

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD
3 -----)
4 CANON, INC.; CANON USA, INC.; CANON)
5 FINANCIAL SERVICES, INC.; FUJIFILM)
6 CORPORATION; FUJIFILM HOLDINGS)
7 AMERICA CORPORATION; FUJIFILM NORTH)
8 AMERICA CORPORATION; JVC KENWOOD)
9 CORPORATION; JVC KENWOOD USA)Case Nos.
10 CORPORATION; NIKON CORPORATION;)IPR 2016-01199
11 NIKON, INC.; OLYMPUS CORPORATION;)IPR 2016-01200
12 OLYMPUS AMERICA, INC.; PANASONIC)IPR 2016-01211
13 CORPORATION; PANASONIC CORPORATION)IPR 2016-01212
14 OF NORTH AMERICA; SAMSUNG)IPR 2016-01213
15 ELECTRONICS COMPANY, LTD.; and)IPR 2016-01214
16 SAMSUNG ELECTRONICS AMERICA, INC.,)IPR 2016-01216
17 Petitioners,)IPR 2016-01225
18 vs.)
19 PAPST LICENSING GMBH & COMPANY KG,)
20 Patent Owner.)
21 -----)
22 DEPOSITION OF PAUL REYNOLDS, JR., Ph.D.
23 Washington, D.C.
24 March 9, 2017
25 REPORTED BY: Tina Alfaro, RPR, CRR, RMR

Page 2

1 Deposition of PAUL REYNOLDS, JR., Ph.D.,
 2 held at the offices of:
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 5 51 Louisiana Avenue, NW
 6 Washington, D.C. 20001
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 8 Taken pursuant to agreement before Tina M.
 9 Alfaro, a Notary Public within and for the District
 10 of Columbia.
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1 Q. Okay. And just let me know if you don't

2 understand a question, I'll try to rephrase it. Is

3 that okay?

4 A. Sure.

5 Q. All right. And let's do our best --

6 probably the most important thing is that we don't

7 talk over each other. So I will try to as best I

8 can let you finish your answer before I start on

9 the question. Okay?

10 A. I'd appreciate that.

11 Q. All right.

12 You are being compensated for your

13 testimony today?

14 A. I am.

15 Q. By whom?

16 A. Multiple law firms.

17 Q. Okay. So you're invoicing the law firms

18 directly?

19 A. I am.

20 Q. All right. Do you have any --

21 Dr. Reynolds, do you have any patents yourself?

22 A. No.

23 Q. You're not an inventor on any U.S.

24 patents?

25 A. No.

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1 WHEREUPON:

2 PAUL F. REYNOLDS, JR., Ph.D,

3 called as a witness herein, having been first duly

4 sworn, was examined and testified as follows:

EXAMINATION

6 BY MR. MARINELLI:

7 Q. Good morning, Dr. Reynolds.

8 A. Good morning.

9 Q. My name is Joe Marinelli. I'm one of the

10 attorneys representing Papst in this IPR

11 proceeding. We've never met before, correct?

12 A. No.

13 Q. Before we begin, could you please state

14 your name for the record.

15 A. Paul F. Reynolds, Junior.

16 Q. All right. And, Dr. Reynolds, what's your

17 address?

18 A. 857 Locust Avenue in Charlottesville,

19 Virginia.

20 Q. Okay. I know you've had your deposition

21 taken a number of times already. So I don't think

22 I need to go through the ground rules, but is there

23 any reason why you're unable to provide competent,

24 accurate testimony today?

25 A. No, not that I know of.

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1 (Reynolds Exhibit 1 marked as

2 requested.)

3 BY MR. MARINELLI:

4 Q. All right. You provided a CV which I'm

5 going to mark as the first exhibit to the

6 deposition. I just have a couple questions about

7 your CV. Okay. Do you recognize this as a copy of

8 your CV?

9 A. It appears to be.

10 Q. So I obtained this copy through the

11 initial petition for Interparty Review and is

12 this -- and it's dated April 2016. Is there

13 anything significant to update on your CV?

14 (Witness reviewing document.)

15 BY THE WITNESS:

16 A. I think there's a deposition that was done

17 since then with respect to the '449 Burrell, the

18 top one on the third page. I had a deposition at

19 the end of the summer last year.

20 Q. Okay. Anything else?

21 A. No.

22 Q. No new articles?

23 A. No.

24 Q. Let me -- let me ask you about your

25 experience in Interparty Review proceedings. You

Page 10

1 have them listed, as you said, on page 3. It may
 2 be indicated on here and I'm missing it, but for
 3 the IPR related to the Burrell patent, were you --
 4 which side were you on? Were you the Petitioner's
 5 side or the patent owner's side?
 6 A. The Petitioner's side.
 7 Q. Were you on the Petitioner's side in all
 8 of these proceedings listed on page 3?
 9 A. Yes, I was.
 10 Q. Okay. Have you ever been on the patent
 11 owner's side in an IPR proceeding?
 12 A. No. The opportunity has never presented
 13 itself.
 14 Q. All right. Now, you have a number of
 15 articles listed beginning on page 4 of your CV, and
 16 I looked through the titles of the articles and I
 17 was trying to identify whether any of these
 18 articles relate to the technology pertinent to the
 19 patents -- relevant to the patents in these IPR
 20 proceedings and I wasn't easily able to discern
 21 that.
 22 So do any of the articles relate to the
 23 technology of the patents involved in these IPR
 24 proceedings?
 25 A. The answer is yes. All right. At the

Page 11

1 bottom of page 4, the very bottom article, it
 2 starts off "An efficient framework for parallel
 3 simulation," the one above it "Design and
 4 performance analysis of hardware support for
 5 parallel simulation," the one four up from the
 6 bottom with C.C. Williams, "Combining atomic
 7 actions."
 8 You'll notice papers on Isotach Networks
 9 that relate to novel approaches to message delivery
 10 ordering in networks that brought me into contact
 11 with a lot of work with hardware and interfacing.
 12 The Srinivasan paper, "Elastic time," we
 13 built special purpose hardware to support that.
 14 That was -- that's under the refereed journal
 15 publications. There would have been a number of
 16 conference publications in the same time frame
 17 where we were building special purpose hardware,
 18 working with SCSI devices, and so forth.
 19 Q. Okay. So let me ask you a little more
 20 direct question. Do any of these articles relate
 21 specifically to computer peripherals?
 22 A. Not in a direct sense, but certainly in an
 23 indirect sense, yes.
 24 Q. Okay. Any articles relate in a direct
 25 sense to the connection of computer peripherals to

Page 12

1 a computer?
 2 A. I'd have to think about that for a minute.
 3 Yes, in the following way. You'll see references
 4 to my work in distributed simulation, and in the
 5 world of distributed simulation, we're often
 6 attaching devices that are measuring human position
 7 and so forth to computers or, let me say,
 8 platforms, military platforms, that are
 9 communicating with computers.
 10 Q. Okay. Do any of these articles relate
 11 to -- directly to processing of analog data?
 12 A. Not directly as I recall, no.
 13 Q. Do any of the articles relate directly
 14 to --
 15 A. I take that back. I mean, a lot of the
 16 data that -- I interpreted your question as
 17 performing A to D or something like that.
 18 Certainly we use technologies that did that. So
 19 the answer really is yes. But did I do research
 20 directly in that area, I would say no, not with
 21 that as the target.
 22 Q. Okay. Do any of the articles specifically
 23 discuss in the articles SCSI interfaces?
 24 A. They should, yes. The work that was done
 25 in the early '90s we used SCSI interfaces in

Page 13

1 special purpose hardware, what I call the parallel
 2 reduction network. We used SCSI technology in
 3 that.
 4 Q. So are you saying that if I went and read
 5 the article, I would find reference to SCSI
 6 technology?
 7 A. I don't remember. We used SCSI
 8 technology. It was -- the focus was on combining
 9 operations in a parallel reduction network. The
 10 SCSI technology supported the data that went into
 11 that network.
 12 Q. Okay. You don't -- so what I understand
 13 you to be saying is you recall having used SCSI
 14 technology in relation to projects, but you don't
 15 recall today whether these articles actually
 16 discuss SCSI interfaces; is that right?
 17 A. I don't recall if they mentioned
 18 explicitly that we were using SCSI interfaces, but
 19 we were.
 20 Q. And a lot of your -- some of your articles
 21 that you list in your CV do mention various
 22 protocols. I'm wondering whether any of the
 23 articles specifically discuss protocols that could
 24 be used to allow a computer peripheral to
 25 communicate with a host computer?

Page 14

1 A. In a general sense, yes.

2 Q. What do you mean?

3 A. Well, a lot of my work was focused on time

4 management in parallel and distributed simulations.

5 So we were interested in maintaining what's known

6 as logical time with respect to each of those

7 devices that were connected into a network, into

8 computers in the network.

9 Q. All right. I'd like to ask you if you're

10 familiar with some references just by virtue of

11 your experience. Are you familiar with the IBM

12 dictionary of computing?

13 A. I think I've heard of it.

14 Q. Have you ever used it?

15 A. Not that I recall.

16 Q. Okay. Are you familiar with the Microsoft

17 Press Computer Dictionary?

18 A. My recollection is I used the Microsoft

19 encyclopedia, but not the dictionary.

20 Q. Okay. Are there certain references that

21 you -- you know, you consider to be kind of go-to

22 technical references that you use frequently in

23 your work or have used frequently in your work?

24 A. Not so much. On occasion, yeah, when we

25 need it for building hardware or something like

Page 15

1 that. Most of the time I'm going to be looking at

2 papers rather than encyclopedic-like documents.

3 Q. Do any of the encyclopedic or desk

4 reference documents come to mind that you've used?

5 A. I'm sure there are some. I'm not

6 remembering them right now.

7 Q. Okay. What about the IEEE standard

8 dictionary of electrical and electronics terms, is

9 that one that you've used?

10 A. I don't recall that I have, no.

11 Q. Have you ever used the Barron's Dictionary

12 of Computer Terms and Internet Terms?

13 A. Possibly through Web reference, but I

14 don't remember doing it.

15 Q. Okay. Now, you did in your declaration --

16 or at least in one of your declarations you

17 reference the MS-DOS Encyclopedia by Ray Duncan; do

18 you recall that?

19 A. Yes.

20 Q. How did you become aware of that

21 reference?

22 A. My best recollection was that it was

23 through search. I expected to find it and I did.

24

25 (Reynolds Exhibit 2 and

Page 16

1 Exhibit 3 were marked as

2 requested.)

3 BY MR. MARINELLI:

4 Q. Dr. Reynolds, I'm going to hand you what

5 I've marked Exhibit 2 to your deposition. This is

6 U.S. Patent No. 8,504,746 to Tasler. Then I'm

7 going to hand you Exhibit 3 to your deposition.

8 This is U.S. Patent No. 8,966,144, also to Tasler.

9 So these are Exhibits 2 and 3. These are the two

10 patents that are involved in these IPR proceedings,

11 correct?

12 A. They appear to be. I'm looking through

13 them right now.

14 Q. Are those the two patents involved in the

15 proceedings?

16 A. They appear to be.

17 Q. Okay. You can hang on to those. I just

18 wanted to mark them to get them in the record.

19 We'll get to them.

20 (Reynolds Exhibit 4 was marked

21 as requested.)

22 BY MR. MARINELLI:

23 Q. Then I want to hand you what I've marked

24 as Exhibit 4. This is a copy of your declaration

25 in relation to the 1213 IPR proceeding -- I'm going

Page 17

1 to call it that, that's the serial number given by

2 the board -- to the proceeding related to the

3 '746 Patent which you've got as Exhibit 2 and the

4 lead reference being the Yamamoto reference, U.S.

5 Patent No. 6,088,532.

6 All right. So you agree that's a copy of

7 your declaration?

8 A. I'm determining that right now.

9 Q. Okay.

10 (Witness reviewing document.)

11 BY THE WITNESS:

12 A. It appears to be the '746 declaration for

13 Yamamoto.

14 Q. Okay. All right. Who wrote the

15 declaration?

16 A. I did.

17 Q. Did you write the whole thing?

18 A. I drafted it, yes. I'm responsible for

19 it.

20 Q. Did you write it with the assistance of

21 attorneys?

22 A. I consulted with attorneys.

23 Q. Who wrote the first draft of it?

24 A. I did.

25 Q. After you wrote the first draft, did you

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