By: Christopher Frerking (<a href="mailto:chris@ntknet.com">chris@ntknet.com</a>)
Reg. No. 42,557

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICRON TECHNOLOGY, INC., INTEL CORPORATION
AND GLOBALFOUNDRIES U.S., INC.

**Petitioners** 

V.

DANIEL L. FLAMM,

Patent Owner

CASE IPR2017-0392 U.S. Patent No. 5,711,849

## PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107

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



### **TABLE OF CONTENTS**

		Page(s)
TABLE	OF CONTENTS	i
TABLE	OF AUTHORITIES	ii
EXHIBI	T LIST	iii
I.	Introduction	1
II.	Overview of the '849 Patent	2
III.	Alkire and Kao Teach Away From Each Other and From the '849 Patent	3
IV.	Alkire Would Not Have Been Combined with Kao and Flamm	9
V.	Ground 1	9
	A. Claim Element [1.2]	11
	B. Claim Element [1.3]	14
	C. Claim 10	16
	D. Claim 20	17
	E. Claim 22	19
	F. Claim 26	21
VI.	Ground 2	22
VII.	Dependent Claims	22
VIII	Conclusion	23



## Inter Partes Review of U.S. Patent No. 5,711,849 IPR2017-00392

#### **TABLE OF AUTHORITIES**

<u>Cases</u>	Page(s)
Hartness Int'l Inc. v. Simplimatic Eng. Co., 819 F.2d 1100 (Fed. Cir. 1987)	22
Kimberly Clark Corp. v. Johnson & Johnson, 745 F.2d 1437 (Fed. Cir. 1984)	23
<u>Statutes</u>	Page(s)
37 C.F.R. § 42.107	1
MPEP § 2143.03	23



### **EXHIBIT LIST**

Ex. 2001	David Edelson and Daniel L. Flamm, <i>Computer Simulation of a CF</i> <sub>4</sub> <i>Plasma Etching Silicon</i> , 56 J. APPLIED PHYSICS 1522 (1984)
	I.C. Plumb and K.R. Ryan, A Model of the Chemical Processes
Ex. 2002	Occurring in $CF_4/O_2$ Discharges Used in Plasma Etching, 6
	Plasma Chem. and Plasma Processing 205 (1986)



Daniel L. Flamm, Sc.D., the co-inventor and sole owner of the U.S. Patent No. 5,711,849 ("the '849 patent"), through his counsel, submits this preliminary response pursuant to 37 C.F.R. § 42.107 and asks that the Patent Trial and Appeals Board decline to institute *inter partes* review on the instant petition because the petition fails to show a reasonable likelihood that any challenged claim is unpatentable.

#### I. Introduction

The Petition relies primarily on a combination of papers written by Alkire and Kao, and Flamm. Alkire relates specifically to a "mathematical model" formulated to analyze transient behavior during film removal for closely spaced wafers in a barrel plasma etching reactor. Alkire, however, even by the admission of the Petitioners, lacks the basic elements of Dr. Flamm's invention. To overcome the shortcomings of Alkire, Petitioners introduce Kao. Kao relates to analysis of non-uniformities in plasma etching of silicon with CF<sub>4</sub>/O<sub>2</sub>, which still fails to teach basic elements of Dr. Flamm's invention. That is, Kao is no more relevant than what has been disclosed as prior art by Dr. Flamm, and no PHOSITA would ever use the data from Kao for any model or application, especially since Kao could not get the data to fit his own model. A further combination of Flamm still lacks the basic elements of the '849 patent.



# 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.

