

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION

Petitioner

v.

ZOND, LLC
Patent Owner

Case IPR2014-00497
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

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I. INTRODUCTION

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 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

¹ 35 U.S.C. § 314(a).

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.

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

But these three references disclose very different structures and processes. Mozgrin teaches two different “[d]ischarge device configurations: (a) planar magnetron and (b) shaped-electrode configuration.”⁴ Mozgrin further discloses a “square voltage pulse application to the gap.”⁵ Wang discloses that a “target 14 is powered by narrow pulses of negative DC power

³ Petition at pp. 14-56.

⁴ Mozgrin, Exhibit 1303 at Fig. 1 caption.

⁵ *Id.* at p. 402, col. 2, ¶ 2.

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