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UNITED STATES PATENT AND TRADEMARK OFFICE

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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 IPR2017-00281¹ U.S. Patent No. RE40,264 E

PATENT OWNER'S RESPONSE UNDER 37 C.F.R. § 42.107 Claims 37-50 & 67

Mail Stop: PATENT BOARD
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¹ Samsung Electronics Company, Ltd. Was joined as a party to this proceeding via a Motion for Joinder in IPR2017-01751.



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IX.	Ground 4 Kikuchi and Matsumura Do Not Render Claims 27 and Obvious	
1.	Neither Kikuchi nor Matsumura teaches claim element 27[a]	
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2.	The Petition does not specify any prior art for claim element 27	



Inter Partes Review of U.S. Patent No. RE40,264 IPR2017-00281

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3.	The PTAB must make a finding of a motivation to combine when it is disputed.	
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4.	None of the defects in the Petition can be cured by Petitioners' Reply	
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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 37 and all its dependent claims.

I. Introduction

This response addresses the independent claim, 37 and its dependent claims that are the subject of the institution Order. The Board ruled that these claims would have been obvious by combining Matsumura and Kadomura (Decision p. 22), and by combining Kikuchi with Matsumura (*Id.* p. 32).

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

the substrate temperature control circuit is operable to change the substrate temperature from the selected first substrate temperature to the selected second substrate temperature within a preselected time period to process the film.

(Claim 37 Ex. 1001 at 22:22-28.)

II. Overview of the '264 Patent

The '264 patent describes methods of fabricating semiconductors, preferably using a plasma discharge. Multiple substrate temperatures are employed in a



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