

DOCKET NO: 0107131.00275US1  
'184 PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

PATENT: 7,808,184, CLAIMS 1-5 AND 11-15

INVENTOR: ROMAN CHISTYAKOV

FILED: APR. 18, 2006

ISSUED: OCT. 5, 2010

TITLE: METHODS AND APPARATUS FOR GENERATING STRONGLY-  
IONIZED PLASMAS WITH IONIZATIONAL INSTABILITIES

---

Mail Stop PATENT BOARD  
Patent Trial and Appeal Board  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF RICHARD DEVITO, REGARDING  
CLAIMS 1-5 AND 11-15 OF U.S. PATENT NO. 7,808,184**

I, Richard DeVito, declare as follows:

1. My name is Richard DeVito.
2. I received my B.S. in Physics from Suffolk University, *cum laude* in 1982. I received my M.S. in Experimental Solid State Physics from Syracuse University in 1986.

3. I am the Founder and President of VAECO Inc. I have been the Director at the “Kostas” Facility for Microfabrication and Nanotechnology at Northeastern University, since October 2005. Between March 2004 and October 2005, I was a Principal Process Development Fab Engineer at Aegis Semiconductor. Between October 2003 and March 2004, I was a consultant at Fluens Corp. I am also a co-founder of Fluens Corp. Between August 2002 and October 2003, I was a Process Manager at NEXX SYSTEMS. Between 2001 and 2002, I was a Director of thin film processing at UNAXIS CORPORATION. Between 2000 and 2001, I was a Director of thin film processing at OPNETICS CORPORATION. Between 1997 and 2000, I was a Sr. Project Engineer at CORNING/OCA/NETOPTIX. Between 1995 and 1997, I was a Project / Process Engineer 1995 -1997 at THE GILLETTE COMPANY. Between 1994 and 1995, I was a Senior Process Engineer at THE GILLETTE COMPANY. Between 1989 and 1994, I was a Senior Physical Scientist at LITTON-ITEK OPTICAL SYSTEMS. Between 1987 and 1989, I was a Physical Scientist at LITTON-ITEK OPTICAL SYSTEMS.

4. A copy of my latest *curriculum vitae* (CV) is attached as Appendix A.

5. For the last fifteen years, the principal focus of my research has been the use of plasma to deposit thin films.

6. I have reviewed the specification, claims, and file history of U.S. Patent No. 7,808,184 (the "'184 patent") (Ex. 1001). I understand that the '184 patent was filed on September 30, 2002, and is a continuation of U.S. Patent No. 7,095,179, which was filed on February 22, 2004. I understand that, for purposes determining whether a publication will qualify as prior art, the earliest date that the '184 patent could be entitled to is February 22, 2004.

7. I have reviewed the following publications:

- D.V. Mozgrin, *et al*, High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research, Plasma Physics Reports, Vol. 21, No. 5, pp. 400-409, 1995 ("Mozgrin" (Ex. 1003)).
- A. A. Kudryavtsev and V.N. Skerbov, Ionization relaxation in a plasma produced by a pulsed inert-gas discharge, Sov. Phys. Tech. Phys. 28(1), pp. 30-35, January 1983 ("Kudryavtsev" (Ex. 1004)).
- U.S. Pat. No. 6,413,382 ("Wang" (Ex. 1005)).
- D.V. Mozgrin, High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research, Thesis at Moscow Engineering Physics Institute, 1994 ("Mozgrin Thesis" (Ex. 1006)). Exhibit 1006 is a certified English translation of the original Mozgrin Thesis, attached as

Exhibit 1007. A copy of the catalogue entry for the Mozgrin Thesis at the Russian State Library is attached as Exhibit 1008.

8. I have read and understood each of the above publications. The disclosure of each of these publications provides sufficient information for someone to make and use the plasma generation and sputtering processes that are described in the above publications.

9. I have considered certain issues from the perspective of a person of ordinary skill in the art at the time the '184 patent application was filed. In my opinion, a person of ordinary skill in the art for the '184 patent would have found the '184 invalid.

10. I have been retained by Intel Corporation ("Intel" or "Petitioner") as an expert in the field of plasma technology. I am working as an independent consultant in this matter and am being compensated at my normal consulting rate of \$250.00/hour for my time. My compensation is not dependent on and in no way affects the substance of my statements in this Declaration.

11. I have no financial interest in the Petitioner. I similarly have no financial interest in the '184 patent, and have had no contact with the named inventor of the '184 patent.

**I. RELEVANT LAW**

12. I am not an attorney. For the purposes of this declaration, I have been informed about certain aspects of the law that are relevant to my opinions. My understanding of the law is as follows:

**A. Claim Construction**

13. I have been informed that claim construction is a matter of law and that the final claim construction will ultimately be determined by the Board. For the purposes of my invalidity analysis in this proceeding and with respect to the prior art, I have applied the broadest reasonable construction of the claim terms as they would be understood by one skilled in the relevant art.

14. I have been informed and understand that a claim in *inter partes* review is given the “broadest reasonable construction in light of the specification.” 37 C.F.R. § 42.100(b). I have also been informed and understand that any claim term that lacks a definition in the specification is therefore also given a broad interpretation.

**B. Obviousness**

15. I have been informed and understand that a patent claim can be considered to have been obvious to a person of ordinary skill in the art at the time the application was filed. This means that, even if all of the requirements of a

# 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.