

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. IPR2017-00281
Patent No. RE40,264 E

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. RE40,264 E**

Claims 37-50 & 67

TABLE OF CONTENTS

	Page
I. Introduction.....	1
II. Mandatory notices	2
A. Real party in interest.....	2
B. Related matters	2
C. Notice of counsel and service information.....	2
III. Requirements for <i>inter partes</i> review	4
A. Ground for standing	4
B. Identification of challenge.....	5
IV. Overview of the '264 patent	5
A. The claims recite two-temperature etch processes and add only conventional features.....	7
B. The earliest priority date for the '264 patent is September 1997.....	9
V. Overview of the prior art	10
A. Kadomura (Ex. 1005).....	11
B. Matsumura (Ex. 1003).....	12
C. Kikuchi (Ex. 1004).....	16
D. Muller (Ex. 1002).....	18
E. Moslehi '824 (Ex. 1010)	20
F. Oka (Ex. 1011)	23
G. Level of ordinary skill in the art.....	24
VI. Claims 37-50 and 67 of the '264 patent are unpatentable.....	24
A. Ground 1: Claims 37-46 are obvious over Kadomura and Matsumura.....	25
1. Claim 37.....	25
2. Claim 38.....	40
3. Claim 39.....	40
4. Claim 40.....	41

TABLE OF CONTENTS
(continued)

	Page
5. Claim 41	45
6. Claim 42	46
7. Claim 43	46
8. Claim 44	47
9. Claim 45	48
10. Claim 46	49
B. Ground 2: Claims 40, 42, 45, 49, and 67 are obvious over Kadomura, Matsumura, and Muller	49
1. Claim 37	49
2. Claim 40	49
3. Claim 42	51
4. Claim 45	52
5. Claim 49	53
6. Claim 67	55
C. Ground 3: Claim 50 is obvious over Kadomura, Matsumura, and Kikuchi	56
1. Claim 37	56
2. Claim 50	56
D. Ground 4: Claims 37-46, 50, and 67 are obvious over Kikuchi and Matsumura	58
1. Claim 37	58
2. Claim 38	67
3. Claim 39	67
4. Claim 40	67
5. Claim 41	70
6. Claim 42	71
7. Claim 43	72

..

TABLE OF CONTENTS
(continued)

	Page
8. Claim 44	73
9. Claim 45	73
10. Claim 46	74
11. Claim 50	74
12. Claim 67	76
E. Ground 5: Claims 41 and 49 are obvious over Kikuchi, Matsumura, and Muller	76
1. Claim 37	76
2. Claim 41	76
3. Claim 49	78
F. Ground 6: Claims 37 and 47-48 are obvious over Moslehi '824, Matsumura, and Oka	81
1. Claim 37	81
2. Claim 47	93
3. Claim 48	94
VII. Conclusion	94

...

EXHIBIT LIST AND TABLE OF ABBREVIATIONS AND CONVENTIONS

Petitioner's Exhibits	
Exhibit	Description
Ex. 1001	U.S. Patent No. RE40,264 (“’264 patent”)
Ex. 1002	U.S. Patent No. 5,605,600 (“Muller”)
Ex. 1003	U.S. Patent No. 5,151,871 (“Matsumura”)
Ex. 1004	U.S. Patent No. 5,226,056 (“Kikuchi”)
Ex. 1005	U.S. Patent No. 6,063,710 (“Kadomura”)
Ex. 1006	Declaration of Dr. John Bravman in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. RE40,264
Ex. 1007	U.S. Patent Application No. 08/567,224 (“’224 application”)
Ex. 1008	Wright, D.R. et al., <i>A Closed Loop Temperature Control System for a Low-Temperature Etch Chuck</i> , <i>Advanced Techniques for Integrated Processing II</i> , Vol. 1803 (1992), pp. 321–329 (“Wright”)
Ex. 1009	U.S. Patent No. 5,711,849 (“’849 patent”)
Ex. 1010	U.S. Patent No. 5,446,824 (“Moslehi ’824”)
Ex. 1011	U.S. Patent No. 6,235,563 (“Oka”)
Ex. 1012	U.S. Patent No. 5,628,871 (“Shinagawa”)
Ex. 1013	U.S. Patent No. 5,393,374 (“Sato”)
Ex. 1014	PTAB Decision Denying Institution of <i>Inter Partes</i> Review, <i>Lam Research Corp. v. Daniel L. Flamm</i> , IPR2016-00470, Paper 6 (July 1, 2016)

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.