

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

MICRON TECHNOLOGY, INC., AND MICRON MEMORY JAPAN, INC.,  
Petitioners

v.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
Patent Owner

---

Case: IPR2015-01087  
U.S. Patent No. 6,057,221

---

**MICRON TECHNOLOGY, INC.'S AND MICRON MEMORY  
JAPAN, INC.'S MOTION FOR *PRO HAC VICE* ADMISSION OF  
THOMAS R. MAKIN UNDER 37 C.F.R. § 42.10(c)**

Mail Stop PATENT BOARD  
Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
*Submitted Electronically via the Patent Review Processing System*

**TABLE OF EXHIBITS**

<b>Exhibit #</b>	<b>Exhibit Description</b> (Citation is to page, column, or paragraph in original, except for Exhibits 1009, for which citation is to inserted page number)
1001	Declaration of Dr. Michael Thomas
1002	Curriculum Vitae of Dr. Michael Thomas
1003	U.S. Patent No. 6,057,221
1004	File History for U.S. Patent No. 6,057,221
1005	<i>The New IEEE Standard Dictionary of Electrical and Electronic Terms, Fifth Ed.</i> , Institute of Electrical and Electronics Engineers, Inc., New York (1993)
1006	Japan Pat. Appl. Publ. No. 8-213465 to Koyou (including English translation and supporting declaration)
1007	Japan Pat. Appl. Publ. No. 6-244285 to Wada, et al. (including English translation and supporting declaration)
1008	U.S. Patent No. 5,729,042 to Lou et al.
1009	U.S. Patent Application No. 514,800 filed August 14, 1995 (to which U.S. Pat. No. 5,729,042 claims priority)
1010	U.S. Patent No. 5,025,300 to Billig et al.
1011	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Request for <i>Ex Parte</i> Reexamination filed March 30, 2011
1012	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Corrected Pre-amendment under 35 C.F.R. 1.530 filed April 14, 2011
1013	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Order Granting Request for <i>Ex Parte</i> Reexamination filed June 23, 2011
1014	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Non-Final Office Action of January 26, 2012

1015	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Request for Reconsideration filed March 26, 2012
1016	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Declaration of Dr. Bernstein filed March 26, 2012 (including exhibits)
1017	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Notice of Intent to Issue <i>Ex Parte</i> Reexamination Certificate of July 11, 2012
1018	“Thermal Conductivity of Metals,” The Engineering ToolBox, <a href="http://www.engineeringtoolbox.com/thermal-conductivity-metals-d_858.html">http://www.engineeringtoolbox.com/thermal-conductivity-metals-d_858.html</a> (last visited April 1, 2015)
1019	Pierson, <i>Handbook of Refractory Carbides and Nitrides: Properties, Characteristics, Processing, and Applications</i> , Noyes Publications (1996)
1020	U.S. Patent No. 5,872,389 to Nishimura et al.
1021	U.S. Patent No. 5,675,174 to Nakajima
1022	U.S. Patent No. 5,538,924 to Chen
1023	U.S. Patent No. 5,300,461 to Ting
1024	U.S. Patent No. 5,729,041 to Yoo
1025	U.S. Patent No. 5,747,869 to Prall
1026	Wilson et al., <i>Handbook of Multilevel Metallization For Integrated Circuits: Materials, Technology, and Applications</i> , Noyes Publications (1993)
1027	Wolf, <i>Silicon Processing for the VLSI ERA Volume 2: Process Integration</i> , Lattice Press, Sunset CA (1990)
1028	Construction Analyses of the Samsung KM44C4000J-7 16 Megabit DRAM, published by Integrated Circuit Engineering, Scottsdale AZ, Report No. SCA 9311-3001 (available at <a href="http://smithsonianchips.si.edu/ice/cd/9311_300.pdf">http://smithsonianchips.si.edu/ice/cd/9311_300.pdf</a> )

1029	Construction Analyses of the Lattice ispLSI2032-180L CPLD, published by Integrated Circuit Engineering, Scottsdale AZ, Report No. SCA 9712-573 (available at <a href="http://smithsonianchips.si.edu/ice/cd/9712_573.pdf">http://smithsonianchips.si.edu/ice/cd/9712_573.pdf</a> )
1030	Construction Analysis of the Intel Pentium Processor w/MMX, published by Integrated Circuit Engineering, Scottsdale AZ, Report No. SCA 9706-540 (available at <a href="http://smithsonianchips.si.edu/ice/cd/9706_540.pdf">http://smithsonianchips.si.edu/ice/cd/9706_540.pdf</a> )
1031	“Intel Introduces The Pentium® Processor With MMX™ Technology,” <a href="http://www.intel.com/pressroom/archive/releases/1997/dp010897.htm">http://www.intel.com/pressroom/archive/releases/1997/dp010897.htm</a> (last visited April 14, 2015)
1032	“Intel Microprocessor Quick Reference Guide,” <a href="http://www.intel.com/pressroom/kits/quickreffam.htm#pentium">http://www.intel.com/pressroom/kits/quickreffam.htm#pentium</a> (last visited April 26, 2015)
1033	Construction Analyses of the Motorola PC603R Microprocessor, published by Integrated Circuit Engineering, Scottsdale AZ, Report No. SCA 9709-551 (available at <a href="http://smithsonianchips.si.edu/ice/cd/9709_551.pdf">http://smithsonianchips.si.edu/ice/cd/9709_551.pdf</a> )
1034	Construction Analyses of the Toshiba TC5165165AFT-50 64 Mbit DRAM, published by Integrated Circuit Engineering, Scottsdale AZ, Report No. SCA 9702-524 (available at <a href="http://smithsonianchips.si.edu/ice/cd/9702_524.pdf">http://smithsonianchips.si.edu/ice/cd/9702_524.pdf</a> )
1035	“Material: Stainless steel, bulk,” <a href="https://www.memsnet.org/material/stainlessteelbulk/">https://www.memsnet.org/material/stainlessteelbulk/</a> (last visited April 14, 2015)
1036	“Material: Silicon Dioxide (SiO <sub>2</sub> ), bulk,” <a href="https://www.memsnet.org/material/silicondioxidesio2bulk/">https://www.memsnet.org/material/silicondioxidesio2bulk/</a> (last visited April 14, 2015)
1037	Osaka, et al. “Development of new electrolytic and electroless gold plating processes for electronics applications,” <i>Science and Technology of Advanced Materials</i> , vol. 7 (2006), pp. 425-437.

1038	Uttecht et al., "A four-level-metal fully planarized interconnect technology for dense high performance logic and SRAM applications," VLSI Multilevel Interconnection Conference, 1991, Proceedings, Eighth International IEEE, June 11-12, 1991, pp. 20-26
1039	<i>Ex Parte</i> Reexamination Application No. 90/011,607, Patent Owner Statement filed August 12, 2011
1040	Seshan ed., <i>Handbook of Thin-Film Deposition Processes and Techniques: Principles, Methods, Equipment and Applications</i> , Second Ed., Noyes Publications, New York (2002)
1041	Vlassak, et al., "A new bulge test technique for the determination of Young's modulus and Poisson's ratio of thin films", J. Mater. Res., Vol. 7, No. 12, Dec 1992
1042	<i>Ineos USA LLC v. Berry Plastics Corp.</i> , No 2014-1540, 2015 WL 1727013, (Fed. Cir. Apr. 16, 2015) (precedential)
1043	Affidavit of Thomas R. Makin in support of Motion for <i>Pro Hac Vice</i> Admission

# 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.