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 TWO LLC & CO. KG, TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC., TOSHIBA AMERICA INC., TOSHIBA AMERICA INFORMATION SYSTEMS, INC. AND TOSHIBA CORPORATION

Petitioner

v.

ZOND, LLC
Patent Owner

U.S. Patent No. 6,806,652

Inter Partes Review Case No. 2014-01066

PATENT OWNER's PRELIMINARY RESPONSE
UNDER 37 CFR § 42.107(a)
Claims 18 - 34

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

TABLE OF CONTENTS

I. INTRODUCTION 1

II. TECHNOLOGY BACKGROUND 3

A. The Need for More Uniformly Distributed Plasmas 3

B. The '652 Patent: Dr. Chistyakov Invents a Technique for Generating Super Ionized Plasma Having A Uniform Charge Distribution. 5

III. SUMMARY OF PETITIONER'S PROPOSED GROUNDS 9

IV. CLAIM CONSTRUCTION UNDER 37 C.F.R. §§ 42.104(B)(3) 9

A. Construction of "generating an initial plasma and excited ions from a volume of feed as" 10

B. Construction of "transporting the initial plasma and excited atoms proximate to a cathode assembly" 11

C. Construction of "super-ionizing the initial plasma proximate to the cathode assembly" 12

V. PETITIONER HAS FAILED TO SHOW A REASONABLE LIKELIHOOD OF PREVAILING ON INDEPENDENT CLAIM 18. 13

A. Defects In Ground I: Petitioner Failed To Demonstrate A Reasonable Likelihood That 18 is Obvious Over Mozgrin, Kudryavtsev, and Fahey. 14

a. Overview of Mozgrin 14

b. Kudryavtsev 16

c. Overview of Fahey 19

d. Differences Between Claim 18 and the Ground I References 21

e. Conclusion: Petitioner Has Not Shown a Reasonable Likelihood of Success That Claim 18 is Obvious for the Reasons Asserted in Ground I. 25

B. Defects In Ground III: Petitioner Failed To Demonstrate A Reasonable Likelihood That Claim 18 is Obvious Over Mozgrin, Kudryavtsev, Fahey and Iwamura. 25

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

C. Defects In Ground V: Petitioner Failed To Demonstrate A Reasonable Likelihood That Claims 18 is Obvious Over Mozgrin and Iwamura 30

VI. PETITIONER HAS FAILED TO SHOW A REASONABLE LIKELIHOOD OF PREVAILING ON DEPENDENT CLAIMS 31, 32 33

a. Subject Matter of Claims 31, 32. 33

b. Petitioner's Grounds Against Claims 31, 32. 34

c. The Primary References: Mozgrin, Kudryavtsev, Fahey, And Iwamura. 35

d. The Secondary Reference: Campbell. 38

e. Conclusion. 40

VII. PETITIONER HAS FAILED TO SHOW A REASONABLE LIKELIHOOD OF PREVAILING ON DEPENDENT CLAIMS 33, 34 40

a. Subject Matter of Claims 33, 34. 40

b. Overview of Petitioner's Grounds. 41

c. The Primary References. 42

d. The Secondary Reference: Fahey. 42

e. Conclusion. 43

VIII. PETITIONER HAS FAILED TO SHOW A REASONABLE LIKELIHOOD OF PREVAILING ON DEPENDENT CLAIMS 19 - 30 44

IX. CONCLUSION 50

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

I. Introduction

The present petition for *inter partes* review is the first of three petitions by The Gillette Company that challenge the patentability of every claim of U.S. Patent No. 6,806,652 ("the '652 patent"). These petitions are part of a campaign to annul ten Zond patents, and every one of hundreds of claims awarded to Zond. The present petition targets independent claim 18 of the '652 patent and its dependent claims 19 - 34.

The '652 patent is generally directed to a technique for generating a super-ionized plasma having a high density of ions. The patent proposes a method in which a volume of feed gas is converted to an initial plasma that is filled with exited atoms. The plasma/excited atom mixture is then transported to a region that is proximate to a cathode assembly, where the plasma is then super-ionized. This technique allows the initial plasma to be created under a first condition that seeds the initial plasma with excited atoms, to facilitate the creation of a highly dense plasma in the next stage. The transportation of this mixture to another location exposes the mixture to a set of conditions that generate a super-ionized plasma from the mixture.

This staged process avoids the risk of arcing often associated with the formation of such dense plasmas. The claims at issue recite this method and various improvements and applications discussed below.

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

The present petition does not cite to any prior art reference that teaches the claimed methods. Instead it weaves together up to four different prior art references in an attempt to recreate the claims from carefully chosen excerpts. The selected references have publication dates that span nearly 20 years. Yet in all that time, not one reference wrote down or proposed the method patented by Zond, despite the advantages of doing so. As the Supreme Court noted long ago:

> But it is plain from the evidence, and from the very fact that it was not sooner adopted and used, that it did not, for years, occur in this light even to the most skilled persons. It may have been under their very eyes, they may almost be said to have stumbled over it; but they certainly failed to see it, to estimate its value and to bring it to notice. [1]

Thus, as explained in this statement, the Petitioner inadvertently resorts to hindsight analysis in the hope of persuading the Board that the claim method was in fact obvious all along: Using the claims as a schematic, the Petitioner carefully selects a set of prior art references and assembles them to suit its objective.

[1] *The Barbed Wire Patent*, 143 U.S. 275 (1891).

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.