UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

FUJITSU SEMICONDUCTOR LIMITED,
FUJITSU SEMICONDUCTOR AMERICA, INC.,
ADVANCED MICRO DEVICES, INC., RENESAS ELECTRONICS
CORPORATION, RENESAS ELECTRONICS AMERICA, INC.,
GLOBALFOUNDRIES U.S., INC., GLOBALFOUNDRIES DRESDEN
MODULE ONE LLC & CO. KG, GLOBALFOUNDRIES DRESDEN
MODULE TWO LLC & CO. KG, TOSHIBA AMERICA ELECTRONIC
COMPONENTS, INC., TOSHIBA AMERICA INC., TOSHIBA
AMERICA INFORMATION SYSTEMS, INC.,
TOSHIBA CORPORATION, and
THE GILLETTE COMPANY,
Petitioner,

v.

ZOND, LLC, Patent Owner

Patent 6,853,142 B2

IPR Case Nos. IPR2014-00818, 00819, 00821, 00827, 01098

DECLARATION OF LAWRENCE J. OVERZET PH.D. ON BEHALF OF PETITIONER



TABLE OF CONTENTS

I.	RELEVANT LAW		6
	A.	Claim Construction	6
	B.	Obviousness	6
II.	SUM	MARY OF OPINIONS: CLAIMS 1-43	9
III.	CLAIM CONSTRUCTION		
	A.	"weakly-ionized plasma" and "strongly-ionized plasma"	10
	B.	"means for ionizing a feed gas" (claims 40 and 41)	13
	C.	"means for supplying power" (claim 40) and "means for applying an electric field" (claim 41)	_
	D.	"means for diffusing"	18
IV.		PONSE TO PATENT OWNER'S ARGUMENTS REGARDING THE VIOUSNESS OF CLAIMS 1-43	
	A.	General Discussion	20
	1.	Power, Voltage, and Current	20
	2.	. The Two Embodiments of Wang	24
		. Kudryavtsev's Strongly Ionized Plasma is Generated Without orming an Arc	27
	4.	. Combining the Teachings of Wang and Kudryavtsev	28
	5.	. Combining the Teachings of Wang and Lantsman	31
	B.	Independent Claims 1, 10, 21, 31, 40, and 41	33
	1.	. Weakly-Ionized and Strongly-Ionized Plasma in Wang	33
	2.	. Wang and Lantsman Teach Feed Gas Diffusion	35
		Wang Teaches A Magnitude And A Rise-Time To Increase The Density Of The Weakly-Ionized Plasma	39
	C.	Dependent Claims 3 and 12: Additional Feed Gas	41
	D.	Dependent Claims 14 and 36: Selecting a pulse amplitude and/or width to increase an ionization rate of the strongly-ionized plasma.	42
	E.	Dependent Claim 26: Selecting a rise time to increase an ionization rate of the weakly-ionized plasma	
	F.	Dependent Claims 15, 27, and 37-38: The strongly-ionized plasma substantially uniform	



	1. At a single instance of time, Wang produces a substantially uniform plasma in a limited area adjacent to the cathode	
	2. Over time, Wang produces a substantially uniform plasma over tentire surface of the cathode	
G.	G. Dependent Claims 13, 24, and 32: A quasi-static electric field	55
Η.	H. Dependent Claim 25: A pulsed electric field	57
I.	Dependent Claims 4-5, 22-23, and 33-34: A constant power or constant voltage	58
J.	. Dependent Claims 21 and 28: A "gap" in the reactor	63
K.	K. Dependent Claims 6 and 29: An "electrode" in the reactor	66

- I, Lawrence J. Overzet, declare as follows:
 - 1. My name is Lawrence J. Overzet.
- 2. I received my bachelors, masters, and Ph.D. in electrical engineering, all from the University of Illinois, College of Engineering, Urbana, IL. My doctoral thesis was titled "Enhancement of the Negative Ion Flux to Surfaces from Radio Frequency Processing Discharges."
- 3. Since graduating in 1988, I have worked as a professor in the Department of Electrical Engineering at the University of Texas at Dallas. I have taught many courses including Introduction to Electromagnetic Fields I and II; Plasma Processing Technology; Plasma Science for Materials Processing; and Current Topics in Plasma Processing.
- 4. I have written over 75 articles, presented over 240 presentations at international symposia, and have 8 patents in various areas of electrical engineering, most of which being related to plasma science.
- 5. I am a senior member of the Institute of Electrical and Electronic Engineers (IEEE), and am a fellow of the American Vacuum Society (AVS) for my contributions toward understanding pulsed plasmas and the role of negative ions in plasma processing.
 - 6. A copy of my resume is provided as Appendix A to this declaration.



- 7. I have reviewed the following publications in preparing this declaration:
 - U.S. Patent No. 6,853,142 (the "'142 Patent") (Ex. 1001)).
 - D.V. Mozgrin, et al, <u>High-Current Low-Pressure Quasi-Stationary</u>
 <u>Discharge in a Magnetic Field: Experimental Research</u>, Plasma Physics
 Reports, Vol. 21, No. 5, pp. 400-409, 1995 ("Mozgrin" (Ex. 1003)).
 - A. A. Kudryavtsev *et al*, <u>Ionization relaxation in a plasma produced by a pulsed inert-gas discharge</u>, Sov. Phys. Tech. Phys. 28(1), pp. 30-35, January 1983 ("Kudryavtsev" (Ex. 1106)).
 - U.S. Pat. No. 6,413,382 ("Wang" (Ex. 1005)), including U.S. Pat. No. 6,306,265 ("Fu" (Ex. 1117)) and U.S. Pat. No. 6,398,929 ("Chiang" (Ex. 2004)) which are both incorporated by reference by Wang.
 - U.S. Pat. No. 6,190,512 ("Lantsman" (Ex. 1004)).
 - D.V. Mozgrin, <u>High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research</u>, Thesis at Moscow Engineering Physics Institute, 1994 ("Mozgrin Thesis" (Ex. 1118)).
- 8. I have read and understood each of the above publications and any other publication cited in this declaration. The disclosure of each of these publications provides sufficient information for someone to make and use the



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