 5 the data source to be uncompressed; is that fair? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: No, the obtaining of the 8 plurality of the multimedia happens -- multimedia 9 items happens separately in whatever form they're 10 chosen. It doesn't restrict them to that. 11 As long as they're separate so they're 12 basically locally generated, so you don't -- you 13 are then able to overlap whatever comes from the 14 web page, that's what that language describes. 15 BY MR. McBRIDE: 16 Q To be clear, a second ago you mentioned that 17 Avellan didn't disclose Claim 1 because you referenced 18 that it obtained compressed multimedia items, but 19 that's actually not a distinction in your mind for 20 Avellan; is that fair? 21 MR. DROLET: Objection. Form. 22 BY MR. McBRIDE: 23 Q Whether it's compressed or uncompressed data 24 doesn't matter in Avellan with respect to obtaining 25 content correspondent to plurality multimedia items? Page 94	1 Q Would Avellan obtaining compressed 2 multimedia items be relevant, the compression aspect, 3 to whether claim element 1(b) is satisfied? 4 MR. DROLET: Objection. Form. 5 THE WITNESS: The compression simply shows 6 that because they compress everything together 7 with the web page, it's not one media stream. 8 That's what it shows. 9 BY MR. McBRIDE: 10 Q We haven't gotten into the media stream yet, 11 sir. 12 I'm simply asking, does Claim element 1(b) 13 require the multimedia items that are -- the content 14 corresponding to the multimedia items that are 15 obtained to be in an uncompressed form, is that what 16 your claim requires? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: What I said, as I expressed in 19 my report, that the obtaining process is a 20 separate step than the rendering process. 21 MR. McBRIDE: Objection. Nonresponsive. 22 BY MR. McBRIDE: 23 Q Sir, a second ago I thought you were trying 24 to draw a distinction between Avellan and the '074 25 patent on the basis that Avellan would obtain Page 96
1 A I don't understand your question. 2 Q You said a second ago that Avellan, when it 3 obtained multimedia items, it was obtaining multimedia 4 items in a compressed form. Is that your opinion that 5 that is what Avellan is doing? 6 MR. DROLET: Objection to form. 7 THE WITNESS: Avellan does not obtain 8 multimedia items. Avellan only obtains web 9 pages, if it obtains anything. Avellan simply 10 retrieves web pages and that's it. 11 BY MR. McBRIDE: 12 Q And if web pages include multimedia items, 13 would those multimedia items be compressed or 14 uncompressed? 15 MR. DROLET: Objection. Form. 16 THE WITNESS: Those would be compressed, 17 according to Avellan, because it turns them into 18 a ZIP or a tag file, so it creates a compression 19 as described in paragraph 126 of my report where 20 Avellan says that it creates a compressed video 21 file, then -- 22 BY MR. McBRIDE: 23 Q Is your argument that Avellan -- 24 A -- a compressed video file is what Avellan 25 teaches. Page 95	1 uncompressed -- sorry -- compressed multimedia items. 2 Are you trying to make that distinction or 3 not? 4 A It does not obtain anything. Avellan simply 5 makes a web request. It does not obtain anything. 6 Q Okay. Well, let's -- if a reference 7 obtained multimedia items that were compressed, would 8 that be a problem for element 1(b)? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: No. 11 BY MR. McBRIDE: 12 Q Okay. So to be clear, element 1(b), it 13 doesn't matter whether the multimedia items are 14 allegedly compressed or uncompressed. Fair? 15 A The separation is what makes the 16 distinction. What makes the distinction is that 17 Avellan can only retrieve one step, basically, a web 18 page rendering. That's the only thing that it 19 supposedly does. 20 And it has little drawbacks, like I said, 21 because the Adobe web player needs to be added to play 22 video or to play audio. 23 Whereas the '074, through it can render web 24 pages with multimedia items that are referenced to 25 Adobe, has an additional step which is the obtaining Page 97

1 plurality of multimedia items that come from any 2 source, from one source, where it retrieves the 3 multimedia items and then it is able to assemble that 4 and multiplex them, web page on one side and the 5 multimedia items that have nothing to do with the web 6 page on another side. 7 Q So your opinion is that the multimedia items 8 have nothing to do with the web page? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: The one -- element 1(a), the 11 obtaining the step has nothing to do, basically 12 as 141 says, that obtaining is a separate 13 process. 14 MR. McBRIDE: Objection. Nonresponsive. 15 BY MR. McBRIDE: 16 Q If a system obtains content, the plurality 17 of multimedia items, and those multimedia items 18 correspond to media that would be associated with the 19 web page that's being rendered, is that a problem? 20 Like, can you explain what you mean? This 21 is really not making any sense. Let me strike that. 22 Let me ask a different question. 23 The content correspondent to plurality 24 multimedia items, can it be related to the web page 25 that's being rendered in element in 1(c)? Page 98	1 BY MR. McBRIDE: 2 Q My question is different, sir. You are a 3 POSITA, right? 4 A Yes. 5 Q You're an educated individual, correct? 6 A Yes. 7 Q In fact you have a Ph.D., correct? 8 A Correct. 9 Q So when I ask a question like, does the 10 content corresponding to the plurality of multimedia 11 items, as recited in element 1(b), can that content be 12 related to the web page in element 1(c). 13 Do you have a problem with that question? 14 A The answer is in paragraph 110 and 111 on my 15 report. 16 Q And is the answer, yes, it can be related 17 or, no, they can't be related? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: The separate request for the 20 web page is separate. The obtaining of the 21 content is a separate step. So obtaining of the 22 content has nothing to do with rendering of a web 23 page. 24 MR. McBRIDE: Objection. Nonresponsive. 25 Page 100
1 MR. DROLET: Objection. Form. 2 THE WITNESS: The obtaining of the 3 multimedia items in element 1(a), like I said 4 here, the obtaining of the multimedia items, 5 which is very, very clearly explained as part of 6 the -- paragraph 97. 7 And then we go on -- I go on, on basically 8 paragraph 103 through 109, basically, indicate 9 that especially in paragraph 110, that obtaining 10 content corresponding to the plurality of 11 multimedia item from at least one source offer 12 the content in at least one source format. 13 So this is part of the request to obtain 14 content, which is a separate request that is used 15 separate of the rendering of the web page by a 16 browser using the content. 17 So then basically you need to have the 18 content first to see what you're going to render 19 next. So basically it cannot happen as part of 20 the rendering of a web page because you're using 21 the content, so you cannot retrieve the web page 22 with the content to use it with the same content 23 that you -- it's nonsensical. 24 MR. McBRIDE: Objection. Nonresponsive. 25 Page 99	1 BY MR. McBRIDE: 2 Q We're not talking about the steps or the 3 requests, or your belief that somehow there are 4 multiple requests that are required. 5 I'm simply asking, is the content 6 corresponding to the plurality of multimedia items, 7 can that content be related to the web page that is 8 rendered in element 1(c). 9 A I -- it depends. 10 MR. McBRIDE: Objection. Nonresponsive. 11 BY MR. McBRIDE: 12 Q When you say "it depends," do the claims 13 require it to be unrelated? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: I think I explained to you 16 like this, the rendering of a -- rendering of a 17 web by a browser using the content, basically is 18 using the content that it was obtained. So, 19 therefore, they cannot be the same content. 20 Because you are using the content that you 21 obtained to render the web page using the 22 content. 23 So you cannot obtain the content to use the 24 content itself. You cannot request the web page 25 with the content that you -- so, in other words, Page 101

1 you are trying to combine two things that are 2 obviously separate. 3 MR. McBRIDE: Objection. Nonresponsive. 4 BY MR. McBRIDE: 5 Q A web page, like you mentioned earlier, can 6 refer or embed multimedia items; is that correct? 7 A A web page can have references over the HTML 8 page or HTML sources to different links that point to 9 different images or other websites or hyperlinks to 10 point to, even a multimedia item. 11 But those are, according to Avellan, 12 retrieved, compressed into a file, and made into some 13 sort of, like a video snippet they call it. So that's 14 completely different and unrelated to what happened 15 with the obtaining a step, because the obtaining a 16 step that the 1(b) recites is separate from the 17 rendering step that you're pointing to. 18 Q Does Avellan obtain content from a network? 19 A It depends. 20 Q Dr. Hernandez, you are a POSITA. You have 21 an opinion on this. You studied Avellan, correct? 22 A Yes, it depends. 23 Q Does Avellan disclose obtaining content from 24 a network? 25 A It does not. Page 102	1 web page? 2 A If it -- 3 (Simultaneous speakers.) 4 Q Do you -- can you find that reference in 5 Avellan, sir? 6 A It refers to the Web to HD protocol, which 7 does not exist, and the reference does not exist. The 8 Web to HD protocol is referenced by Avellan, for 9 example, in paragraph 122. And there's no reference. 10 Lipoff does not know what it is, that's your expert. 11 And Avellan basically calls it the Web to HD 12 Video Protocol, which is inexistent. And that's the 13 main foundation for Avellan to render a web page in 14 some way. Therefore, I think Avellan does not 15 disclose clearly or basically it's questionable, what 16 the Web to HD protocol is. 17 Q If I were to review Avellan, if you were to 18 review Avellan, sir, would you be able to find a 19 reference to the words rendering a web page in 20 Avellan? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: Yeah, but it's referring to 23 the web to HD protocol -- the web to HD video 24 protocol is what Avellan refers to for this 25 process. And, therefore -- and process does not Page 104
1 Q It does not. Okay. So your opinion is that 2 it does not disclose that; is that fair? 3 A That's correct. It does not disclose that. 4 The only thing it discloses is a rendering of a web 5 page. 6 Q So Avellan only discloses, in your mind, 7 rendering of a web page? 8 A That's the only thing it discloses. 9 Q Okay. So let's talk about the rendering 10 step now. So Avellan discloses rendering the web 11 page, correct? 12 A That's what it claims through some sort of 13 fictitious web through HTML protocol that nobody knows 14 how it works, but let's assume that it does that. 15 MR. McBRIDE: Objection. Nonresponsive. 16 BY MR. McBRIDE: 17 Q Is there references to rendering a web page 18 in Avellan? 19 A Like I said, the rendering for a web page in 20 Avellan is due to a Web to HD protocol that is 21 inexistent, therefore, I would be baffled if it even 22 discloses that. 23 MR. McBRIDE: Objection. Nonresponsive. 24 BY MR. McBRIDE: 25 Q Does Avellan reference anywhere rendering a Page 103	1 exist, so I think it is a wishful thinking that 2 Avellan makes in that regard. 3 BY MR. McBRIDE: 4 Q So your opinion is that Avellan discloses 5 it, written on the web page, but they meant that to 6 refer to a technology that does not exist; is that 7 your opinion? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: It's correct. The Web to HD 10 protocol does not exist. 11 BY MR. McBRIDE: 12 Q It does not exist for rendering a web page; 13 is that your opinion? 14 A That's correct. The Web to HD protocol does 15 not exist. 16 Q And somebody reading the words "rendering a 17 web page" in Avellan would have no idea what that 18 phrase means; is that your opinion? 19 MR. DROLET: Objection to form. 20 THE WITNESS: Well, rendering to a web page 21 means that you have to display it in some screen, 22 so that could mean that you have a browser on 23 some sort of a screen that you connect to it, but 24 that's just partially what you're pointing to. 25 The rendering of a web page and all the Page 105

1 other components of the claims and language 2 require the use of the Web to HD protocol that is 3 nowhere to be defined. I couldn't find it 4 anywhere. 5 If you can point me to the Web to HD 6 protocol certification, I would be happy to 7 review it. 8 BY MR. McBRIDE: 9 Q Dr. Hernandez, does the word "browser" 10 appear in Avellan? 11 You reviewed Avellan, right? You understand 12 Avellan, right? 13 MR. DROLET: Objection. Form. 14 BY MR. McBRIDE: 15 Q Does the word "browser" appear in Avellan, 16 sir? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: In reference to the Web to HD 19 protocol. 20 BY MR. McBRIDE: 21 Q So Avellan does disclose a browser, correct? 22 MR. DROLET: Objection. Form. 23 THE WITNESS: In reference to the Web to HD 24 protocol. 25 Page 106	1 A The browser is tied to the Web to HD Video 2 Protocol, which is not inexistent, so I don't know 3 what Avellan is using for that process, because that's 4 not defined anywhere. Unless you can show it to me, 5 it is not defined. 6 Q Dr. Hernandez, the '074 patent -- do any of 7 the challenged patents define the word "browser"? 8 A The fact that the word "browser" is used, is 9 used in conjunction with several other steps that are 10 clearly disclosed in '074 patent. 11 The Web to HD protocol, which is done in 12 hindsight basically to say that that's magically what 13 the '074 patent does is incorrect and inappropriate 14 because the Web to HD protocol is not in existence, so 15 the word "browser" in the content of the Web to HD 16 Video Protocol is up to speculation. 17 MR. McBRIDE: Objection. Nonresponsive. 18 BY MR. McBRIDE: 19 Q Do the challenged patents define the word 20 "browser"? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: The challenged patents use the 23 word browser in the context of what it does to 24 generate the temporal screen captures, insofar as 25 the claimed language states in elements 1(c), Page 108
1 BY MR. McBRIDE: 2 Q Do you not understand what the word 3 "browser" means? 4 A I think Avellan connect to browser to the 5 Web to HD protocol, or to the -- 6 MR. McBRIDE: Objection. Nonresponsive. 7 BY MR. McBRIDE: 8 Q Does the word "browser" mean different 9 things to a POSITA? 10 A Hey, Mike, can you please, you know, chill. 11 Be more respectful. 12 Q I'm asking simple questions. 13 A Can you please be more respectful? 14 Q I am being perfectly respectful, sir. I'm 15 not getting answers to the questions that I'm asking 16 which is causing a problem. So let me try again. 17 Does the word "browser" mean different 18 things to different POSITAS? 19 A In Avellan the "browser" means tied to the 20 Web to HD Video Protocol. That's what it means in 21 Avellan. 22 Q So someone reading Avellan, seeing the word 23 "browser" would come up with a different understanding 24 of what a browser is than somebody reading the '074 25 patent; is that your opinion? Page 107	1 1(d), and 1(e). Whereas in Avellan, the browser 2 is named in the context of the Web to HD Video 3 Protocol, which is inexistent. 4 BY MR. McBRIDE: 5 Q Let me try this again. 6 Objection. Nonresponsive. 7 Do the challenged patents have a specific 8 definition of browser. Yes or no? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: I already answer to that 11 question. 12 BY MR. McBRIDE: 13 Q I'm not getting an answer to that question. 14 Do the challenged patents provide a 15 definition of the term "browser." Yes or no? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: The patents cite the word 18 browser as several examples in the specification, 19 and how it is being used to do the screen 20 captures of the web pages as required in contrast 21 to the Web to HD Video Protocol that it does not. 22 BY MR. McBRIDE: 23 Q Let's get to the Web to HD. I know you like 24 saying that word, but let's start with '074 and the 25 other challenged patents. You said they provide Page 109

1 samples of browsers. Is that what you said? 2 A Yes. 3 Q Is the challenged patents -- strike that. 4 Are the challenged patents limited to those 5 example browsers? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: Browser is not a protocol, 8 just to make sure, so then browsers are just 9 named there but not a Web to HD Video Protocol. 10 MR. McBRIDE: Objection. Nonresponsive. 11 BY MR. McBRIDE: 12 Q Sir, we're going to get to the web to HD 13 protocol. I know you love those words. We are going 14 to get there. We are going to start with the 15 challenged patents. 16 Do the challenged patents limit the term 17 "browser" to only the specific browsers disclosed in 18 the specification? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: The browser is different -- 21 the browser term is very well specified in the 22 specification, and I think the browser term is 23 described in my report. So if we go to my 24 report, I describe that part. 25 MR. McBRIDE: Objection. Nonresponsive. Page 110	1 they wouldn't necessarily limit it to a specific 2 browser or a specific protocol unless it was 3 specifically required by that reference; is that fair? 4 A You're incorrect. 5 Q How am I incorrect? 6 A A browser is not a protocol. 7 Q Would somebody picking up a patent that 8 simply says "browser," would they feel that it is 9 proper to limit it to only a certain category of 10 browsers? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: Yeah, existing browsers that 13 exist. I think that depends on what browser 14 they're saying to as well. So if they support 15 XML, they support HTML, they support JavaScript, 16 they support what. So depending on what version 17 of the browser is cited, how interactive or 18 non-interactive there is, there are all kinds of 19 different type of browsers that exist. There are 20 headless browsers. There are browsers that are 21 made for special purpose browsers. There are 22 many browsers. 23 What I am saying is that by no means does 24 any of the browsers support, or have any way of 25 supporting an existent protocol like the Web to Page 112
1 THE WITNESS: I have not finished the 2 answer. 3 MR. McBRIDE: Objection. Nonresponsive. 4 THE WITNESS: Look, if you're going to cut 5 me off like that let's -- Rob, you know. 6 BY MR. McBRIDE: 7 Q Dr. Hernandez, I'm asking a very simple 8 question that I think has a very simple answer, and I 9 don't even really have a say in which way the answer 10 is. This is entirely up to you. 11 Is it your opinion that the challenged 12 patents are limited to only the browsers that 13 specifically are disclosed in the specification? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: The browser is not Web to HD 16 protocol. Any other browser is okay. 17 BY MR. McBRIDE: 18 Q In the '074 patent -- sorry -- in the 19 challenged patents? 20 A In any patent, actually. Like in any 21 patent. I think that would be true for any patent in 22 the world. 23 Q Okay. So I think -- we're making progress 24 here and I appreciate it. 25 So when somebody sees the word, "browser," Page 111	1 HD Video Protocol. 2 BY MR. McBRIDE: 3 Q So any browser is covered under the term 4 browser. It's not something that would -- a Person of 5 Ordinary Skill In the Art would limit necessarily to a 6 specific browser, correct? 7 A The browser are basically defined in the 8 patent as part of the paragraph 177, under the Custom 9 AI web page located where you have a particular URL, 10 or a Universal Resource Locator, that use JSON or XML 11 definitions or a URL as input to create the screen 12 captures. 13 Q In the challenged patents, Claim 1(c), to be 14 satisfied by an accused product that had any browser 15 as long as that browser was rendering a web page using 16 the content obtained in 1(b), correct? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: Dude, it doesn't use the 19 content from 1(b). It's a different content. 20 It's like -- basically, like, the web browser 21 renders the web page using the content that was 22 obtained from 1(b) because it was a separate 23 retrieval. 24 So let's say you have a jazz channel, so you 25 retrieve the jazz channel first and then you say, Page 113

1 Okay, what's the web page correspondence to the 2 jazz channel? And then, okay, the jazz channel 3 is the input to URL, so then the user interface 4 is the user interface for the jazz channel. 5 That's what that means. 6 MR. McBRIDE: Objection. Nonresponsive. 7 BY MR. McBRIDE: 8 Q I will note that it sounded like you said 9 the rendering of a web page by a browser does not use 10 the content or 1(b), or was that a misstatement by 11 you? I'm sorry, can you repeat what you said? 12 A I gave you an example of how that works. 13 You said it was nonresponsive. You want me to repeat 14 it, I'm glad to repeat it. 15 Q Does the rendering a web page by a browser 16 step of element 1(c) use the content that is obtained 17 in element 1(b) of the challenged claims? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: Yeah, you obtain the plurality 20 of the media stream. Let's say the jazz channel 21 has 1,000 music channels -- 1,000 music files, so 22 and obtain that in that 1(b) step, and then you 23 render a web page that the name is jazz channel, 24 that's how you render the page corresponding to 25 that content. Page 114	1 yield simple answers, but let's try simple questions. 2 Do your challenged patents require a 3 specific browser to satisfy any of the claim members? 4 A Any browser except an imaginary browser, 5 like the one to HD protocol browser. 6 Q Okay, any browser. All right. Got that. 7 Now we can turn to Web to HD protocol. Is 8 it your opinion that Avellan requires the use of Web 9 to HD Video Protocol, is that your opinion? 10 A That's what Avellan teaches. It teaches the 11 fact that there is a Web to HD Video Protocol that in 12 a way creates these videos -- these video snippets 13 from the web page. That's what it does. 14 Q But if a reference didn't require Web to HD 15 protocol, it wouldn't really matter, right? If a Web 16 HD protocol is optional, would that be important to 17 you? 18 A That's what your expert says that it 19 requires. It didn't say that. That's what Lipoff 20 did. Lipoff did that in his report. 21 MR. McBRIDE: Objection. Nonresponsive, 22 sir. 23 THE WITNESS: I mean, I'm saying -- I am 24 responding -- 25 Page 116
1 And now the screen for jazz will be rendered 2 over the web page, and the plurality of 3 multimedia items that was retrieved in a 4 particular format is now being used as the 5 background music to generate the screen -- with 6 the temporal screens for the web page for the 7 jazz channel. 8 BY MR. McBRIDE: 9 Q For the challenged claims, element 1(c), for 10 example, is satisfied by any browser, in your opinion, 11 that is capable of rendering a web page using that 12 content; is that fair? 13 A In the format I describe is how that works. 14 Q So that would be fair, yes? 15 A It depends on if it's used the way I 16 described it. 17 Q Okay. So if a browser is capable of 18 rendering a web page using that content, your opinion 19 would be that that browser could satisfy element 1(c). 20 MR. DROLET: Objection. Form. 21 THE WITNESS: I'm not sure I follow what you 22 are saying. 23 BY MR. McBRIDE: 24 Q Sir, I'm trying to get simple answers. And 25 the simple answers -- or the simple questions don't Page 115	1 BY MR. McBRIDE: 2 Q I'm asking about your opinions, 3 Dr. Hernandez. Is it your opinion that Avellan must 4 use a Web to HD Video Protocol? 5 A Basically I'm referring to paragraph 105 6 where your petitioner relies on the Avellan that 7 includes an inexistent to Web to HD Video Protocol, 8 and that's what your report says. So I didn't make 9 any analysis besides what your report cited. 10 Q Dr. Hernandez, I'm going to object, 11 nonresponsive. Simple question, hopefully get simple 12 answers. 13 Is it your opinion that Avellan requires the 14 use of a Web to HD protocol? 15 A I only responding to what your expert said. 16 I didn't do any other analysis. 17 Q So you have no position on whether or not 18 Avellan requires a web to HD protocol? 19 A That's what your expert said. I just say 20 that he is wrong. 21 MR. McBRIDE: Objection. Nonresponsive. 22 BY MR. McBRIDE: 23 Q You personally are not opining, or are you, 24 that Avellan requires a Web to HD Video Protocol; is 25 that fair? Page 117

1 A I'm just saying your expert pointed to that 2 functionality to be the one that anticipates the 3 '074 -- 4 MR. McBRIDE: Objection. Nonresponsive. 5 THE WITNESS: -- patent. 6 (Simultaneous speakers.) 7 BY MR. McBRIDE: 8 Q Are you offering the opinion that Avellan 9 requires the use of Web to HD Video Protocol? Yes or 10 no. 11 A That's partially true. 12 Q Partially true. So you are partially 13 offering the opinion that Avellan requires that? 14 A Yeah, of course, because I'm responding to 15 your expert. 16 Q And in terms of when you see "browser" in 17 Avellan, your argument that the browser this was in 18 Avellan doesn't disclose the browser of element 1(c), 19 as based upon your partial opinion that Avellan 20 requires use of the Web to HD Video Protocol; is that 21 fair? 22 A I think that if you -- are you asking about 23 the browser, or the virtual browser, or just browser. 24 Q You understand that Avellan references 25 "browser," right? Page 118	1 A It's part of the misconception of what the 2 Web to HD protocol is, because it is not existent, so, 3 therefore, like using browser and virtual browser 4 seems to be irrelevant, so he's basically making a lot 5 of stuff up. 6 Q Dr. Hernandez, in your opinion, is the 7 browser that is located at the gateway server of 8 Avellan, is that a virtual browser, or a browser, or 9 does it not matter? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: Like I said, your expert 12 says -- points to element 106 that recites in the 13 gateway, and he said that it was a browser or a 14 virtual browser. 15 I'm just citing what your expert says and 16 that's basically -- I think he equates they both 17 are both the same. I'm not sure why he did that, 18 but that's your argument, not mine. 19 BY MR. McBRIDE: 20 Q Do you believe that whether it is a virtual 21 browser or a browser matters for purposes of the IPR 22 process? 23 A I think it shows confusion in terms of your 24 statements so then, obviously, that is going to weigh 25 in terms of the value that the IPR court will give to Page 120
1 A A virtual browser, so I want to make sure 2 which one you are referring to. 3 Q Avellan references the use of a browser at 4 the gateway server, correct? 5 A Yes, your Lipoff deposition, page 124, lines 6 17 to 24, describe that there is a browser or a 7 virtual browser, so which one are you referring to? 8 Q You understand that there's a browser at the 9 gateway server of Avellan, correct? Am I right or am 10 I wrong? 11 MR. DROLET: Objection to form. 12 THE WITNESS: So you're asking for the 13 browser, or not the virtual browser then? 14 BY MR. McBRIDE: 15 Q Okay. That's going to be my follow-up 16 question. 17 Is the browser at the gateway server of 18 Avellan, are you calling that a virtual browser or are 19 you calling that a browser? 20 A Your expert said browser or virtual browser, 21 so I assume that he's equating them. 22 Q Okay. Do you have a different theory on 23 that? 24 A Yeah, of course. 25 Q What is -- Page 119	1 the browser, a virtual browser, calling one or the 2 other one. 3 Q Do you think that if it is a virtual browser 4 located at the gateway server that that is not a 5 browser? 6 A I think the virtual browser from Avellan is 7 not a browser that is commercially available. It is 8 something part of their imaginary tag file 9 communication protocol thing, so I think that's what 10 it refers to, to the virtual browser, because it 11 relies on the tag file protocol system that Avellan 12 cites. 13 And if you want to refer to my report, I 14 think the tag file system is based on paragraph 184 of 15 my report, where this virtual browser is mentioned. 16 Q So the browser of Avellan, that you believe 17 does not disclose the browser of the challenged 18 patents is not commercially available? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: Yeah, tag files are not used 21 by any browser at all. No browser uses that. 22 BY MR. McBRIDE: 23 Q The browser of Avellan uses that; isn't that 24 your opinion? 25 A I mean, I don't know -- it's like basically Page 121

1 you're trying to make Web to HD protocol, virtual 2 browser, creating a lot of things that are not 3 existent. I don't have an opinion on something that 4 does not exist. If we're going to establish that the 5 Web to HD protocol exist, then -- 6 Q Dr. Hernandez, nobody is talking about the 7 Web to HD protocol at this time. 8 A It is part of Avellan. It's part of it. 9 That's part of it. 10 Q Dr. Hernandez, let's start again and let's 11 try to make simple answers to simple questions. 12 MR. DROLET: Objection. 13 BY MR. McBRIDE: 14 Q Does Avellan disclose a browser located at 15 the server gateway? 16 A Avellan discloses a browser and a virtual 17 browser, so both. Which one are you referring to? 18 Q Let's start with the virtual browser. Is a 19 virtual browser a type of browser? 20 A No. 21 Q And why not, in your opinion? 22 A Because it relies on tag files and some 23 other features that is retrieving just -- some 24 proprietary video snippets that are compressed in a 25 ZIP format or a TAR format. They are decompressed Page 122	1 BY MR. McBRIDE: 2 Q Dr. Hernandez, are you familiar with 3 Avellan? 4 A Of course. 5 MR. DROLET: Objection to form. 6 BY MR. McBRIDE: 7 Q Did you review Avellan in preparing your 8 report? 9 A That's obviously why I responded to your -- 10 I focus on your expert arguments. 11 Q So sitting here, you're not aware of whether 12 or not Avellan discloses a browser at the gateway 13 server; is that correct? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: If you're referring to -- 16 BY MR. McBRIDE: 17 Q I'm asking. 18 A I didn't memorize it, so if you can please 19 help me with my memory. I didn't memorize that. 20 Q Okay. I have added Exhibit 4. Please let 21 me know when it's there. 22 When you get it, I'd like you to turn to 23 page 21. 24 MR. DROLET: Counsel, you just added 25 Exhibit 4; is that correct? Page 124
1 somehow and shown to the user, and the user then has 2 this image where it can navigate through a tag file 3 and send commands to the browser itself. So it's like 4 remote -- it's like Citrix MetaFrame type of thing. 5 Q Are you of the opinion that the virtual 6 browser at the gateway server of Avellan is not 7 capable of rendering HTML? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: I think that's the issue with 10 this questioning is that you're confused where 11 the browser is. Are you saying browser or 12 virtual browser? 13 BY MR. McBRIDE: 14 Q Dr. Hernandez, is it your opinion that the 15 virtual browser of Avellan located at the gateway 16 server is not a browser -- strike that. 17 Is it your opinion that the virtual browser 18 located at the gateway server of Avellan is not 19 capable of rendering HTML? 20 A Can you point me to where the virtual 21 browser is into the gateway server? I don't recall 22 that that is true. 23 Q Let me introduce your petition. 24 (Exhibit 4 marked.) 25 Page 123	1 MR. McBRIDE: Yes, Exhibit 4 has been added 2 to the cabinet. 3 MR. DROLET: And Exhibit 4 is what? 4 MR. McBRIDE: Exhibit 4 should be the '349 5 or '074 patent petition. 6 MR. DROLET: Okay, thank you. 7 Counsel, you're introducing this to refresh 8 his memory on Avellan, is that what you're doing? 9 MR. McBRIDE: I am introducing this to call 10 out citations in Avellan, because he's responding 11 to the petition, correct? 12 MR. DROLET: Could you refer to Avellan? In 13 your petition it is -- 14 MR. McBRIDE: Mr. Drolet, I want to be very 15 clear, that if this continues going the way it 16 does, I will be making a call to the Patent Trial 17 and Appeal Board. 18 Unlike litigations where people don't use 19 the hotline, in IPR processes, people do. I am 20 asking very simple questions, the record will 21 reflect that, and I have not been able to get a 22 single straight answer from the witness on any of 23 it. 24 If this is a delay game, in which he wants 25 to consult multiple references to answer basic Page 125

1 questions, then I think I'm going to have to give 2 the IPR a call and let them know. 3 Maybe it comes to nothing. Maybe your 4 client gets sanctions. But it is really 5 ridiculous that I have to go through multiple 6 exhibits for basic elements that your witness is 7 of the opinion are not disclosed. 8 MR. DROLET: Feel free to do what you have 9 to do. 10 MR. McBRIDE: Let's start with the petition. 11 And if your witness simply cannot agree that the 12 language is what the language is, we will consult 13 Avellan. And if it delays longer, then this will 14 take all day tomorrow and I will be asking for 15 more time. 16 MR. DROLET: Mike, you can do what you want 17 to do; however, you're trying to, you know, get 18 his opinion -- 19 MR. McBRIDE: I think it would be helpful if 20 you could talk to your client about the 21 importance of answering simple questions with 22 simple answers. 23 Asking a simple yes or no question and 24 having it to go on into two or three paragraphs 25 of an answer without an actual answer is Page 126	1 Q Dr. Hernandez, if you genuinely do not 2 understand a question I'm asking, sure. Please do. 3 A Thank you. 4 Q I'm asking in many regards very simple 5 questions, so we'll keep going on this, but I will be 6 calling the board if it doesn't get better. 7 A Call whoever you want. 8 Q I'm sorry that you feel the need to play 9 this game, sir. 10 Let's turn to Exhibit 4, which is the IPO 11 petition. Let me know when you have that up. 12 A Yeah, it is there. Paragraph 21 of your 13 petition? 14 Q Let's turn to page 26 -- sorry, wrong 15 petition. 16 Page 21. Avellan, as it states in quotes, 17 discloses browser software 106, resides at the gateway 18 134, and was configured to run as a virtual browser. 19 Do you see that? 20 A As a remote client of the gateway server 21 134. 22 Q Sure. 23 A So basically browser software 106, so it's 24 106, recites that the gateway 134, and it is 25 configured to run as a virtual browser as a remote Page 128
1 inappropriate. 2 MR. DROLET: He's doing his best. 3 MR. McBRIDE: I disagree. 4 MR. DROLET: He is. He is doing his best, 5 Counsel. 6 MR. McBRIDE: Perhaps he is doing his best; 7 he can do a little better, because we need simple 8 answers to simple questions. 9 MR. DROLET: We are here in good faith. 10 BY MR. McBRIDE: 11 Q Is that fair, Dr. Hernandez? Is that fair? 12 A What? 13 Q That you can give simple answers to simple 14 questions? 15 MR. DROLET: Objection. 16 THE WITNESS: If I understand the question, 17 I am entitled to request -- as part of the 18 rules -- 19 BY MR. McBRIDE: 20 Q Okay. 21 A -- I just want to make sure. Wait, wait, 22 wait. I just want to make sure the rules are clear. 23 If I do not understand your question, I'm entitled to 24 request for you to rephrase the question and for you 25 to repeat your question; is that right? Page 127	1 client of the gateway server 134. But the remote 2 clients are basically removed from the picture in 3 Figure 1. 4 Q Is browser software 106, which resides at 5 the gateway to 134 of Avellan, a browser as the '074 6 patent issues that term? 7 A Well, because this browser requires the use 8 of the elements on 112, 120, 124, 122, 120, I'm not 9 sure it will be a standard browser because it uses all 10 this tag files and all this sort of process that is 11 part of the quote, unquote, browser that Avellan uses. 12 Q So if I understand you correctly, Avellan's 13 browser software 106 is not a standard browser, in 14 your mind? 15 A It's basically represented by the figure 16 that you're showing in Figure 1, that is exchanging 17 through 122, 124 lines -- 120 to 124 lines, 18 communication with what you remove from the screen, 19 which is going to be the client. 20 So the clients are actually using a virtual 21 browser to chat or to speak to whatever browser is 22 there to enhance this communication. 23 Therefore, there's no -- Firefox doesn't use 24 tag files; Safari doesn't use tag files; Google Chrome 25 doesn't use tag files. Any headless browser doesn't Page 129

1 use any of these tag files. No browser that is in use 2 at all today uses any of these tag files and all this 3 120, 122, and 124 lines that Avellan shows as part of 4 Figure 1. 5 MR. McBRIDE: Objection. Nonresponsive. 6 BY MR. McBRIDE: 7 Q I'm going to ask a simple question. 8 In your opinion, is the browser software 9 106, described in Avellan a standard browser? Yes or 10 no. 11 A From the evidence shown, it s -- 106 is not 12 shown on the screen, so I don't know exactly what you 13 are referring to. 106 is not on the screen. 14 Q You understand that Avellan discloses 15 browser software 106, correct? 16 A It is not on the figure that you are showing 17 me. I did not memorize the figure, so I don't know. 18 So maybe -- 19 Q Is it your opinion that browser software 106 20 is not a standard browser? 21 A There's no 106 on the screen. 22 Q There doesn't need to be a 106 on the 23 screen, sir. I'm asking you a very simple question. 24 You understand that the petition points to 25 browser software 106 as the virtual browser of the Page 130	1 distinction. 2 Q You mentioned that there are things that a 3 non-modified standard browser does. What does a 4 standard browser do? 5 A A standard browser simply retrieves the 6 HTML, gets the web pages, and some of these browsers 7 have JavaScript that you can call to obtain screen 8 capture of the rendered image, and that's it, or they 9 render XML to make a user interface, or they render 10 JSON to make a user interface, but do not require any 11 of these tag files at all. Those are only for 12 Avellan. 13 Q Does the browser software of Avellan render 14 HTML? 15 A It depends on the Web to HD Video protocol 16 for that, so therefore -- 17 Q Why does it depend on the Web to HD Video 18 Protocol? 19 A Because it is what it says. Avellan is what 20 it says here. I mean, even your petition says that. 21 MR. McBRIDE: Objection. Nonresponsive. 22 BY MR. McBRIDE: 23 Q If Avellan doesn't use Web to HD Video 24 Protocol, would the browser software of Avellan render 25 HTML? Page 132
1 gateway server, correct? 2 A Would you please point me on the figure 3 where is that? I can't find it. 4 Q Sir, is the browser software that's 5 described on Avellan a standard browser? 6 MR. DROLET: Objection. Form. 7 BY MR. McBRIDE: 8 Q It's a yes or no. 9 A It is a modified browser that using tag 10 files and some sort of Web to HD Video Protocol. 11 Q Does the fact that it's a modified browser, 12 in your opinion, impact whether it discloses the term 13 "browser" as used in the challenged patents? 14 A Of course. That's a material change. 15 Q And why is that a material change, in your 16 opinion? 17 A Because you're relying on other components, 18 like tag files and video files that compress files on 19 things like that that regular browsers don't do. So 20 basically the Web to HD Video Protocol is something 21 that this browser does from Avellan. 22 And, obviously, the dependency on 120, 122, 23 and 124 lines and I assume the 106 is there somewhere, 24 which is not shown on Figure 1, on page 21 of your 25 petition, then I believe that that makes a huge Page 131	1 A I'm not sure about that. 2 Q If the Avellan browser software uses this 3 Web to HD Video Protocol, does it render HTML? 4 A I don't know. What was the specification 5 from the Web to HD Video Protocol. 6 Q I'm trying to understand why you believe in 7 your opinion that any use of the Web to HD Video 8 Protocol would have any bearing upon whether the 9 browser software of Avellan is capable of rendering to 10 HTML. 11 A I'm sorry, I didn't get your question. 12 Q Why do you believe that whether or not this 13 Web to HD Video Protocol is used impacts whether the 14 browser of Avellan renders to HTML? 15 A Because it's part of this tag files and the 16 protocol that is used to interact with the web page. 17 So then it's clearly depending on that to define when 18 to render what from the web page as you scroll down. 19 So Avellan teaches -- if we bring Avellan, I 20 can show you what Avellan teaches, how scrolling down 21 on the web page basically will create rendering of 22 certain parts of the web page. 23 So it's like, like I said, it's a Citrix 24 MetaFrame type of protocol which is not a standard 25 browser. That's more like a Citrix MetaFrame system. Page 133

1 Q You said, "standard browser." Is that 2 required by the challenged patents? 3 MR. DROLET: Objection. Form. 4 THE WITNESS: The standard browsers are 5 cited in the patent basically. Like any browser 6 that can render a web page or can render JSON or 7 XML files that can turn into user interfaces, 8 that's what that process does. 9 But additional to the rendering process, it 10 shows that the browser can also render the web 11 page to the temporal sequence of the screens and 12 those temporal sequence of the screens can show 13 dynamic changes as well as assemble those screens 14 to one media stream that's -- that's what the 15 claim describe, which basically is what you 16 assume, as the petitioner, the Web to HD protocol 17 does without citing any evidence of how the Web 18 to HD protocol does and how does it relate to the 19 tag files that are in lines 122 -- 120, 122 and 20 page 31 of your petition of Figure 1. 21 BY MR. McBRIDE: 22 Q Is the Web to HD Video Protocol, in your 23 understanding of that term as it is used in Avellan, 24 the act of rendering a web page? 25 A The name says it itself. Right. Web HTML. Page 134	1 that part. 2 Q So let me see if we can get common ground on 3 this. 4 If a browser is nonstandard, is it your 5 opinion that it is not a browser for purposes of the 6 challenged claims? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: The browser itself does not 9 show the challenged claim. The browser simply 10 provide the mechanism for rendering. So then as 11 long as that part is met by the software, then I 12 think that's -- you can consider that rendering 13 process, but there are more steps that are 14 required to complete the other elements of the 15 claim. 16 BY MR. McBRIDE: 17 Q So and let's focus just -- 18 A I haven't finished, sir. Let me finish, 19 please. I don't know what I was saying now. 20 Q So let's start on just the rendering 21 process, because that's what I have been asking about. 22 The claims of the challenged patents, Claim 23 1, for example, references rendering a web page with a 24 browser, correct? 25 A By a browser. Page 136
1 Web page to HD video protocol, so that's what it is 2 supposed to be doing but it doesn't say how. So it is 3 obvious that just the name by itself describes a 4 mechanism to convert HTML or web pages to some sort of 5 an HD format or a video format through a protocol, 6 which I think is what Avellan cites as the main source 7 of the, and you cite as the petitioner, to the main 8 source to be the 014 patent -- to the '074 patent. 9 Q So in your opinion, because Avellan uses a 10 nonstandard browser that is allegedly compatible with 11 a Web to HD Video Protocol, it is not the type of 12 browser that the challenged patents are referring to; 13 is that fair? 14 MR. DROLET: Objection. Form. 15 THE WITNESS: No, it's not fair. It's 16 basically -- you're equating the Web to HD Video 17 Protocol existed, and it does not. It's 18 basically speculation to say that, even to make 19 that question. 20 BY MR. McBRIDE: 21 Q If Avellan is not using a Web to HD Video 22 Protocol, in your opinion, would Avellan's browser 23 software be a standard browser? 24 A I didn't invent Avellan so I'm just replying 25 what your expert says in his report, so I didn't study Page 135	1 Q Okay. So we're not talking about any of the 2 following elements, just that one step of rendering a 3 web page by a browser. 4 Are we all on agreement that that's what we 5 are talking about right now? 6 A If that process is basically retrieving the 7 HTML or XML and turn that into some sort of an image 8 on a buffer, on a screen buffer, and that's -- that 9 needs to be, like, the way it works, so you have the 10 image created based on the renderings part of the web 11 page, that's an intermediate step to create the screen 12 captures or the frames of the future video to be 13 generated. 14 Q And those are the later steps. So we will 15 focus right now on the rendering of a web page by a 16 browser. 17 Does the browser, for purposes of that 18 limited language, need to be a standard browser, in 19 your opinion? 20 A It needs to be a browser capable of 21 generating the screen captures. 22 Q So the browser itself needs to be able to 23 generate the screen capture; is that what you said? 24 A It needs to generate the screen captures and 25 it needs to basically be able to render HTML, XML or Page 137

1 JSON as the patent description describes, and my 2 report, I believe, at paragraph -- paragraph -- I will 3 say the paragraph -- 177 describes and -- sorry, 4 paragraph 77 to 78 describes. 5 Q Okay. 6 A 76. 7 Q You said a second ago that the browser has 8 to generate the screen captures. Is that what you 9 meant or is that a misstatement? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: The browser renders the web 12 pages and creates the screen captures. That's 13 what is -- 14 BY MR. McBRIDE: 15 Q So if I have a browser that renders a web 16 page -- 17 (Simultaneous speakers.) 18 (Court reporter clarification.) 19 BY MR. McBRIDE: 20 Q So really quickly, just to wrap up as much 21 as we can before a break is needed, the -- a system 22 that has a browser that renders a web page but then 23 has separate software not capable of browsing, that 24 does a screen capture, would that not practice the 25 '074 patent, Claim 1? Page 138	1 even Chrome, or Chromium can act without 2 displaying their web page on the screen can 3 generate the screen captures -- the sequence of 4 screen captures as well. 5 BY MR. McBRIDE: 6 Q Okay. One more quick question and I think 7 we're done with this, hopefully. 8 Is it your opinion that Avellan does not 9 disclose all of the elements of Claim 1 in part 10 because the browser software described in Avellan does 11 not actually do the screen capturing process required 12 by Claim 1 of the user report patent? 13 A Avellan does not disclose 1(b), 1(c), 1(d), 14 1(e). And in my report you will see it doesn't 15 disclose 1(f) because of the way -- the one stream is 16 generated by Avellan is through some compressed file, 17 call it compressed video file, which does not qualify 18 either as a media stream. 19 MR. McBRIDE: Objection. Nonresponsive. 20 BY MR. McBRIDE: 21 Q Dr. Hernandez, you understand our court 22 reporter needs a break and I'm just trying to wrap up 23 one quick question. 24 Is it your opinion that Avellan does not 25 disclose all amounts of Claim 1 of the '074 patent Page 140
1 A I didn't make that analysis. I don't know 2 what the question is about. 3 Q Dr. Hernandez, you keep saying things like 4 the browser is generating the screen captures. Do you 5 mean that? In your opinion, do your claims require 6 the browser itself to generate the screen captures? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: I will refer to the language 9 on the claim itself. The language on the claim 10 refers to the screen captures, basically says 11 generating a temporal sequence of screen captures 12 of the rendered web dramatic illustrating dynamic 13 changes in the content over a period of time. 14 BY MR. McBRIDE: 15 Q Last quick question, and then we can give 16 our court reporter a break, does that language say 17 anything about the browser software having to do that 18 process of screen capturing? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: Well, I'm not sure about that. 21 That's more of an implementation question, and I 22 didn't -- I don't have an opinion on how this 23 could be implemented separately. 24 I know that certain browsers like headless 25 browsers, like Fountain jazz, or other browsers, Page 139	1 based in part on your opinion that the browser 2 software disclosed in Avellan does not also generate 3 the screen captures required by the challenged claim? 4 MR. DROLET: Objection. Form. 5 BY MR. McBRIDE: 6 Q Is that true? 7 A It's a very compound question so I'm not 8 sure that I can answer that. 9 MR. McBRIDE: Okay, we can go ahead and take 10 a break. We're off the record. 11 (Lunch recess taken.) 12 (Exhibit 5 marked.) 13 BY MR. McBRIDE: 14 Q Okay. Welcome back from the break. 15 So before we broke for lunch we were talking 16 about Avellan and the browser element of Claim 1 of 17 the '074 patent. 18 I have added into the cabinet, you should 19 see Exhibit 5 Avellan, Dr. Hernandez. Do you mind 20 pulling that up and let me know when you have it 21 pulled up? 22 A Just one second. 23 Exhibit 5, right? 24 Q Yes. 25 A Let me check. Page 141

1 It's on my computer. 2 Q All right. So as I understand it, and 3 please correct me if I'm wrong, this is a summary of 4 where we are at, it is your opinion that the browser 5 discussed in Avellan does not satisfy the browser 6 that's required by the claims of the challenged 7 patents; is that fair? 8 A That's partially true. 9 Q You say "partially true." What is partially 10 true about that? 11 A Yeah, I think there's a browser in Avellan, 12 but this browser has additional capabilities that make 13 it more -- if we make it a Venn diagram, the browsers 14 will be within it and then there will be -- like 15 Avellan's browser will have many components of a 16 browser, but it has additional components that are not 17 present in most of the browsers. 18 Like I said before, the tag protocol, the 19 tag files is something that is not present -- I mean 20 when I say tag, t-a-g, and that can be found in my 21 report at paragraph 131, for example, 136, where 22 Avellan teaches that the tag file is in use for -- as 23 part of the rendering mechanism from this browser, 24 attaches this tag files, and then that's how the -- 25 the user can locate elements on the screen, and it can Page 142	1 So the 106 that is described in Figure 1, is 2 reciting at the element 110, 104, 106, that's what it 3 points at, that the browser is reciting which is 4 basically confusing, because you said that the browser 5 was in the gateway server, but there's another 106 6 pointing in the Figure 1 at the laptop as 104N, for 7 example. 8 Q Did the claims of the challenged patents 9 exclude browsers that will have additional features, 10 such as the additional features you believe are part 11 of Avellan's browser? 12 MR. DROLET: Objection. Form. 13 THE WITNESS: I didn't do an analysis, to be 14 honest with you. I just basically relied on the 15 functionality described in the '074 claims, not 16 on any other functionality that could have been 17 present at Avellan. 18 But it is clear that Avellan is 19 distinguishable because it requires additional 20 features. For example, to play the video, you 21 have to send -- press the play button and then 22 basically Avellan discusses that about pressing 23 something on the screen, and basically like on 24 column 3, lines 62, it says, and the browser 25 including a mouse, select button keyboard, and on Page 144
1 interact with web players that could be present on the 2 particular web pages that Avellan is projecting. 3 Q Okay. Is it fair to say that in your 4 opinion the browser described in Avellan adds 5 additional features as compared to the browser 6 required by the challenged patents? 7 A Yes, it describes a different mechanism so 8 although they both have inputs as a web page, so they 9 both obviously have some sort of a web page interface, 10 because Avellan, as my paragraph 136 of my report 11 describes, basically -- I'm sorry. -- that creates a 12 compressed video file that -- and it's, for example, 13 at column 7 I will believe is line 47, is a -- sorry. 14 Column, I will say -- let me see what 15 Avellan says. "Including one of the pages images." 16 Yes, it will be on column 5, lines 10 to 15, Avellan 17 describes that the gateway server will be certain to 18 capture all the information on the web page, even if 19 that information continues over a period of time, once 20 the page is imaged, including any audio on the page, 21 which is kind of -- a little bit strange because a 22 page that is imaged does not include audio. And the 23 gateway server compresses the image or video frame 24 format and sends it to the browser 106 via the 25 satellite 102. Page 143	1 touch screen touch pad and other suitable input 2 device. 3 Basically this browser has an interactive 4 keyboard, a mouse and a button that it will 5 interact with whatever is being processed through 6 the tag file that elements 112 and 114, as 7 described by Avellan on Figure 1, basically. 8 The Figure 1, the laptop will go to 14N 9 choose 112, 114, responded tag file and -- let's 10 pull up to tag file. Tag data or action points, 11 that's basically to handle the drop menu, that 12 would be on element -- column 5, line 39, 13 basically that's when Avellan describes after 14 that on lines 39 to about 44, that when the 15 website is captured in a video frame format, 16 those action points are imaged and their 17 functionality is not retained -- is not retained 18 in the video images, rather a separate tag file 19 is created which maps the various locations and 20 the action points of the web page that -- that 21 tag file associated with the compressed video 22 file. 23 So, in other words, you have a tag file and 24 a compressed video file that are handled by the 25 laptop that receives this information. Page 145

1 BY MR. McBRIDE: 2 Q The additional features that you describe 3 for the browser in Avellan, are those relevant to 4 whether or not Avellan's browser discloses element 5 1(c), 1(d) and/or 1(e)? 6 MR. DROLET: Objection. Form. 7 BY MR. McBRIDE: 8 Q Let me ask a better question then. 9 You mentioned these additional features. 10 What claim elements of Claim 1 of the '074 patent are 11 those additional features relevant to your opinion 12 that Avellan does not disclose Claim 1? 13 A Sure. Sure. 14 So basically by generating this compressed 15 video file, then obviously as my report says on 16 paragraph 139 and 140, basically, then it will not be 17 assembled in a media stream because what it assembles 18 is a file with a tag file. 19 So as Avellan discloses, it assembles, 20 instead of a media screen, it uses the tag file and 21 the video file as cited by the column 5, lines -- 22 about 30 to 35, as I read before in the previous 23 answer. 24 Q Okay. Is it your opinion that the 25 additional features of Avellan's browser means that it Page 146	1 A The rendering process, what it does, it 2 retrieves the HTML, retrieves all the CSS, and all the 3 web resources and see where they go on the screen. 4 So rendering, what it does, that interprets 5 based on the HTML standard, it interprets the 6 positioning of all this objects and draws them on a 7 frame buffer, that this frame buffer, it's in memory. 8 And this frame buffer can then be dumped into an image 9 file if one chooses to or the frame buffer can be 10 updated on the fly and never save as a file and just 11 operate in memory as part of the software. 12 Q Does the browser in Avellan, the software 13 located at the gateway server, does it perform that 14 rendering process as you just described? 15 A It appears that it does that, but it creates 16 a compressed video file, so it creates -- it works 17 with the tag file. So the tag file maps to the video 18 file. So you have a tag file that has -- okay, the 19 search button is on the corner of the screen. The 20 picture of Google is in the middle of the screen. 21 Then the search button is to the right side, 22 coordinates whatever. 23 So this was the tag file continuing the 24 positioning. Then the image rendered by Avellan turn 25 into this video file, so the tag file maps the video Page 148
1 doesn't render a web page, as that phrase is used in 2 the challenged patents? 3 A Well, it doesn't render a web page with the 4 content because it simply receives a URL that is 5 passed from the remote browser. Basically the web 6 page is sent to, as information as shown by, I will 7 say a keyboard. 8 So basically when you type remotely, then it 9 said the user made -- okay, this is on column -- again 10 on column 5, line 61, "The user may then use the 11 keyboard to start typing a term in the search box." 12 So that means that you have a search box, 13 you have a lingo where you type, so when you type to 14 the keyboard, you're sending the link, www.Google.com 15 or www.CNN.com, or www, whatever website.com you have, 16 and then those keyboard strikes are sent to the 17 browser and that type of interaction between the 18 virtual browser and the browser is not part of any 19 standard browser. Therefore, the rendering mechanism 20 that is done by Avellan is distinct from additional 21 features and it works in a different way. Instead of 22 generating a one million stream, it generates a 23 compressed video file with a tag file. 24 Q What does a typical rendering process 25 entail? Page 147	1 file. So when the user receives that, then it 2 uncompresses the tag file in a safe format, and then 3 it uncompresses the video file that probably were in a 4 ZIP format -- ZIP or TAR, whatever format it was used. 5 And then this browser thing knows, okay, the 6 tag file indicates that it is all over here. So if 7 the user start typing something or clicking on the 8 search button it will position the cursor there and 9 you start typing search for -- I don't know -- USPTO, 10 for example. Search for news on Ukraine, or news on 11 whatever. And then when you press the search button, 12 then those commands are sent back to the browser that 13 Avellan has remote, and then that's what that virtual 14 browser does. 15 None of that is required for the '074 patent 16 because the '074 patent simply creates one million 17 stream that is -- that can be broadcasted. 18 Q Can the media stream and the challenged 19 patents be compressed? 20 A No, they're encoded. Encoding is different 21 than compression, so I speak about that in my report. 22 You have to be careful, and coding is not compression. 23 So basically compression is more of basically grabbing 24 a file and you do the process of compressing and 25 decompressing. Page 149

1 In other words, you have to download the 2 entire file, like a ZIP file and then one is resized 3 on your computer, then you decompress it and you 4 extract the contents. 5 When it is something that is encoded you can 6 download the different packages at different times and 7 simply decode it with the decoder format. Let's say, 8 H.264, MPEG-2 video, x265, some sort of encoding, so 9 that will be a one media stream now, because it's more 10 assigned for streaming as opposed to just transferring 11 the compressed file in a ZIP format and decompressing 12 it as another extraction, unzip or untar. 13 Q Is it -- so strike that. 14 Is it your opinion that Avellan does not 15 disclose transmitting video data for the splitting of 16 real time; is that what I'm understanding? 17 A Of course it does it but in a very 18 inefficient way. When you ZIP something, that's the 19 antique way before codec became prevalent. Codec 20 basically came to solve that issue of sending like a 21 ZIP file. 22 But in the case of Avellan, because it needs 23 to tie the tag file with the position of the screen. 24 It doesn't have a choice but to send the equivalent 25 file zipped, so it may actually have as -- one single Page 150	1 file, can Avellan create it? 2 A I don't know. That's a hypothetical 3 question. I don't know how Avellan would do that. 4 Avellan. 5 Q Avellan, in your opinion, discloses creation 6 of a tag file to basically track buttons and links; is 7 that fair? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: Yeah, most of the buttons, 10 like I said, the scroll bar, the search button, 11 the text fields, and things like that, so Avellan 12 knows where they are because the user, the 13 virtual browser receives a virtual screen than 14 the browser render. 15 Obviously it's assigned to compress the data 16 because they need to compress this video file and 17 tag file because you're supposed to be over the 18 satellite with limited bandwidth. 19 So as the limited bandwidth is obviously 20 slow, then you, as a user, need to receive these 21 two commands, but Avalon does not disclose what 22 happen if the website is empty or the website is 23 like a 404 error, or a 403 error, or some sort of 24 error message that has no search button. You can 25 click on it. Page 152
1 file could be like that that has a tag file with all 2 the positions of the screen and then you have the 3 contents of the web page that map the tag files, so 4 you needed the two elements; the tag file and the 5 video file that are compressed for proper download. 6 Therefore, using the codec is obviously not 7 possible, because that's the duality is the tag file, 8 the video file, and compressed, so then although you 9 can download an uncompressed and see the video file, 10 it's not the same as one stream. Because the stream 11 is that you can stream the bytes on the fly. You 12 don't need to uncompress anything. They just provide 13 that you to code it. You can lose some bytes because 14 that's what usually happens and then you simply have 15 pixilation on the screen, but then the streaming 16 continues as opposed this mechanism described by 17 Avellan. 18 Q Is it your opinion that a tag file is always 19 generated in Avellan? 20 A That's what Avellan says. I don't think 21 Avellan is assigned to operate with web pages that 22 have all these buttons and search buttons and click 23 buttons and interact through the keyboard mouse cited 24 on Avellan before. 25 Q Okay. If a website does not need a tag Page 151	1 But I assume you have the back button so you 2 can go back and click the back button so it 3 renders that part of the browser as well. So you 4 press the back button and return back to the web 5 page that you had before. Because it's an area 6 that you're describing, if it's a deadened 7 screen, like a 403 error, or a 404 error, or a 8 303, one of those error messages, you have to 9 have a way to go back; otherwise you're stuck 10 there forever. 11 And then I don't know what -- I mean, you're 12 stuck on a web page. Avellan doesn't disclose 13 what happened. Obviously you have to have a back 14 button to return back to the previous screen so 15 you can go back and go back so you can navigate 16 through the different web pages that Avellan is 17 displaying to you. 18 BY MR. McBRIDE: 19 Q Let me make sure I understand some of the 20 points here. 21 So you would agree that Avellan does 22 disclose realtime transmission of video; is that fair? 23 A No. 24 Q What was the answer? 25 A No, it does not. Page 153

1 Q It does not disclose realtime or it does not 2 disclose video? 3 A No, it can't. 4 Q Okay. So in your opinion, Avellan would not 5 support something like Sherman television? 6 MR. DROLET: Objection. Form. 7 THE WITNESS: You will get snippets of the 8 screen, but you will not be like watching -- 9 first, the files are compressed and then you 10 probably -- let's say you go to ESPN website, you 11 see that there's a game there, you play -- you 12 click on the play button and it will send 13 snippets of that game with the tag file so you 14 can pause it or you can increase the volume of 15 the audio, or you can decrease the volume, or you 16 can go back to the previous page. 17 So obviously it has to report that, but the 18 way that it is designed it will send snippets in 19 different files as it is. In fact, Avellan does 20 not disclose that, so I assume that's how it 21 might work because it doesn't really say how it 22 works, but given the fact that it works on 23 compressed video file with the tag file, that's 24 likely how a POSITA will interpret that a live 25 broadcast may be -- and, of course, basically by Page 154	1 column 7, lines 55 through 57, it says that, "The 2 broadcast device, 102, to the use computer 104, may be 3 immediately displayed once the compressed at the 4 computer 104." 5 So, in other words, for something to be 6 compressed, it has to be a finite size. It cannot be 7 an infinite size. So, therefore, you're limited to 8 files that can decompressed from this mechanism of 9 compression and noncompression mechanisms that reside 10 in -- on files. 11 Q Okay. Well, in MPEG transmission, isn't 12 there a compression of the MPEG claims? 13 A No, it's encoding, not compression. It's a 14 perception that -- 15 Q Are you trying to differentiate that from 16 compression in your mind; is that what you're trying 17 to do? 18 A Of course. It is different. 19 Q Is an MPEG file, let's say a P-frame, and an 20 I-frame, the P-frame and B-frame together, are those 21 in an MPEG format smaller than three I-frames in terms 22 of the amount of data? Is that typically the case? 23 A No. So basically the way MPEG works, you 24 have a transfer stream, which is designed for 25 transport, designed for broadcasting, and you have the Page 156
1 doing this compression you will be losing a lot 2 of the content from the original screen, so then 3 you would be like limited. And it doesn't say 4 how the audio is going to be together with that 5 field because sometimes the audio feed comes in a 6 different channel, things like that, so it 7 doesn't really disclose how a live stream will 8 work. 9 BY MR. McBRIDE: 10 Q So it couldn't, in your opinion, transmit 11 streaming television because at most it would be 12 transmitting snippets of video at a time? 13 A Yes, when you use video files, that mostly 14 likely is your end goal. 15 Q Does the end portion of Avellan specifically 16 say that it only sends snippets at a time, to your 17 knowledge? 18 A No, it only says that it uses video files 19 and the tag file that are compressed and decompressed, 20 so it's obvious that's how it works. 21 Q But there's no actual statement in Avellan 22 saying that it can only send snippets of video at a 23 time; is that fair? 24 A Let me remember that. I think it just -- 25 let me see. In fact it does, because if we looked at Page 155	1 package screen, which is PS file. The PS file format 2 is different than the transfer stream for format, and 3 they follow different standards; therefore, you need 4 to specify which one you're referring to. 5 Q MPEG is a way of sending video information 6 at a lower amount of data bitrate than if you send a 7 video file, for example, as a, I don't know, a 8 non-MPEG way -- strike that. 9 What ways alternatively to MPEG can you send 10 data that's not encoded? Let's start there. 11 A MPEG is an encapsulation format, and the 12 encapsulation format includes the coding that you're 13 using. So then the package that you're describing, 14 the I-frame, B-frame, and P-frame are going to be 15 mapped to the program management table at the initial 16 or every X amount of packets. 17 So once you receive that, you know what 18 encoder you're using for the video, what encoder 19 you're using for the audio. So the process of 20 transmitting that requires decoding of the video with 21 one codec, and the coding of the audio with a 22 different codec. 23 So, like, it's not a MPEG file, per se. 24 It's an MPEG transfer stream, like I said, and each of 25 those frames are encoded, depending on the video and Page 157

1 the audio format that your shadow box receives in 2 general, but in Avellan's case, there's no disclosure 3 of that. 4 Q In your experience what types of file 5 formats typically become encoded into MPEG format? 6 A No, there's -- MPEG is not a file format. 7 MPEG is a transport stream. So MPEG is basically -- 8 like I said, you could lose packets and it still be 9 recorded. With a compressed file, you cannot lose one 10 packet because you cannot decompress it. 11 Q Let me try a different way of asking the 12 same question. 13 H.264 is an MPEG-base in coding standard, 14 correct? 15 A It's a coding. 16 Q What file types, what video file types, in 17 your experience, are typically converting these H.264 18 codec? 19 A It depends, because like I said, you have 20 the video in H.264 and the audio could be MP3 or AVC 21 format. So generally -- 22 Q I asked you -- 23 (Simultaneous speakers.) 24 A Generally -- a single video-only file 25 doesn't work usually. You have -- you run into errors Page 158	1 Q But if you were trying to do that in real 2 time, wouldn't bandwidth be an issue? 3 A Of course, because like I said, when you 4 encode something, you encode a certain bitrate, so 5 what are the parameter for encoding? Bitrate, aspect 6 ratio. 7 Q Why did you -- 8 (Simultaneous speakers.) 9 A You need to see the chromium, you need to 10 see other parameters, that's what you call encoding. 11 When you do compressing, it's just about size. It has 12 nothing to do. They're completely different things. 13 Q Okay. Let me try this again. 14 So when a video file being coded into an 15 MPEG form -- 16 A There's no MPEG-4 in -- MPEG-4 is an 17 encapsulation form. It's completely different. 18 Q So there's no situation which, in your 19 opinion, you could ever take a video file and convert 20 it into a MPEG format; is that what you're saying? 21 MR. DROLET: Objection. Form. 22 THE WITNESS: Okay. So I think you're 23 confused with two things. One thing is what 24 video files are. Usually video files are MPEG 25 and encoded as well and they're encapsulated Page 160
1 because the synchronicity is done through the audio. 2 So in practice, only video files only, you need to do 3 certain tricks to maintain the synchronicity of the 4 video. 5 Q Are there file types that you're aware of 6 that typically are encoded using an MPEG-base codec. 7 You are aware of example of file types? 8 A I think you're confusing file types with 9 transmission, so they're completely different worlds. 10 File types is one world where you compress files and 11 decompress files. 12 When you transmit something, it's a 13 completely different beast. You're using realtime 14 processing. You're using impactization. You're 15 basically relying on the bandwidth to be able to 16 decode things that is -- if you have something encoded 17 at 2 megabytes, obviously you need 4 megabytes of 18 bandwidth or more than 2 megabytes to be able to 19 decode it, whereas in files you don't have that 20 limitation. 21 In files you simply send the file. You just 22 wait. It could be just a large file. And then you 23 decode it locally on your computer because you don't 24 have the limitation of bandwidth. So transmission is 25 one thing and files is a different thing. Page 159	1 using MPEG file formats. And then you have MPEG 2 transport formats, so you have two different MPEG 3 formats. 4 The thing is in my report, if we go to my 5 report, I make that distinction there, and I cite 6 the MPEG standard basically encapsulation. 7 BY MR. McBRIDE: 8 Q Did I hear you right that there are MPEG 9 file types? 10 A So there's a section in video encoding 11 encapsulation, which is paragraph 89 through 12 paragraph -- about -- 94 that describes what 13 encapsulation is and how that works. 14 And then I go on into basically like -- the 15 format of encapsulation is usually defined by MPEG, 16 and MPEG defines what type of codec you have inside 17 the video streams. So when you have the video stream, 18 you have audio and video or you have all the packet 19 loads. They're tied to program identifiers, so the 20 program identifiers what defines the content of the 21 MPEG -- the stream. 22 Q What is the output on an MPEG video encoder? 23 A The MPEG video encoder is a support 24 transmission as an MPEG transport stream package. 25 Q What is the output of an MPEG video encoder? Page 161

1 A Like what? 2 Q What is the output of an MPEG video encoder? 3 A MPEG as in encapsulation. You're just 4 getting encapsulated package. You have to say what 5 codec. MPEG is not codec. 6 Q What is the output of an MPEG-2 video 7 encoder? 8 A It is MPEG-2 video format. 9 Q Is there a file type associated with that? 10 A Nope. It's only like -- an MPEG video 11 encoder will be done in binary. Like, for example, an 12 FFmpeg, when you do MPEG-2 video, you extract the raw 13 data and then you convert that into predicted frames. 14 Because you're encoding it. So you're 15 predicting. You're doing a lot of mathematical 16 functions. It's called DCT transforms, so you can 17 encapsulate that data and create frames, I-frame, 18 P-frame, B-frame, depending on the codification you 19 need and depending on the bitrate you want, so that's 20 the output of the MPEG-2 video. 21 It is a sequence of packets that based on 22 I-frame you can predict, based on the difference of 23 different P-frames, what's the result so you can 24 display it. So if you lose a few packets you can 25 still display some of it. Like what they call Page 162	1 header of the file it is going to tell you, this is 2 the codec that I am using for audio. This is the 3 codec I'm using for video, and this is the bitrate I'm 4 using. So once you get that, you're able to decode 5 that. 6 Q So an output of an MPEG-2 video encoder 7 could be a .m2v video file? 8 A Like I said, that usually doesn't work for 9 audio. You need to add audio because video does not 10 work without audio. 11 Q Dr. Hernandez, I'm just asking about the 12 questions I'm asking. 13 A It's a hypothetical question. It doesn't 14 exist. It is not going to work. 15 Q If I have an MPEG-2 video encoder, a 16 different output in .m2v file. Is that true? 17 A It's not going to work. You cannot decode 18 that. That's a theoretical question. You find a way 19 to decode that, that's a patent, my friend. 20 Q I'm completely not understanding how you're 21 getting to the answer that you're getting, sir. Is -- 22 A What you are saying -- what you are saying 23 is wrong. It is completely wrong. You are totally 24 making a lot of stuff up. I'm sorry, but you -- that 25 can't happen. What you're asking is like, hey, can I Page 164
1 packetization. Basically you have pixilation on the 2 screen. 3 Q Do you know what a file extension is, sir? 4 A A file extension is a different thing. Like 5 I said, you're confusing transmission with file 6 extension. 7 Q I'm just asking simple questions, so let's 8 not say I'm confusing things. I'm asking a simple 9 question. 10 What is a file extension? 11 A A file extension is usually how you want to 12 save a file. That's how. 13 Q Are the file extensions associated with the 14 MPEG-2 video codec? 15 A No. 16 Q So .m2V would not be a file extension for 17 MPEG-2 video, in your opinion? 18 A No, that's an encapsulation format. 19 Q So it's a file format for the encapsulation. 20 I'm trying to figure out where you're drawing the line 21 here. 22 A Yes. Encapsulation is one thing. Inside 23 you have bytes that are encoded. You have frames that 24 are encoded. So that's why you have -- you need to 25 look at the header file. And if you look at the Page 163	1 win the Lotto? Why don't you win the Lotto? 2 Q An MPEG-2 video is a video encoder, correct? 3 A Yes, but MPEG-2 video doesn't work alone. 4 MPEG-2 video only works within an encapsulation 5 format. 6 Q Okay. So the encapsulation format would 7 have a video component and an audio component; is that 8 what you're saying? 9 A Yes. You have package, you have frames with 10 video and other components. And you have something 11 called the Program Management Table, the PMT, that 12 basically maps all those frames to different program 13 identifiers when you have audio and video. This is 14 the MPEG standard. 15 Q And that encapsulation format has a file 16 extension associated with it, correct? 17 A Well, yes, that could be a PTS file or a PS 18 file, as I said before. 19 Q .m2v is a file extension for MPEG-2 video, 20 correct? 21 A That is a more modern version of this, like 22 m2v. I don't know exactly how the -- I'm not familiar 23 with m2v format. I'm more familiar with the transfer 24 streams at the PS formats, so that's what I prepared 25 for, for this deposition. Page 165

1 Q Have you ever heard of a .mp2 extension for 2 files? 3 A Yes. That's for audio. 4 Q So you can have an MPEG-2 output file; is 5 that fair? 6 I mean, I'm trying to understand why it 7 seems to suggest that there is no file associated with 8 data that's being encoded? 9 A No, no. What I am trying to tell you is 10 that when you save a file, it has nothing to do with 11 transmission. So in this case of Avellan it's about 12 transmission. It's not about files. 13 If you transfer a file like that, you ZIP 14 the file and transfer it, it has nothing to do with 15 streaming. It's not a one-million streaming. You're 16 simply sending a file, like attaching a file to an 17 e-mail. 18 Q Is the word -- 19 A Is attaching a file to an e-mail streaming, 20 in your opinion? I'm asking. 21 Q Is the word ZIP ever used in Avellan? 22 A That's a standard compression format, a ZIP 23 file. 24 Q Is the ZIP file format ever mentioned in 25 Avellan? Page 166	1 A Yeah, encapsulation has audio and video, 2 exactly. 3 Q So there's file formats associated with 4 this, right? 5 A Exactly. 6 Q Okay. And of one of the points and purposes 7 of the file format is to reduce the amount of data 8 that would otherwise be required, fair? 9 A No. 10 Q No? 11 A No, no, it's not about reducing data. It's 12 about fitting the streaming to certain bitrate. It's 13 not just to data. 14 Bitrate, you can lose data, in fact. All 15 the opposite. When you have a video codec, you can 16 lose data and still have a successful result. 17 With video compression, you cannot lose to 18 one byte because you cannot uncompress the file. 19 Q Is there any portion of Avellan that says 20 that, that if they lose one byte of data, that the 21 entire thing fails? Is there anything that supports 22 that in Avellan? 23 A I don't think Avellan even touches that. I 24 think Avellan assumes that the tag files are 25 compressed, and they're mapped, associated with a Page 168
1 A It's, in general, compressed files is what 2 it says. ZIP is an example; TAR is an example; gzip, 3 bzip is an example. 4 Q There's lots of ways to compress 5 information, right? 6 A Yeah, exactly, but compression is not the 7 same thing as encoding. I think you're confused. 8 Compression basically is -- 9 Q Sir, I'm asking questions. 10 A Let me explain to you because you're -- 11 Q You're not answering the question. 12 A I will answer the question. 13 Q I am going to ask the question, 14 Dr. Hernandez. This is how it works. 15 There are video codecs. Do they output a 16 file? 17 A No. 18 Q So any codec, there's no file associated 19 ever with a codec in your mind? 20 A No, the codecs are -- only binary things are 21 run on the software that is going to be encapsulated 22 in some sort of a file format, an encapsulation 23 format. 24 Q So the encapsulation will have a file 25 format? Page 167	1 video file at the same time, because that's the only 2 way that the tag files are going to operate, with 3 the -- 4 (Simultaneous speakers.) 5 Q Does Avellan ever say that its use of the 6 phrase compressed video file format is not synonymous 7 with what you would call encoding? 8 A It's not synonymous, sir, not at all. 9 Q Does it ever say that those two things are 10 different to Avellan? 11 A A POSITA will know that. So it's like 12 that's a dumb question. Any POSITA will know that. 13 It's compression of a file. It has nothing to do with 14 encoding -- 15 Q Dr. Hernandez, I'm asking a simple question 16 again. 17 Does Avellan ever say that a compressed 18 video file format is distinct and different from what 19 you would consider encoding? 20 A I don't know. 21 Q So your opinion on that is based on your 22 belief that those two things are different; is that 23 fair? 24 A I already explained to you why, but you 25 refuse to listen. Page 169

1 Q Well, it's your opinion that you have come 2 to that conclusion that those two things are 3 different; is that fair? 4 A No, no, no, no. It's in the research paper. 5 It is in the report. That's what I was trying to tell 6 you. 7 Q But there's no portion of Avellan that says 8 that that is indeed how Avellan used that; is that 9 fair? 10 A No. I think that's more for the paragraph 11 in 82 where a POSITA will know that the MPEG for 12 specification includes video codecs, it varies the 13 screen solutions, such as MPEG-4 Part 10, or H.264, 14 AVC, MPEG-H Part 2, or any encoding profile that are 15 supported by video encoders, including H.264, MPEG-2 16 video or an audio encoder such as AC-3 or MP. I think 17 clearly that's how this works. It has nothing to do 18 with the files. 19 Q So, again, your distinction between this 20 idea of a compressed video file format being different 21 from what you consider encoding, there's no actual 22 statement in Avellan that says that? 23 And instead, you're relying upon your 24 expertise and your alleged understandings to reach 25 that conclusion; is that fair? Page 170	1 MR. McBRIDE: Objection. Nonresponsive. 2 BY MR. McBRIDE: 3 Q Is it your opinion that when Avellan 4 discloses transmitting streaming television, that that 5 is not a media stream? 6 A It can't. It cannot. 7 Q You will have to restate your answer. 8 A What you're asking is impossible. It's not 9 possible. 10 Q Let me see if I can get a more refined 11 answer to that, a yes or no. 12 Is it your opinion that when Avellan 13 discloses streaming television, that that is not a 14 media stream? 15 A I think Avellan does not disclose how 16 television -- it's rudimentary just by Avellan saying 17 television but it doesn't -- television streaming is 18 like M3 Wave, for example. You in fact cited another 19 reference for M3 Wave, so therefore, it cannot 20 disclose live streaming because you cited a different 21 reference for that. 22 And your expert actually said that, that for 23 the M3 Wave format, which is live streaming, you need 24 another reference, plus Avellan. So, therefore, 25 Avellan cannot in itself disclose live television. Page 172
1 A No. I think I relied on a book that is on 2 here attached to it. 3 Q So you relied upon something outside of 4 Avellan? 5 A Yes. It's a POSITA raised, so we have to 6 use what the standard says, not what you want to say. 7 Q So your opinion is based upon something 8 other than specifically Avellan to reach an opinion? 9 A Yeah, the MPEG handbook. 10 MR. DROLET: Objection. Form. 11 THE WITNESS: The Exhibit 2040, Exhibit 12 2042, which is H.264 and MPEG-4 video 13 compression, video encoding multimedia book, so 14 that's what the references you can read yourself. 15 BY MR. McBRIDE: 16 Q So when Avellan subscribes that it's capable 17 of broadcasting streaming television, in your mind 18 that's not a media stream; is that fair? 19 A It is a media format that is relying on this 20 video file and tag files that are passed to the 21 virtual browser. 22 So the virtual browser receives that, 23 uncompresses that, and immediately displays them as 24 Avellan discloses in the specification, so that's what 25 I am relying on in my analysis, what Avellan says. Page 171	1 MR. McBRIDE: Objection. Nonresponsive. 2 BY MR. McBRIDE: 3 Q Is it your opinion that if Avellan discloses 4 broadcasting live streaming television feeds that 5 those are not media streams? 6 MR. DROLET: Objection. Form. 7 BY MR. McBRIDE: 8 Q Yes or no? 9 A Are you referring to M3 Wave format? 10 Q I'm asking a very simple question, 11 Dr. Hernandez. 12 Is it your opinion that when Avellan 13 discloses broadcasting live streaming television 14 feeds, that those would not be media streams? 15 A What do you mean by "live media streams"? 16 Give me an example of that, a technical example. Not 17 a CNN. No. How technically, in what protocol, in 18 what format that live stream is. 19 MR. McBRIDE: Objection. Nonresponsive. 20 BY MR. McBRIDE: 21 Q Do you -- 22 A I'm asking you, like you need to clarify. 23 It is a technical question. Live streams have a 24 technical protocol. What protocol are you referring 25 to for the live stream. Page 173

1 Q Is it your opinion, Dr. Hernandez, that your 2 invention of the challenged patents require a specific 3 protocol? 4 MR. DROLET: Objection. Form. 5 THE WITNESS: It is obvious that all this 6 technology requires a streaming protocol of 7 certain type, and not just fluff, up in the air 8 things that you believe. 9 I don't know. Is television like that. 10 Like ATSC 3.0, or is it live television ATSC 1.0? 11 Is it live television like IHDN TV from Japan? 12 What is live television in your opinion or 13 in your question? 14 BY MR. McBRIDE: 15 Q Dr. Hernandez, I am asking the question and 16 I think it is a simple question. 17 Is it your opinion that the challenged 18 patents require a media stream be sent in a very 19 specific protocol? 20 A For example? What protocol? 21 Q I am asking -- 22 (Simultaneous speakers.) 23 A -- what protocol? PCP, RTSP? What 24 protocol? 25 Q Is it your opinion that the challenged Page 174	1 protocol. 2 What I'm asking, is it your opinion that 3 your challenged patents require a media stream to be 4 sent using a particular protocol or protocols? 5 A Let me review my report so I can see what 6 you're talking about. 7 According to Claim 19, basically there is a 8 listing of protocols that correspond to the one media 9 stream. Those are HTTP live stream and HTTP playlist, 10 and the realtime is streaming transfer protocol. So 11 then that's -- those are some of the protocols that 12 are required to perform one media stream. 13 Q Dr. Hernandez, is it your opinion that those 14 protocols, even though they're recited in a dependent 15 claim, are required for Claim 1? 16 A Oh, that's what your question was? 17 Q Yes. 18 A I thought you were saying like in general. 19 Claim 1 simply requires protocols that 20 exist, something that the Web to HD protocol does not 21 exist. So then it excludes stuff that does not exist, 22 that it is imaginary. I think that could be a good 23 answer. 24 But protocols that exist, such as HTTP, HTTP 25 live streaming, RTSP, things like that, that could be Page 176
1 patents require a specific protocol to be used? 2 A It depends. 3 MR. McBRIDE: Objection. Nonresponsive. 4 BY MR. McBRIDE: 5 Q Dr. Hernandez, I understand that you are 6 trying to draw a distinction between Avellan and the 7 challenged patents on some basis that Avellan does not 8 disclose an adequate streaming protocol. 9 I'm asking if the challenged patents 10 require, in your view, a specific protocol? 11 A The patent cites multiple protocols, but I 12 don't know what you're talking about. I don't know if 13 you're talking about TCP/IP, ATCP. I don't know. 14 You need to be more specific on what type of 15 protocol you're describing. Protocol, there are 16 thousands -- there are Layer 2 protocol, Layer 3 17 protocol, Layer 4, Layer 5. There are multiple type 18 of protocols. You need to be more specific on your 19 question. 20 MR. McBRIDE: Objection. Nonresponsive. 21 BY MR. McBRIDE: 22 Q Dr. Hernandez, I understand that you're 23 trying to draw a distinction between Avellan and your 24 challenged patents on the basis of whether Avellan 25 sends streaming television, vis-a-vis, specific Page 175	1 as a -- rsync, for example, to synchronize the 2 obtaining of the multimedia items, for example. Rsync 3 works on TCP or works over SSH too. You can do rsync 4 over SSH. Those are the protocols that will 5 encapsulate the elements of the Claim 1, among other 6 ones. 7 Q Dr. Hernandez, are you saying that your 8 claims only recover protocols that existed as of the 9 time you filed your patent and don't include any 10 future protocols? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: Included protocols that are 13 valid, not protocols that are made up. 14 BY MR. McBRIDE: 15 Q And who determines whether a protocol is 16 made up? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: Yeah, usually protocols are 19 part of a standard, so you meet with a lot of 20 engineers and create something called Request For 21 Comment, like an RFC. 22 And their RFC establishes the type of 23 protocol you create. There's no RFC for Web to 24 HD protocol. There is not even a paper for that 25 protocol, so it excludes completely your Page 177

1 reference. 2 BY MR. McBRIDE: 3 Q Dr. Hernandez, because Avellan refers 4 generally to a Web to HD protocol, your position is 5 that it doesn't disclose a specific protocol that is 6 required by your claims, therefore, Avellan doesn't 7 disclose a media stream; is that fair? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: I believe you need -- I don't 10 know what the standard is, but I think you need 11 to make reference to things that really -- 12 clearly exist, not things you made up now and 13 then you're, Okay, the Web to HD protocol is this 14 now just to -- for the purposes of your IPR. I 15 think that's -- I don't think that is going to 16 fly. 17 BY MR. McBRIDE: 18 Q I'm not quite sure what that means. 19 Is a specific protocol required to satisfy 20 the requirement of a media stream? 21 A There are multiple protocols that allow you 22 to do a stream being, like I said, RTTP -- I'm sorry, 23 RTSP, the realtime transfer protocol is one of them. 24 The TCP/IP over HTTP live streaming is another 25 protocol. DASH is another protocol, for example. It Page 178	1 BY MR. McBRIDE: 2 Q I'm not sure what you mean by made up, but 3 let me ask you a different line of questioning. 4 So earlier, about five minutes ago, we had 5 talked about that Avellan discloses broadcasting a 6 live streaming television feed. 7 Is it your opinion that broadcasting live 8 streaming television would not be a media stream? 9 MR. DROLET: Objection. Form. 10 THE WITNESS: Well, in that case it shows a 11 screenshot of a web page, so that's what Avellan 12 is sending. So it is sending the screenshots 13 of -- so a live stream is arriving to the 14 browser. So let's say Avellan is arriving 15 30-frame per second, in high definition. So what 16 you will see in Avellan is just a screenshot of 17 that. So that is not immediate streaming 18 anymore. 19 Remember you are making a screenshot of 20 something that is live, that is vivid, that you 21 have all the detail and everything, that is the 22 browser. And then Avellan basically just creates 23 a screenshot of that screen stream, destroying 24 the quality, basically, and just compressing that 25 into this video file and adding the stock file Page 180
1 is more modern, and HTTP playlist, for example, is 2 another protocol. So you have different protocols 3 that are tied to -- monetized that are related to 4 media streams. 5 Q And those protocols are required by the 6 claim; is that what you're saying? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: I would not say required, but 9 those can be used to implement the claim. 10 BY MR. McBRIDE: 11 Q You understand that "can be used" and 12 "required" are two different things, right? 13 A Yeah, I don't have an opinion on that. I 14 didn't make the analysis, to be honest with you. 15 Q These are claims that you wrote and that are 16 in the challenged patents require a particular 17 protocol or protocols to be used. Yes or no? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: That's basically -- some 20 examples are in the specification, but it is not 21 limited to that, but it is not limited to -- and 22 is -- is not -- it does not correlate to Web to 23 HD protocol because that doesn't exist. It's 24 something that is made up by Avellan. 25 Page 179	1 system, and that, in essence, destroys the media 2 stream. 3 So in the end, Avellan basically does not 4 and cannot have a media stream anymore because it 5 destroyed it. It turned it into a bunch of 6 screenshots from the original file, from the 7 original stream, and now it is a like very low 8 quality replica or screenshots of that. 9 So I don't even know if the screenshot will 10 include the entire screen, or it will just be the 11 corner of the screen where the game is playing, 12 for example. It sounds for Avellan that will be 13 the corner of the screen, and it will screenshot 14 the controls as well, so you can control it 15 through the tag file, the play of that particular 16 screen. 17 But getting a screenshot does not qualify as 18 a media stream as I interpret it, because it's 19 not -- it's not any of the MIME types that are 20 media stream anymore. It is just screenshots of 21 something. 22 BY MR. McBRIDE: 23 Q So Avellan takes screen captures of a web 24 page? It takes screen captures of streaming 25 television feeds; is that fair? Page 181

1 A Yeah, it is probably -- but first you need 2 the user to send the play button to play that stream, 3 and then basically if it's part of the web page, if 4 you can visualize it, I think you will get some 5 sequence of a screenshot, the screen captures from 6 that particular feed. 7 Q Does Avellan ever say that it provides low 8 quality video that is subpar? 9 A Yes, it does. 10 Q It does? 11 A It does. 12 Q Is that a distinction in your claim 13 language? 14 A Of course. 15 Q So your claim language requires high 16 definition video? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: In Avellan you cannot do high 19 definition video. Even if you have the Web to HD 20 protocol, if it existed you're tied to a 21 satellite link, that is what, 256 kilowatts maybe 22 at the time. 23 Now we have Starlink and those sort of 24 things, but we don't need Avellan for that, so 25 then you cannot do HD at 256. So in the '074 Page 182	1 Q So it is your belief that differences 2 between Avellan and the challenged patents are 3 important, even if they don't go to the claim language 4 at issue; is that your opinion? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: The claim language, it speaks 7 by itself and reflects that the distinction 8 between the two, and it's clear for a POSITA that 9 by obtaining the plurality of multimedia items in 10 a separate mechanism, it allows you to have any 11 quality of the video and the audio in any form, 12 any, in any aspect ratio, in any codec. You have 13 nothing, no interruption from the web page 14 mechanism. That's what one of the main 15 distinctions is. 16 BY MR. McBRIDE: 17 Q Dr. Hernandez, I'll just ask simply, what 18 you just said doesn't actually appear in the claims 19 that you wrote. Fair? 20 MR. DROLET: Objection. Form. 21 THE WITNESS: I disagree with you. 22 BY MR. McBRIDE: 23 Q Is there one word of Claim 1 that requires a 24 level of quality? 25 A It is obvious. Page 184
1 patent, because you're doing the obtaining of the 2 plurality of the media stream separate from the 3 web page, then you can do 4K, 8K video 4 irrespectively of what is happening to the web 5 page situation. Avellan cannot do that. The 6 '074 enables that and provides that. 7 MR. McBRIDE: Objection. Nonresponsive. 8 BY MR. McBRIDE: 9 Q Are you saying that your claims require a 10 certain level of quality? 11 MR. DROLET: Objection. Form. 12 THE WITNESS: I'm giving you an example of 13 what can be done and what Avellan cannot do. 14 BY MR. McBRIDE: 15 Q You understand that not every difference is 16 relevant to claim language; is that fair? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: I think I described that in my 19 report clearly. 20 BY MR. McBRIDE: 21 Q You agree with that, though, correct? 22 A About what? 23 Q That not every particular difference is 24 relevant to claim language? 25 A I'm not sure about that. Page 183	1 Q I take it by that answer that the answer is 2 no. 3 A I didn't say that. 4 Q Is there any portion of Claim 1 that talks 5 about if certain transmissions through a satellite 6 don't result in specific quality, the claims are not 7 satisfied? 8 A I didn't analyze that. 9 Q Is there any portion of your patent claims 10 that you, yourself wrote, that require some amount of 11 bandwidth such that it can only be practiced by a very 12 specific protocol? 13 MR. DROLET: Objection. Form. 14 THE WITNESS: The '074 patent does not have 15 any limitation on that. Avellan does, and that's 16 the difference. Avellan has a limitation on 17 bandwidth. Has the limitation on -- everything 18 needs to be on the web page. If it's not on the 19 web page, it cannot work, and that's the 20 limitation of Avellan. 21 Avellan does things different, using this 22 tag files and this video compressed files, and it 23 does not provide one media stream, it does not 24 operate in one media streams, and those are 25 gigantic distinctions to the claim language on Page 185

1 Claim 1. 2 BY MR. McBRIDE: 3 Q Dr. Hernandez, what you just said was that 4 there's bandwidth restrictions in Avellan. Is that 5 what I heard? 6 A That's what Avellan says, and that's what 7 your expert says in paragraph -- on my report, 8 paragraph 179, basically, and he says there that -- 9 Q Does your challenged patents require a 10 bandwidth that's higher than this alleged bandwidth 11 restriction found in Avellan? 12 A No. It just -- it doesn't tie to any 13 bandwidth. It is, basically by doing the obtaining 14 and the rendering separate. Obviously whatever 15 happens during the rendering, we have certain type of 16 conditions, certain size, certain encoders, certain 17 bitrates, certain aspect ratio that does not need to 18 correspond with the obtaining. 19 So the obtaining could be only video, it 20 could be only video or audio, it could only be video, 21 and then you decide, on software, what to do with the 22 two sources. Avellan can only have one source which a 23 web page done, and they're restricted by bandwidth. 24 Q You keep saying that Avellan has only one 25 source. What does the word, "source" mean in Page 186	1 So when you have this reference to 2 multimedia files, then obviously you need the same 3 browser to act on that. And how do they act on that? 4 Based on the flash player or some JavaScript player to 5 be able to handle the retrieval of this music or web 6 page, or call it a web player. This web player will 7 be able to play the multimedia or the video that is 8 tied to that. 9 Q Are you familiar with YouTube? 10 A Yes. 11 Q YouTube is a site that has video and audio; 12 is that fair? 13 A Yeah, it has HTML. You will see YouTube 14 video has an HTML there. And then basically the HTML 15 contains links to all the videos. In the past it was 16 Flash based for many years, and then Google is like, 17 no, Flash is too bulky. It doesn't work very well, so 18 they moved to JavaScript because now the browser has 19 more capability for JavaScript, so you can make a web 20 player that uses JavaScript. 21 Q So YouTube would have multimedia associated 22 with the web page, correct? 23 A Yeah, but it is not -- when you download 24 YouTube, it doesn't download the multimedia. I mean, 25 what it downloads is just basically -- a screen Page 188
1 connection with the '074 patent? 2 MR. DROLET: Object to the form. 3 THE WITNESS: Avellan basically points to 4 the web page, that's it. That's the only place 5 where you can have content. I seem to establish 6 that. 7 BY MR. McBRIDE: 8 Q I'm not sure what you mean. Can you explain 9 that? 10 A If you go to Figure 1 on Avellan, and by the 11 way, that's -- I cite 179 on my report, basically, 12 with regard to low bandwidth, because I believe 13 Avellan is assigned for that. And then -- so if we go 14 back to my report, and then we go into -- 15 Q Do the websites identified in Avellan, for 16 example, in Figure 1, do they have associated media 17 files, such as audio or video? 18 A The files are related -- are web resources, 19 that you're describing, those are not real files. 20 They are web resources. They require a separate web 21 request to retrieve them. 22 And like I said, the HTML is just text. It 23 is MIME type x to HTML. That's the MIME type for 24 that. And it just text files that contains references 25 to different multimedia files. Page 187	1 capture thumbnails of all the videos that you want to 2 play. So what you download is the images from the 3 videos. It's not until you click on top of the video 4 that you can play it, so that's how YouTube works. 5 Q There's a media associated with YouTube, 6 right? 7 A It's part of the web page, the YouTube web 8 page. They're not separately loaded. So they have to 9 be part of the web page, otherwise it cannot be 10 loaded. 11 Q Okay. Now you reference that you have to 12 press a play button. I'm assuming you're arguing or 13 under the belief that the challenged patents require 14 some sort of automatic aspect. Is that why you keep 15 referencing a playback button? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: No, you don't need to play 18 anything. In fact, that's your bad. I mean, it 19 doesn't have to play anything. You simply 20 assemble things. It is for broadcasting. You 21 don't need to play absolutely nothing. 22 If you see, there's no interaction by the 23 user, there's not a single command that the user 24 can send to anything. It is everything automated 25 by the method itself. Page 189

1 BY MR. McBRIDE: 2 Q I'm not sure how that quite makes sense. 3 Let me ask you a better question. 4 Do the claims require automatic generation 5 of media streams? 6 MR. DROLET: Objection. Form. 7 MR. McBRIDE: Strike that. 8 BY MR. McBRIDE: 9 Q Do the challenged patents require the 10 automatic generation of media streams? 11 A The method of claim, as you can see there, 12 can be called in a loop, in a four-loop, and you can 13 basically load a playlist and it start creating assets 14 and saving them -- in the different claims, right, you 15 see Claim 2, Claim 3, Claim 4. I believe Claim 3 in 16 the '074 patent. 17 MR. McBRIDE: Objection. Nonresponsive. 18 THE WITNESS: I'm answering your question. 19 BY MR. McBRIDE: 20 Q Does it require the automatic generation of 21 media streams? Do you believe that that's what the 22 claim language requires? 23 MR. DROLET: Object to form. 24 THE WITNESS: I don't think it requires 25 anything. Page 190	1 Q Are you, as a POSITA, familiar with how the 2 information is obtained from the World Wide Web? 3 A Via an HTTP request or via what? 4 Q Both. Is an HTTP request a common way of 5 obtaining information from the web? 6 A That's one way. 7 Q If you went up to a POSITA and told them you 8 wanted to acquire information from the web, would they 9 look at you like you were speaking a foreign language? 10 MR. DROLET: Objection. Form. 11 THE WITNESS: It depends, because if you're 12 retrieving from a web service? Are you 13 retrieving a ChatGPT query? Are you retrieving 14 something based on JavaScript? Are you 15 retrieving something based on just a standard URL 16 that does not need authentication? You need 17 authenticate. You need to pass a certificate. 18 There are multiple ways to retrieve the web. 19 BY MR. McBRIDE: 20 Q Does your clones of the challenged patents 21 require obtaining content in any specific way or 22 format? 23 A The patent describe that it needs to be a 24 custom server interface, the creation of some sort of 25 a custom UI. So I think right there it limits Page 192
1 BY MR. McBRIDE: 2 Q Okay. Talking briefly about Avellan's 3 discussion of a Web to HD Video Protocol, you have an 4 opinion that such a protocol does not exist; is that 5 fair? 6 A I could not find it. 7 Q Is your analysis trying to find something 8 that verbatim is called Web to HD2 Video Protocol? 9 A That's what the patent says. I'm not here 10 to guess what the patent was trying to say. 11 Q Okay. Well, let's take a look at it. So 12 the term "web," do you as a POSITA understand what the 13 term "web" means? 14 A Yes. 15 Q And what does the term "web" mean? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: Well, it's in general whatever 18 is on a website or whatever is in the cloud, 19 that's the web. We call it the different 20 websites around the world. That's the web. 21 BY MR. McBRIDE: 22 Q So would a fair assessment be that it's 23 talking about acquiring information from the World 24 Wide Web? 25 A How? Page 191	1 basically the creation of customer user interfaces, so 2 the creation of -- I think it's -- the custom UI is on 3 my report. 4 Q Dr. Hernandez, where in Claim 1 of your '074 5 patent does it recite a custom user interface needs to 6 be used for acquiring content? 7 MR. DROLET: Objection. Form. 8 THE WITNESS: I think that answer is in 9 paragraph 74 of my report. The '074 patent 10 describe how, by using a browser or a rendering 11 engine. The rendering web page or custom UI 12 images are saved at different intervals of time. 13 That's what my report says. 14 BY MR. McBRIDE: 15 Q Dr. Hernandez, that's not my question. 16 Do the claims that you wrote on the 17 challenged patents require a custom user interface to 18 obtain content from a web? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: I don't think I did that 21 analysis. 22 BY MR. McBRIDE: 23 Q Okay. Sitting here today, are you able to 24 identify any claim language that you wrote in your 25 challenged patents that require in any way a specific Page 193

1 way of obtaining content from a web? 2 MR. DROLET: Objection. Form. 3 THE WITNESS: I don't -- are you talking 4 about 1(b) or 1(c). 5 BY MR. McBRIDE: 6 Q How about 1(b). 7 A Ah, okay. For 1(b), it can be obtained 8 using rsync protocol. It could be obtained connecting 9 to like a Dropbox link, for example, that you can 10 retrieve Google Drive some content. And then you 11 retrieve the plurality multiple items that way. So 12 you can use multiple protocols that you described to 13 obtain the plurality multimedia items from the 1(b). 14 For 1(c) -- 15 Q Does it require -- 16 A -- for 1(c) it is HTTP protocol only. 17 Q Do your claims require the use of any 18 specific protocol for 1(b)? 19 MR. DROLET: Objection. Form. 20 THE WITNESS: It can be -- basically the 21 obtaining, assuming that is a separate thing that 22 that's not being compressed, it is not being 23 destroyed. It is not screenshot. It is the 24 multimedia item itself. It cannot be, like, a 25 picture of multimedia item. It cannot be, like, Page 194	1 request like my report on paragraph 81 through 82 2 describe. 3 BY MR. McBRIDE: 4 Q And this separation you alluded to is, in 5 your opinion, a key distinction between Avellan and 6 the challenged patents; is that fair? 7 A That's one of the distinctions, that's 8 correct. 9 Q Turning back to the Web to HD Video Protocol 10 mentioned in Avellan, we talked about how there are 11 protocols for accessing content over the web; is that 12 true? 13 A Yeah. They're usually described clearly 14 through a request for comments. They have specifics 15 on what the protocol is about. 16 In other words, it describe how it works. 17 It has a specificity. For example, HTTP is based on 18 get, post, put, and other commands that are related to 19 HTTP, so that's a specification. Then HTTP live 20 streaming has another specification. HTTP playlist 21 has another specification. RTSP has another 22 specification. 23 So each of those protocols have a very, very 24 carefully drafted specification where you can use that 25 specification for multiple purposes. Page 196
1 a letter that describes the multimedia item. It 2 needs to be the multimedia item. That's what 3 that obtaining means. 4 And by obtaining that multimedia item, like 5 as I said, it is in a separate stream, then you 6 can do the obtaining and then you can do like 7 paragraph 81 through 84 on my report describes -- 8 sorry, 81 through 82 of my report describe how 9 the obtaining -- the separation of the rendering, 10 or retaining or retrieving allows the interaction 11 and the creation of multiple scenarios that 12 Avellan simply cannot do. 13 BY MR. McBRIDE: 14 Q Dr. Hernandez, I'm understanding that your 15 answer is that a specific protocol is not required by 16 element 1(b) to obtain content; is that fair? 17 MR. DROLET: Objection. Form. 18 THE WITNESS: 1(b) requires to be separate. 19 In other words, that the session keys and the 20 session identification for the retrieval of the 21 plurality of the multimedia items is not part of 22 the web page. It is as simple as that. 23 The web page generates user interfaces or 24 whatever you want to show to the user, and the 25 plurality of multimedia items is a separate Page 195	1 Q How is content, for example, from CNN turned 2 over to the web? 3 A When? 4 Q The protocols used. 5 A Most likely, the way they work it, as far as 6 I understand using HTTP live stream, which is using M3 7 Wave and adaptive bitrate streaming, that's how most 8 of these companies do. 9 So what they will do, they will have a feed 10 from the studio that is sent over a satellite link, 11 and the satellite will be broadcast over the satellite 12 to multiple occasions, many cable operators, when it 13 is, like, localized. What I mean by localized will be 14 like adding their own ads, adding their own content, 15 adding, like, their own specifics of the area. 16 And then once the broadcast is basically 17 multiplexed as that, then it is received by the cable 18 company for cable system, and it will broadcast that 19 to all the subscribers for the cable multicast system. 20 If it is for the web or for a smart TV it is 21 encoded using MP3 Wave or DASH, so then you have a 22 live stream that is sent over the link with some 23 authentication of -- obviously the authentication is 24 missing there -- and then the client will know the URL 25 to CNN, connect to the URL and start retrieving Page 197

1 streaming the appropriate packet, depending on the 2 bitrate that you have at the time when you're 3 retrieving the packet. That's how CNN work. 4 Q Do you understand what the concept of what 5 HD video is? 6 A Like what? HD what? 7 Q HD video, do you understand what that 8 concept is? 9 A HD video depends on the specification you 10 are running. 11 Q What does HD mean? What does it stand for? 12 A It's just high definition. It doesn't have 13 any -- high definition audio. 14 Q So I want to direct your attention to 15 Avellan column 5, line 16. Let me know when you're 16 there. 17 MR. DROLET: Where are you directing? 18 MR. McBRIDE: Column 5, line 16. 19 MR. DROLET: On Avellan; is that right? 20 MR. McBRIDE: In Avellan. 21 MR. DROLET: Thank you. 22 THE WITNESS: Correct. 23 BY MR. McBRIDE: 24 Q Avellan states that in a nonlimiting aspect 25 of the invention, a Web to HD Video Protocol may be Page 198	1 Q Would it be accurate to say that if you're 2 looking outside of Avellan for something called the 3 Web to HD Video Protocol, you're not really looking at 4 the right place; is that fair? 5 A No. 6 Q It's not? You shouldn't be looking at 7 Avellan to determine what Avellan means by that? 8 A Streaming protocols are very well-known, are 9 very well established. This protocol simply does not 10 exist. So that tells me that if it's trying to equate 11 a protocol that doesn't exist with the rest of 12 discussions, it's because it doesn't have clear how 13 this works. 14 Q Dr. Hernandez, you said "the protocol." You 15 understand it is saying "a protocol." You understand 16 that difference, correct? 17 A It is irrelevant. It's the standard. The 18 Web to HD protocol reference makes me think that the 19 same description there is just kind of saying, hey, 20 whatever this does is what we do. 21 It is not clear to me from the description 22 on Avellan that it's enabled. So it's an enabling 23 problem for Avellan. I don't think Avellan could ever 24 be enabled. That's my opinion. 25 Q And that's an opinion that you offer. Does Page 200
1 used to transmit images/audio of a web page, including 2 a full multimedia web page. Do you see that? 3 A Yes, that's what we're saying, that 4 basically Avellan will do some sort of a screen 5 capture of the multimedia that is played within the 6 web page, inside the web page only. 7 Q So, first off, it's not accurate to say that 8 Avellan is referring to something like the Web to HD 9 Video Protocol. It is just simply describing a Web to 10 HD Video Protocol; is that fair? 11 A Well, your report says otherwise. So your 12 report basically relies on Web to HD protocol to 13 describe the functionality that you claim the 14 invention does. I didn't do that. Now you're 15 switching your position. That is a different thing. 16 MR. McBRIDE: Objection. Nonresponsive. 17 BY MR. McBRIDE: 18 Q Avellan refers to "A," emphasis on the word 19 "A" Web to HD Video Protocol. Do you see that? 20 A That's what it says. 21 Q Did you review the patent to see how Avellan 22 discloses capturing and transmitting images/audio of a 23 web page, including a full multimedia web page? 24 A It generically describes that but it doesn't 25 say in detail. Page 199	1 Avellan say that it's not enabled? 2 A What patent says that? None. 3 Q Exactly. So your opinion is that reading 4 Avellan, you believe that Avellan does not enable a 5 Web to HD Video Protocol for its own discussion; is 6 that fair? 7 A Avellan does not cite any reference to the 8 Web to H2 Video Protocol like all the other protocols 9 that I cited do. 10 Q Dr. Hernandez -- 11 (Simultaneous speakers.) 12 A -- it is limited -- I am saying that it does 13 not describe the protocols as I cited before. Web to 14 HD Video Protocol does not describe anywhere in the 15 specification or anywhere in the industry; therefore, 16 it is a made-up protocol. 17 Q Dr. Hernandez, you keep referring to it as 18 "the protocol." 19 You understand that Avellan is simply 20 describing generally that "a" Web to HD Video Protocol 21 can be used. You keep thinking that it's something 22 specifically required in the field of the protocol. 23 Do you understand that "the" and "a" are 24 different words? 25 MR. DROLET: Objection. Form. Page 201

1 BY MR. McBRIDE: 2 Q In other words, Dr. Hernandez, is it your 3 opinion that Avellan is referring to a specific 4 protocol that allegedly they believe existed outside 5 of Avellan and that you just can't find, or do you 6 believe that it is referring to the protocol that is 7 discussed in Avellan? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: I think that they are 10 references from your expert, which I'm looking 11 for right now, in his report. 12 BY MR. McBRIDE: 13 Q Dr. Hernandez, I'm asking about your 14 opinions, please. 15 A No, I think -- 16 (Simultaneous speakers.) 17 Q So let me ask you a cleaner question on 18 this. 19 You agree that Avellan is referring to "a" 20 Web to HD Video Protocol, correct? 21 MR. DROLET: Objection, form. 22 THE WITNESS: I think -- I think -- let me 23 remember this discussion. 24 BY MR. McBRIDE: 25 Q Dr. Hernandez, I'm directing your attention Page 202	1 does is not -- is not a one-liner. 2 MR. McBRIDE: Objection. Nonresponsive. 3 BY MR. McBRIDE: 4 Q Dr. Hernandez, does Avellan disclose, for 5 example, using HTTP to obtain work content? 6 A Let me see. 7 Q And I'll direct your attention to, again, 8 column 5, lines 16 through 19. 9 A Yes, I think Avellan cites HTTP. And it 10 basically says, "Since HTTP is inefficient and slow, 11 the Web to HD Video capture protocol improves the 12 performance of satellite channels to be equal or 13 better than 50 milliseconds." 14 And that's basically at, the same column, 15 lines 22 to 25. So that contradicts what you're 16 saying because you're pointing to the web, HTTP, but 17 Avellan basically says that HTTP is slow and 18 inefficient; therefore, it is not the same. 19 MR. McBRIDE: Objection. Nonresponsive. 20 BY MR. McBRIDE: 21 Q In line 19 it refers to an original format, 22 for example, HTTP. You would agree that Avellan 23 discloses the use of HTTP to acquire web content. 24 True? 25 MR. DROLET: Objection. Form. Page 204
1 to column 5, line 16. Do you agree it refers to "a 2 Web to HD Video Protocol," correct? 3 A I'm reading. 4 I think basically what happens is that your 5 report basically cites that for element 1(g), Avellan 6 discloses that a Web to HD Video Protocol may be used. 7 That's why I think your entire argument is for 1(g) or 8 in the '002 patent at least, from what I can find 9 here, they're referring to this protocol. 10 That's why -- I'm making the analysis on 11 that. I didn't make an analysis on "a" or "that." I 12 am making an analysis on your report and your 13 petition. 14 Q Dr. Hernandez, I see down below it says that 15 it references HTTP. Now, we talked about earlier 16 that's a protocol for obtaining web content from the 17 web; is that fair? 18 A HTTP protocol defines how to obtain web 19 content using several servers and client mechanisms 20 using the protocol. 21 Q So, for example, it discloses that you can 22 use HTTP to obtain web content. Fair? 23 A It's an oversimplification because what it 24 does is it describes what RFC, a Request For Comment, 25 I don't know maybe 40, 50 pages of what the protocol Page 203	1 THE WITNESS: I disagree. I think it 2 contradicts itself on line 21 to 23 -- to 24 3 because it says, "Since HTTP is inefficient and 4 is slow the Web to HD Video capture protocol 5 improves the performance." 6 Therefore, it is saying that HTTP and the 7 web that you're trying to equate in your 8 questioning is incorrect. 9 BY MR. McBRIDE: 10 Q Dr. Hernandez, does it ever say in the 11 passage you're looking at that it's not going to use 12 HTTP to access web content? 13 A It says that HTTP is slow and inefficient, 14 that's what it says. 15 Q HTTP can be slow and inefficient; isn't that 16 fair? 17 A That's what Avellan uses Web to HD protocol, 18 but you made a line of questioning that web is HTTP 19 and it is not, obviously, because it's not even 20 related. It is an alternative to HTTP. It's not the 21 same. 22 Q I think what everyone is saying is that it 23 can speed up the overall process through this 24 conversion or this capturing and transmission of 25 images and audio. I mean, do you disagree with that? Page 205

1 A I completely disagree that your line of 2 questioning basically was wrong or the Web to HD 3 protocol, you claim that it was HTTP, but obviously 4 Avellan says that HTTP is slow and inefficient and the 5 Web to HD is an alternative. 6 An alternative means, correct me if I'm 7 incorrect, but the opposite or a different way so, 8 therefore, they're not the same. 9 Q So your opinion is that Avellan, even though 10 it doesn't explicitly say it there, simply does not 11 store data in an HTTP format; is that what you are 12 saying? 13 A Well, Avellan contradicts itself. That's 14 the only thing I can say. 15 Q Well -- 16 A It says -- 17 (Simultaneous speakers.) 18 A -- HTTP is one thing, and Web to HD is a 19 different thing. That's what it says. I'm just 20 reading what it says. 21 Q My question is simple. Do you believe 22 reading -- strike that. 23 Dr. Hernandez, do you believe reading 24 Avellan that it does not store data in HTTP format? 25 A I don't know. Page 206	1 way, it claims that this new protocol is more 2 efficient, somehow, so it cannot be based on HTTP, 3 because HTTP HD is slow and inefficient, so then -- 4 that my conclusion that that is a contradictory 5 statement that your report and your petition is based 6 on. 7 So the petition is based for element 1(g) 8 for the '002 patent, and I believe for element -- the 9 equivalent element in the '074 patent for the Claim 1 10 is based on, so your argument is questionable and it 11 is false. 12 Q Dr. Hernandez, I'm trying to synthesize your 13 argument. Am I correct that in your opinion, none of 14 the reasons why you don't allegedly know what a Web to 15 HD Video Protocol could entail is because you're 16 unsure of what web content protocols are contemplated 17 by Avellan; is that fair? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: I don't understand your 20 question. Maybe you can break it down. 21 BY MR. McBRIDE: 22 Q Sure. 23 We have acknowledged that Avellan discusses 24 a Web to HD Video Protocol, correct? 25 A Avellan cites that protocol that I don't Page 208
1 Q Because it says that it is slow and 2 inefficient. Is that your conclusion? 3 A That's what it says there. I don't know -- 4 I mean that's a contradiction from Avellan. It says 5 one thing in one place and it says another thing in 6 another place, and now you're trying to connect the 7 places that contradicts with something else. So it's 8 very hard to analyze something as a moving target. 9 That's what I'm saying. 10 Q I understand that your position is that you 11 don't know what a Web to HD Video Protocol is because 12 part 1 of this is that you think that there are 13 multiple ways to access web content and Avellan 14 doesn't disclose any way to access web content. Is 15 that a fair assessment of your position? 16 A No. 17 Q Can you please provide me what your position 18 is then? 19 A My position is basically reading line 22, 20 "Since HTTP is inefficient and slow, the Web to HD 21 Video Protocol improves the performance of satellite 22 channels to be equal or better than 50 milliseconds, 23 directional high capacity channels not access by HD 24 internet using the present invention." 25 So, therefore, although it cites HTTP as one Page 207	1 know where it came from but it cites that. 2 Q As I understood it, one of your basis for 3 why Avellan is not enabled, is because you couldn't 4 find in the surrounding art a reference to the Web to 5 HD Video Protocol; is that fair? 6 A There's no -- the level of quality and 7 specificity as other protocols that exist today for 8 streaming are labeled and are documented; therefore, a 9 one-liner as a protocol that contradicts itself by 10 saying that it is better than HTTP is questionable. 11 MR. McBRIDE: Objection. Nonresponsive. 12 BY MR. McBRIDE: 13 Q Am I correct that one of your basis for 14 opining that a Web to HD Video Protocol in Avellan is 15 not enabled is because you consulted the other art in 16 the field and you couldn't find a reference to the Web 17 to HD Video Protocol; is that fair? 18 A It's composed by two, that's one. Clearly 19 there's no reference, otherwise you wouldn't be 20 showing it to me today. 21 Number two is that that statement 22 contradicts itself, how this Web to HD Video Protocol 23 works, because apparently it's an alternative to HTTP. 24 So if it's an alternative to HTTP, it cannot 25 be HTTP based. And the entire argument for your Page 209

1 petition is based on that Web to HD protocol, that's 2 what I'm saying. 3 Q Dr. Hernandez, does the challenged patents 4 require an HTTP protocol to be engaged from beginning 5 to end? 6 MR. DROLET: Objection to form. 7 THE WITNESS: I don't know what you mean by 8 that, but that's one of the examples that are 9 cited on the patent. 10 BY MR. McBRIDE: 11 Q It's an example; is that fair? 12 A Correct. That's a specific -- a specific 13 HTTP protocol is very well documented by the RFCs, 14 Request For Comment. It is very clear how it operates 15 and how it works. It is unclear that this Web to HD 16 protocol in a one-liner that contradicts itself 17 operates. 18 Q Dr. Hernandez, let's do Maria a favor here 19 and try to confine your answer to the question that 20 I'm asking. 21 Do the claims of the challenged patents 22 require the use of the HTTP protocol? 23 A Which claims? 24 MR. DROLET: Objection. Form. 25 Page 210	1 THE WITNESS: I think the patent is clear of 2 when the providing is. Providing basically means 3 the file. Then it's passed to another module 4 that it will be able to do the transmission. And 5 in that transmission that's when you have the 6 HTTP server turned on for that transmission to 7 occur. And it depends on the claim, so then just 8 in general terms the Claim 3 from the -- let me 9 just double check that. 10 For example, at Claim number 10, which is an 11 independent claim, basically that's -- no, sorry 12 about this. I'm trying to -- I lost my train of 13 thought. What was your question? Sorry about 14 that. 15 BY MR. McBRIDE: 16 Q It's okay. 17 A Can we take a little break, please. 18 Q Why don't we take about a ten-minute break 19 and then we can continue. 20 (Recess taken.) 21 BY MR. McBRIDE: 22 Q You have in front of you still Avellan as 23 the exhibit, correct? 24 A I do. Just let me bring it up here. 25 I have it right here. Page 212
1 BY MR. McBRIDE: 2 Q That's what I want to know. 3 A Which claims? 4 Q Let's start with Claim 1. 5 Does Claim 1 of the '074 patent require the 6 use of the HTTP protocol? 7 A The rendering of a web page will encompass 8 the use of an HTTP protocol because it is a web-based 9 resource that is retrieved. 10 Q Does the transmission of the media stream 11 require the use of the HTTP protocol? 12 A What claim is that? 13 Q On Claim 1. 14 A What element of the claim? 15 Q From Claim 1 you can see, "Providing at 16 least one media stream to the content provider for 17 broadcast." 18 Do you see that? 19 A Okay. 20 Q Does that element require the use of the 21 HTTP protocol? 22 A It does not. 23 Q Okay. So HTTP can be used for some parts of 24 a system but not parts for the other, correct? 25 MR. DROLET: Objection. Form. Page 211	1 Q Okay. Now, in your report you reference 2 that, or you suggest that Avellan uses ZIP or TAR 3 files. Do you recall saying that? 4 A Yes. 5 Q Is there any reference to ZIP files in 6 Avellan? 7 A No. It simply says that they have 8 compressed video file, so I assume that basically like 9 the compressed video and tag files are related to 10 column 5, line 44. 11 It says that tag file is associated with the 12 compressed video file based on the domain name for the 13 image page. And the video is synchronized with the 14 tag file so that the proper action points are 15 associated with the video images. 16 So, in other words, there is a tag file. 17 For that tag file to exist, it has a compressed video 18 file that is taken care of. 19 Q Is there any reference in Avellan 20 specifically to TAR files? 21 A Compressed files can only be TAR files, ZIP 22 files, bzip files. All those formats are compressed 23 formats. Encoding formats are never called compressed 24 video files. 25 Q Is there any specific reference in Avellan Page 213

1 to TAR files? 2 A To compressed video files, yes, but not to 3 TAR files per se. 4 Q I'm sorry, I don't think I understood your 5 answer. 6 Does the phrase TAR file appear anywhere in 7 Avellan? 8 A No. They simply say compressed video files 9 and associated with a tag file. For that to work a 10 POSITA would know that there needs to be some sort of 11 a ZIP file or a compressed file that you tag, that the 12 tag file points to so you can compress that and see 13 it. That compression could be over ZIP files or TAR 14 files. That's my understanding of how Avellan will 15 operate. 16 Q Is there a difference in your mind between 17 video files and video formats? 18 A Of course. Video format, like I said, when 19 you have a compressed file you cannot lose one byte 20 because you cannot uncompress it. That's basically a 21 failed transmission. 22 When you have codecs and you use video 23 codecs, is designed to lose data and to lose content 24 like that. And basically it's going to be a problem 25 because of the way the association happens. Basically Page 214	1 now because I'm transferring right now. 2 In the way Avellan describes it, it's like 3 sending this compressed file with a tag file, a 4 compressed file with tag file. It is irrelevant what 5 it is. It's not going to be a one media stream as it 6 is understood by a POSITA. 7 Q I think my question is a little different, 8 though. Around the date of the Avellan patent, let's 9 say 2012, were there common video formats known to 10 POSITAs. 11 A Of course. There are video formats that you 12 can transfer, you could use uncompressed as well, but 13 since Avellan -- 14 (Simultaneous speakers.) 15 Q -- what is it commonly known to the art at 16 that time? 17 A There were multiple formats. Like I said 18 there's an MPEG specification provides two types of 19 different streams, the transport stream and the packet 20 stream. I think it is the PS format and the TS 21 format. Those are encapsulation. 22 And within those formats there is audio and 23 video that is encapsulated inside of it for purposes 24 of video broadcasting, and those will be streams, 25 because you can stream those, transfer a stream. Page 216
1 encoded files are being transmitted. It doesn't have 2 an end -- sorry, a live stream does not have an end so 3 then technically there's no way to map this tag files 4 to something that has no end. So you would have to 5 design some sort of protocol on top of the stream to 6 get the mapping as -- the mapping is 1 to 1 right now 7 from the description of Avellan; therefore, this 8 mapping has to happen using a compressed video file 9 format and the tag file itself. 10 Q In terms of video formats, what are common 11 video formats that a POSITA would know of? 12 A Like I said, there's video format -- there's 13 encapsulation, right. When you're talking of a media 14 stream you're encapsulating things that you're going 15 to transmit that are going to be realtime dependent. 16 In other words, you lose one frame and then 17 you pull some more frames and you reconstruct that. 18 And the human eye, basically, is able to reconstruct 19 the video because of the pixilation, as we have seen 20 multiple times even during a Zoom call. 21 Whereas when you have a compressed file you 22 cannot afford that, because compressed files are not 23 destined for streaming so, therefore, there's no one 24 media stream. Because one media stream basically is a 25 realtime dependent thing that needs to happen right Page 215	1 The PS is not streamable. In fact, that's 2 more for videos that you place in a DVD that you don't 3 ever transmit because simply the way it is stored is 4 not to be transmitted. You have to convert that to a 5 transfer stream and some sort of a multiplexer for 6 that purpose. 7 Q Are you familiar with concept of lossless as 8 it relates to video? 9 A That's what I have been saying, when you 10 have a streaming format you lose your design to lose 11 frames so you can reconstruct it because it's decoding 12 the video as you receive it. 13 Whereas if you have like a file, then if you 14 are unable to uncompress one of the files then you 15 lost the entire thing because you cannot -- 16 Q As a POSITA your understanding of lossless 17 is if you lose data you -- I'm sorry, could you repeat 18 your understanding? 19 A What I'm saying is lossless is usually in 20 general for images and codecs that are related to 21 codecs, so most of the codecs are designed to lose 22 packets. So when you receive the new packets via 23 whatever protocol you're using, then you can see a 24 little bit of pixilation momentarily, but then you 25 recover it because the next packet has more Page 217

1 synchronicity data, it has new audio packets and then 2 you're able to recover, so that would be a streaming 3 format. 4 And then you have the file formats that 5 don't work with streaming, so those file formats are 6 simply available in, like I said, for DVD player or a 7 CD player where you have a static device, like in the 8 past, right, you will buy something from Blockbuster 9 and bring the DVD and play it at home. 10 Q What in your estimation is lossy? Do you 11 know what that term is? 12 A I didn't do that analysis, to be honest with 13 you. I don't think it is relevant for this analysis. 14 Q But you're an expert in the field of 15 multimedia distribution, correct? 16 MR. DROLET: Objection. Form. 17 THE WITNESS: But I didn't do an analysis 18 for this. 19 BY MR. McBRIDE: 20 Q In your experience as an expert in the field 21 of multimedia distribution, have you ever seen the 22 term "lossy" used to describe a codec? 23 A Image codecs have lossless compression and 24 lossy compression. So lossless like PNG, for example, 25 they're gigantic files. JPEG, depending on what the Page 218	1 file to preserve the file, to compress the file as 2 opposed to encode the file for transmission purposes. 3 Those are two different things. 4 Q Dr. Hernandez, I understand that you want to 5 believe that those are two different things. 6 A It's not that I believe. That's what it is. 7 (Simultaneous speakers.) 8 Q There's a concept in this art called lossy 9 compression, correct? 10 A For images, correct. Yes. 11 Q You think it doesn't apply to video at all; 12 is that your testimony? 13 A It applies to video but, again, it is the 14 same thing. Like you have to have the MPEG 15 encapsulation and inside of that you have a program 16 identifier for video and another program identifier 17 for audio, in the MPEG transport stream format. 18 That's how this works. 19 Q MPEG video can be compressed using the 20 lossy compression. 21 A It's not compression. It's encoding. 22 Because you need to -- compression means that you 23 compress something without parameters. For encoding 24 you need parameters. You need aspect ratio, you need 25 bitrate, you need chromotos, you need the format of Page 220
1 compression you choose, you can create an image that 2 is much smaller. 3 Q An MPEG, that family of video codecs, those 4 are lossy, correct? 5 A It depends on the codec and what you were 6 talking about, but like I said, the MPEG encapsulation 7 has the MPEG codec and the audio codec in different 8 program identifiers. And you can store -- basically 9 you can use a codec that is set for a certain bitrate, 10 let's say 2 megabytes and certain aspect ratio. 11 So then when the codec is encoding the video 12 that is incoming, then it encodes that and then sends 13 the packets with timing and information, the video 14 packets, and also the audio packets so it can combine 15 those into the transfer stream to be delivered to the 16 end user. 17 That's how MPEG encapsulation works. If you 18 have an MPEG encapsulation format and two codecs, one 19 for video, one for audio, and is assigned to lose 20 packets. 21 Q The video data in an MPEG encapsulated 22 stream is compressed using lossy compression; isn't 23 that true? 24 A No, it's encoded. It's not -- it's encoded. 25 It's not -- I think you're confusing the term saving a Page 219	1 the bytes, WFFF or NTSC or whatever. 2 So the coder receives four, five, six, seven 3 parameters at the very minimum, including the frame 4 per second, for example, so that's codec. That's 5 encoding. 6 Compression, you just simply grab a file and 7 make it smaller. So you're trying to equate encoding 8 that requires a set of parameters that are needed for 9 encoding purposes when it reduces the size of the 10 file, so it's two different processes, clearly. 11 Q We talked about the MPEG codec earlier, do 12 you recall that? 13 A The MPEG-2 video codec. That's one video 14 codec, yes. 15 Q And the MPEG-2 video codec, if you put an 16 input video file into it, what is outputted? 17 A It depends. 18 Q Tell me the examples that can be outputted. 19 A Like I said, you can set up a bitrate of 2 20 megabytes. You can set an aspect ratio of 640 by 480 21 pixels. You can set YFFF, Y -- like that's the format 22 for pixilation. You can actually set a frame per 23 seconds. You can set a time for -- when you have the 24 PTS file, you have like a JPTS format. 25 So you set all this parameters and the codec Page 221

1 then grabs your input, probably a raw video, and 2 generates an output, which is encoded. 3 So you cannot simply say, like, okay, codec, 4 do your magic and compress it, because it doesn't work 5 like that. You need multiple parameters to obtain the 6 response you want. 7 Q Without using the words "encoding" or 8 "compression," because I think those are buzz words 9 that you're drawing undue attention to, let's just 10 talk in general. 11 You can take a raw video file and put it 12 into an MPEG formatted encoder; is that fair? 13 A No, that would be totally speculative and 14 inaccurate. 15 Q You just said that, so how is that 16 inaccurate then? 17 A Because you don't consider all the other 18 parameters. You're like magic. It is just like 19 saying -- I don't know -- 20 Q Dr. Hernandez, are -- 21 A -- it doesn't work like that. Sorry. 22 Q -- MPEG video encoders used to encode video? 23 A In a bitrate format, in an aspect ratio 24 format. It has different inputs. It doesn't work 25 with magic. It doesn't work without parameters. Page 222	1 set those parameters. That's -- 2 Q You set those parameters so it outputs 3 video. Do you understand that phrase? 4 A Yes. If you set those parameters, then it 5 is called an encoder format, so that's why you encode 6 it because you set the parameters. So when you grab 7 FFmpeg and you input that video that you output from 8 the encoder, it's going to output and it is going to 9 say, like, the aspect ratio, the bitrate, the audio 10 format that you encoded into as well. It's like 11 audio, right. You say, oh. 12 Q Understood, Dr. Hernandez. Is the resulting 13 video, does it have an associated file type? 14 A You could store it as a file, that's 15 possible. 16 Q Okay. Let's take that file that we just 17 generated from this process. 18 If we were to compare the file size of that 19 file to the raw video file that we initially used, 20 would the resulting file be smaller than the raw video 21 file? 22 A It could be bigger or smaller. 23 Q Okay. So it could be smaller? 24 A It could be bigger or smaller, depending on 25 the coding parameters you chose. Page 224
1 Q Nobody is talking about -- 2 (Simultaneous speakers.) 3 A You are. 4 Q -- magic, sir. 5 Can you put a raw video file and put it into 6 a video encoder, an endplate video encoder? 7 A Just randomly just doing that, it cannot 8 work. 9 Q Dr. Hernandez, I am absolutely unclear on 10 why this is a sore spot for you. My hunch is because 11 it is calling attention to an issue that you know does 12 not have merit, but I'm trying to very hard to avoid 13 the buzz words that set you off, encoding versus 14 compression. 15 I'm simply asking, if I have an MPEG format 16 encoder and I put in a raw video into that encoder, 17 does it output video? 18 MR. DROLET: Objection. Form. 19 THE WITNESS: It depends on the parameters 20 you choose. 21 BY MR. McBRIDE: 22 Q Are there parameters that I can choose to 23 output video? 24 A I told you, bitrate, aspect ratio, 25 pixilation format, time for timestamps. You need to Page 223	1 Q Is it common, in your opinion, for that 2 process to be used to generate a smaller file compared 3 to the raw video file? 4 A It's not designed to make smaller files. 5 This is assigned to transmit at a bitrate. It is not 6 assigned to -- look, you're thinking you're sending an 7 e-mail, that's incorrect. It's about broadcasting to 8 a set-top box. A set-top box don't get files. 9 Set-top box get realtime streams. 10 So when you have that, or even today, this 11 is stream, for example, it is not a file. It is a 12 constant set of frames that have been set across the 13 internet to create this grid, what we call a Zoom, and 14 for that, it is not a file. 15 Q Does the -- 16 A So it -- 17 (Simultaneous speakers.) 18 Q -- resulting file, in our hypothetical, have 19 to be transmitted over the internet? 20 A Which one? Sorry. 21 Q So in our hypothetical we talked about 22 taking a raw video file, putting it into an MPEG 23 encoder, and through application of the parameters, 24 generating a video file, correct? 25 A I think that -- Page 225

1 Q Does that generated video file have to be 2 transmitted over the internet? 3 A It depends. 4 Q So it doesn't always have to be transmitted 5 over the internet; is that fair? 6 A It depends. 7 Q Okay, I'll take that as a yes. 8 So what we've acknowledged is that through 9 the use of an MPEG encoder we can generate a smaller 10 video file that we can choose, one way or the other, 11 to transmit over a network; is that fair? 12 A It depends on what you're trying to say 13 transmit is. 14 Q It depends, understood, on whether we want 15 to do that or not. 16 Now, in terms of lossy, you understand that 17 lossy would refer to the ability to gather the -- 18 well, strike that. Let me back up a step. 19 At the end, before we watch a video, whether 20 it's transmitted or not, is there a process that we 21 would call decoding? 22 A Yes, you decode the video to match the 23 bitrate that you encoded with, and to extract the 24 aspect ratio that you said you encoded with. That's 25 the purpose of that process. Page 226	1 and it would decode that, using your words, into a 2 resulting video file that is bigger typically, right? 3 MR. DROLET: Object to form. 4 THE WITNESS: No, it does not turn into 5 video. It goes straight to the display. It does 6 not uncompress the file. It doesn't operate on 7 files. Simply when you receive the file itself, 8 the coding that you have on your TV retrieves the 9 bytes, without touching the file, and simply 10 decodes that and turns into pixels that you see 11 the frames, that's what it does. It doesn't 12 uncompress as nothing. So once it's compressed, 13 it is never decompressed. If you want to call it 14 compression. 15 (Simultaneous speakers.) 16 Q What is a B-frame, or a P-frame in the MPEG 17 or parlance, Dr. Hernandez? 18 A I'm sorry, what? 19 Q What does it mean to be a B-frame or a 20 P-frame in an MPEG standard? 21 A The I-frame is the information frame. The 22 B-frames and P-frames are used to predict the frame 23 and basically to enable you to pass those to the codec 24 so you can decode that from the information frame that 25 you have. So it's a predicted frame, some B-frame for Page 228
1 That could be a bigger file. It could be a 2 bigger video. Let's say you have a small video and 3 you make it into HD, you can go to 640 by 480 to 196 4 by 1080, for example. You can do that. Or you can 5 grab a 1080 -- 3120 by 1080 video and make it a 640 by 6 480 and cut some parts, but those processes are not 7 code compression. They're code coding. And it 8 doesn't really matter if it's like the small file or 9 big file. It is a totally different thing. It's like 10 compressing is not -- I think you're confused. I'm 11 sorry about that. 12 Q And I understand that you think I'm 13 confused, sir. 14 A Of course. 15 Q And I understand that you're getting a 16 little hostile to this idea. 17 A No, no, it's the truth. You don't want to 18 accept it. 19 (Simultaneous speakers.) 20 Q Excuse me, sir. I'm still talking. 21 I understand you want to draw a distinction 22 between compression and encoding. 23 A It is not -- 24 Q I'm asking about the encoding process 25 typically would take a video file that's transmitted Page 227	1 synchronicity and things like that. 2 Q Is the data that's required to represent a 3 P-frame or a B-frame typically smaller than the amount 4 of data required to represent an I-frame in the MPEG 5 standard? 6 A It's not smaller. It's simply a 7 mathematical function. It is called a Discrete Cosine 8 Transform, so it's a DCT, that you grab that data and 9 you do a mathematical function. It's not a 10 compression. It is basically math. 11 Q There are zeros and ones that are being 12 transmitted, in this hypothetical, that would 13 represent a P-frame or a B-frame, correct? 14 A You send parameters or metrics that are 15 going to be used for the multiplication of the frame, 16 that you call it the I-frame, and determine the 17 differences in color and movement in between all the 18 other frames. And you send more I-frame as the new 19 I-frame arrives, then the codec will simply restart 20 itself to continue the coding, so that's what it does. 21 It never turns that into another file so -- 22 Q The information -- 23 A -- once you encode that into, say, a movie, 24 the decoder seems to see that, without uncompressing 25 anything, and simply displays that by the code and the Page 229

1 contents of that file. 2 Let's say you have a PS file and if you 3 transmit it, it's doing the same thing. You're 4 receiving the frames over the UDP packet, for example, 5 for a multicast, and it is retrieving all those 6 frames, passing it to the decoder. And the decoder, 7 the MPEG-2 decoder, grabs that, looks for the audio, 8 synchronizes it, and then we have resulting 9 programming their video. 10 Q Dr. Hernandez, in the transmission of 11 I-frames, P-frames and B-frames, would there be zeros 12 and ones that correspond to the P-frames and B-frames? 13 A simple question. 14 A Give me an example. 15 Q I don't need to give you an example. 16 A You do. 17 Q In the transmission of MPEG formatted video, 18 would there be zeros and ones, bytes, that correspond 19 to a P-frame or a B-frame? 20 A It depends. 21 Q What does it depend on? 22 A The coding, the video that you sent. 23 Q Okay. So there would be situations in which 24 a P-frame or a B-frame would be represented by zeros 25 and ones; is that fair? Page 230	1 and B-frames typically represented bytes, zeros and 2 ones? 3 A It's obvious that every single frame is a 4 binary, so I don't know what your question is. 5 Q And typically, in your experience, are the 6 number of bytes required to represent a P-frame or a 7 B-frame typically less than the number of bytes 8 required to represent an I-frame? 9 A It depends. It depends on the bitrate. The 10 bitrate is not -- 11 Q So it's possible? 12 (Simultaneous speakers.) 13 A Let me explain it to you. It is not 14 possible. 15 Q It is not possible for there to be less 16 bytes? 17 A It is even less. It could be more or it 18 could be less. So let's say you're checking a video 19 from your house and your garage, it would be zero 20 bytes. If somebody moves, it is going to be more 21 bytes. Is that a scenario considered in your 22 question? 23 Q Typically -- again I'm asking a typical -- 24 A So your answer is no. 25 Q -- you purport to be an expert in -- Page 232
1 A We're talking about the little formats, all 2 of them are zeros and ones, even HTML, so you have to 3 be more specific than that. 4 Q I'm trying to ask you a question, 5 Dr. Hernandez. When you transmit frames of MPEG 6 video, those frames are represented by bytes, correct? 7 A It depends on the codec, the parameters of 8 the codec. What bitrate you have. 9 Q So those formats -- 10 (Simultaneous speakers.) 11 A Codec is 2 megabytes, 1080 by 780, let's 12 say, that's the form; is that right? Let's make that 13 an example; is that fair? 14 Q Dr. Hernandez, I'm asking you a very simple 15 question. Are there MPEG formats that do not send 16 bytes to represent frames? 17 A Like I said, all the little formats use -- 18 Q So the frames of an MPEG video would be 19 represented by bytes; is that correct? 20 A Frames that have, like, binary, so they have 21 bytes. I don't understand what your question is. It 22 is irrelevant, the question. 23 Q It is a very simple question. 24 A What is your question? 25 Q In an MPEG video, are the I-frames, P-frames Page 231	1 A What is your question? 2 Q -- the field of multimedia distribution. Do 3 you agree -- 4 (Simultaneous speakers.) 5 A I disagree with -- your question is totally 6 off. It doesn't make any sense. 7 Q You need to listen to the question. 8 A All your questions are dumb. I'm sorry, 9 but... 10 Q Dr. Hernandez, I'm asking you a very 11 straightforward question. 12 A You are repeating the same question ten 13 times, and I already told you, it depends on the 14 bitrate, it depends on the content. You're trying to 15 make an assumption that is completely irrelevant and 16 wrong. Your question is incorrect. 17 Q Dr. Hernandez, I understand that you believe 18 my question is dumb but I still get to ask it. 19 As an expert in the field of multimedia 20 distribution, you understand that MPEG is used very 21 often as a family of codecs to transmit video; is that 22 fair? 23 A MPEG video is part of the MPEG -- to 24 transfer a stream, again it needs to have some audio 25 to synchronize everything correctly. Page 233

1 Q An MPEG is also used very common, as a 2 family of codecs, to generate even video files, 3 correct? 4 A MPEG can be stored as a video file, that's 5 totally correct, but it does not mean it is used for 6 transmission and it is smaller. It all depends on the 7 content of the file. 8 Like I said, the contents of the file that 9 you are describing, you are missing this, it is not 10 the same thing as shooting a black screen and then 11 shooting a soccer game because now you have more 12 content and then your bitrate is going to pick up and 13 you will have more data. 14 Q Dr. Hernandez -- 15 A When you go back to the black screen, then 16 you have less content and your bitrate is going to go 17 down, so that's the answer to your question. 18 Q Dr. Hernandez, I am going to ask if you 19 agree with this statement and I would like you to say 20 "agreed" or "disagreed." 21 Would you agree that one of the main 22 purposes of using MPEG to generate video files from 23 raw video files is to result in smaller video files? 24 A It depends on what you're trying to do. 25 Q So you're unaware -- Page 234	1 bitrate of the transmission. 2 And in some cases you try to achieve 3 constant bitrate, but you can do like -- called gross 4 bitrate where you have bursts of packets that are 5 being sent across the channel as you transmit those 6 packets. 7 So it is not a definite answer -- it is not 8 the purpose of reducing the size. It is the purpose 9 of adapting to the bitrate of the medium. It has 10 nothing to do with the size. 11 Q Okay. Let's see how we're doing on time. 12 Really quick, what is EGLA Corporation? 13 A It is Edwin G, L -- is my mother Gladys, and 14 A is Alcides, my father. That's what EGLA stands for. 15 Q And are you an owner of EGLA Corporation? 16 A I am the founder and owner. 17 MR. DROLET: Objection. Form. 18 BY MR. McBRIDE: 19 Q Are you a majority owner of EGLA? 20 MR. DROLET: Objection. Form. 21 THE WITNESS: Yes, I think I responded to 22 that question before. 23 BY MR. McBRIDE: 24 Q And what percentage of EGLA do you own? 25 MR. DROLET: Objection. Form. Page 236
1 A It depends on the -- 2 Q -- to agree -- 3 A -- well -- 4 Q Excuse me, sir. I get to finish my 5 question, sir. I know you think I'm dumb, but I get 6 to ask the questions. 7 So are you saying that you do not agree that 8 one of the main purposes of MPEG is to produce smaller 9 video files than the raw video file? 10 A No, it's not for size. It's about to adapt 11 into the bitrate. 12 Q And would you disagree that one of the main 13 purposes of using MPEG video codecs to generate video 14 for transmission is similarly to generate smaller 15 videos that can be transmitted easier? 16 A I disagree. It's related to bitrate, to the 17 size. It is incorrect, your question. 18 Q So in your mind you would have us believe 19 that MPEG, the MPEG standards, have nothing to do with 20 the desire to make video smaller, either for storage 21 or transmission purposes. Is that your position? 22 A My position is that all those video formats 23 and encoders are designed to adapt to a certain 24 bitrate. The bitrate is what defines, and the size of 25 the screen of course, is what define the ultimate Page 235	1 THE WITNESS: Well, this is variable. I 2 have 60 percent in paper, but my parents being 3 the other 40 percent are very flexible with any 4 percentage they choose. 5 BY MR. McBRIDE: 6 Q When you say "flexible with the 7 percentages," what does that mean? 8 MR. DROLET: Objection. Form. 9 THE WITNESS: In terms of decision-making, 10 if I need to make a decision, I will make the 11 decision as soon as I explain it to them and they 12 can understand in simple terms what the decision 13 is. 14 So my parents will support me -- so in a way 15 I'm a majority, because they have a percentage 16 base but it is only for financial purposes and 17 decision-making purposes, but in general I call 18 most of the shots. 19 BY MR. McBRIDE: 20 Q Okay. Does EGLA have any ownership of any 21 of the challenged patents? 22 MR. DROLET: Objection. Form. 23 THE WITNESS: I think one of the patents is 24 assigned to EGLA actually, but I don't know which 25 one it is. I don't think is challenged is the Page 237

1 12-something patent is assigned. 2 BY MR. McBRIDE: 3 Q So the challenged patents are not assigned 4 to ECLA; is that fair? 5 MR. DROLET: Objection. Form. 6 THE WITNESS: I believe they are not. 7 MR. McBRIDE: It's approaching 4. We still 8 need to meet and confer. I propose ending the 9 deposition today. Let's do the meet and confer 10 and then let me think about whether we need any 11 time or if we need any time, what the start time 12 will be for tomorrow, because I don't think we 13 will need to take all day, and I am sure we can 14 work through making it more flexible on timing, 15 if we want. Is that okay? 16 MR. DROLET: Sounds good to me. 17 Dr. Hernandez, are you good with that? 18 THE WITNESS: I'm okay with that. Just let 19 me know, because I could be available as early as 20 you wish. 8 a.m. is fine. 21 MR. McBRIDE: It certainly won't be earlier. 22 THE WITNESS: If you want it earlier, that's 23 good as well. Just let me know as well tonight 24 so I can prepare. 25 MR. McBRIDE: I will let everyone know what Page 238	1 CERTIFICATE 2 3 4 STATE OF FLORIDA) 5 COUNTY OF MIAMI-DADE) 6 7 I, Maria E. Fernandez, Registered Professional 8 Reporter, Florida Professional Reporter, Notary 9 Public, State of Florida, certify that Dr. 10 Edwin A. Hernandez-Mondragon remotely appeared 11 before me on December 4, 2025 was remotely duly 12 sworn. 13 Signed this 9th day of December, 2025. 14 15  16 MARIA E. FERNANDEZ 17 Registered Professional Reporter 18 Florida Professional Reporter 19 Notary Public, State of Florida 20 21 Personally known_____ 22 OR Produced Identification_____ 23 Type of Identification Produced_____ 24 25 Page 240
1 time we proceed, but let's go off the record. 2 (Deposition adjourned at 4:47 p.m.) 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Page 239	1 CERTIFICATE 2 3 STATE OF FLORIDA) 4 COUNTY OF MIAMI-DADE) 5 6 I, MARIA E. FERNANDEZ, RPR, FPR-C, do hereby 7 certify that I was authorized to and did 8 remotely stenographically report the foregoing 9 deposition of Dr. Edwin A. Hernandez-Mondragon; 10 that a review of the transcript was requested; 11 and that the transcript is a true record of my 12 stenographic notes. 13 I FURTHER CERTIFY that I am not a relative, 14 employee, attorney, or counsel of any of the 15 parties, nor am I a relative or employee of any 16 of the parties' attorney or counsel connected 17 with the action, nor am I financially 18 interested in the action. 19 Dated this 9th day of December 2025. 20 21  22 MARIA E. FERNANDEZ, RPR, FPR-C 23 and Notary Public 24 25 Page 241

1 Stingray Group Inc Et Al v. Hernandez-Mondragon, Edwin A. 2 Dr. Edwin A. Hernandez-Mondragon Job No. 7746564 3 E R R A T A S H E E T 4 PAGE_____ LINE_____ CHANGE_____ 5 _____ 6 REASON_____ 7 PAGE_____ LINE_____ CHANGE_____ 8 _____ 9 REASON_____ 10 PAGE_____ LINE_____ CHANGE_____ 11 _____ 12 REASON_____ 13 PAGE_____ LINE_____ CHANGE_____ 14 _____ 15 REASON_____ 16 PAGE_____ LINE_____ CHANGE_____ 17 _____ 18 REASON_____ 19 PAGE_____ LINE_____ CHANGE_____ 20 _____ 21 REASON_____ 22 _____ 23 _____ 24 Dr. Edwin A. Hernandez-Mondragon _____ Date _____ 25 _____ Page 242	1 _____ 2 December 9, 2025 3 Stingray Group Inc Et Al v. Hernandez-Mondragon, Edwin A. 4 DEPOSITION OF: Dr. Edwin A. Hernandez-Mondragon 7746564 5 The above-referenced witness transcript is 6 available for read and sign. 7 Within the applicable timeframe, the witness 8 should read the testimony to verify its accuracy. If 9 there are any changes, the witness should note those 10 on the attached Errata Sheet. 11 The witness should sign and notarize the 12 attached Errata pages and return to Veritext at 13 errata-tx@veritext.com. 14 According to applicable rules or agreements, if 15 the witness fails to do so within the time allotted, 16 a certified copy of the transcript may be used as if 17 signed. 18 Yours, 19 Veritext Legal Solutions 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____ Page 244
1 Stingray Group Inc Et Al v. Hernandez-Mondragon, Edwin A. 2 Dr. Edwin A. Hernandez-Mondragon 7746564 3 ACKNOWLEDGEMENT OF DEPONENT 4 I, Dr. Edwin A. Hernandez-Mondragon, do hereby declare that I 5 have read the foregoing transcript, I have made any 6 corrections, additions, or changes I deemed necessary as 7 noted above to be appended hereto, and that the same is 8 a true, correct and complete transcript of the testimony 9 given by me. 10 _____ 11 _____ 12 Dr. Edwin A. Hernandez-Mondragon _____ Date _____ 13 *If notary is required 14 SUBSCRIBED AND SWORN TO BEFORE ME THIS 15 _____ DAY OF _____, 20____. 16 _____ 17 _____ 18 _____ 19 NOTARY PUBLIC 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____ Page 243	

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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