# 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. IPR2016-01377 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.



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	mask is inconsistent with the understanding of a skilled person in view of the disclosure of the '696 patent and the '371 application.  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.	
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13. Claim 10 (step l)— "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 the wiring grooves and the contact holes in the patterned	



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		third insulating film and the first insulating film, respectively; and"	58
		14. Claim 10 (step m) – "filling in the wiring grooves and the contact holes with a metal film, thereby forming upper-level metal interconnects and contacts connecting the lower- and upper-level metal interconnects together."	61
	B. document	Claim 11 of the '696 Patent is fully supported by the foreign priority and is entitled to the claimed March 28, 1998 priority date	
	C. priority da	Petitioner has not shown and cannot show that Grill is entitled to the ate of the Grill Provisional	
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	A. dual-relie:	Petitioner's proposed modification of Grill eliminates Grill's use of f patterns to form dual-relief cavities	
	B. control ov	Petitioner's proposed modifications of Grill would eliminate Grill's ver its wiring dimensions	
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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. <sup>1</sup>
- 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**.



<sup>&</sup>lt;sup>1</sup> 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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