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, Petitioners,

v.

ZOND, LLC, Patent Owner

IPR2014-00829¹ Patent 6,085,779 B2

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

Claims 16, 28, 41, 42, 45 and 46

¹ Cases IPR2014-00828, IPR2014-00917, IPR2014-01073, and IPR2014-01076 have been joined with the instant proceeding.

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II.	ZO	ND'S FLAWED INTERPRETATIONS OF THE PRIOR ART FAIL1
	A.	Zond's interpretation of a "plasma" in Iwamura contradicts both Iwamura and the '779 Patent's teachings 1
	B.	Zond mischaracterizes the teachings of Pinsley and Angelbeck
	C.	A person of ordinary skill in the art would have combined Iwamura with Pinsley and Angelbeck
		AIMS 16, 28, 41, 42, 45, AND 46 ARE UNPATENTABLE OVER ITED PRIOR ART
	A.	Iwamura in view of Pinsley and Angelbeck teaches an excited/metastable atom source including a magnetic field that substantially traps electrons proximate to ground state atoms as claimed by claims 1, 18, and 41
	B.	Iwamura in view of Pinsley and Angelbeck teaches an energy source that is coupled to the excited/metastable atoms and generates a plasma with a multi-step ionization process as claimed by claims 1, 18, and 4115
	C.	Iwamura in view of Pinsley and Angelbeck teaches "a plasma chamber that is coupled to the [excited / metastable] atom source" recited in claims 1, and "a metastable atom source" recited in claim 18

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D. Iwamura in view of Pinsley and Angelbeck teaches "an electron/ion	
absorber trapping electrons and ions" as recited by claims 16, 28, 42,	
45, 46	. 18
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Cases

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EWP Corp. v. Reliance Universal, Inc., 755 F.2d 898, 907 (Fed. Cir. 1985)......4

PETITIONER'S EXHIBIT LIST

April 27, 2015

Exhibit	Description
1301	U.S. Patent No. 6,805,779 ("'779 Patent")
1302	Kortshagen Declaration ("Kortshagen Decl.")
1303	D.V. Mozgrin, <i>et al</i> , <u>High-Current Low-Pressure Quasi-Stationary</u> <u>Discharge in a Magnetic Field: Experimental Research</u> , Plasma Physics Reports, Vol. 21, No. 5, 1995 ("Mozgrin")
1304	A. A. Kudryavtsev and V.N. Skerbov, Ionization relaxation in a plasma produced by a pulsed inert-gas discharge, Sov. Phys. Tech. Phys. 28(1), pp. 30-35, January 1983 ("Kudryavtsev")
1305	U.S. Patent No. 3,761,836 ("Pinsley")
1306	U.S. Patent No. 3,514,714 ("Angelbeck")
1307	U.S. Patent No. 5,753,886 ("Iwamura")
1308	File History for U.S. Patent No. 6,805,779, Office Action dated February 11, 2004 ("02/11/04 Office Action")
1309	File History for U.S. Patent No. 6,805,779, Response dated May 6, 2004 ("05/06/04 Response")
1310	European Patent Application No. 1614136, Response dated July 24, 2007 (07/24/07 Response in EP 1614136)
1311	J. Vlček, A collisional-radiative model applicable to argon discharges over a wide range of conditions. I: Formulation and basic data, J. Phys. D: Appl. Phys. 22 (1989) pp. 623-631
1312	J. Vlček, A collisional-radiative model applicable to argon discharges over a wide range of conditions. II: Application to low-pressure, hollow- cathode arc and low-pressure glow discharges, J. Phys. D: Appl. Phys.

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