Docket No. 1642930-0006 IPR2

UNITED STATES PATENT AND TRADEMARK OFFICE	
BEFORE THE PATENT TRIAL AND APPEAL BOARD	
BEFORE THE PATENT TRIAL AND AFFEAL BOARD	

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., AND TOSHIBA CORPORATION
Petitioners

V.

ZOND, INC. Patent Owner

Case No.

PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 7,808,184 CHALLENGING CLAIMS 6-10 AND 16-20 UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104



## **TABLE OF CONTENTS**

I. Ma	andatory Notices 1	
A.	Real Party-in-Interest1	L
B.	Related Matters 1	
C.	Counsel1	L
D.	Service Information	2
II. Ce	rtification of Grounds for Standing2	)
III. O	verview of Challenge and Relief Requested	3
A.	Prior Art Patents and Printed Publications	3
В.	Grounds for Challenge	1
IV. B	rief Description of Technology	1
A.	Plasma	1
В.	Ions and Excited Atoms	
V. Ov	verview of the '184 Patent	
A.	Summary of Alleged Invention of the '184 Patent	
B.	Prosecution History	3
VI. C	verview of the Primary Prior Art References	
A.	Summary of the Prior Art	8
B.	Overview of Mozgrin	
C.	Overview of Kudryavtsev1	1
D.	Overview of Wang	
VII.	Claim Construction	3
A.	"Strongly-ionized plasma" and "weakly-ionized plasma" 14	
VIII.	Specific Grounds For Petition	5
A.	Ground I: Claims 6-10 and 16-20 are obvious in view of the combination	_
	lozgrin and Kudryavtsev10	
1.	Independent claim 110	
2	Independent claim 11	ŏ



3. Dependent claims 6-10 and 16-20 are obvious in view of the co	
of Mozgrin and Kudryavtsev	31
B. Ground II: Claims 6-10 and 16-20 are obvious in view of the conformal of Mozgrin and the Mozgrin Thesis	
1. Independent Claim 1	39
2. Independent claim 11	42
3. Dependent claims 6-10 and 16-20	43
C. Ground III: Claims 6, 7, 9, 10, 16, 17, 19 and 20 are obvious in combination of Wang and Kudryavtsev	
1. Independent claim 1	44
2. Independent claim 11	53
3. Dependent claims 6, 7, 9, 10, 16, 17, 19, and 20 are obvious in the combination of Wang and Kudryavtsev	view of54
D. Ground IV: Claims 8 and 18 are obvious in view of the combination Wang, Kudryavtsev and Mozgrin	ation of 57
Y Conclusion	



## TABLE OF AUTHORITIES

In re ICON Health & Fitness, Inc., 496 F.3d 1374, 1379 (Fed. Cir. 2007).

37 C.F.R. §42.22(a)(1)

37 C.F.R. § 42.100(b)

37 C.F.R. §42.104(a)

37 C.F.R. §42.104(b)(1)-(5)

77 Fed. Reg. 48764 (Aug. 14, 2012).



### I. MANDATORY NOTICES

## A. Real Party-in-Interest

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., and Toshiba Corporation (collectively, "Petitioner") are the real parties-in-interest.

#### B. Related Matters

Zond has asserted U.S. Patent No. 7,808,184 ("'184 Patent") (Ex. 1101) against numerous parties in the District of Massachusetts. *See* List of Related Litigations (Ex. 1123). Petitioner is also filing additional Petitions for *Inter Partes* review in several patents that name the same alleged inventor. The below-listed claims of the '184 Patent are presently the subject of four substantially identical petitions for *inter partes* review with Case Nos. IPR2014-00456, IPR2014-00803, IPR2014-00858, and IPR2014-00996. Petitioner plans to seek joinder with IPR2014-00456.

## C. Counsel

LEAD COUNSEL: David M. Tennant (Reg. No. 48,362).

BACKUP COUNSEL: Brian M. Berliner (Reg. No. 34549), Ryan K.



# 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.

