

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ADVANCED MICRO DEVICES, INC., RENESAS ELECTRONICS CORPORATION, RENESAS ELECTRONICS AMERICA, INC., GLOBAL FOUNDRIES 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, LLC,
Patent Owner.

Case IPR2014-01047
Patent 7,147,759 B2

Before KEVIN F. TURNER, DEBRA K. STEPHENS, JONI Y. CHANG, SUSAN L.C. MITCHELL, and JENNIFER M. MEYER,
Administrative Patent Judges.

CHANG, *Administrative Patent Judge.*

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Petitioners (collectively, “AMD”) filed a Petition requesting an *inter partes* review of claims 20, 21, 34–36, 38, 39, 47, and 49 of U.S. Patent No. 7,147,759 B2 (Ex. 1201, “the ’759 patent”). Paper 2 (“Pet.”). Zond, LLC (“Zond”), filed a Preliminary Response. Paper 8 (“Prelim. Resp.”).

We have jurisdiction under 35 U.S.C. § 314. The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides:

THRESHOLD.—The Director may not authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Upon consideration of the Petition and Preliminary Response, we conclude that the information presented in the Petition demonstrates that there is a reasonable likelihood that AMD would prevail in challenging claims 20, 21, 34–36, 38, 39, 47, and 49 as unpatentable under 35 U.S.C. § 103(a). Pursuant to 35 U.S.C. § 314, we hereby authorize an *inter partes* review to be instituted as to claims 20, 21, 34–36, 38, 39, 47, and 49 of the ’759 patent.

A. *Related District Court Proceedings*

The parties indicate that the ’759 patent was asserted in *Zond, LLC v. Advanced Micro Devices, Inc.*, No.1:13-cv-11577-DPW (D. Mass.). Paper 5; Ex. 1235. They also identify other proceedings in which Zond asserted the ’759 patent. *Id.*

B. Related Inter Partes Reviews

The following Petitions for *inter partes* review also challenge the same claims based on the same grounds of unpatentability as those in the instant proceeding: *Intel Corp. v. Zond, LLC.*, Case IPR2014-00445; *Taiwan Semiconductor Mfg. Co., Ltd. v. Zond, LLC.*, Case IPR2014-00781; *Fujitsu Semiconductor Ltd. v. Zond, LLC.*, Case IPR2014-00845; and *The Gillette Co. v. Zond, LLC.*, Case IPR2014-00985.

In each of IPR2014-00445, IPR2014-00781, and IPR2014-00845, we instituted an *inter partes* review of claims 20, 21, 34–36, 38, 39, 47, and 49 of the '759 patent, based on the following grounds of unpatentability:

Claims	Basis	References
20, 21, 34, 36, 47	§ 103	Wang and Kudryavtsev
35	§ 103	Wang, Kudryavtsev, and Li
38	§ 103	Wang, Kudryavtsev, and Yamaguchi
39	§ 103	Wang, Kudryavtsev, and Müller-Horsche
49	§ 103	Wang, Kudryavtsev, and the Mozgrin Thesis

We terminated IPR2014-00445 and IPR2014-00845, but not IPR2014-00781. In IPR2014-00445, we terminated the proceeding in light of the Written Settlement Agreement, made in connection with the termination of the proceeding in accordance with 35 U.S.C. § 317(b) and 37 C.F.R. § 42.74(b), between Intel and Zond. IPR2014-00445, Papers 14, 15; IPR2014-00443, Ex. 1035. We further joined IPR2014-00845 with IPR2014-00781, and terminated IPR2014-00845. IPR2014-00845, Paper 14.

AMD filed a revised Motion for Joinder with IPR2014-00781. Paper 11. In a separate decision, we grant AMD's revised Motion for Joinder, joining the instant proceeding with IPR2014-00781, and terminating the instant proceeding.

C. Prior Art Relied Upon

AMD relies upon the following prior art references:

Wang	US 6,413,382 B1	July 2, 2002	(Ex. 1205)
Müller-Horsche	US 5,247,531	Sep. 21, 1993	(Ex. 1221)
Yamaguchi	EP 1 113 088 A1	July 4, 2001	(Ex. 1222)

D.V. Mozgrin et al., *High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research*, 21 PLASMA PHYSICS REPORTS 400–409 (1995) (Ex. 1203, “Mozgrin”).

A.A. Kudryavtsev and V.N. Skrebov, *Ionization Relaxation in a Plasma Produced by a Pulsed Inert-Gas Discharge*, 28(1) SOV. PHYS. TECH. PHYS. 30–35 (1983) (Ex. 1204, “Kudryavtsev”).

D.V. Mozgrin, *High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research*, Thesis at Moscow Engineering Physics Institute (1994) (Ex. 1218, “Mozgrin Thesis”).¹

Li et al., *Low-Temperature Magnetron Sputter-Deposition, Hardness, and Electrical Resistivity of Amorphous and Crystalline Alumina Thin Films*, 18 J. VAC. SCI. TECH. A 2333–38 (2000) (Ex. 1220, “Li”).

¹ The Mozgrin Thesis is a Russian-language reference. The citations to the Mozgrin Thesis are to the certified English-language translation (Ex. 1217).

D. Asserted Grounds of Unpatentability

AMD asserts the following grounds of unpatentability:

Claims	Basis	References
20, 34	§ 103	Mozgrin and Kudryavtsev
21, 47, 49	§ 103	Mozgrin, Kudryavtsev, and the Mozgrin Thesis
34–36	§ 103	Mozgrin, Kudryavtsev, and Li
38	§ 103	Mozgrin, Kudryavtsev, and Yamaguchi
39	§ 103	Mozgrin, Kudryavtsev, and Müller-Horsche
20, 21, 34, 36, 47	§ 103	Wang and Kudryavtsev
35	§ 103	Wang, Kudryavtsev, and Li
38	§ 103	Wang, Kudryavtsev, and Yamaguchi
39	§ 103	Wang, Kudryavtsev, and Müller-Horsche
49	§ 103	Wang, Kudryavtsev, and the Mozgrin Thesis

II. ANALYSIS

A. Printed Publication under 35 U.S.C. § 102

In its Petition, AMD makes the same assertion that Taiwan Semiconductor Manufacturing Company, Ltd. and TSMC North America Corp. (collectively, “TSMC”) made in IPR2014-00781 concerning the Mozgrin Thesis—namely, the Mozgrin Thesis is a doctoral thesis at Moscow Engineering Physics Institute, published in 1994, and it is prior art under 35 U.S.C. § 102(b). *Compare* Pet. 4, with IPR2014-00781, Paper 2 (“’781 Pet.”), 4. AMD also proffers the same catalog entry for the Mozgrin Thesis at the Russian State Library. *Compare* Ex. 1219, with IPR2014-00781, Ex. 1219.

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