1 UNITED STATES PATENT AND TRADEMARK OFFICE

2 ----------

3 BEFORE THE PATENT TRIAL AND APPEAL BOARD

4 ----------

5 AMAZON.COM, INC., AMAZON.COM SERVICES LLC,

6 Petitioner,

7 v.

8 NOKIA TECHNOLOGIES OY,

9 Patent Owner,

10 ----------

11 Case IPR2024-00604

12 Case IPR2024-00605

13 U.S. Patent No. 10,536,714

14 ----------

15

16 REMOTE DEPOSITION OF

17 CLIFFORD READER, PH.D.

18 January 23, 2025

19

20

21 Reported by: Susan S. Klinger, RMR-CRR, CSR

22 Job No. 567274

1
2
3 January 23, 2025
4
5
6
7
8 Remote Deposition of CLIFFORD READER, PH.D..,
9 held before Susan S. Klinger, a Registered Merit
10 Reporter and Certified Realtime Reporter of the
11 State of Texas.
12
13
14
15
16
17
18
19
20
21
22

Nokia Exhibit 2022, p. 2
Amazon.com v. Nokia
IPR2024-00605

1 A P P E A R A N C E S:
2
3 Attorneys for Plaintiff(s):
4 Fred J.S. Chung, Esquire
5 SHEPPARD MULLIN
6 1540 El Camino Real, Suite 120
7 Menlo Park, California 94025
8 650.815.2600
9
10
11 Attorneys for Patent Owner:
12 Emily Tannenbaum, Esquire
13 McKOOL SMITH P.C.
14 300 Crescent Court, Suite 1200
15 Dallas, Texas 75201
16 214.978.4000
17
18
19
20
21
22

Nokia Exhibit 2022, p. 3
Amazon.com v. Nokia
IPR2024-00605

1 I N D E X
2
3 WITNESS PAGE
4 CLIFFORD READER, PH.D.
5 EXAMINATION BY MS. TANNENBAUM 5
6 EXAMINATION BY MR. CHUNG 32
7
8
9 E X H I B I T S
10 No. Description Page
11 Exhibit 1 Reader declaration 7
12 Exhibit 2 Nakamura reference 21
13
14
15
16
17
18
19
20
21
22

Nokia Exhibit 2022, p. 4
Amazon.com v. Nokia
IPR2024-00605

1 P R O C E E D I N G S
2 CLIFFORD READER, PH.D.,
3 having been first duly sworn testified as follows:
4 EXAMINATION
5 BY MS. TANNENBAUM:
6 Q Good morning, Dr. Reader.
7 A Good morning.
8 Q I apologize in advance if you hear any
9 loud noises. I'm in New York City and there is a
10 lot of honking and sounds of my pipes. So if you
11 can't hear me, just please let me know.
12 Dr. Reader, have you been deposed before?
13 A Yes, I have. And let me apologize in case
14 of any interruption on my side, because I'm in an
15 Apple environment. Everything is interconnected.
16 And the phone is silenced, my watch is silenced
17 and so if somebody calls me it is possible that my
18 desktop computer will ring. And if it does, I can
19 stop it quickly, but I hope it won't interrupt.
20 Thank you.
21 Q Thank you. How many times have you been
22 deposed before?

Nokia Exhibit 2022, p. 5
Amazon.com v. Nokia
IPR2024-00605

1 A More than 25.
2 Q So you know the general rules. Can you
3 agree to let me know if you don't understand a
4 question?
5 A I will.
6 Q Dr. Reader, is there anyone in the room
7 with you today?
8 A No, there is not.
9 Q And other than the video conferencing
10 application Zoom, do you have anything else open
11 on your computer?
12 A Not on the desktop that I'm using for this
13 call.
14 Q Do you have any documents with you in the
15 room today, either electronic or hard copy?
16 A Not close to me.
17 Q Can you tell me how you prepared for
18 today's deposition?
19 A Sorry, would you repeat the question,
20 please?
21 Q How did you prepare for today's
22 deposition?

Nokia Exhibit 2022, p. 6
Amazon.com v. Nokia
IPR2024-00605

1 A I reviewed the documents that are in my
2 declaration and I had two short sessions with
3 counsel, who is on this call, yesterday.
4 Q Did you meet with anybody else?
5 A No.
6 Q And how long were your calls yesterday?
7 A Roughly speaking one hour each.
8 Q So you have been offered as an expert on
9 video coding, correct?
10 A Correct.
11 MS. TANNENBAUM: I would like to ask the
12 court reporter to introduce what has been uploaded
13 and premarked as Exhibit 1.
14 Can you please provide that to Dr. Reader?
15 (Exhibit 1 marked.)
16 REMOTE TECHNICIAN: One second. This is
17 Exhibit 1.
18 Q Thank you. You have Exhibit 1 in front of
19 you. Do you recognize Exhibit 1 as the
20 declaration you provided in both IPR2024-00604 and
21 605?
22 A This is the cover page. Did you intend to

Nokia Exhibit 2022, p. 7
Amazon.com v. Nokia
IPR2024-00605

1 put it in the chat?
2 MS. TANNENBAUM: Can the court reporter
3 please upload it into the chat?
4 REMOTE TECHNICIAN: One moment, please,
5 thank you.
6 Q Please let me know, Dr. Reader, once you
7 have had time to take a look at the exhibit.
8 A I have it downloaded and I am -- I have it
9 up on -- I have it up on my screen. You can see
10 my signature on this second page. So yes, I have
11 it, thank you.
12 Q Great. I'm just going to repeat my
13 question. So you have Exhibit 1 in front of you.
14 Do you recognize Exhibit 1 as the declaration you
15 provided in both IPR2024-00604 and 605?
16 A Yes, I do.
17 Q I want to make this more straightforward.
18 Do you agree that your declarations in the 604 and
19 605 IPRs are substantially similar?
20 A They are.
21 Q So I'm going to refer to Exhibit 1 and you
22 will understand that it covers both of your

Nokia Exhibit 2022, p. 8
Amazon.com v. Nokia
IPR2024-00605

1 declarations?
2 A Okay, yes.
3 Q Great. So I would like to first discuss
4 your qualifications and background particularly
5 related to standardization on page 5.
6 When did you first become involved in
7 video coding standardization?
8 A In 1990.
9 Q So you have had over 30 years of
10 experience with video coding standardization,
11 correct?
12 A Correct.
13 Q How did you get involved with the Moving
14 Pictures Expert Group?
15 A Video Coding Experts Group, VCEG are --
16 I'm sorry I want to -- I want to be specific about
17 my answer.
18 Can you -- can you ask -- can you ask a
19 more specific question and then I can understand
20 what you are looking for?
21 Q How did you get involved with the Moving
22 Pictures Expert Group, the MPEG?

Nokia Exhibit 2022, p. 9
Amazon.com v. Nokia
IPR2024-00605

1 A Yes.
2 Q How did you get involved with it?
3 A I attended the first meeting in the spring
4 of 1990. I was a technical contributor to the
5 MPEG standards 1, 2, and 4. I was involved in the
6 management of the -- of the standardization
7 process for MPEG-1 and MPEG-4. And I was head of
8 the U.S. delegation to MPEG about two and a half
9 years in the time period of the MPEG-1 and MPEG-2
10 standards.
11 Q Was MPEG the first major video coding
12 standardization organization?
13 A No, no, it wasn't.
14 Q But MPEG was the first video coding
15 standards organization that you were a part of?
16 A I'm sorry, your question has changed. The
17 question you first asked was MPEG. The first, you
18 know, video coding standard and I answered no to
19 that.
20 In terms of your second question it was
21 the first video coding standards development that
22 I was personally attending and involved in.

Nokia Exhibit 2022, p. 10
Amazon.com v. Nokia
IPR2024-00605

1 Q Thank you. And you were not editor in
2 chief for the MPEG-1 standard, correct?
3 A Yes, I was.
4 Q Is that a position you sought for yourself
5 or is there a nominee or election process?
6 A I did not seek that position. I was asked
7 by the convener of MPEG to be the editor.
8 Q That is a big deal. There is only one
9 editor in chief, correct?
10 A Correct. Well, for perhaps for your
11 amusement I actually think that he asked me to be
12 the chief editor, not only because of my
13 qualifications and my fairly good knowledge of the
14 English language, but given that I was head of
15 delegation for the United States, I had the
16 suspicion that he asked me to be chief editor to
17 keep me too busy to cause too much trouble, which
18 failed miserably for him, but that is history.
19 Q Do you agree that being editor in chief
20 requires you to be one of the top dogs in the
21 field of video coding?
22 A Yes. Actually the MPEG-1 standard has

Nokia Exhibit 2022, p. 11
Amazon.com v. Nokia
IPR2024-00605

1 three parts, video, audio and something called
2 systems, which is -- which is something that
3 involves the multiplexing and synchronization, and
4 other functions of providing a complete video
5 signal. And I was intimately familiar with all
6 three parts of the MPEG-1 standard.
7 Q So I would like to turn to your CV,
8 towards the end of your declaration on page 31.
9 Is your CV an accurate representation of your
10 prior work experience?
11 A What is on the page right now, as it says,
12 is a summary. So it is -- it is very much in
13 brief, but any of the facts that are on this page
14 in front of us now are accurate, yes.
15 Q So if you look at the next few pages that
16 follow as well.
17 Would you say that the entirety of your CV
18 is an accurate representation of your prior work
19 experience?
20 A In summary form, that's correct, yes.
21 Q So what is your current job title?
22 A I use the title consultant.

Nokia Exhibit 2022, p. 12
Amazon.com v. Nokia
IPR2024-00605

1 Q And how long have you been a consultant
2 for?
3 A It is now 24 years.
4 Q And prior to becoming a consultant, did
5 you have any experience working with Nokia?
6 A I'm sorry, I think you just asked me two
7 questions. Would you like to break that down?
8 Q I will repeat my question.
9 Prior to becoming an independent
10 consultant, did you have experience working with
11 Nokia?
12 A I'm sorry, I didn't understand the
13 question. No.
14 Q No, you didn't have any prior experience
15 working with Nokia?
16 A Correct.
17 Q So you didn't analyze technologies that
18 contributed to the H.264 standard for Nokia?
19 A Not prior to becoming a consultant.
20 Q Thank you for clarifying.
21 During your time as a consultant, did you
22 analyze technologies contributed to the H.264

Nokia Exhibit 2022, p. 13
Amazon.com v. Nokia
IPR2024-00605

1 standard for Nokia?
2 A Yes.
3 Q Can you tell me about the work you did
4 related to that?
5 A So in 2000 -- in the 2001 to 2002
6 timeframe, I don't remember exactly what date I
7 was first contacted, but I was contacted by a
8 group of 10 companies on the topic of intellectual
9 property rights as they related to essential
10 patents for the H.2 -- for the under development
11 H.264 standard, and Nokia was one of those 10
12 companies.
13 Q And for those 10 companies, you analyzed
14 technologies that contributed to the H.264
15 standard?
16 A In summary, that's correct.
17 Q Dr. Reader, do you have a method of
18 keeping track of the technology you analyze?
19 A I'm sorry, can you -- can you ask that
20 question again?
21 Q Yes. Do you have a method of keeping
22 track of the technology you analyze?

Nokia Exhibit 2022, p. 14
Amazon.com v. Nokia
IPR2024-00605

1 A Yes, I do.
2 Q And how do you keep track of the
3 technology you analyze?
4 A I have a personal archive of all of the
5 documents related to video coding standards, that
6 is one thing. Another thing is to follow, you
7 know, technical conferences in my field, the two
8 prominent organizations that over the decades have
9 had conferences or specific conference sessions
10 related to video coding that I have attended and
11 sometimes presented papers in IEEE and SPIE. So
12 those are two principal methods by which, you
13 know, I track technology in my field.
14 Q What does SPIE stand for?
15 A The Society of Photooptical
16 Instrumentation Engineers.
17 Q Thank you.
18 You mentioned in your answer that you keep
19 a personal archive. Is that the same thing as the
20 personal databases that you have on your CV?
21 A Yes, it is.
22 Q When did you start maintaining those

Nokia Exhibit 2022, p. 15
Amazon.com v. Nokia
IPR2024-00605

1 databases?
2 A I started, you know, in 1990 when I -- you
3 know, when I became an accredited expert MPEG --
4 in the MPEG-1 standard.
5 Q And why did you decide to start
6 maintaining the database?
7 A Well, at that time -- at the very
8 beginning in spring of 1990, then I was receiving
9 the documents from the committee in two roles.
10 One as an individual contributor and very
11 interested in the documents, because I was the
12 head of an engineering team that was designing a
13 chip to implement the MPEG-1 standards, but also
14 because I was the head of a U.S. delegation and
15 needed to be responsible for my entire delegation
16 including every aspect of video.
17 As mentioned, video is a slightly
18 overloaded term because sometimes we refer to
19 video as the visual component of a communication
20 method, but of course as you know every day in
21 your living room when you watch television, video
22 also refers to the complete service which

Nokia Exhibit 2022, p. 16
Amazon.com v. Nokia
IPR2024-00605

1 includes, of course, the audio. And as I said,
2 the so-called systems that multiplexes and
3 synchronizes and does other functions to make the
4 video and audio present in realtime and be -- and
5 have lip sync in realtime.
6 Subsequent to 1990, you can see on my CV I
7 was in '93 hired as a consultant by Cable Labs to
8 investigate the essential patents for the then
9 emerging MPEG-2 standard. And that is when I
10 acquired another motivation to maintain a
11 database, because from that point forward, I have
12 had a keen interest in, you know, in this -- in
13 this subject of standards-essential patents
14 related to the technology that is the -- comprises
15 the video coding tools of the video coding
16 standards.
17 Q Did you create your database from scratch?
18 A I think the correct answer to that
19 question is yes. I mean obviously the materials
20 -- the materials were provided, you know, by the
21 distribution methods of the standards committees,
22 which in the first years until 1995 were paper.

Nokia Exhibit 2022, p. 17
Amazon.com v. Nokia
IPR2024-00605

1 And what I did was to have all of that scanned
2 into PDFs.
3 And the committees, the various committees
4 over all this time have always provided an index
5 for all of the documents that pertain to the
6 development of the standard. And they have always
7 been organized on a meeting-by-meeting basis. So
8 even for -- even for the standard before I was
9 personally involved, the H.261 standard.
10 It is the case that, you know, that the
11 archive of documents was -- was fully indexed by
12 the chairperson or persons and an index was
13 provided to all of the experts and made available.
14 And after 1995 and the conversion to electronic
15 media then those indices and all of the documents
16 have been available to anyone online.
17 Q Does your personal database include
18 documents other than the documents that the
19 standards committees provided to you?
20 A I missed the key part of your sentence.
21 You asked me does my personal database include and
22 what was it you asked?

Nokia Exhibit 2022, p. 18
Amazon.com v. Nokia
IPR2024-00605

1 Q Documents other than the documents that
2 were provided to you from the standards
3 committees?
4 A No. I mean this database is a database of
5 those documents.
6 Q Did you add any new documents to your
7 database?
8 A I'm sorry, I don't really understand what
9 you are asking.
10 Q Other than the documents that were
11 provided to you in the 1990s by the standards
12 committees that you included in your personal
13 database, do you still upload documents to your
14 database today?
15 A Yes, I do.
16 Q What documents do you upload to your
17 personal database today?
18 A There is -- so in the most recent years,
19 my database has been updated to include the next
20 generation of standard beyond H.265, which is
21 H.266 also known as -- as VVC for versatile video
22 coder, I think.

Nokia Exhibit 2022, p. 19
Amazon.com v. Nokia
IPR2024-00605

1 And perhaps this week I mean, what is
2 going on right now is that the committees are
3 launching, there is a meeting going on at the
4 moment in Geneva. And so now there is a new
5 effort to develop what would probably become
6 H.267. And I haven't yet uploaded documents for
7 that, but at an appropriate time, I will upload
8 the documents from that too.
9 Q When you -- when do you decide to upload
10 these documents?
11 A Basically when they become available.
12 Q Do you agree that you actively stay on top
13 of what is happening in the world of video coding
14 standardization?
15 A So I need to hear the question again,
16 please, ask it again.
17 Q Sorry. I will repeat my question.
18 Do you agree that you actively stay on top
19 of what is happening in the world of video coding
20 standardization?
21 A I try to do that.
22 Q And do you consider your databases to be

Nokia Exhibit 2022, p. 20
Amazon.com v. Nokia
IPR2024-00605

1 unique or one of a kind?
2 A I don't know. There are organizations
3 within the video coding community who -- who I
4 think likely maintain similar databases to myself,
5 key players in -- I mean, key participants in the
6 field, corporations such as companies making
7 consumer electronics products, companies providing
8 consumer electronics services in the video area.
9 I think they -- they probably maintain similar
10 databases.
11 Q Do you know of another individual that is
12 not a part of the corporation that maintains
13 databases similar to yours?
14 A No, I don't.
15 MS. TANNENBAUM: I would like to introduce
16 what has been uploaded and premarked as Exhibit 2.
17 Please provide that to the witness.
18 REMOTE TECHNICIAN: One moment, please.
19 (Exhibit 2 marked.)
20 A Okay, I have it downloaded and displayed,
21 thank you.
22 Q Thank you. Exhibit 2 is the Nakamura

Nokia Exhibit 2022, p. 21
Amazon.com v. Nokia
IPR2024-00605

1 reference you cite in your report, KCTBCF419,
2 correct?
3 A Yes, that is correct, it is.
4 Q And you are familiar with the JCT-VC;
5 correct?
6 A I am.
7 Q And JCT-VC stands for Joint Collaborative
8 Team on Video Coding, correct?
9 A Yes, that's correct.
10 Q And the JCT-VC was formed in 2010,
11 correct?
12 A It was first announced that it was going
13 to be formed in 2009. It held its first meeting
14 in 2010.
15 Q Did you learn about the JCT-VC right when
16 it formed?
17 A No. I was aware of the effort years
18 before that.
19 Q What is the JCT-VC responsible for?
20 A You can look at the terms of reference,
21 which I think is also an exhibit that provides a
22 detailed answer to that question.

Nokia Exhibit 2022, p. 22
Amazon.com v. Nokia
IPR2024-00605

1 Q Are they responsible for developing the
2 VCEG standard?
3 A Certainly that is one of the things that
4 the committee did.
5 Q And who is a part of the joint
6 collaborative team on video coding?
7 A So I don't -- can you repeat the question
8 again?
9 Q Yes. Who is a part of the joint
10 collaborative team on video coding?
11 A So I don't -- I don't understand the
12 question. You -- are you asking what is a part of
13 or --
14 Q Who are -- who are the members that
15 make-up the joint collaborative on video coding?
16 A Okay. Anyone who -- who wants to
17 participate in -- participate or observe the work
18 of the -- of the committee.
19 Q Are you a member of the JCT-VC?
20 A Well, I didn't attend any of the meetings
21 personally and I wasn't accredited to do so at the
22 time.

Nokia Exhibit 2022, p. 23
Amazon.com v. Nokia
IPR2024-00605

1 Q You weren't accredited at the time to
2 attend the meetings. What are the requirements to
3 make you eligible to attend the meetings?
4 A I mean the members -- I mean, very, very
5 formally, in speaking very formally, the members
6 of these committees which fall either under the
7 ITU or the ISO both of which are -- have their
8 secretaries and headquarters in Geneva,
9 Switzerland. In a strict formal manner the
10 members of the committee are countries. So the
11 United States is a member, Germany is a member,
12 and so on.
13 Each of those countries has their own
14 requirements to accredit people as their people to
15 attend the meeting in-person and -- and part --
16 you know, and physically participate in the
17 meetings. And those requirements vary widely from
18 one country to another.
19 Q So can non-members not attend the
20 meetings?
21 A Well, the other category of person
22 attending the meeting is someone who is an invited

Nokia Exhibit 2022, p. 24
Amazon.com v. Nokia
IPR2024-00605

1 expert. I testified in the other deposition. I
2 took on that. I was an invited expert for the
3 preceding standard, JCT, in the early 2000s. So
4 you can be invited as an individual to attend the
5 meeting, but I should point out that regardless,
6 all of the proceedings of the meetings, all of the
7 input documents and all of the output documents of
8 the meeting are available online to anyone who
9 wants to access those documents.
10 Q Did you attend the meetings for the
11 preceding -- the meetings preceding the
12 formulation about the formation of the JCT-VC?
13 A In the -- if you are referring to the
14 meetings that were occurring in the 2000s, I was
15 not attending those meetings physically, no.
16 Q I just want to circle back to one of my
17 previous questions where you mentioned that there
18 are requirements that vary per country to become a
19 JCT-VC member. Are you aware if there are
20 requirements in the United States?
21 A I don't -- I don't know the exact details
22 of the requirements today. I can describe the

Nokia Exhibit 2022, p. 25
Amazon.com v. Nokia
IPR2024-00605

1 process when I was accredited as a U.S. delegate
2 and U.S. expert to the standards earlier in my
3 career. And I can give a -- I can give you a
4 general idea of what the process is like today if
5 you wish.
6 Q Yes. If you can --
7 A I mean, the general process followed in
8 the United States has been for anyone who wants to
9 become accredited as a delegate to first join the
10 U.S. standards body and attend at least a couple
11 of meetings of the U.S. standards body before
12 attending an international meeting such as a
13 meeting of JCT-VC.
14 Q Do you have any knowledge regarding the
15 procedures for accessing the JCT-VC documents
16 online around the 2010-2011 timeframe?
17 A There is no -- there was no restriction to
18 access then, and there isn't any restriction now.
19 You don't need to log on, you don't need a user
20 name, you don't need a password. You personally
21 could go to the ITU website at this moment and
22 access all of the JCT-VC documents.

Nokia Exhibit 2022, p. 26
Amazon.com v. Nokia
IPR2024-00605

1 Q How did you obtain your knowledge on how
2 to access these documents on the website?
3 A Well, it is -- it has been -- it has been
4 a common practice through generations of the
5 standards beginning in 1995. So, you know, when I
6 first accessed any documents online, I would have
7 been informed in 1995, because I was attending
8 MPEG meetings and attending the ITU's H.263
9 standards meetings. Those bodies would have
10 announced at that time, you know, to anyone
11 interested, you know, how to access those
12 documents.
13 And of course that has been through the
14 standard practice of having an internet URL as the
15 access point.
16 Q So you were closely monitoring the
17 development of the JCT-VC in the 2010, 2011
18 timeframe, correct?
19 A Yes, specifically but as mentioned in
20 response to one of your earlier questions, I was
21 tracking the process leading into -- into what got
22 formally launched as JCT-VC, so I was monitoring

Nokia Exhibit 2022, p. 27
Amazon.com v. Nokia
IPR2024-00605

1 the process starting in the mid -- in the mid
2 2000s.
3 Q Are you aware of others who were closely
4 monitoring the developments of the JCT-VC during
5 the 2010/2011 timeframe?
6 A Yes.
7 Q Are all of those people a part of the
8 video coding industry?
9 A I mean, the common interest is -- is of
10 course the subject matter of the committee. So in
11 the field of audio/visual coding, that community
12 of people were, of course, following the
13 development of the next generation of standard.
14 MS. TANNENBAUM: I would like to go off
15 the record and take a short break if that is okay.
16 A Absolutely fine with me.
17 (Recess, 11:38 to 11:46 a.m.)
18 Q Dr. Reader, are you ready to proceed?
19 A I am.
20 Q Great, thank you.
21 So I want to circle back to when you were
22 editor in chief of MPEG. You mentioned when you

Nokia Exhibit 2022, p. 28
Amazon.com v. Nokia
IPR2024-00605

1 originally received the documents they were in
2 paper form and you would scan them and upload them
3 to your database.
4 Were you editor in chief when MPEG started
5 uploading documents themselves?
6 A No, I was editor from in the '91 through
7 '92 timeframe and so everything was still on paper
8 in that time.
9 Q And earlier in your testimony you
10 mentioned VCEG. Were you a member of VCEG?
11 A I didn't attend VCEG meetings as a member
12 of VCEG. Let me -- let me try to explain.
13 In the timeframe of the development of
14 MPEG-4 part 2 and the ITU's H.263 standard, we
15 synchronized our activities very, very closely,
16 because we were sharing even though there wasn't a
17 joint team formed at that time. We did want to
18 develop our standards together utilizing the
19 resources of the experts coming from both sides.
20 So I was attending meetings in the 1990s
21 from the ISO MPEG side that were co-located with
22 and synchronized with the meetings on the H.263

Nokia Exhibit 2022, p. 29
Amazon.com v. Nokia
IPR2024-00605

1 side involving the committee VCEG video coding
2 experts group.
3 So I'm sorry, it is a little bit
4 complicated, but I mean I certainly was attending
5 VCEG meetings in that timeframe, but -- but not
6 formally as a member of VCEG instead due to this
7 close -- close cooperation between the two sides.
8 Q Was the VCEG the first major video coding
9 standards organization?
10 A No, no. It was -- it was formed in I
11 think -- let me think it. It had its origins
12 within a group known as LVC within the ITU for low
13 bit rate coding. And informally was a
14 subcommittee beginning -- it is an evolution
15 process, but VCEG had its origins in meetings in
16 this 95/96 timeframe around the time of, you know,
17 the electronic -- around the time of the
18 electronic media distribution. That is when the
19 first meetings of a committee that evolved to
20 become VCEG happened. And if you want I can go
21 into a little bit more detail if you need it.
22 Q Were those meetings the first major video

Nokia Exhibit 2022, p. 30
Amazon.com v. Nokia
IPR2024-00605

1 coding standardization organization informally?
2 A Let me try and give you some context. On
3 the ITU side, the focus was on communication
4 services. So from the beginning, the ITU was
5 focused on video conferencing in the context of
6 video coding.
7 And the first meeting on the ITU side was
8 December of 1984 and they developed the
9 specification for H.261 through the second half of
10 the 1980s finalizing in December of technically
11 freezing the specification in December of 1989.
12 And then on the ITU side, the next
13 independent effort to develop a video coding
14 standard was H.263, which launched in 1993
15 contemporaneously with us on the MPEG side, the
16 ISO side launching MPEG-4 part 2 in 1993. And I
17 can provide more information if you wish. It is
18 up to you.
19 Q We have no further questions at this time,
20 thank you.
21 A Thank you.
22 MR. CHUNG: I think I will just ask a few

Nokia Exhibit 2022, p. 31
Amazon.com v. Nokia
IPR2024-00605

1 questions in cross-examination.
2 EXAMINATION
3 BY MR. CHUNG:
4 Q So Dr. Reader, in your experience with
5 these conferences at meetings for the
6 standardization bodies whether it is for the MPEG
7 or the JCT-VC you previously talked about, you
8 answered counsel's questions about membership.
9 During these meetings, were there usually
10 meetings or were there also other events
11 presentations or business that happened on the
12 side?
13 A I'm sorry, to understand your question.
14 You are saying during the meetings were --
15 Q During the meetings, yes, are they limited
16 to the meetings between the JCT-VC members or were
17 there cases where there are other sorts of
18 presentations that were open to the interested
19 public?
20 A During a meeting with any of the standards
21 committees, you know, the meeting conducts -- the
22 meeting is conducted with several activities. One

Nokia Exhibit 2022, p. 32
Amazon.com v. Nokia
IPR2024-00605

1 key activity is for the meeting to review and
2 discuss all of the contributions that were input
3 documents to the meeting. But the committee would
4 in terms of the sessions of a meeting, then there
5 is plenary sessions at least in the beginning and
6 end and typically in the middle as well.
7 There is activity between the meetings
8 conducted by ad hoc groups, so-called ad hoc
9 groups. And a meeting will receive a report from
10 each of the ad hoc groups summarizing the work
11 that has gone on between the meetings and making
12 recommendations -- likely to make recommendations
13 based on the results of that work.
14 There is also -- can be an activity during
15 a meeting which is called a breakout group,
16 commonly abbreviated to BOG. So if there is a
17 particular topic of interest during a meeting,
18 then a breakout group may be formed during the
19 meeting with people who volunteer and are accepted
20 to be chairing the breakout group.
21 And the breakout group may then go off and
22 meet in a -- in a room set aside for such

Nokia Exhibit 2022, p. 33
Amazon.com v. Nokia
IPR2024-00605

1 meetings. And it may produce an output document
2 summarizing the conclusions of the participants in
3 the breakout group and perhaps making
4 recommendations to adopt certain things based upon
5 those -- those discussions.
6 Such an activity -- so the activities of
7 the ad hoc groups between the meeting or the
8 breakout groups in a meeting are all then
9 presented to the committee at large via the
10 uploading of documents, which allows people to see
11 those -- those recommendations as soon as they're
12 available, but then the results of all of that get
13 discussed in the plenary sessions where the entire
14 assembly of experts approves or maybe disapproves
15 the recommendations that are made.
16 Q Thank you, doctor, for clarifying the
17 general process of how the meetings work.
18 MR. CHUNG: No more questions to ask, so I
19 think we're done.
20 (Deposition adjourned at 11:57 a.m.)
21
22

Nokia Exhibit 2022, p. 34
Amazon.com v. Nokia
IPR2024-00605

1 CERTIFICATE OF SHORTHAND REPORTER
2
3 I, Susan S. Klinger, the officer before
4 whom the foregoing deposition was taken, do hereby
5 certify that the foregoing transcript is a true
6 and correct record of the testimony given; that
7 said testimony was taken by me stenographically
8 and thereafter reduced to typewriting under my
9 direction; that reading and signing was not
10 discussed; and that I am neither counsel for,
11 related to, nor employed by any of the parties to
12 this case and have no interest, financial or
13 otherwise in its outcome.
14 IN WITNESS WHEREOF, I have herunto set my
15 hand on the 30th of January, 2025.
16
17
18 Susan S. Klinger
19 Susan S. Klinger, RMR-CRR, CSR
20 Texas CSR 6531, Exp: 10/23/25
21 California CSR 14487, Exp: 11/30/25
22

Nokia Exhibit 2022, p. 35
Amazon.com v. Nokia
IPR2024-00605

A
abbreviated 33:16
about 9:16, 10:8, 14:3, 22:15, 25:12, 32:7, 32:8
absolutely 28:16
accepted 33:19
access 25:9, 26:18, 26:22, 27:2, 27:11, 27:15
accessed 27:6
accessing 26:15
accredit 24:14
accredited 16:3, 23:21, 24:1, 26:1, 26:9
accurate 12:9, 12:14, 12:18
acquired 17:10
actively 20:12, 20:18
activities 29:15, 32:22, 34:6
activity 33:1, 33:7, 33:14, 34:6
actually 11:11, 11:22
ad 33:8, 33:10, 34:7
add 19:6
adjourned 34:20
adopt 34:4
advance 5:8
after 18:14
again 14:20, 20:15, 20:16, 23:8
agree 6:3, 8:18, 11:19, 20:12, 20:18
all 12:5, 15:4, 18:1, 18:4, 18:5, 18:13, 18:15, 25:6, 25:7, 26:22, 28:7, 33:2, 34:8, 34:12
allows 34:10
also 16:13, 16:22, 19:21, 22:21, 32:10, 33:14
always 18:4, 18:6
amazon 1:5
amusement 11:11
analyze 13:17, 13:22, 14:18, 14:22, 15:3
analyzed 14:13
announced 22:12, 27:10
another 15:6, 17:10, 21:11, 24:18
answer 9:17, 15:18, 17:18, 22:22
answered 10:18, 32:8
any 5:8, 5:14, 6:14, 12:13, 13:5, 13:14, 19:6, 23:20, 26:14, 26:18, 27:6, 32:20, 35:11
anybody 7:4
anyone 6:6, 18:16, 23:16, 25:8, 26:8, 27:10
anything 6:10
apologize 5:8, 5:13
appeal 1:3
apple 5:15
application 6:10
appropriate 20:7
approves 34:14
archive 15:4, 15:19, 18:11
area 21:8
around 26:16, 30:16, 30:17
aside 33:22
asked 10:17, 11:6, 11:11, 11:16, 13:6, 18:21, 18:22
asking 19:9, 23:12
aspect 16:16
assembly 34:14
attend 23:20, 24:2, 24:3, 24:15, 24:19, 25:4, 25:10, 26:10, 29:11
attended 10:3, 15:10
attending 10:22, 24:22, 25:15, 26:12, 27:7, 27:8, 29:20, 30:4
attorneys 3:3, 3:11
audio 12:1, 17:1, 17:4, 28:11
available 18:13, 18:16, 20:11, 25:8, 34:12
aware 22:17, 25:19, 28:3

B
back 25:16, 28:21
background 9:4
based 33:13, 34:4
basically 20:11
basis 18:7
became 16:3
because 5:14, 11:12, 16:11, 16:14, 16:18, 17:11, 27:7, 29:16
become 9:6, 20:5, 20:11, 25:18, 26:9, 30:20

Nokia Exhibit 2022, p. 36
Amazon.com v. Nokia
IPR2024-00605

becoming
13:4, 13:9, 13:19
been
5:3, 5:12, 5:21, 7:8, 7:12, 13:1, 18:7, 18:16, 19:19, 21:16, 26:8, 27:3, 27:7, 27:13
before
1:3, 2:9, 5:12, 5:22, 18:8, 22:18, 26:11, 35:3
beginning
16:8, 27:5, 30:14, 31:4, 33:5
being
11:19
between
30:7, 32:16, 33:7, 33:11, 34:7
beyond
19:20
big
11:8
bit
30:3, 30:13, 30:21
board
1:3
bodies
27:9, 32:6
body
26:10, 26:11
bog
33:16
both
7:20, 8:15, 8:22, 24:7, 29:19
break
13:7, 28:15
breakout
33:15, 33:18, 33:20, 33:21, 34:3, 34:8
brief
12:13
business
32:11
busy
11:17

C

cable
17:7
california
3:7, 35:21
call
6:13, 7:3
called
12:1, 33:15
calls
5:17, 7:6
camino
3:6
can't
5:11
career
26:3
case
1:11, 1:12, 5:13, 18:10, 35:12
cases
32:17
category
24:21
cause
11:17
certain
34:4
certainly
23:3, 30:4
certificate
35:1
certified
2:10
certify
35:5
chairing
33:20
chairperson
18:12
changed
10:16
chat
8:1, 8:3
chief
11:2, 11:9, 11:12, 11:16, 11:19, 28:22, 29:4
chip
16:13
chung
3:4, 4:6, 31:22, 32:3, 34:18
circle
25:16, 28:21
cite
22:1
city
5:9
clarifying
13:20, 34:16
clifford
1:17, 2:8, 4:4, 5:2
close
6:16, 30:7
closely
27:16, 28:3, 29:15
co-located
29:21
coder
19:22
coding
7:9, 9:7, 9:10, 9:15, 10:11, 10:14, 10:18, 10:21, 11:21, 15:5, 15:10, 17:15, 20:13, 20:19, 21:3, 22:8, 23:6, 23:10, 23:15, 28:8, 28:11, 30:1, 30:8, 30:13, 31:1, 31:6, 31:13
collaborative
22:7, 23:6, 23:10, 23:15
com
1:5
coming
29:19
committee
16:9, 23:4, 23:18, 24:10, 28:10, 30:1, 30:19, 33:3, 34:9
committees
17:21, 18:3, 18:19, 19:3, 19:12, 20:2, 24:6, 32:21
common
27:4, 28:9
commonly
33:16
communication
16:19, 31:3
community
21:3, 28:11
companies
14:8, 14:12, 14:13, 21:6, 21:7
complete
12:4, 16:22
complicated
30:4
component
16:19
comprises
17:14
computer
5:18, 6:11
conclusions
34:2
conducted
32:22, 33:8
conducts
32:21

Nokia Exhibit 2022, p. 37
Amazon.com v. Nokia
IPR2024-00605

conference 15:9
conferences 15:7, 15:9, 32:5
conferencing 6:9, 31:5
consider 20:22
consultant 12:22, 13:1, 13:4, 13:10, 13:19, 13:21, 17:7
consumer 21:7, 21:8
contacted 14:7
contemporaneously 31:15
context 31:2, 31:5
contributed 13:18, 13:22, 14:14
contributions 33:2
contributor 10:4, 16:10
convener 11:7
conversion 18:14
cooperation 30:7
copy 6:15
corporation 21:12
corporations 21:6
correct 7:9, 7:10, 9:11, 9:12, 11:2, 11:9, 11:10, 12:20, 13:16, 14:16, 17:18, 22:2, 22:3, 22:5, 22:8, 22:9, 22:11, 27:18, 35:6
could 26:21
counsel 7:3, 35:10
counsel's 32:8
countries 24:10, 24:13
country 24:18, 25:18
couple 26:10
course 16:20, 17:1, 27:13, 28:10, 28:12
court 3:14, 7:12, 8:2
cover 7:22
covers 8:22
create 17:17
crescent 3:14
cross-examination 32:1
csr 1:21, 35:19, 35:20, 35:21
current 12:21
cv 12:7, 12:9, 12:17, 15:20, 17:6

D

dallas 3:15
database 16:6, 17:11, 17:17, 18:17, 18:21, 19:4, 19:7, 19:13, 19:14, 19:17, 19:19, 29:3
databases 15:20, 16:1, 20:22, 21:4, 21:10, 21:13
date 14:6
day 16:20
deal 11:8
decades 15:8
december 31:8, 31:10, 31:11
decide 16:5, 20:9
declaration 4:11, 7:2, 7:20, 8:14, 12:8
declarations 8:18, 9:1
delegate 26:1, 26:9
delegation 10:8, 11:15, 16:14, 16:15
deposed 5:12, 5:22
deposition 1:16, 2:8, 6:18, 6:22, 25:1, 34:20, 35:4
describe 25:22
description 4:10
designing 16:12
desktop 5:18, 6:12
detail 30:21
detailed 22:22
details 25:21
develop 20:5, 29:18, 31:13
developed 31:8
developing 23:1
development 10:21, 14:10, 18:6, 27:17, 28:13, 29:13
developments 28:4
direction 35:9
disapproves 34:14
discuss 9:3, 33:2
discussed 34:13, 35:10
discussions 34:5
displayed 21:20
distribution 17:21, 30:18
doctor 34:16
document 34:1
documents 6:14, 7:1, 15:5, 16:9, 16:11, 18:5, 18:11, 18:15, 18:18, 19:1, 19:5, 19:6, 19:10, 19:13, 19:16, 20:6, 20:8, 20:10, 25:7, 25:9, 26:15, 26:22, 27:2, 27:6,

Nokia Exhibit 2022, p. 38
Amazon.com v. Nokia
IPR2024-00605

27:12, 29:1, 29:5, 33:3, 34:10
dogs 11:20
done 34:19
down 13:7
downloaded 8:8, 21:20
dr 5:6, 5:12, 6:6, 7:14, 8:6, 14:17, 28:18, 32:4
due 30:6
duly 5:3
during 13:21, 28:4, 32:9, 32:14, 32:15, 32:20, 33:14, 33:17, 33:18

E

each 7:7, 24:13, 33:10
earlier 26:2, 27:20, 29:9
early 25:3
editor 11:1, 11:7, 11:9, 11:12, 11:16, 11:19, 28:22, 29:4, 29:6
effort 20:5, 22:17, 31:13
either 6:15, 24:6
el 3:6
election 11:5
electronic 6:15, 18:14, 30:17, 30:18
electronics 21:7, 21:8
eligible 24:3
else 6:10, 7:4
emerging 17:9
emily 3:12
employed 35:11
end 12:8, 33:6
engineering 16:12
engineers 15:16
english 11:14
entire 16:15, 34:13
entirety 12:17
environment 5:15
esquire 3:4, 3:12
essential 14:9, 17:8
even 18:8, 29:16
events 32:10
every 16:16, 16:20
everything 5:15, 29:7
evolution 30:14
evolved 30:19
exact 25:21
exactly 14:6
examination 4:5, 4:6, 5:4, 32:2
exhibit 4:11, 4:12, 7:13, 7:15, 7:17, 7:18, 7:19, 8:7, 8:13, 8:14, 8:21, 21:16, 21:19, 21:22, 22:21
exp 35:20, 35:21
experience 9:10, 12:10, 12:19, 13:5, 13:10, 13:14, 32:4
expert 7:8, 9:14, 9:22, 16:3, 25:1, 25:2, 26:2
experts 9:15, 18:13, 29:19, 30:2, 34:14
explain 29:12

F

facts 12:13
failed 11:18
fairly 11:13
fall 24:6
familiar 12:5, 22:4
few 12:15, 31:22
field 11:21, 15:7, 15:13, 21:6, 28:11
finalizing 31:10
financial 35:12
fine 28:16
first 5:3, 9:3, 9:6, 10:3, 10:11, 10:14, 10:17, 10:21, 14:7, 17:22, 22:12, 22:13, 26:9, 27:6, 30:8, 30:19, 30:22, 31:7
focus 31:3
focused 31:5
follow 12:16, 15:6
followed 26:7
following 28:12
follows 5:3
foregoing 35:4, 35:5
form 12:20, 29:2
formal 24:9
formally 24:5, 27:22, 30:6
formation 25:12
formed 22:10, 22:13, 22:16, 29:17, 30:10, 33:18
formulation 25:12
forward 17:11
fred 3:4

Nokia Exhibit 2022, p. 39
Amazon.com v. Nokia
IPR2024-00605

freezing
31:11
front
7:18, 8:13, 12:14
fully
18:11
functions
12:4, 17:3
further
31:19

G

general
6:2, 26:4, 26:7, 34:17
generation
19:20, 28:13
generations
27:4
geneva
20:4, 24:8
germany
24:11
give
26:3, 31:2
given
11:14, 35:6
go
26:21, 28:14, 30:20, 33:21
going
8:12, 8:21, 20:2, 20:3, 22:12
gone
33:11
good
5:6, 5:7, 11:13
great
8:12, 9:3, 28:20
group
9:14, 9:15, 9:22, 14:8, 30:2, 30:12, 33:15, 33:18, 33:20, 33:21, 34:3
groups
33:8, 33:9, 33:10, 34:7, 34:8

H

half
10:8, 31:9
hand
35:15
happened
30:20, 32:11
happening
20:13, 20:19
hard
6:15
head
10:7, 11:14, 16:12, 16:14
headquarters
24:8
hear
5:8, 5:11, 20:15
held
2:9, 22:13
hereby
35:4
herunto
35:14
hired
17:7
history
11:18
hoc
33:8, 33:10, 34:7
honking
5:10
hope
5:19
hour
7:7

I

idea
26:4
ieee
15:11
implement
16:13
in-person
24:15
inc
1:5
include
18:17, 18:21, 19:19
included
19:12
includes
17:1
including
16:16
independent
13:9, 31:13
index
18:4, 18:12
indexed
18:11
indices
18:15
individual
16:10, 21:11, 25:4
industry
28:8
informally
30:13, 31:1
information
31:17
informed
27:7
input
25:7, 33:2
instead
30:6
instrumentation
15:16
intellectual
14:8
intend
7:22
interconnected
5:15
interest
17:12, 28:9, 33:17, 35:12
interested
16:11, 27:11, 32:18
international
26:12
internet
27:14
interrupt
5:19
interruption
5:14
intimately
12:5
introduce
7:12, 21:15
investigate
17:8
invited
24:22, 25:2, 25:4
involved
9:6, 9:13, 9:21, 10:2, 10:5, 10:22, 18:9
involves
12:3
involving
30:1
ipr
1:11, 1:12, 7:20, 8:15
iprs
8:19
iso
24:7, 29:21, 31:16
itu
24:7, 26:21, 30:12, 31:3, 31:4, 31:7, 31:12
itu's
27:8, 29:14

J

january
1:18, 2:3,

Nokia Exhibit 2022, p. 40
Amazon.com v. Nokia
IPR2024-00605

35:15
jct
25:3
jct-vc
22:4, 22:7, 22:10, 22:15, 22:19, 23:19, 25:12, 25:19, 26:13, 26:15, 26:22, 27:17, 27:22, 28:4, 32:7, 32:16
job
1:22, 12:21
join
26:9
joint
22:7, 23:5, 23:9, 23:15, 29:17

K

kctbcf
22:1
keen
17:12
keep
11:17, 15:2, 15:18
keeping
14:18, 14:21
key
18:20, 21:5, 33:1
kind
21:1
klinger
1:21, 2:9, 35:3, 35:19
know
5:11, 6:2, 6:3, 8:6, 10:18, 15:7, 15:13, 16:2, 16:3, 16:20, 17:12, 17:20, 18:10, 21:2, 21:11, 24:16, 25:21, 27:5, 27:10, 27:11, 30:16, 32:21
knowledge
11:13, 26:14, 27:1
known
19:21, 30:12

L

labs
17:7
language
11:14
large
34:9
launched
27:22, 31:14
launching
20:3, 31:16
leading
27:21
learn
22:15
least
26:10, 33:5
likely
21:4, 33:12
limited
32:15
lip
17:5
little
30:3, 30:21
living
16:21
llc
1:5
log
26:19
long
7:6, 13:1
look
8:7, 12:15, 22:20
looking
9:20
lot
5:10
loud
5:9
low
30:12
lvc
30:12

M

made
18:13, 34:15
maintain
17:10, 21:4, 21:9
maintaining
15:22, 16:6
maintains
21:12
major
10:11, 30:8, 30:22
make
8:17, 17:3, 24:3, 33:12
make-up
23:15
making
21:6, 33:11, 34:3
management
10:6
manner
24:9
many
5:21
marked
7:15, 21:19
materials
17:19, 17:20
matter
28:10
maybe
34:14
mckool
3:13
mean
17:19, 19:4, 20:1, 21:5, 24:4, 26:7, 28:9, 30:4
media
18:15, 30:18
meet
7:4, 33:22
meeting
10:3, 20:3, 22:13, 24:15, 24:22, 25:5, 25:8, 26:12, 26:13, 31:7, 32:20, 32:21, 32:22, 33:1, 33:3, 33:4, 33:9, 33:15, 33:17, 33:19, 34:7, 34:8
meeting-by-meeting
18:7
meetings
23:20, 24:2, 24:3, 24:17, 24:20, 25:6, 25:10, 25:11, 25:14, 25:15, 26:11, 27:8, 27:9, 29:11, 29:20, 29:22, 30:5, 30:15, 30:19, 30:22, 32:5, 32:9, 32:10, 32:14, 32:15, 32:16, 33:7, 33:11, 34:1, 34:17
member
23:19, 24:11, 25:19, 29:10, 29:11, 30:6
members
23:14, 24:4, 24:5, 24:10, 32:16
membership
32:8
menlo
3:7

Nokia Exhibit 2022, p. 41
Amazon.com v. Nokia
IPR2024-00605

mentioned
15:18, 16:17, 25:17, 27:19, 28:22, 29:10
merit
2:9
method
14:17, 14:21, 16:20
methods
15:12, 17:21
mid
28:1
middle
33:6
miserably
11:18
missed
18:20
moment
8:4, 20:4, 21:18, 26:21
monitoring
27:16, 27:22, 28:4
more
6:1, 8:17, 9:19, 30:21, 31:17, 34:18
morning
5:6, 5:7
most
19:18
motivation
17:10
moving
9:13, 9:21
mpeg
9:22, 10:5, 10:8, 10:11, 10:14, 10:17, 11:7, 16:3, 27:8, 28:22, 29:4, 29:21, 31:15, 32:6
mpeg-1
10:7, 10:9, 11:2, 11:22, 12:6, 16:4, 16:13
mpeg-2
10:9, 17:9
mpeg-4
10:7, 29:14, 31:16
much
11:17, 12:12
mullin
3:5
multiplexes
17:2
multiplexing
12:3
myself
21:4

N

nakamura
4:12, 21:22
name
26:20
need
20:15, 26:19, 26:20, 30:21
needed
16:15
neither
35:10
new
5:9, 19:6, 20:4
next
12:15, 19:19, 28:13, 31:12
noises
5:9
nokia
1:8, 13:5, 13:11, 13:15, 13:18, 14:1, 14:11
nominee
11:5
non-members
24:19

O

observe
23:17
obtain
27:1
obviously
17:19
occurring
25:14
offered
7:8
office
1:1
officer
35:3
okay
9:2, 21:20, 23:16, 28:15
once
8:6
one
7:7, 7:16, 8:4, 11:8, 11:20, 14:11, 15:6, 16:10, 21:1, 21:18, 23:3, 24:18, 25:16, 27:20, 32:22
online
18:16, 25:8, 26:16, 27:6
only
11:8, 11:12
open
6:10, 32:18
organization
10:12, 10:15, 30:9, 31:1
organizations
15:8, 21:2
organized
18:7
originally
29:1
origins
30:11, 30:15
other
6:9, 12:4, 17:3, 18:18, 19:1, 19:10, 24:21, 25:1, 32:10, 32:17
others
28:3
otherwise
35:13
out
25:5
outcome
35:13
output
25:7, 34:1
over
9:9, 15:8, 18:4
overloaded
16:18
own
24:13
owner
1:9, 3:11
oy
1:8

P

page
4:3, 4:10, 7:22, 8:10, 9:5, 12:8, 12:11, 12:13
pages
12:15
paper
17:22, 29:2, 29:7
papers
15:11
park
3:7
part
10:15, 18:20, 21:12, 23:5, 23:9, 23:12, 24:15, 28:7, 29:14, 31:16
participants
21:5, 34:2
participate
23:17, 24:16
particular
33:17

Nokia Exhibit 2022, p. 42
Amazon.com v. Nokia
IPR2024-00605

particularly
9:4
parties
35:11
parts
12:1, 12:6
password
26:20
patent
1:1, 1:3, 1:9, 1:13, 3:11
patents
14:10, 17:8, 17:13
pdfs
18:2
people
24:14, 28:7, 28:12, 33:19, 34:10
perhaps
11:10, 20:1, 34:3
period
10:9
person
24:21
personal
15:4, 15:19, 15:20, 18:17, 18:21, 19:12, 19:17
personally
10:22, 18:9, 23:21, 26:20
persons
18:12
pertain
18:5
petitioner
1:6
ph
1:17, 2:8, 4:4, 5:2
phone
5:16
photooptical
15:15
physically
24:16, 25:15
pictures
9:14, 9:22
pipes
5:10
plaintiff(s
3:3
players
21:5
please
5:11, 6:20, 7:14, 8:3, 8:4, 8:6, 20:16, 21:17, 21:18
plenary
33:5, 34:13
point
17:11, 25:5, 27:15
position
11:4, 11:6
possible
5:17
practice
27:4, 27:14
preceding
25:3, 25:11
premarked
7:13, 21:16
prepare
6:21
prepared
6:17
present
17:4
presentations
32:11, 32:18
presented
15:11, 34:9
previous
25:17
previously
32:7
principal
15:12
prior
12:10, 12:18, 13:4, 13:9, 13:14, 13:19
probably
20:5, 21:9
procedures
26:15
proceed
28:18
proceedings
25:6
process
10:7, 11:5, 26:1, 26:4, 26:7, 27:21, 28:1, 30:15, 34:17
produce
34:1
products
21:7
prominent
15:8
property
14:9
provide
7:14, 21:17, 31:17
provided
7:20, 8:15, 17:20, 18:4, 18:13, 18:19, 19:2, 19:11
provides
22:21
providing
12:4, 21:7
public
32:19
put
8:1

Q

qualifications
9:4, 11:13
question
6:4, 6:19, 8:13, 9:19, 10:16, 10:17, 10:20, 13:8, 13:13, 14:20, 17:19, 20:15, 20:17, 22:22, 23:7, 23:12, 32:13
questions
13:7, 25:17, 27:20, 31:19, 32:1, 32:8, 34:18
quickly
5:19

R

rate
30:13
reader
1:17, 2:8, 4:4, 4:11, 5:2, 5:6, 5:12, 6:6, 7:14, 8:6, 14:17, 28:18, 32:4
reading
35:9
ready
28:18
real
3:6
really
19:8
realtime
2:10, 17:4, 17:5
receive
33:9
received
29:1
receiving
16:8
recent
19:18
recess
28:17
recognize
7:19, 8:14
recommendations
33:12, 34:4,

Nokia Exhibit 2022, p. 43
Amazon.com v. Nokia
IPR2024-00605

34:11, 34:15
record
28:15, 35:6
reduced
35:8
refer
8:21, 16:18
reference
4:12, 22:1, 22:20
referring
25:13
refers
16:22
regarding
26:14
regardless
25:5
registered
2:9
related
9:5, 14:4, 14:9, 15:5, 15:10, 17:14, 35:11
remember
14:6
remote
1:16, 2:8, 7:16, 8:4, 21:18
repeat
6:19, 8:12, 13:8, 20:17, 23:7
report
22:1, 33:9
reported
1:21
reporter
2:10, 7:12, 8:2, 35:1
representation
12:9, 12:18
requirements
24:2, 24:14, 24:17, 25:18, 25:20, 25:22
requires
11:20
resources
29:19
response
27:20
responsible
16:15, 22:19, 23:1
restriction
26:17, 26:18
results
33:13, 34:12
review
33:1
reviewed
7:1
right
12:11, 20:2, 22:15
rights
14:9
ring
5:18
rmr-crr
1:21, 35:19
roles
16:9
room
6:6, 6:15, 16:21, 33:22
roughly
7:7
rules
6:2

S

s
3:1
said
17:1, 35:7
same
15:19
say
12:17
saying
32:14
says
12:11
scan
29:2
scanned
18:1
scratch
17:17
screen
8:9
second
7:16, 8:10, 10:20, 31:9
secretaries
24:8
see
8:9, 17:6, 34:10
seek
11:6
sentence
18:20
service
16:22
services
1:5, 21:8, 31:4
sessions
7:2, 15:9, 33:4, 33:5, 34:13
set
33:22, 35:14
several
32:22
sharing
29:16
sheppard
3:5
short
7:2, 28:15
shorthand
35:1
should
25:5
side
5:14, 29:21, 30:1, 31:3, 31:7, 31:12, 31:15, 31:16, 32:12
sides
29:19, 30:7
signal
12:5
signature
8:10
signature-b7fzp
35:17
signing
35:9
silenced
5:16
similar
8:19, 21:4, 21:9, 21:13
slightly
16:17
smith
3:13
so-called
17:2, 33:8
society
15:15
some
31:2
somebody
5:17
someone
24:22
something
12:1, 12:2
sometimes
15:11, 16:18
soon
34:11
sorry
6:19, 9:16, 10:16, 13:6, 13:12, 14:19, 19:8, 20:17, 30:3, 32:13
sorts
32:17
sought
11:4
sounds
5:10
speaking
7:7, 24:5
specific
9:16, 9:19,

Nokia Exhibit 2022, p. 44
Amazon.com v. Nokia
IPR2024-00605

15:9
specifically
27:19
specification
31:9, 31:11
spie
15:11, 15:14
spring
10:3, 16:8
stand
15:14
standard
10:18, 11:2, 11:22, 12:6, 13:18, 14:1, 14:11, 14:15, 16:4, 17:9, 18:6, 18:8, 18:9, 19:20, 23:2, 25:3, 27:14, 28:13, 29:14, 31:14
standardization
9:5, 9:7, 9:10, 10:6, 10:12, 20:14, 20:20, 31:1, 32:6
standards
10:5, 10:10, 10:15, 10:21, 15:5, 16:13, 17:16, 17:21, 18:19, 19:2, 19:11, 26:2, 26:10, 26:11, 27:5, 27:9, 29:18, 30:9, 32:20
standards-essential
17:13
stands
22:7
start
15:22, 16:5
started
16:2, 29:4
starting
28:1
state
2:11
states
1:1, 11:15, 24:11, 25:20, 26:8
stay
20:12, 20:18
stenographically
35:7
still
19:13, 29:7
stop
5:19
straightforward
8:17
strict
24:9
subcommittee
30:14
subject
17:13, 28:10
subsequent
17:6
substantially
8:19
suite
3:6, 3:14
summarizing
33:10, 34:2
summary
12:12, 12:20, 14:16
susan
1:21, 2:9, 35:3, 35:19
suspicion
11:16
switzerland
24:9
sworn
5:3
sync
17:5
synchronization
12:3
synchronized
29:15, 29:22
synchronizes
17:3
systems
12:2, 17:2

T

take
8:7, 28:15
taken
35:4, 35:7
talked
32:7
tannenbaum
3:12, 4:5, 5:5, 7:11, 8:2, 21:15, 28:14
team
16:12, 22:8, 23:6, 23:10, 29:17
technical
10:4, 15:7
technically
31:10
technician
7:16, 8:4, 21:18
technologies
1:8, 13:17, 13:22, 14:14
technology
14:18, 14:22, 15:3, 15:13, 17:14
television
16:21
tell
6:17, 14:3
term
16:18
terms
10:20, 22:20, 33:4
testified
5:3, 25:1
testimony
29:9, 35:6, 35:7
texas
2:11, 3:15, 35:20
th
35:15
thank
5:20, 5:21, 7:18, 8:5, 8:11, 11:1, 13:20, 15:17, 21:21, 21:22, 28:20, 31:20, 31:21, 34:16
themselves
29:5
thereafter
35:8
thing
15:6, 15:19
things
23:3, 34:4
think
11:11, 13:6, 17:18, 19:22, 21:4, 21:9, 22:21, 30:11, 31:22, 34:19
three
12:1, 12:6
through
27:4, 27:13, 29:6, 31:9
time
8:7, 10:9, 13:21, 16:7, 18:4, 20:7, 23:22, 24:1, 27:10, 29:8, 29:17, 30:16, 30:17, 31:19
timeframe
14:6, 26:16, 27:18, 28:5, 29:7, 29:13, 30:5, 30:16
times
5:21
title
12:21, 12:22

Nokia Exhibit 2022, p. 45
Amazon.com v. Nokia
IPR2024-00605

today
6:7, 6:15, 19:14, 19:17, 25:22, 26:4
today's
6:18, 6:21
together
29:18
took
25:2
tools
17:15
top
11:20, 20:12, 20:18
topic
14:8, 33:17
towards
12:8
track
14:18, 14:22, 15:2, 15:13
tracking
27:21
trademark
1:1
transcript
35:5
trial
1:3
trouble
11:17
true
35:5
try
20:21, 29:12, 31:2
turn
12:7
two
7:2, 10:8, 13:6, 15:7, 15:12, 16:9, 30:7
typewriting
35:8
typically
33:6

U

under
14:10, 24:6, 35:8
understand
6:3, 8:22, 9:19, 13:12, 19:8, 23:11, 32:13
unique
21:1
united
1:1, 11:15, 24:11, 25:20, 26:8
until
17:22
updated
19:19
upload
8:3, 19:13, 19:16, 20:7, 20:9, 29:2
uploaded
7:12, 20:6, 21:16
uploading
29:5, 34:10
url
27:14
use
12:22
user
26:19
using
6:12
usually
32:9
utilizing
29:18

V

various
18:3
vary
24:17, 25:18
vceg
9:15, 23:2, 29:10, 29:11, 29:12, 30:1, 30:5, 30:6, 30:8, 30:15, 30:20
versatile
19:21
via
34:9
video
6:9, 7:9, 9:7, 9:10, 9:15, 10:11, 10:14, 10:18, 10:21, 11:21, 12:1, 12:4, 15:5, 15:10, 16:16, 16:17, 16:19, 16:21, 17:4, 17:15, 19:21, 20:13, 20:19, 21:3, 21:8, 22:8, 23:6, 23:10, 23:15, 28:8, 30:1, 30:8, 30:22, 31:5, 31:6, 31:13
visual
16:19, 28:11
volunteer
33:19
vvc
19:21

W

want
8:17, 9:16, 25:16, 28:21, 29:17, 30:20
wants
23:16, 25:9, 26:8
watch
5:16, 16:21
we're
34:19
website
26:21, 27:2
week
20:1
weren't
24:1
whereof
35:14
whether
32:6
widely
24:17
wish
26:5, 31:17
within
21:3, 30:12
witness
4:3, 21:17, 35:14
work
12:10, 12:18, 14:3, 23:17, 33:10, 33:13, 34:17
working
13:5, 13:10, 13:15
world
20:13, 20:19

Y

years
9:9, 10:9, 13:3, 17:22, 19:18, 22:17
yesterday
7:3, 7:6
york
5:9
yourself
11:4

Z

zoom
6:10

.

.2
14:10
.2600
3:8

Nokia Exhibit 2022, p. 46
Amazon.com v. Nokia
IPR2024-00605

.261
18:9, 31:9
.263
27:8, 29:14, 29:22, 31:14
.264
13:18, 13:22, 14:11, 14:14
.265
19:20
.266
19:21
.267
20:6
.4000
3:16

0

00604
1:11, 7:20, 8:15
00605
1:12

1

10
14:8, 14:11, 14:13, 35:20
10,536,714
1:13
11
28:17, 34:20, 35:21
120
3:6
1200
3:14
14487
35:21
1540
3:6
1980
31:10
1984
31:8
1989
31:11
1990
9:8, 10:4, 16:2, 16:8, 17:6, 19:11, 29:20
1993
31:14, 31:16
1995
17:22, 18:14, 27:5, 27:7

2

2000
14:5, 25:3, 25:14, 28:2
2001
14:5
2002
14:5
2009
22:13
2010
22:10, 22:14, 26:16, 27:17, 28:5
2011
26:16, 27:17, 28:5
2024
1:11, 1:12, 7:20, 8:15
2025
1:18, 2:3, 35:15
21
4:12
214.978
3:16
23
1:18, 2:3, 35:20
24
13:3
25
6:1, 35:20, 35:21

3

30
9:9, 35:15, 35:21
300
3:14
31
12:8
32
4:6
38
28:17

4

419
22:1
46
28:17

5

567274
1:22
57
34:20

6

604
8:18
605
7:21, 8:15, 8:19
650.815
3:8
6531
35:20

7

75201
3:15

9

91
29:6
92
29:7
93
17:7
94025
3:7
95
30:16
96
30:16

Nokia Exhibit 2022, p. 47
Amazon.com v. Nokia
IPR2024-00605