

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

DANIEL L. FLAMM,
Patent Owner.

PTAB Case No. IPR2017-00279
Patent No. RE40,264 E

**DECLARATION OF DR. JOHN BRAVMAN IN SUPPORT OF PETITION
FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. RE40,264
(Claims 13-26 and 64-65)**

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY OF TESTIMONY	1
A. Qualifications	1
1. Education	1
2. Career	2
3. Publications	4
4. Curriculum Vitae.....	5
B. Compensation.....	5
C. Materials Reviewed.....	5
D. Level of Ordinary Skill in the Art.....	8
II. OVERVIEW REGARDING TECHNOLOGY	10
A. Priority Date	10
1. The Challenged Independent Claim	11
2. The Disclosure of Application No. 08/567,224, Filed on December 4, 1995	11
B. State of the Art from the Perspective of a Person of Ordinary Skill in the Art of the Time of the Alleged Invention	14
1. In situ Multiple Temperature Processing.....	14
2. Designing Substrate Holders to Have a Selected Thermal Mass	18
C. Background and General Description of the '264 Patent	23
D. Claim Construction	29
1. "Selected thermal mass"	30
2. "The thermal mass of the substrate holder is selected for a predetermined temperature change within a specific in- terval of time"	31
III. OVERVIEW OF THE PRIOR ART	33
A. Standard for Invalidity.....	33

TABLE OF CONTENTS (continued)

	Page
B. Background on Muller	35
1. General overview of Muller.....	35
2. Summary of Muller.....	39
C. Reasons to combine Muller with Kadomura.....	39
D. Background on Matsumura	41
1. General overview of Matsumura	41
2. Summary of Matsumura	44
E. Reasons to combine Matsumura with Muller	44
F. Background on Kadomura	49
1. General overview of Kadomura.....	49
2. Summary of Kadomura.....	57
G. Reasons to combine Kadomura with Matsumura	57
H. Background on Anderson.....	61
1. General overview of Anderson	61
2. Summary of Anderson	63
I. Motivation to Combine Anderson with Muller and Matsumura	64
J. Motivation to Combine Anderson with Kadomura and Matsumura.....	66
K. Background on Hinman	68
1. General overview of Hinman.....	68
2. Summary of Hinman.....	71
L. Motivation to Combine Hinman with Muller, Matsumura and Anderson	71
M. Motivation to Combine Hinman with Kadomura, Matsumura and Anderson.....	74
N. Background on Kikuchi	77

TABLE OF CONTENTS (continued)

	Page
1. General overview of Kikuchi.....	77
2. Summary of Kikuchi	82
O. Reasons to combine Kikuchi with Muller and Matsumura.....	82
P. Reasons to combine Kikuchi with Kadomura and Matsumura	86
Q. Background on Moslehi '849	89
1. General overview of Moslehi '849	89
2. Summary of Moslehi '849	91
R. Motivation to Combine Moslehi '849 with Muller, Matsumura and Anderson.....	91
S. Motivation to Combine Moslehi '849 with Kadomura, Matsumura and Anderson	93
T. Background on Wright (A Closed Loop Temperature Control System for a Low-Temperature Etch Chuck)	95
1. General overview of Wright	95
2. Summary of Wright	100
U. Motivation to Combine Wright with Muller, Matsumura and Anderson	100
IV. MULLER, MATSUMURA, ANDERSON, HINMAN, KIKUCHI, WRIGHT AND MOSLEHI '849 RENDERED CLAIMS 13-26 AND 64-65 OBVIOUS	102
A. Muller, Matsumura, Anderson and Hinman rendered claim 13 obvious	103
1. Muller disclosed what is recited in the preamble of claim 13	103
2. Muller in view of Anderson disclosed claim 13, limitation [a]	103
3. Muller in view of Matsumura disclosed claim 13, limitation [b].....	108

TABLE OF CONTENTS (continued)

	Page
4. Muller in view of Matsumura disclosed claim 13, limitation [c]	114
5. Muller in view of Matsumura disclosed claim 13, limitation [d]	117
6. Muller disclosed claim 13, limitation [e]	118
7. Muller, Matsumura, Anderson and Hinman disclosed claim 13, limitation [f]	119
B. Muller, Matsumura, Anderson and Hinman rendered claim 14 obvious	127
C. Muller, Matsumura, Anderson and Hinman rendered claim 15 obvious	130
D. Muller, Matsumura, Anderson and Hinman rendered claim 16 obvious	133
E. Muller, Matsumura, Anderson, Hinman and Kikuchi rendered claim 17 obvious	135
F. Muller, Matsumura, Anderson and Hinman rendered claim 18 obvious	136
G. Muller, Matsumura, Anderson and Hinman, alone or further in view of Wright rendered claim 19 obvious	137
H. Muller, Matsumura, Anderson and Hinman further in view of Wright rendered claim 20 obvious	142
I. Muller, Matsumura, Anderson and Hinman rendered claim 21 obvious	144
J. Muller, Matsumura, Anderson and Hinman rendered claim 22 obvious	146
K. Muller, Matsumura, Anderson and Hinman rendered claim 23 obvious	147
L. Muller, Matsumura, Anderson and Hinman in view of Moslehi '849 rendered claim 24 obvious	149

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.