Paper No. 44

Filed: October 22, 2021

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION and XILINX, INC.¹, Petitioners,

v.

FG SRC LLC, Patent Owner.

IPR2020-01449 Patent No. 7,149,867

PATENT OWNER'S SUR-REPLY TO PETITIONERS' REPLY TO PATENT OWNER RESPONSE

¹ Xilinx, Inc. filed a petition and motion for joinder in IPR2021-00633 which were granted and, therefore, has been joined as a petitioner in this proceeding.



LIST OF EXHIBITS

Exhibit No.	Descriptions
2001	Declaration of Dr. Vojin Oklobdzija
2002	Cray, Britannica Online Encyclopedia
2003	Declaration of Brandon Freeman dated 10/25/18 SRC Labs LLC and Saint Regis Mohawk Tribe v. Microsoft Corporation, No. 2:18-cv-00321-JLR, Dkt. 125 (W.D. Wash. Oct. 25, 2018)
2004	Plaintiff's Original Complaint For Patent Infringement in FG SRC LLC v. Intel Corp., No. 6:20-cv-00315-ADA (W.D. Texas), filed April 24, 2020
2005	Plaintiff's First Amended Complaint For Patent Infringement in FG SRC LLC v. Intel Corp., No. 6:20-cv-00315-ADA (W.D. Texas), filed April 24, 2020
2006	Declaration of Mark Wollgast dated 09/10/18 Xilinx, Inc. v. Saint Regis Mohawk Tribe, IPR2018-0195
2007	COTS Journal, UAVs Lead Push for Embedded Supercomputing
2008	Press Release: SRC Computers Chosen by Lockheed Martin for U.S. Army Program
2009	Declaration of Henning Schmidt
2009-1	Declaration of Henning Schmidt, Exhibit A, IEEE Xplore: Advanced Search
2009-2	Declaration of Henning Schmidt, Exhibit B, IEEE Xplore: Advanced Search Results
2010	Declaration Of Ryan Kastner, Ph.D. In Support Of FG SRC LLC's Opening Claim Construction Brief in FG SRC LLC v. Intel Corp., No. 6:20-cv-00315-ADA (W.D. Texas), filed April 24, 2020
2011	Peter McMahon, High Performance Reconfigurable Computing for Science and Engineering Applications (Thesis Oct. 2006).
2012	Caliga, Delivering Acceleration: The Potential for Increased HPC Application Performance Using Reconfigurable Logic
2013	D. A. Buell, D. Caliga, J. P. Davis, G. Quan, "The DARPA boolean equation benchmark on a reconfigurable computer," Proceedings of the Military and Aerospace Programmable Logic Devices (MAPLD) Conference, Washington, DC, 8-10 September 2004



Exhibit No.	Descriptions
2014	El-Araby, The Promise of High-Performance Reconfigurable Computing
2015	FG SRC LLC's Opening Claim Construction Brief in FG SRC LLC v. Intel Corp., No. 6:20-cv-00315-ADA (W.D. Texas), filed April 24, 2020
2016	Kerr Machine Co. d/b/a Kerr Pumps v. Vulcan Industrial Holdings, LLC, No. 6:20-cv-00200, Text Order dated Aug. 2, 2020 (W.D. Tex.)
2017	MultiMedia Content Mgmt LLC v. Dish Network L.L.C., No. 6:18-cv-00207, Dkt. 73 (W.D. Tex.)
2018	Solas OLED v. Dell Techs. Inc., No. 6:19-cv-00514, Text Order dated June 23, 2020
2019	Kerr Machine Co. v. Vulcan Indus. Holdings, LLC, No. 6:20-cv-200, Dkt. 28 (W.D. Tex. July 31, 2020)
2020	Kerr Machine Co. v. Vulcan Indus. Holdings, LLC, No. 6:20-cv-200, Dkt. 24 (W.D. Tex. June 14, 2020)
2021	Kerr Machine Co. v. Vulcan Indus. Holdings, LLC, No. 6:20-cv-200, Dkt. 12 (W.D. Tex., June 14, 2020)
2022	Email from J. Yi to Counsel (Aug. 3, 2020)
2023	FG SRC LLC v. Intel Corp., No. 1:20-cv-00834, Dkt. 48 (W.D. Tex. Nov. 23, 2020) (Amended Schedule)
2024	Continental Intermodal Group - Trucking LLC v. Sand Revolution LLC, No. 7:18-cv-00147, Text Order dated July 22, 2020 (W.D. Tex.)
2025	Solas OLED v. Dell Techs. Inc., No. 6:19-cv-00515, Text Order dated Jun. 23, 2020
2026	2019-07-11 - DirectStream MSFT - Huppenthal Declaration
2027	Declaration of William Mangione-Smith, Ph.D., In Support of FG SRC LLC's Motion to Amend
2028	Declaration of Dr. William Mangione-Smith in support of Patent Owner Response
2029	Deposition Transcript of Dr. Stanley Shanfield
2030	Declaration of William Mangione-Smith, Ph.D., In Support of FG SRC LLC's Revised Motion to Amend



TABLE OF CONTENTS

I.	INTE	INTRODUCTION	
II.	CHIE	E INSTITUTED COMBINATION OF <i>ZHANG</i> , <i>GUPTA</i> , AND <i>IEN</i> DOES NOT RENDER THE CHALLENGED CLAIMS VIOUS1	
	A.	The instituted combination of <i>Zhang</i> , <i>Gupta</i> , and <i>Chien</i> teaches away from the '867 Patent.	1
	В.	The combination does not render obvious a "reconfigurable processor that instantiates an algorithm as hardware."	2
	C.	The combination does not render obvious a "data prefetch unit."	5
	D.	The combination does not render obvious a data prefetch unit "wherein the data prefetch unit retrieves only computational data required by the algorithm."	7
	E.	The combination does not render obvious a first memory and a data prefetch unit "wherein at least the <i>first memory</i> and <i>data prefetch unit</i> are configured to conform to needs of the algorithm."	9
	F.	The combination does not render obvious a data prefetch unit "configured to match format and location of data in the second memory."	. 10
III	COM	CHISION	12



TABLE OF AUTHORITIES

CASES

1



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.

