UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
APPLIED MATERIALS, INC.
Petitioner
V.
DEMARAY LLC Patent Owner
Case IPR2021-00104 Patent No. 7,381,657





LIST OF EXHIBITS

Ex. No.	Description	Previously Submitted
Ex. 1001	U.S. Patent No. 7,381,657	X
Ex. 1002	Declaration of Dr. Vivek Subramanian	X
Ex. 1003	Curriculum Vitae of Dr. Vivek Subramanian	X
Ex. 1004	Prosecution History of U.S. Patent No. 7,381,657	X
Ex. 1005	U.S. Patent No. 6,342,134 to Barber et al.	X
Ex. 1006	U.S. Patent No. 6,485,602 to Hirose	X
Ex. 1007	U.S. Patent No. 5,651,865 to Sellers	X
Ex. 1008	A. Belkind et al., Pulsed-DC reactive sputtering of dielectrics: Pulsing parameter effects (2000)	X
Ex. 1009	U.S. Patent No. 4,464,223 to Gorin	X
Ex. 1010	U.S. Patent No. 6,132,564 to Licata	X
Ex. 1011	U.S. Patent No. 5,942,089 to Sproul	X
Ex. 1012	U.S. Patent No. 6,352,629 to Wang	X
Ex. 1013	S. Gibilisco, Handbook of Radio & Wireless Technology (1999)	X
Ex. 1014	J. Joo, Low-temperature polysilicon deposition by ionized magnetron sputtering (2000)	X
Ex. 1015	B. Chapman, Glow Discharge Processes	X
Ex. 1016	U.S. Patent No. 4,579,618 to Celestino	X
Ex. 1017	International Publication No. WO 02/23588 to Quon	X
Ex. 1018	International Publication No. WO 01/6300 to Johnson	X



Ex. No.	Description	Previously
Lin 100	D escription	Submitted
Ex. 1019	U.S. Patent No. 6,695,954 to Hong	X
Ex. 1020	U.S. Patent No. 6,153,068 to Ohmi	X
Ex. 1021	U.S. Patent No. 4,846,920 to Keller	X
Ex. 1022	U.S. Patent No. 6,911,351 to Kidoguchi	X
Ex. 1023	U.S. Patent No. 5,302,882 to Miller	X
Ex. 1024	Pinnacle Plus+ 10KW (325-650 Vdc) Master/Slave AE Bus, DeviceNet, MDXL User, UHF Output User Manual (March 2005)	X
Ex. 1025	The Advanced Energy MDX Magnetron Drive, Advanced Energy Industries, Inc. (March 1993)	X
Ex. 1026	Pinnacle 10x6 kW DeviceNet, MDXL User 5702063-C, User Manual, (May 2000)	X
Ex. 1027	U.S. Patent Publication No. 2002/0027249 A1 to Takemura	X
Ex. 1028	U.S. Patent Publication No. 2002/0144889 to Tao	X
Ex. 1029	E. Dogheche, Growth and optical characterization of aluminum nitride thin films deposited on silicon by radio-frequency sputtering, Applied Physics Letters (1999)	X
Ex. 1030	U.S. Patent No. 6,506,686 to Masuda	X
Ex. 1031	K. Nam, A study on the high rate deposition of CrN films with x controlled microstructure by magnetron sputtering, Surface & Coatings Technology (2000)	X
Ex. 1032	D. Mattox, Handbook of Physical Vapor Deposition (PVD) Processing – Film Formation, Adhesion, Surface Preparation and Contamination Control (1998)	X
Ex. 1033	U.S. Patent No. 5,830,327 to Kolenkow	X
Ex. 1034	U.S. Patent Publication No. 2001/0041252 to Laird	X



Ex. No.	Description	Previously
	_ = ===================================	Submitted
Ex. 1035	M. Ruske, <i>Properties of SiO</i> ₂ and Si ₃ N ₄ layers deposited	X
	by MF twin magnetron sputtering using different target	
	materials, Thin Solid Films (1999)	
Ex. 1036	W. Sproul, <i>High-rate reactive DC magnetron sputtering</i>	X
	of	
Ex. 1037	oxide and nitride superlattice coatings (1998) U.S. Patent Publication No. 2003/0029563 to Kaushal	X
EX. 103/	U.S. Patent Publication No. 2003/0029303 to Kaushai	Λ
Ex. 1038	U.S. Patent No. 6,627,323 to Nagaraj	X
F 1020		V
Ex. 1039	I. Safi, A novel reactive magnetron sputtering technique for producing insulating oxides of metal alloys and	X
	other compound thin films (2000)	
Ex. 1040	U.S. Patent No. 6,001,227 to Pavate	X
LA. 10-10	0.5.1 atent 1.0. 0,001,227 to 1 avate	71
Ex. 1041	S. Wolf et al., Silicon Processing for the VLSI Era, Vol.	X
	1 (2000)	
Ex. 1042	Declaration of Dr. Ingrid Hsieh-Yee	X
Ex. 1043	U.S. Patent Publication No. 2001/0031383 to Sakawaki	X
Ex. 1044	U.S. Patent No. 4,895,631 to Wirz	X
Ex. 1045	U.S. Patent No. 7,041,391 to Ando	X
Ex. 1046	U.S. Patent No. 6,657,260 to Yamazaki	X
Ex. 1047	A. Billard, Low-frequency modulation of pulsed d.c. or	X
	r.f. discharges for controlling the reactive magnetron	
	sputtering process, Surface & Coatings Technology	
	(1996)	
Ex. 1048	P. Kelly, The deposition of aluminum oxide coatings by	X
T 1040	reactive unbalanced magnetron sputtering (1996)	37
Ex. 1049	U.S. Patent No. 7,247,227 to Hanson	X
Ex. 1050	U.S. Patent No. 7,391,072 to Forbes	X
Ex. 1051	International Publication No. WO 96/06203 to O'Brien	X



Ev. No	Description	
Ex. No.	Description	Previously Submitted
Ex. 1052	File History of U.S. Patent No. 7,378,356	X
LA. 1032	1 he Thistory of C.S. 1 atent 100. 7,576,550	Α
Ex. 1053	Applied Physics Letters, Vol. 74, No. 9 (March 1, 1999)	X
	Webpages	
	https://aip.scitation.org/toc/apl/74/9?size=all∧	
	https://aip.scitation.org/doi/10.1063/1.123501 (visited	
	Sept. 2020)	
T 1051	VIG D 7.221.210 7.4	**
Ex. 1054	U.S. Patent No. 5,331,218 to Moody	X
Ex. 1055	Overall Revision of the Rules Regarding Industrial	X
	Scientific and Medical (ISM) Equipment, 50 Fed. Reg.	
	36,061 (September 5, 1985)	
Ex. 1056	U.S. Patent No. 6,409,965 to Nagata	X
Ex. 1057	U.S. Patent No. 6,284,110 to Sill	X
Ex. 1058	U.S. Patent No. 5,148,133 to Zennamo	X
Ex. 1059	P. Kelly et al., Reactive pulsed magnetron sputtering	X
	process for alumina films (2000)	
Ex. 1060	U.S. Patent Application No. 09/145,323 to Miller et al.	X
Ex. 1061	U.S. Patent No. 4,960,651 to Pettigrew	X
Ex. 1062	Pinnacle 20 kW DeviceNet, MDXL User 5702199-A,	X
	User Manual, (April 2001)	
Ex. 1063	U.S. Patent No. 6,010,583 to Annavarapu	X
Ex. 1064	RESERVED	
Ex. 1065	Pinnacle Plus Pulsed DC Power Supply Data Sheet	X
	(April 1999)	
Ex. 1066	Advanced Energy Industries, Inc. SEC 10-K (2000)	X
Ex. 1067	Pinnacle Plus 10kW User 5702269-B, User Manual, (June 2002)	X
Ex. 1068	Japanese Patent Publication No. JPH10102247A to	X
EA. 1008	Aokura and certified English translation of	Λ
	JPH10102247A	
	VI IIIVIVAZTIII	



DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

