

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

The Gillette Company
Petitioner

v.

ZOND, LLC
Patent Owner

U.S. Patent No. 6,896,775

Inter Partes Review Case No. 2014-00604

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

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I. Introduction

The present petition for *inter partes* review of U.S. Patent No. 6,896,775 (“the ‘775 patent”) is the second of two petitions filed by the Gillette Company challenging the ‘775 patent. This petition challenges three independent claims 30, 36, 37 and six dependent claims, nos. 31 – 35.

Claims 30 and 37 are directed to a magnetically enhanced plasma processing method and apparatus for etching a substrate, wherein a substrate is positioned in proximity to a cathode and wherein a bias voltage is applied to the substrate to cause ions from a plasma to impact and etch the substrate’s surface. To form ions for such etching, a feed gas is ionized into a strongly-ionized plasma by an applied electrical pulse. The strongly ionized plasma formed by the pulse is exchanged with a second volume of feed gas during the pulse to thereby generate strongly-ionized plasma made of a second plurality of ions. As explained in the patent, “transporting the strongly-ionized plasma through the region 245 by a rapid volume exchange of the feed gas 264 increases the level and the duration of the power that can be applied to the strongly-ionized plasma and, thus, generates a higher density strongly-ionized plasma in the region 246.”¹

¹ Ex. 1101, ‘775 Patent, col. 10, lines 29 – 34.

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