#### UNITED STATES PATENT AND TRADEMARK OFFICE

#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

XILINX, INC.,

Petitioner

v.

### POLARIS INNOVATIONS LIMITED,

Patent Owner.

## PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,157,589

Case No. IPR2023-00516

Mail Stop Patent Board Patent Trial and Appeal Board U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450



## **TABLE OF CONTENTS**

I.	Introduction			
II.	Mandatory Notices (37 C.F.R. §42.8)1			
	A.	Real Parties-In-Interest (37 C.F.R. §42.8(b)(1))	. 1	
	B.	Related Matters (37 C.F.R. §42.8(b)(2))	. 1	
	C.	Lead and Back-Up Counsel (37 C.F.R. §42.8(b)(3))	.2	
	D.	Service Information	.2	
III.	Paym	nent of Fees (37 C.F.R. §42.103)	.2	
IV.	Requirements for IPR (37 C.F.R. §42.104)3			
	A.	Grounds for Standing (37 C.F.R. §42.104(a))	.3	
	B.	Challenge Under 37 C.F.R. §42.104(b) and Relief Requested	.3	
V.	Summary of the '589 Patent			
	A.	Brief Description	.4	
	B.	Summary of the Prosecution	.7	
	C.	Applicant Admitted Prior Art in the Background of the '589 Patent .1	0	
VI.	Tech	nology Overview1	2	
VII.	Overview of the Prior Art Used in the Grounds			
	A.	Kocis (EX1004)1	6	
	B.	Lee (EX1005)1	7	
	C.	JESD 21-C (EX1006)	8	
	D.	Iketani (EX1007)2	0	
VIII.	Clain	n Construction (37 C.F.R. §42.104(B)(3))2	1	



IX.	Level	of Ordinary Skill in the Art	.21
X. Paten		e is a Reasonable Likelihood That at Least One Claim of the '589	.22
	A.	Ground 1: Claims 1, 9, 11, and 13 are Anticipated by Kocis	.22
	B.	Ground 2: Claims 2, 8, 10, and 12 are Obvious Over Kocis in Combination with JESD 21-C	.37
	C.	Grounds 3A & 3B: Claims 1 and 11 are Anticipated by or Obvious Over Lee	.46
	D.	Ground 4: Claims 1 and 11 are Obvious Over Lee in Combination with Iketani	.59
	Е.	Ground 5: Claims 2, 8, 10, and 12 are Obvious Over Lee in Combination with JESD 21-C	.63
	F.	Ground 6: Claims 2, 8, 10, and 12 are Obvious over Lee in Combination with Iketani and JESD 21-C	.65
	G.	Ground 7: Claims 9 and 13 are Obvious Over Lee in Combination with Kocis	.66
	H.	Ground 8: Claims 9 and 13 are Obvious Over Lee in Combination with Iketani and Kocis.	.71
XI. Discr		Board Should Consider the Petition on the Merits and Not Exercise it o Deny Institution	
	A.	Fintiv (Section 314(a))	.72
	B.	Section 325(d)	.72
XII.	Conc	lusion	.74



## **EXHIBIT LIST**

Exhibit	Description
1001	U.S. Patent No. 6,157,589 (the "'589 Patent")
1002	U.S. Prosecution History of the '589 Patent
1003	Declaration of Stephen W. Melvin
1004	U.S. Patent No. 5,559,753 to Kocis entitled "Apparatus and Method for Preventing Bus Contention During Power-Up in a Computer System With Two or More DRAM Banks" ("Kocis")
1005	U.S. Patent No. 5,774,402 to Lee entitled "Initialization Circuit for a Semiconductor Memory Device" ("Lee")
1006	JEDEC Standard No. 21-C, entitled "Configurations for Solid State Memories," Compilation of Releases 1 through 7, dated January 1997 ("JESD 21-C")
1007	U.S. Patent No. 5,703,510 to Iketani et al. entitled "Power On Reset Circuit For Generating Reset Signal at Power On" ("Iketani")
1008	Prosecution History of EPO Patent Application No. 99 113 048.5 (Original)
1009	Excerpt of Prosecution History of EPO Patent Application No. 99 113 048.5 (Original)
1010	Excerpt of Prosecution History of EPO Patent Application No. 99 113 048.5 (English Translation)
1011	Japanese Patent Publication No. JP 09 106668 A to Samsung Electronics Co. Ltd. dated April 22, 1997 ("Tetsuka")
1012	Declaration of Julie Carson
1013	JEDEC Standard No. 21-C, entitled "Configurations for Solid State Memories," Release 7, dated January 1997



Exhibit	Description
1014	Scheduling Order, <i>Polaris Innovations Limited v. Xilinx, Inc.</i> , 1:22-cv-00174-RGA, Docket No. 20 (May 31, 2022)
1015	United States District Courts — Federal Court Management Statistics, National Judicial Caseload Profile (June 30, 2022), available at https://www.uscourts.gov/sites/default/files/fcms_na_distprofile0630.2022_0.pdf
1016	Motion Success for Stay Pending IPR before Judge Richard G. Andrews in the District of Delaware (Docket Navigator data from 2020 to 1/20/2023)
1017	Excerpt of Micron Technology, Inc., "DRAM Data Book" (1992)
1018	Excerpt of Samsung Electronics Co., Ltd., "Data Book: DRAM" (Dec. 1995)
1019	Samsung Electronics, "4M x 8Bit x 4 Banks Synchronous DRAM" Doc. No. KM48S16030, Rev. 2 (March 1998)



# 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.

