

By: Christopher Frerking (chris@ntknet.com)
Reg. No. 42,557

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION, GLOBALFOUNDRIES U.S., INC.,
MICRON TECHNOLOGY, INC., AND
SAMSUNG ELECTRONICS COMPANY, LTD.,

Petitioners

v.

DANIEL L. FLAMM,

Patent Owner

CASE IPR2017-00280¹
U.S. Patent No. RE40,264 E

PATENT OWNER'S RESPONSE
UNDER 37 C.F.R. § 42.107
Claims 27-36, 51-55, 66 & 68-69

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

¹ Samsung Electronics Company, Ltd. Was joined as a party to this proceeding via a Motion for Joinder in IPR2017-01750.

TABLE OF CONTENTS

	<u>Page(s)</u>
TABLE OF CONTENTS.....	i
TABLE OF AUTHORITIES	ii
I. Introduction	1
II. Overview of the '264 Patent.....	2
III. The Prior Art.....	3
A. Kadomura.....	3
B. Matsumura.....	6
IV. Kadomura and Matsumura Do Not Render Claims 27 and 51 Obvious.....	7
V. Petitioners' Fail to Articulate any Benefit from Combining Matsumura with Kadomura	10
VI. Petitioners' Fail to Articulate any Motivation for Combining Matsumura with Kadomura	14
VII. Petitioners Have Failed to Prove Obviousness.....	17
VIII. Some Further Observations on Kadomura and Matsumura	18
IX. Ground 4 Kikuchi and Matsumura Do Not Render Claims 27 and 51 Obvious.....	19
1. Neither Kikuchi nor Matsumura teaches claim element 27[a]	19

2.	The Petition does not specify any prior art for claim element 27 [e]	21
3.	The PTAB must make a finding of a motivation to combine when it is disputed.	21
4.	None of the defects in the Petition can be cured by Petitioners’ Reply	21
X.	The Dependent Claims are Not Invalid	22
XI.	Conclusion	23

TABLE OF AUTHORITIES

<u>Cases</u>	<u>Page(s)</u>
<i>Hartness Int’l Inc. v. Simplimatic Eng. Co.</i> , 819 F.2d 1100 (Fed. Cir. 1987).....	22
<i>In Re Fine</i> 837 F.2d 1071 (Fed. Cir. 1988).....	23
<i>In Re: Nuvasive, Inc.</i> , 842 F.3d 1376 (Fed. Cir. 2016).....	12,15, 16, 17
<i>Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.</i> , 821 F.3d 1359 (Fed.Cir.2016).....	21
<i>Kimberly Clark Corp. v. Johnson & Johnson</i> , 745 F.2d 1437 (Fed. Cir. 1984).....	23
<i>KSR Int’l Co. v. Teleflex, Inc.</i> , 550 U.S. 398 (2007)	15, 17
<i>Office Patent Trial Practice Guide</i> , 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012).....	22
<u>Statutes</u>	<u>Page(s)</u>
37 C.F.R. § 42.104(b)(4).....	20, 21
37 C.F.R. § 42.107.....	1
35 U.S.C. 103(a)	23
MPEP § 2143.03	23

COMES NOW Patent Owner, Daniel L. Flamm, Sc.D., the sole inventor and owner of the U.S. Patent No. RE40,264 (“the ‘264 patent”), through his counsel, submits this response pursuant to 37 C.F.R. § 42.107 and asks that the Patent Trial and Appeals Board confirm the patentability of independent claims 27 and 51 and all their dependent claims.

I. Introduction

This response addresses the two independent claims, 27 and 51, and their dependent claims that are the subject of the institution Order. The Board ruled that these claims would have been obvious “using Matsumura’s control “recipes” in Kadomura’s dry etching apparatus and method” (Decision p. 22), and by combining Kikuchi with Matsumura (*Id.* p. 34).

The obviousness issue revolves around the claim limitation, changing the temperature “within a preselected time interval,” specifically:

wherein substrate temperature is changed from the selected first substrate temperature to the selected second substrate temperature, using a measured substrate temperature, within a preselected time interval for processing. . . .

(Claim 27 Ex. 1001 at 22:22-28.)

The substrate temperature control effectuates the change from the first substrate temperature to the second substrate temperature within a preselected time period

(Claim 51, *Id.* 24:23-26)

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.