

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GLOBALFOUNDRIES U.S., INC.,
GLOBALFOUNDRIES DRESDEN MODULE ONE LLC & CO. KG
GLOBALFOUNDRIES DRESDEN MODULE TWO LLC & CO. KG

Petitioner

v.

ZOND, LLC
Patent Owner

U.S. Patent No. 7,604,716

Inter Partes Review Case No. 2014-01100

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 CFR § 42.107(a)**

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I. Introduction

The Petitioner has represented in a motion for joinder that this petition “is identical to the Intel IPR no. IPR2014-00521 in all substantive respects, includes identical exhibits, and relies upon the same expert declarant.”

Accordingly, based upon that representation, the Patent Owner opposes review on the same basis presented in opposition to Intel’s request no. IPR-2014-00521, which is reproduced below:

The present petition for *inter partes* review of U.S. Patent No. 7,604,716 (“the ‘716 patent”) is the second of four petitions filed by Intel challenging the ‘716 patent. This petition challenges two claims of the ‘716 patent, nos. 12, 13, that depend from claim 1. Parent claim 1 is addressed separately in Intel’s petition number IPR2014- 520.

Claims 12 and 13 are directed to the plasma generating apparatus of claim 1 that also includes a gas line for supplying feed gas to a region where a strongly ionize plasma is formed to thereby “**transport** the strongly ionized plasma by a **rapid volume exchange**.” The specification explains, as we will discuss below, that this type of gas flow permits more power to be added to the plasma without arcing and thus allows the formation of denser plasmas.

The Petition alleges that the claims are obvious in view of Mozgrin¹ or Wang² (that were already considered by the Patent Office)³ combined with a prior art patent to Lantsman.⁴ But the Petition does not, because it cannot, cite to any teaching in these references of a gas flow through a region where a strongly ionize plasma is formed to thereby “transport” the strongly ionized plasma by “a rapid volume exchange.” Accordingly, it instead tries to nullify this claim language, boldly asserting that this language “merely recites the natural consequence of exchanging gas during processing, e.g., by adding gas to balance gas withdrawn by the vacuum system.”⁵ In other words, the Petition alleges that any gas exchange in a plasma chamber, no matter how slow and diffuse, and regardless of the location of the gas flux in the chamber relative to the site where the strongly ionized plasma is formed, will inherently “transport” the strongly ionized plasma by a “rapid volume exchange.” The only evidence cited in support of this facially flawed assertion, is a single

¹ Ex. 1103, Mozgrin.

² Ex. 1104, Wang patent No. 6,413,382 (“Wang”).

³ Ex. 1101, ‘716 Patent, list of cited references cited.

⁴ Ex. 1105, Lantsman patent no. 6,190,512 (“Lantsman”).

⁵ Petition, page 28.

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