# Filed on behalf of Godo Kaisha IP Bridge 1

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### UNITED STATES PATENT AND TRADEMARK OFFICE

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## BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED, Petitioner,

v.

GODO KAISHA IP BRIDGE 1, Patent Owner.

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Case IPR2016-01249 U.S. Patent No. 6,538,324

# PATENT OWNER'S CURRENT EXHIBIT LIST (As of March 7, 2017)

Mail Stop PATENT BOARD, PTAB Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450



# PATENT OWNER'S CURRENT EXHIBIT LIST (As of March 7, 2017)

Exhibit No.	Description	Newly Submitted
2001	Chang, C.C., Chen, J.S. and Hsu, W.S., "Failure Mechanism of Amorphous and Crystalline Ta-N Films in the Cu/Ta N/Ta/SiO2 Structure." <i>Journal of The Electrochemical Society</i> , <b>151</b> (11), pp.G746-G750 (2004).	
2002	U.S. Patent Application No. 08/995,108, Amendment "A" Under 37 C.F.R. §1.111, dated February 1, 2000.	
2003	"Amorphous." Merriam-Webster.com. Accessed September 30, 2016. http://www.merriam-webster.com/dictionary/amorphous.	
2004	"Nitride." Merriam-Webster.com. Accessed September 30, 2016. http://www.merriam-webster.com/dictionary/nitride.	
2005	Expunged	
2006	Expunged	
2007	Expunged	
2008	Guralnik, D. B., ed. "Amorphous." Def. 4.  Webster's New World Dictionary of the American  Language. Modern desk ed. Prentice Hall Press, 1979. Print.	Х
2009	Grant, J., ed. "Nitride." <i>Hackh's Chemical Dictionary</i> . 4th ed. McGraw-Hill, 1969. Print.	х
2010	Sienko, M.J., Plane, R.A. <i>Chemistry</i> . 2d ed. New York, McGraw-Hill, 1961, pp. 193-195. Print.	х



Exhibit No.	Description	Newly Submitted
2011	Declaration of Harlan Rusty Harris, Ph.D.	X
2012	MPEP, 2111.03 Transitional Phrases [R-08.2012].	Х
2013	Claim Construction Memorandum And Order, November 9, 2016, pp. 31-32 ( <i>Godo Kaisha IP Bridge 1 v. Broadcom Limited et al.</i> , USDC EDTEX 2:16-cv-00134-JRG-RSP).	х
2014	JP H08-139092A.	X
2015	English translation of JP H08-139092A.	X
2016	JP H08-250596A.	X
2017	English translation of JP H08-250596A.	X
2018	JP H08-274098A.	X
2019	English translation of JP H08-274098A.	X
2020	JP H09-64044A.	X
2021	English translation of JP H09-64044A.	X
2022	JP H09-293690A.	X
2023	English translation of JP H09-293690A.	X
2024	JP H10-125627A.	X
2025	English translation of JP H10-125627A.	Х
2026	JP H10-256256A.	Х
2027	English translation of JP H10-256256A.	Х
2028	JP H10-330938A.	Х



Exhibit No.	Description	Newly Submitted
2029	English translation of JP H10-330938A.	X
2030	JP H11-67686A.	X
2031	English translation of JP H11-67686A.	X
2032	D. Denning, et al., "An Inlaid CVD Cu Based Integration for Sub 0.25mum Technology." 1998 Symposium on VLSI Technology Digest of Technical Papers, 1998, pp. 22-23.	X
2033	K. Kwon, et al., "Characteristics of Ta As An Underlayer for Cu Interconnects." Advanced Metallization and Interconnect Systems for ULSI Applications in 1997, 1998, pp. 711-716.	X
2034	N. Awaya, "Semiconductor World." Feb. 1998, pp. 91-96 ("Awaya").	X
2035	English translation of Awaya.	X
2036	Grant, J., ed. "Solid Solution." <i>Hackh's Chemical Dictionary</i> . 4th ed. McGraw-Hill, 1969. Print.	X
2037	Declaration of Harlan Rusty Harris, Ph.D. In Support Of Patent Owner's Motion To Amend.	X
2038	Declaration of Rumiko Whitehead.	X
2039	U.S. Patent No. 6,346,745 to Nogami et al.	X
2040	U.S. Patent No. 6,156,647 to Hogan.	X
2041	U.S. Patent No. 6,139,699 to Chiang et al.	X
2042	Min, K. H. et al., "Comparative study of tantalum and tantalum nitrides (Ta2N and TaN) as a diffusion barrier for Cu metallization." <i>Journal of Vacuum Science &amp; Technology B: Microelectronics and</i>	х



Exhibit No.	Description	Newly Submitted
	Nanometer Structures Processing, Measurement, and Phenomena, 14(5), pp. 3263-3269 (1996).	

Dated: March 7, 2017 Respectfully submitted by:

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