

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD
3

4 TAIWAN SEMICONDUCTOR	Patent No. 7,147,759
MANUFACTURING COMPANY,	IPR 2014-00781
LTD., et al.,	IPR 2014-00782
5	IPR 2014-01083
Petitioners,	IPR 2014-01086
6	IPR 2014-01087

7 vs.

8 ZOND, LLC, INC.,

9 Patent Owner.
10
11 -----
12
13
14

15 VIDEOTAPED DEPOSITION OF LARRY D. HARTSOUGH, Ph.D.
16 Berkeley, California
17 Wednesday, February 25, 2015
18
19
20
21
22
23

24 REPORTED BY:

TAVIA MANNING, CSR No. 13294, CLR, CCRR, RPR

25 JOB NO. 90526

February 25, 2015
9:01 A.M.

Deposition of LARRY D. HARTSOUGH, Ph.D.,
taken on behalf of Petitioners at 200
Marina Boulevard, Berkeley, California,
before Tavia Manning, Certified Shorthand
Reporter No. 13294, Certified LiveNote
Reporter, California Certified Realtime
Reporter, Registered Professional Reporter.

APPEARANCES:
FOR TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY,
LIMITED and TSMC NORTH AMERICA:
DUANE MORRIS
BY: ANTHONY FITZPATRICK, ESQ.
100 High Street
Boston, MA 02110

-- and --

FOR TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY,
LIMITED and TSMC NORTH AMERICA and FUJITSU:
HAYNES AND BOONE
BY: GREGORY HUH, ESQ.
DAVID McCOMBS, ESQ.
2505 North Plano Road
Richardson, TX 75082

///

APPEARANCES (CONTINUED):
FOR THE GLOBALFOUNDRIES PETITIONERS:
WHITE & CASE
BY: DAVID TENNANT, ESQ.
BRETT RISMILLER, ESQ.
701 Thirteenth Street, N.W.
Washington, D.C. 20005

APPEARANCES (CONTINUED):

FOR TOSHIBA:
BAKER BOTTS
BY: ROBINSON VU, ESQ.
One Shell Plaza
910 Louisiana Street
Houston, TX 77002

///

APPEARANCES (CONTINUED):
FOR THE PATENT OWNER ZOND, LLC:
RADULESCU
BY: MICHAEL SADOWITZ, ESQ.
ETAI LAHAV, ESQ.
The Empire State Building
350 Fifth Avenue
New York, NY 10118

Also present: Sean McGrath, Videographer

1 BERKELEY, CALIFORNIA;
2 WEDNESDAY, FEBRUARY 25, 2015; 9:01 A.M.

3
4 THE VIDEOGRAPHER: Good morning.

5 This is the beginning of Disk Number 1 of
6 the videotaped deposition of Dr. Larry Hartsough in
7 the matter Taiwan Semiconductor Manufacturing
8 Company, Limited, et al., versus Zond, LLC, in the
9 U.S. Patent and Trademark Office before the Patent
10 Trial and Appeal Board; Case Numbers IPR 2014-00781,
11 IPR 2014-00782, IPR 2014-01083, IPR 2014-01086, and
12 IPR 2014-01087.

13 This deposition is being held at 200 Marina
14 Boulevard, Berkeley, California on February 25th,
15 2015 at approximately 9:02 a.m.

16 My name is Sean McGrath from TSG Reporting,
17 Incorporated, and I am the legal video specialist.

18 The court reporter is Tavia Manning in
19 association with TSG Reporting.

20 Will counsel please introduce yourselves
21 starting with the questioning attorney.

22 MR. FITZPATRICK: Anthony Fitzpatrick, from
23 Duane Morris, LLP, on behalf of Taiwan Semiconductor
24 Manufacturing Company, Limited, and TSMC North
25 America.

1 EXAMINATION

2 BY MR. FITZPATRICK:

3 Q. Good morning, Doctor.

4 A. Good morning.

5 Q. Would you please state your full name for
6 the record.

7 A. Would you please speak up just a little
8 bit.

9 Q. I'm sorry. I'll try again today.

10 Would you please state your full name for
11 the record?

12 A. Larry Dowd Hartsough.

13 Q. And I know you've been deposed several
14 times in the last couple of weeks, but I'll just go
15 over the ground rules because that may be helpful.

16 You understand that you've taken an oath to
17 tell the truth today?

18 A. Yes.

19 Q. And your testimony will be truthful?

20 A. Yes.

21 Q. And your answers to my questions will be
22 complete?

23 A. Yes.

24 Q. You understand that you are required to
25 answer my questions even if your counsel objects,

1 MR. HUH: Gregory Huh, from Haynes and
2 Boone, on behalf of TSMC and Fujitsu.

3 MR. McCOMBS: David McCombs, on behalf of
4 TSMC, TSMC North America, and Fujitsu.

5 MR. TENNANT: David Tennant, from White &
6 Case, on behalf of GLOBALFOUNDRIES.

7 MR. RISMILLER: Brett Rismiller, from White
8 & Case, on behalf of GLOBALFOUNDRIES.

9 MR. VU: Robinson Vu, with Baker Botts, on
10 behalf of Toshiba.

11 MR. SADOWITZ: Michael Sadowitz, with
12 Radulescu, and with me is Etai Lahav, also from
13 Radulescu, representing the patent owner and the
14 witness.

15 THE VIDEOGRAPHER: Is there anyone on the
16 phone?

17 Will the reporter please swear in the
18 witness, and we can proceed.

19
20 LARRY D. HARTSOUGH,

21 having been first duly sworn by the reporter,
22 testified as follows:

23 //

24 //

1 unless your counsel instructs you not to answer?

2 A. Yes.

3 Q. Have you ingested anything that could
4 impair your ability to testify truthfully and fully
5 today?

6 A. No.

7 Q. If you, at any point, don't understand any
8 question or you haven't fully heard it, will you
9 please let me know?

10 A. Yes.

11 Q. And if you answer a question, then I'll
12 assume that you've heard it fully and understood it.

13 Is that fair?

14 A. Yes.

15 Q. What did you do to prepare for today's
16 deposition?

17 A. I met with counsel and reviewed some of the
18 prior art and relevant documents, such as my
19 declaration and the patents -- declarations and
20 patents.

21 Q. When did you meet with counsel?

22 A. Over the last three days, Sunday through
23 Tuesday.

24 Q. And for how long each day?

25 A. About 20 hours all together.

1 Q. Over the three days?

2 A. That's correct.

3 Q. And which items of prior art did you review
4 in preparation for this deposition?

5 A. Mainly the prior art cited in the grounds
6 by the Board. I may not be able to list them all
7 off the top of my head, but --

8 Q. Can you list any of them?

9 A. By -- not by a full title, but the Wang
10 patents -- yes, I can list some of them.

11 Q. Okay. Please do.

12 A. As I said, it's not exhaustive because I
13 don't -- didn't memorize the list, memorize what I
14 looked at, but the Wang patents and the Kudryavtsev
15 article and Mozgrin's thesis and a Yamaguchi patent
16 and several more that I can't recall the names of
17 the authors right at this moment.

18 Q. And other than those pieces of prior art
19 and your declaration and the '759 patent, did you
20 review any other documents in preparation for this
21 deposition?

22 A. Well, as I told you, the list of prior art
23 that I gave you is not -- not complete. I didn't
24 review any documents that have not been listed as
25 relevant to the case.

1 question without looking at both my declaration and
2 what -- what documents are -- what documents are --
3 were listed as the grounds by the Board for the
4 various claims to see if I looked at any documents
5 that were outside of that.

6 Q. You understand that today's deposition
7 pertains to United States Patent Number 7,147,759?

8 A. That's -- yes.

9 Q. And if I refer to that as the '759 patent,
10 you will know what I am referring to?

11 A. Yes.

12 Q. I am going to hand you what has been marked
13 already as Exhibit 2005. Please take a look at it
14 and tell me if you recognize it.

15 A. Yes.

16 Q. What is it?

17 A. It's my declaration in regard to the '759
18 patent.

19 Q. And on the last page of the declaration, it
20 doesn't have a page number, but it's page 100, I
21 believe.

22 Is that your signature?

23 A. Yes.

24 Q. Do you know why it is that the preceding
25 pages of the declaration have page numbers but your

1 Q. You --

2 A. As I said, I don't -- I may have briefly
3 referred to other documents for specific, narrow
4 items. But those would have been listed in, you
5 know, as -- as part of the case already. There was
6 nothing outside of that scope.

7 Q. When you say "listed as part of the case,"
8 are you referring to documents that would have been
9 identified in your declaration?

10 A. There may have been a document listed in my
11 declaration that I didn't review in the last -- that
12 I didn't review.

13 Q. I understand.

14 I'm just trying to understand which
15 documents you looked at in preparing to testify here
16 today.

17 And so my question is: Is everything that
18 you looked at in preparing for the deposition either
19 listed in the declaration or the declaration itself?

20 MR. SADOWITZ: Objection; form.

21 THE WITNESS: I am not sure I -- is
22 everything that I looked at?

23 BY MR. FITZPATRICK:

24 Q. In preparing for today's deposition.

25 A. Again, I am not sure I can answer that

1 signature page does not?

2 A. No, I wasn't responsible for pagination.

3 Q. Did you sign this declaration on
4 December 30, 2014?

5 A. Yes.

6 Q. If you could please look at paragraph 3 of
7 the declaration on page 1.

8 That paragraph begins:

9 "The list of materials I considered in
10 forming the opinions set forth in this
11 declaration includes" -- and then it lists
12 various documents.

13 Do you see that?

14 A. Yes.

15 Q. What other documents or materials did you
16 consider in forming the opinions set forth in your
17 declaration?

18 A. As I said, I would have to review the prior
19 art references discussed, as I don't remember all of
20 them off the top of my head. I can't make a list.

21 So, you know, I can't just answer that
22 question as I sit here today. I can't answer that
23 question, "what other documents," unless I eliminate
24 whether they're part of this list or not -- whether
25 I determined whether they're part of this listing

1 here or not.

2 Q. Well, you -- presumably you reviewed the
3 Wang patent in connection with forming your opinions
4 relating to the '759 patent; right?

5 A. Yes.

6 Q. And you reviewed the Kudryavtsev article or
7 paper in connection with the '759 patent; is that
8 correct?

9 A. Yes.

10 Q. And you reviewed the Yamaguchi reference in
11 connection with the '759 patent?

12 A. Yes.

13 Q. And you reviewed the Müller-Horsche
14 reference in connection with the '759 patent, if you
15 look at page 87 of your declaration?

16 A. Yes.

17 That's to answer your question. Yes, I
18 looked at the Müller-Horsche.

19 Q. And did you look at the Li, L-I, reference
20 in connection with the '759 patent?

21 A. When? In the last three days or...

22 Q. The questions that I am asking you right
23 now, Doctor, pertain to paragraph 3 of your
24 declaration, which says that the list of materials
25 that you considered in forming the opinions set

1 Q. Okay. Now, looking again at paragraph 3 of
2 your declaration on page 1.

3 Other than the items -- the materials that
4 are specifically identified in that paragraph, are
5 there any other materials that you considered in
6 forming the opinions set forth in your declaration
7 concerning the '759 patent?

8 A. Not that I -- not that I recall, but I
9 might -- might have considered some other materials,
10 maybe perhaps to illustrate my opinion. But again,
11 at the moment, I don't recall.

12 Q. There's nothing at all that you remember
13 other than what's identified in paragraph 3?

14 MR. SADOWITZ: Objection; form.

15 THE WITNESS: Not that I recall at the
16 moment.

17 BY MR. FITZPATRICK:

18 Q. If at any point during the day you remember
19 anything, would you please let me know?

20 A. Yes.

21 Q. Now, directing your attention back to your
22 preparation for this deposition, having in mind the
23 materials that are identified in paragraph 3 of your
24 declaration, is there anything other than your
25 declaration itself and the materials identified in

1 forth in your declaration includes, and then it
2 lists various items.

3 A. Yes.

4 Q. And I am trying to understand which items
5 you considered in forming the opinions set forth in
6 your declaration.

7 So my question is: Was one of the items
8 the Li reference?

9 A. I would have to look at -- I -- I -- it's
10 been three months, and I don't recall. I would have
11 to look at it. But I -- it was material that I
12 would have reviewed back in December, and I just --
13 I just don't recall the details of it.

14 Q. Look at page 86 of your declaration,
15 please.

16 A. Okay, yeah.

17 Q. If you could please read to yourself
18 paragraphs 162 and 163 and let me know when you're
19 done.

20 Does that refresh your memory as to whether
21 you reviewed and considered the Li reference in
22 connection with the '759 patent?

23 A. Yes.

24 Q. And you did, in fact, consider it?

25 A. Yes.

1 paragraph 3 that you reviewed in preparing for your
2 deposition?

3 A. Again, without a review of -- a summary of
4 the prior art references, which I don't have in
5 front of me, and comparing that to what I did
6 review, I just can't tell you.

7 I would have to eliminate the ones that are
8 prior art references. But again, I don't -- I don't
9 think I did.

10 Q. If you remember anything during the course
11 of the day, will you please let me know?

12 A. Yes.

13 Q. Have you reviewed any of the transcripts
14 from your prior depositions in the Zond IPR
15 proceedings?

16 A. I looked briefly at the first one, but I
17 did not review the entire transcript. I just looked
18 at it briefly.

19 Q. When did you look at that?

20 A. The day -- it would have been, like, two
21 days after I gave it. It was just the -- what do
22 you call it? -- the rough.

23 So I noted that there were a lot of
24 corrections, probably, to some of the technical
25 terms and so on, but, you know, other than that,

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.