UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LAM RESEARCH CORP.,

Petitioner

v.

DANIEL L. FLAMM,

Patent Owner

U.S. Patent No. RE40,264 E

Issued: April 29, 2008

Named Inventor: Daniel L. Flamm

Title: MULTI-TEMPERATURE PROCESSING

DECLARATION OF JOSEPH L. CECCHI IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. RE40,264 E UNDER 37 C.F.R. § 1.68

DECLARATION FOR THIRD PETITION

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

LAM Exh 1008-pg. 1 Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

TABLE OF CONTENTS

Page

I.	INTRODUCTION		
II.	QUALIFICATIONS AND PROFESSIONAL EXPERIENCE 1		
III.	PERSON HAVING ORDINARY SKILL IN THE ART		
IV.	RELEVANT LEGAL STANDARDS 11		
V.	THE '264 PATENT		
	A.	Representative Claim 37	
	B.	The '264 Patent Disclosure	
		1. Multi-Temperature Etching	
		2. Substrate Holder and Heat Transfer Device	
		3. Temperature Sensor	
		4. Control System	
VI.	TECHNICAL BACKGROUND		
VII.	CLAIM CONSTRUCTION		
	A.	"portion of the film"	
	B.	"preselected time interval" and "preselected time period" 22	
VIII.	OPIN	NIONS RELATING TO EACH OF THE GROUNDS	
	A.	Ground 1: Claims 27, 31, and 32 Are Rendered Obvious by Hwang in View of Tegal, Matsumura, and Narita Under 35 U.S.C. § 103(a)	
		1. Hwang in View of Tegal, Matsumura, and Narita Teaches All the Limitations of Independent Claim 27	
		2. Chart for Claim 27	

IX.

Page 1

	3.	Hwang in View of Tegal, Matsumura, and Narita Teaches All the Limitations of Dependent Claims 31 and 32	
	4.	Chart for Claims 31 and 32	
	5.	Reasons for Combinability for Claims 27 and 32	
	6.	Reasons for Combinability for Claim 31 40	
В.	View	a)	
	1.	Nakamura in View of Tegal, Matsumura, and Narita Teaches All the Limitations of Claim 34	
	2.	Chart for Claim 34	
	3.	Reasons for Combinability for Claim 34 44	
C.	Ground 3: Claims 37, 40, 41, 44, 47, 48, and 50 are Rendered Obvious by Wang in View of Tegal, Matsumura and Narita Under 35 U.S.C. § 103(a)		
	1.	Wang in View of Tegal, Matsumura and Narita Teaches All the Limitations of Independent Claim 37	
	2.	Chart for Claim 37	
	3.	Wang in view of Tegal, Matsumura and Narita Teaches All the Limitations of Dependent Claims 40, 41, 44, 47, 48, and 50	
	4.	Chart for claims 40, 41, 44, 47, 48, and 50	
	5.	Reasons for Combinability for Claims 37, 40, 41, 44, 47, and 48	
	6.	Reasons for Combinability for Claim 5072	
CON	ICLUS	SION	

I, Joseph L. Cecchi, declare as follows:

I. INTRODUCTION

1. I am over 18 years of age and otherwise competent to make this Declaration.

I have been asked to provide my views regarding technical issues in connection with the above-captioned *inter partes* review of U.S. Patent No.
RE40,264 E ("the '264 patent"). I opine only with respect to certain issues that are discussed in this declaration.

II. QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

 I am currently Dean of the School of Engineering and Professor of Chemical and Biological Engineering at the University of New Mexico ("UNM").
This is my second term as Dean, and the term began in February 2014. I have held my appointment as Professor since joining UNM in 1994.

4. From 2011 to 2012, while on leave from UNM, I served as Provost and Professor of Engineering at the Masdar Institute of Science and Technology in Abu Dhabi, United Arab Emirates.

5. My first appointment as Dean of the School of Engineering extended from 2000 to 2009. From 2004 to 2011, I was Chair of the Board of Directors of the Science and Technology Corp. at UNM, the university's technology transfer organization responsible for patenting and licensing UNM's intellectual property. 6. From 1994 until 2000, I was Chair of the Department of Chemical and Nuclear Engineering at UNM. Previously, I was a Lecturer with the rank of Professor in the Department of Chemical Engineering at Princeton University, where I also directed the Graduate Program in Plasma Science and Technology. I was associated with the Plasma Physics Laboratory at Princeton University for twenty-one years, as leader of the Plasma Processing Group (1987-1994); Principal Research Physicist (1984-1994); leader of the Materials Physics Group (1979-1987); Research Physicist (1978-1984); and Staff Physicist (1972-1978).

7. From 1991 to 1994, I was Director of the New Jersey SEMATECH Center of Excellence for Plasma Etching. This organization, which involved four universities and one industrial laboratory, was engaged in state-of-the-art research in plasma processing for semiconductor manufacturing.

8. From 1992 to 2001, I worked on three committees established by the Semiconductor Industry Association ("SIA") to generate technology "roadmaps" for semiconductor manufacturing. Most recently, from 1998 to 2000, I was a member of the Interconnect Technical Working Group ("TWG") for the SIA International Technology Roadmap for Semiconductors ("ITRS").

9. I obtained my Ph.D. in physics from Harvard University in 1972. I also received a Master's degree in physics from Harvard University in 1969, a Bachelor's degree in physics from Knox College in 1968, and a Master's of

DOCKET A L A R M



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.