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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Taiwan Semiconductor Manufacturing Company, Ltd.

Petitioner

V.

Godo Kaisha IP Bridge 1

Patent Owner

Patent No. 7,126,174 Filing Date: November 24, 2004 Issue Date: October 24, 2006

Title: SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

Inter Partes Review No. IPR2016-01247

DECLARATION OF DR. SANJAY KUMAR BANERJEE, PH.D. IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 7,126,174



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I, Dr. Sanjay Kumar Banerjee, Ph.D., declare as follows:

I. Introduction

- 1. My name is Dr. Sanjay Kumar Banerjee. I have been asked to submit this declaration on behalf of Taiwan Semiconductor Manufacturing Company, Ltd. ("TSMC" or "Petitioner") in connection with a petition for *inter partes* review of U.S. Patent No. 7,126,174 ("the '174 patent"), which I have been told is being submitted to the Patent Trial and Appeal Board of the United States Patent and Trademark Office by TSMC.
- 2. I have been retained as a technical expert by TSMC to study and provide my opinions on the technology claimed in, and the patentability or non-patentability of, claims 1, 4, 5, 8–12, 14, and 16 in the '174 patent ("the Challenged Claims").
- 3. I understand the '174 patent is related to U.S. Patent Nos. 6,967,409 (the '409 patent), 6,709,950 (the '950 patent), and 6,281,562 (the '562 patent) and also claims the benefit of priority to two Japanese applications, JP 7-192181, which was filed on July 27, 1995, and JP 7-330112, which was filed on December 19, 1995.



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