Exhibit 1245



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Page 1
1
          UNITED STATES PATENT AND TRADEMARK OFFICE
          BEFORE THE PATENT TRIAL AND APPEAL BOARD
2
3
     TAIWAN SEMICONDUCTOR
                              Patent No. 7,808,184
     MANUFACTURING COMPANY,
                                        IPR 2014-00803
     LTD., et al.,
                                       -- joined with --
                                         IPR 2014-00858
5
               Petitioners,
                                        IPR 2014-00996
                                         IPR 2014-01061
6
7
     vs.
                                      Patent No. 7,808,184
      ZOND, LLC, INC.,
                                         IPR 2014-00799
                                       -- joined with --
9
                                         IPR 2014-00855
               Patent Owner.
                                         IPR 2014-00955
10
                                         IPR 2014-01042
11
12
13
14
15
     VIDEOTAPED DEPOSITION OF LARRY D. HARTSOUGH, Ph.D.
16
                     Berkeley, California
17
                 Wednesday, February 11, 2015
18
19
20
21
22
23
24
    REPORTED BY:
    TAVIA MANNING, CSR No. 13294, CLR, CCRR, RPR
    JOB NO. 90256
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	Page 2		Page 3
1	February 11, 2015	1	APPEARANCES:
2	9:07 A.M.	2	
3	<i>3</i> , 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	3	FOR TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY,
4		4	LIMITED and TSMC NORTH AMERICA:
5		5	DUANE MORRIS
6	Deposition of LARRY D. HARTSOUGH, Ph.D.,	6	BY: ANTHONY FITZPATRICK, ESQ.
7	taken on behalf of Petitioners at 200	7	RICHARD KIM, ESQ.
8	Marina Boulevard, Berkeley, California,	8	100 High Street
9	before Tavia Manning, Certified Shorthand	9	Boston, MA 02110
10	Reporter No. 13294, Certified LiveNote	10	,
11	Reporter, California Certified Realtime	11	
12	Reporter, Registered Professional Reporter.	12	and
13	Reporter, Registered Professional Reporter.	13	
		14	
14		15	FOR TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY.
15		16	LIMITED and TSMC NORTH AMERICA and FUJITSU:
16			
17		17	HAYNES AND BOONE
18		18	BY: GREGORY HUH, ESQ.
19		19	DAVID McCOMBS, ESQ.
20		20	2505 North Plano Road
21		21	Richardson, TX 75082
22		22	
23		23	
24		24	
25		25	///
	Page 4		Page 5
1	APPEARANCES (CONTINUED):	1	APPEARANCES (CONTINUED):
2		2	
3	FOR THE GILLETTE COMPANY:	3	FOR TOSHIBA:
4	WILMERHALE	4	BAKER BOTTS
5	BY: COSMIN MAIER, ESQ.	5	BY: ROBINSON VU, ESQ.
6	7 World Trade Center	6	One Shell Plaza
7	250 Greenwich Street	7	910 Louisiana Street
8	New York, NY 10007	8	Houston, TX 77002
9		9	
10		10	
11		11	
12		12	
13	FOR THE GLOBALFOUNDRIES PETITIONERS:	13	FOR THE RENESAS PETITIONERS:
14	WHITE & CASE	14	FOLEY & LARDNER
15	BY: DAVID TENNANT, ESQ.	15	BY: PAVAN AGARWAL, ESQ.
16	BRETT RISMILLER, ESQ.	16	3000 K Street, N.W.
17	701 Thirteenth Street, N.W.	17	Washington, D.C. 20007
18	Washington D.C. 20005	18	5 ,
19		19	
20		20	
21		21	
22		22	
		23	
23			
23 24		24	



	Page 6		Page 7
1	APPEARANCES (CONTINUED):	1	BERKELEY, CALIFORNIA;
2	THE PRIME (COLVER (CEEP).	2	WEDNESDAY, FEBRUARY 11, 2015; 9:07 A.M.
3	FOR THE PATENT OWNER ZOND, LLC:	3	
4	RADULESCU	4	THE VIDEOGRAPHER: Good morning.
5	BY: DAVID RADULESCU, PH.D., ESQ.	5	This is the beginning of Disk Number 1 of
6	TIGRAN VARDANIAN, ESQ.	6	the videotaped deposition of Larry D. Hartsough,
7	The Empire State Building	7	Ph.D., in the matter of Taiwan Semiconductor
8	350 Fifth Avenue	8	Manufacturing Company, LTD, et al., versus Zond,
9	New York, NY 10118	9	LLC, in the U.S. Patent and Trademark Office, before
10	,	10	the Patent Trial and Appeal Board, Cases 2014-00799,
11		11	joined with IPR 2014-00855, IPR 2014-00955, IPR
12		12	2014-01042, and Case Numbers 2014-00803, joined with
13		13	IPR 2014-00858, IPR 2014-00996, and IPR 2014-01061.
14		14	This deposition is being held at 200 Marina
15	Also present: Sean McGrath, Videographer	15	Boulevard, Berkeley, California, on February 11th,
16		16	2015 at approximately 9:08 a.m.
17	***	17	My name is Sean McGrath from TSG Reporting,
18		18	Incorporated, and I'm the legal video specialist.
19		19	The court reporter is Tavia Manning, in
20		20	association with TSG Reporting.
21		21	Will counsel please introduce yourselves,
22		22	starting with the questioning attorney.
23		23	MR. FITZPATRICK: Anthony Fitzpatrick, from
24		24	Duane Morris, LLP, on behalf of petitioners, Taiwan
25		25	Semiconductor Manufacturing Company, Limited, and
	Page 8		Page 9
1	TSMC North America.	1	Morris, on behalf of the Taiwan Semiconductor
2	MR. HUH: Gregory Huh from Haynes and	2	defendants or petitioners, rather.
3	Boone, LLP, on behalf of TSMC and Fujitsu.	3	THE VIDEOGRAPHER: That's it?
4	MR. McCOMBS: David McCombs, with Haynes	4	Will the court reporter please swear in the
5	and Boone on behalf of TSMC, TSMC North America, and	5	witness, and we can proceed.
6	Fujitsu.	6	
7	MR. MAIER: Cosmin Maier, of WilmerHale, on		
8		7	LARRY HARTSOUGH, Ph.D,
	behalf of The Gillette Company.	7 8	having been first duly sworn by the reporter,
9	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White &	1	
9 10	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES.	8	having been first duly sworn by the reporter, testified as follows:
10 11	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White	8 9 10 11	having been first duly sworn by the reporter,
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10 11 12 13	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with	8 9 10 11 12 13	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony
10 11 12 13	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with Radulescu, LLP, on behalf of the patent owners, Zond	8 9 10 11 12 13 14	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony Fitzpatrick.
10 11 12 13 14 15	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with Radulescu, LLP, on behalf of the patent owners, Zond LLC.	8 9 10 11 12 13 14	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony Fitzpatrick. THE WITNESS: Fitzpatrick.
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10 11 12 13 14 15 16 17 18 19 20 21	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with Radulescu, LLP, on behalf of the patent owners, Zond LLC. And with me is my partner, David Radulescu, also with Radulescu, LLP, on behalf of Zond LLC. MR. FITZPATRICK: Can counsel on the phone please state their names. MR. VU: Yes. This is Robinson Vu, with Baker Botts, for Toshiba.	8 9 10 11 12 13 14 15 16 17 18 19 20 21	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony Fitzpatrick. THE WITNESS: Fitzpatrick. MR. FITZPATRICK: Good morning. THE WITNESS: I do have hearing problems you've been made aware of, and so it would help me if you speak up. MR. FITZPATRICK: Sure. Certainly. THE WITNESS: I'll let you know.
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10 11 12 13 14 15 16 17 18 19 20 21 22 23	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with Radulescu, LLP, on behalf of the patent owners, Zond LLC. And with me is my partner, David Radulescu, also with Radulescu, LLP, on behalf of Zond LLC. MR. FITZPATRICK: Can counsel on the phone please state their names. MR. VU: Yes. This is Robinson Vu, with Baker Botts, for Toshiba. MR. FITZPATRICK: Go ahead. MR. AGARWAL: Okay. This is Pavan Agarwal,	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony Fitzpatrick. THE WITNESS: Fitzpatrick. MR. FITZPATRICK: Good morning. THE WITNESS: I do have hearing problems you've been made aware of, and so it would help me if you speak up. MR. FITZPATRICK: Sure. Certainly. THE WITNESS: I'll let you know. MR. FITZPATRICK: Yes, please. If at any point you don't fully hear any of my questions,
10 11 12 13 14 15 16 17 18 19 20 21 22	behalf of The Gillette Company. MR. TENNANT: David Tennant, from White & Case, on behalf of GLOBALFOUNDRIES. MR. RISMILLER: Brett Rismiller, with White & Case, on behalf of GLOBALFOUNDRIES. MR. VARDANIAN: Tigran Vardanian, with Radulescu, LLP, on behalf of the patent owners, Zond LLC. And with me is my partner, David Radulescu, also with Radulescu, LLP, on behalf of Zond LLC. MR. FITZPATRICK: Can counsel on the phone please state their names. MR. VU: Yes. This is Robinson Vu, with Baker Botts, for Toshiba. MR. FITZPATRICK: Go ahead.	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	having been first duly sworn by the reporter, testified as follows: THE WITNESS: Could you please restate your name? MR. FITZPATRICK: Sure. My name is Tony Fitzpatrick. THE WITNESS: Fitzpatrick. MR. FITZPATRICK: Good morning. THE WITNESS: I do have hearing problems you've been made aware of, and so it would help me if you speak up. MR. FITZPATRICK: Sure. Certainly. THE WITNESS: I'll let you know. MR. FITZPATRICK: Yes, please. If at any



	Page 10		Page 11
1	EXAMINATION	1	Q. Have you been deposed previously?
2	BY MR. FITZPATRICK:	2	A. I have.
3	Q. Do you understand that you've taken an oath	3	Q. On how many occasions?
4	to tell the truth today?	4	A. I don't recall the exact number, but it is
5	A. Yes.	5	in my it's not on my CV, because I only go back
6	Q. And your answers to my questions will be	6	five years in my what I provided to you. But,
7	truthful?	7	you know, on a number of occasions, probably five or
8	A. Yes.	8	six.
9	Q. They will be complete?	9	Q. Have you testified in court or before an
10	A. I will strive to make them complete.	10	arbitrator previously?
11	Q. If at any point you don't understand any of	11	A. I have testified before an arbitration
12	my questions, will you please let me know?	12	panel.
13	A. I will.	13	Q. On how many occasions?
14	Q. If you answer my question, I will assume	14	A. On one.
15	that you've understood it; is that fair?	15	Q. The occasions on which you were deposed
16	A. Yes.	16	previously, did those all involve expert testimony?
17	Q. And you understand that if counsel for Zond	17	A. In the depositions that I made, I was
18	makes an objection to any question, that you still	18	always testifying as an expert.
19	are required to answer the question, unless they	19	Q. And did any of those instances involve
20	instruct you not to answer it?	20	technology relating to plasma generation?
21	A. I understand that.	21	A. Yes.
22	Q. Have you ingested any medication or	22	Q. All of them or some of them?
23	anything else that could impair your ability to	23	A. Most of them.
24	testify truthfully and completely today?	24	I would have to look at the details to
25	A. No.	25	recall my earlier ones, but in one form or another
	Page 12		Page 13
1	it all dealt with plasma generation.	1	Do you recognize this document?
2	Q. And did they did they did any of them	2	A. I do.
3	relate to magnetron sputtering technology?	3	Q. What is it?
4	A. Well, actually, I have to correct myself,	4	A. It is excuse me my declaration in
5	because one of the	5	regard to the U.S. Patent 7,808,184.
6	Probably I should look at my CV to remind	6	Q. And beginning on page 89 of the document,
7	myself.	7	in Appendix A, is that a copy of your CV?
8	But the testimony before the arbitration	8	A. Yes.
9	panel was actually about wafer a wafer heating	9	Q. There's not a listing in this CV
10	methodology. Although, it was in a sputtering	10	A. There is not a listing, yeah.
11	system, it was really a wafer heating and cooling	11	Q of your prior experience testifying in
12	technology, not the sputtering part.	12	depositions or before an arbitrator; correct?
13	THE VIDEOGRAPHER: Mr. Hartsough, could you	13	A. Yes. That's correct.
14	move your microphone to your tie or your other	14	I had submitted to counsel a qualification,
15	lapel?	15	a five-year history of cases and so on, which I
16	(Pause in the proceedings.)	16	presume was made available to your side.
17	THE WITNESS: Do you have a copy of my CV?	17	So I don't have the list or the
18	BY MR. FITZPATRICK O. Well. I'll show you what I do have which	18	recollection of every single deposition that I made
19 20	Q. Well, I'll show you what I do have, which	19	at this time. I just don't recall it all.
20 21	is your declaration.	20	Specific cases I can I can remember
22	A. My declaration has a summary of my work experience, but yeah.	21 22	that the well, actually, I wasn't deposed in the
~ ~	eaperence, but yean.		most recent case I had. I have to go back further
23	•	þγ	than that So it's been a while I haven't had
23 24	Q. Why don't I show you what's previously been	23 24	than that. So it's been a while. I haven't had
23 24 25	•	23 24 25	than that. So it's been a while. I haven't had much depositions in the last five years. Q. And the testimony that you provided before

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