UNITED STATES PATENT AND TRADEM	MARK OFFICE
BEFORE THE PATENT TRIAL AND APPL	PEAL BOARD

Petitioner

THE GILLETTE COMPANY

v.

ZOND, LLC Patent Owner

Case IPR2014-01022 Patent 6,805,779

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



TABLE OF CONTENTS

1.	INTRU	DDUCTION	1
II.	TECH	NOLOGY BACKGROUND	9
	A.	Overview Of Plasma Generation	9
	B.	The '779 patent: Dr. Chistyakov invents a new plasma generating process comprising the steps of generating a magnetic field trapping electrons near ground state atoms, generating metastable atoms from the ground state atoms, and ionizing the metastable atoms in a multi-step ionization process	11
	C.	The Petitioner Mischaracterized The File History	15
Ш	. SUM	MARY OF THE PETITIONER'S PROPOSED GROUNDS FOR REVIEW	16
IV		RE IS NO REASONABLE LIKELIHOOD OF PETITIONER PREVAILING O A CHALLENGED CLAIM OF THE '779 PATENT	18
	A.	The Petition failed to demonstrate any motivation to combine.	19
	1.	Scope and content of prior art.	22
		a. Mozgrin	22
		b. Kudravtsev	24
		c. Iwamura	27
		d. Pinsley and Angelbeck	29
	2.	The Petitioner Fails To Show That It Would Have Been Obvious To Combine Either Kudryavtsev's Cylindrical Device Without A Magnet or Pinsley's Gas Laser With The Magnetron System Of Mozgrin	30
	3.	The Petitioner Failed To Show That It Would Have Been Obvious To Combine Angelbeck's Gas Laser With The Plasma Treatment Apparatus Of Iwamura.	35
	B.	The Petition failed to demonstrate how the alleged combinations teach every element of the challenged claims.	37
	1.	The combination of Mozgrin, Kudryavtsev and Pinsley does not teach "generating a magnetic field proximate to a volume of ground state molecules to substantially trap electrons proximate to the volume of ground state molecules," as recited in independent claim 30 and as similarly recited in independent claim 40.	20



IPR2014-01022 U.S. Patent No. 6,805,779

	2.	The combination of Mozgrin, Kudryavtsev and Pinsley does not teach "raising an energy of the metastable atoms so that at least a portion of the volume of metastable atoms is ionized," as recited in independent claim 30 and as similarly recited in independent claim 40.	38
	3.	The combination of Iwamura and Angelbeck does not teach a "generating a plasma with a multi-step ionization process," as recited in independent claim 30 and as similarly recited in claim 40.	39
	4.	The combination of Iwamura and Angelbeck does not teach "generating a magnetic field proximate to a volume of ground state atoms to substantially trap electrons proximate to the volume of ground state atoms," as recited in independent claim 30 and as similarly recited in claim 40	40
	5.	The combination of Iwamura and Angelbeck does not teach "raising an energy of the metastable atoms so that at least a portion of the volume of metastable atoms is ionized" as recited in independent claim 30 and as similarly recited in claim 40.	41
	C.	The Petition Failed to Identify Any Compelling Rationale for Adopting Redundant Grounds of Rejection.	42
	D.	The Petition failed to set forth a proper obviousness analysis	46
1.	CONC	LUSION	49



I. INTRODUCTION

The Board should deny the present request for *inter partes* review of U.S. Patent No. 6,805,779 ("the '779 patent") because there is not a reasonable likelihood that the Petitioner will prevail at trial with respect to at least one claim of the '779 patent.¹

Indeed, there are five different and independent groups of reasons why the Petitioner cannot prevail. First, the reference that is primarily relied upon by the Petitioner (*i.e.*, Mozgrin) was already considered by the Examiner and overcome during the prosecution of the application that led to the issuance of the '779 patent. Indeed, Mozgrin was considered by 6 different examiners and overcome during the prosecution of 9 other patents that are related to the '779 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, the Petitioner's obviousness rejections are all predicated on the false assumption that a skilled artisan could have achieved the combination of (i) generating a magnetic field proximate to a volume of ground state atoms to substantially trap electrons proximate to the volume of ground state atoms; (ii) generating a volume of metastable atoms from the volume of ground state atoms; and (iii) raising an energy of the metastable atoms so that some of the metastable atoms are ionized, thereby generating a plasma with a multi-step ionization process, as required by independent claims 30 and 40 of the '779 patent by combining the teachings of Mozgrin with Kudryavtsev and Pinsley.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." Mozgrin further discloses a "square voltage pulse application to the gap." Kudryavtsev teaches a third type of discharge device configuration in which the "discharge occurred inside a cylindrical tube of diameter 2R = 2.5 cm and the distance between the electrodes was L = 52 cm." Kudryavtsev's system does not even



³ Petition at pp. 18-40.

⁴ Mozgrin, Ex. 1003 at Fig. 1 caption.

⁵ *Id.* at p. 402, col. 2, \P 2.

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

