

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

~~INTEL CORPORATION, GLOBALFOUNDRIES U.S., INC.,~~

~~AND MICRON TECHNOLOGY, INC.,~~

~~Petitioners,~~

SAMSUNG ELECTRONICS COMPANY, LTD.

Petitioner

v.

DANIEL L. FLAMM,

Patent Owner.

---

~~PTAB Case No. IPR2017-00280~~

Patent No. RE40,264 E

---

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

~~Claims 27-36, 51-55, 66 & 68-69~~

# 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 .....	6
	A. The specification describes multi-temperature etch processes .....	6
	B. The claims recite two-temperature etch processes and add only conventional features.....	8
	C. The earliest priority date for the '264 patent is September 1997.....	9
V.	Overview of the prior art .....	11
	A. Kadomura (Ex. 1005).....	12
	B. Matsumura (Ex. 1003).....	13
	C. Kikuchi (Ex. 1004).....	16
	D. Muller (Ex. 1002).....	19
	E. Level of ordinary skill in the art.....	21
VI.	Claims 27-36, 51-55, 66, and 68-69 of the '264 patent are unpatentable.....	22
	A. Ground 1: Claims 27, 29, 32, 34, 36, and 66 are obvious over Kadomura and Matsumura .....	22
	1. Claim 27.....	22
	2. Claim 29.....	36
	3. Claim 32.....	36
	4. Claim 34.....	37
	5. Claim 36.....	37

## TABLE OF CONTENTS

(continued)

	<u>Page</u>
6. Claim 66 .....	38
B. Ground 2: Claims 31 and 35 are obvious over Kadomura, Matusmura, and Kikuchi .....	38
1. Claim 27 .....	38
2. Claim 31 .....	39
3. Claim 35 .....	42
C. Ground 3 .....	42
1. Claim 27 .....	42
2. Claim 28 .....	42
3. Claim 30 .....	44
4. Claim 33 .....	47
5. Claim 51 .....	47
6. Claim 52 .....	52
7. Claim 53 .....	53
8. Claim 54 .....	54
9. Claim 55 .....	55
10. Claim 68 .....	57
11. Claim 69 .....	58
D. Ground 4 .....	58
1. Claim 27 .....	58
2. Claim 28 .....	70
3. Claim 31 .....	71
4. Claim 32 .....	73
5. Claim 33 .....	73
6. Claim 34 .....	74
7. Claim 35 .....	75
8. Claim 36 .....	75

**TABLE OF CONTENTS**  
**(continued)**

	<b><u>Page</u></b>
9. <del>Claim 51</del> .....	75
10. <del>Claim 52</del> .....	79
11. <del>Claim 53</del> .....	80
12. <del>Claim 54</del> .....	81
13. <del>Claim 66</del> .....	81
14. <del>Claim 68</del> .....	82
15. <del>Claim 69</del> .....	82
E. <del>Ground 5: Claims 29-30, 34, 55, and 68 are obvious over Kikuchi, Matsumura, and Muller</del> .....	82
1. <del>Claim 27</del> .....	82
2. <del>Claim 29</del> .....	82
3. <del>Claim 30</del> .....	84
4. <del>Claim 34</del> .....	86
5. <del>Claim 51</del> .....	88
6. <del>Claim 55</del> .....	88
7. <del>Claim 68</del> .....	90
VII. <del>Conclusion</del> .....	90

**TABLE OF CONTENTS**  
**(continued)**

**Page**

# 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.