UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., Petitioner,

v.

GODO KAISHA IP BRIDGE 1, Patent Owner.

> Case No. IPR2016-01378 Patent Number 6,197,696

Before JUSTIN T. ARBES, MICHAEL J. FITZPATRICK, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

DECLARATION OF ALEXANDER GLEW, Ph.D.

IP Bridge Exhibit 2009

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	1. The exclusion of using two layers having flush edges as a mask is inconsistent with the understanding of a skilled person in view of the disclosure of the '696 patent and the '371 application27			
	2. The exclusion of using two layers having flush edges as a mask is inconsistent with the plain and ordinary meaning in view of the disclosure of the '696 patent and the '371 application as understood by a person of ordinary skill in the art			
VII. Grill Is Not Prior Art to the '696 Patent				
A. Claim 13 of the '696 Patent is fully supported by the foreign priority document and is entitled to the claimed March 28, 1998 priority date				
	1. Claim 13 (Preamble) – "A method for forming an interconnection structure, comprising the steps of:"			
	 Claim 13 (step a) – "forming a first insulating film over lower-level metal interconnects;"			
	3. Claim 13 (step b) – "forming a second insulating film, having a different composition than that of the first insulating film, over the first insulating film;"			

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10. Claim 13 (step i) – "dry-etching the second insulating film using the patterned third insulating film as a mask, thereby patterning the second insulating film to have the openings for forming contact holes;"	2
11. Claim 13 (step j)– "dry-etching the patterned third insulating film and the first insulating film using the mask pattern and the patterned second insulating film as respective masks, thereby forming wiring grooves and contact holes in the patterned third insulating film and the first insulating film, respectively;"	5
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1. Grill teaches away from incorporating processes that carbon based compounds to wet etching or photoresist st and ashing steps	tripping,
2. Grill teaches away from incorporating processes that thick resist over via holes	
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I, Dr. Alexander Glew, Ph.D., hereby declare under penalty of perjury under the laws of the United States of America:

I. **Qualifications**

1. I am currently President of Glew Engineering Consulting, Inc. ("Glew Engineering") of Mountain View, California. Glew Engineering provides consulting and engineering services relating to various technology or engineering areas, including CVD technology. My responsibilities at Glew Engineering include acting as a consultant and as a principal managing the company.¹

2. I received a Bachelors of Science degree in Mechanical Engineering from University of California, Berkeley in 1985; a Master of Science degree in Mechanical Engineering from University of California, Berkeley in 1987; a Master of Science in Materials Science and Engineering from Stanford University in 1995. I later also obtained a Doctor of Philosophy degree in Materials Science and Engineering from Stanford University in 2003. A copy of my Curriculum Vitae is attached to this report as **Attachment A**.

¹ All emphasis and annotations added unless otherwise noted. A list of exhibits considered is attached to this Declaration as **Attachment B**. Citations to the exhibits in this declaration are exemplary and are not meant to be limiting.

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