UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RENESAS ELECTRONICS CORPORATION, RENESAS ELECTRONICS AMERICA, INC., ADVANCED MICRO DEVICES, INC., GLOBALFOUNDRIES U.S., INC., GLOBALFOUNDRIES DRESDEN MODULE ONE LLC & CO. KG, GLOBALFOUNDRIES DRESDEN MODULE TWO LLC & CO. KH, TOSHIBA AMERICA, INC., TOSHIBA AMERICAN INFORMATION SYSTEMS, INC., AND TOSHIBA CORPORATON

Petitioner

v.

ZOND, LLC Patent Owner

Case IPR2014-01063 Patent 6,853,142

ZOND LLC'S PATENT OWNER PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(a)



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		a.	Kudryavtsev – 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 (Ex. 1304),	23	
		b.	Mozgrin – D.V. Mozgrin, et al, High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research, Plasma Physics Reports, Vol. 21, No. 5, pp. 400-409, 1995 (Exhibit 1303).	25	
		c.	Wang – U.S. Patent No. 6,413,382 (Exhibit 1305)	27	
	2.	(The Petitioner Fails To Show That It Would Have Been Obvious To Combine The Cylindrical Tube System Without A Magnet Of Kudryavtsev With Either The Mozgrin or Wang Magnetron System	29	



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В.	The Petition fails to demonstrate how the alleged combinations teach every element of the challenged claims.	35
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2.	The cited references do not teach "applying the electric field at a constant power," as recited in dependent claim 33.	38
3.	The cited references do not teach "a pulsed electric field," as recited in claim 25	40
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I. INTRODUCTION

The Petitioner has represented in a motion for joinder that this petition "is identical to the Intel IPR2014-00497 in all substantive respects, includes identical exhibits, and relies upon the same expert declarant." Accordingly, based upon that representation, the Patent Owner opposes review on the same basis presented in opposition to Intel's request no. IPR2014-00497, which is repeated below:

The Board should deny the present request for *inter partes* review of U.S. Patent No. 6,853,142 ("the '142 patent") because there is not a reasonable likelihood that the Petitioner will prevail at trial with respect to at least one claim of the '142 patent.¹

Indeed, there are five different and independent groups of reasons why the Petitioner cannot prevail. First, the references that are primarily relied upon by the Petitioner (*i.e.*, Mozgrin and Wang) were already considered by the Examiner and overcome during the prosecution of the application that led to the issuance of the '142 patent. These references were considered by 6



¹ 35 U.S.C. § 314(a).

different examiners and overcome during the prosecution of 9 other patents that are related to the '142 patent over nearly a 10 year period.²

Second, all of the Petitioner's obviousness rejections are predicated on the false assumption that a skilled artisan could have achieved the combination of i) an anode; ii) a cathode that is positioned adjacent to the anode and forming a gap there between; iii) an ionization source generating a weakly-ionized plasma proximate to the cathode, and iv) a power supply that generates an electric field across the gap to produce a highly-ionized plasma, as required by independent claim 21 and as similarly required by independent claim 31 of the '142 patent by combining the teachings of Kudryavtsev with either Mozgrin or Wang.³



² Examiners Douglas Owens, Tung X. Le, Rodney McDonald, Wilson Lee, Don Wong, and Tuyet T. Vo allowed U.S. Patents 7,147,759, 7,808,184, 7,811,421, 8,125,155, 6,853,142, 7,604,716, 6,896,775, 6,896,773, 6,805,779, and 6,806,652 over Mozgrin and Wang over nearly a decade from the time that the application for the '759 patent was filed on 9/30/2002 to the time that the '155 patent issued on 2/28/2012.

³ Petition at pp. 14-56.

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