IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

FG SRC LLC, Plaintiff, v. INTEL CORPORATION, Defendant.	Case No. 1:20-cv-00834-ADA JURY TRIAL DEMANDED

PLAINTIFF FG SRC LLC'S OPENING CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES:

INDEX OF EXHIBITS

EXHIBIT	DESCRIPTION
A	U.S. Patent No. 7,149,867
B	Declaration of Ryan Kastner, Ph.D., dated November 17, 2020, referred to herein as "Kastner Dec."
C	Excerpt from Ryan Kastner, Ph.D., et al. Parallel Programming for FPGAs 18 (2020), available at http://kastner.ucsd.edu/hlsbook/.

Plaintiff FG SRC LLC ("SRC") submits its opening claim construction brief which includes proper constructions and related argument for the disputed terms of U.S. Patent No. 7,149,867 ("'867 patent").

I. GENERAL TECHNICAL BACKGROUND

A. Processor Types

The '867 patent relates to the use of reconfigurable processors, such as Field Programmable Gate Arrays ("FPGAs"). Ex. A 1:16-24, 5:26-29. An FPGA is an integrated circuit that contains an array of programmable logic blocks and memory elements connected via programmable interconnect. Kastner Dec. ¶ 14. A user can program an FPGA to perform a specific function by configuring the logic blocks and interconnect. *Id.* This enables the user to create a hardware accelerated implementation of an algorithm by programming the FPGA in a manner that efficiently executes the algorithm. *Id.* In other words, with a reconfigurable processor such as an FPGA, the hardware adapts to the algorithm.

This can be contrasted with implementing the algorithm with software on a CPU or microprocessor. *Id.* ¶ 15. A CPU executes the algorithm by performing a sequence of instructions (e.g., arithmetic, logical, memory (load/store)) that implement the algorithm. *Id.* A different algorithm can be implemented on the CPU by changing the instructions. *Id.* The CPU is flexible; it can implement almost any algorithm. *Id.* Because the CPU hardware is fixed, it cannot be customized towards the algorithm like an FPGA implementation. *Id.* These customizations allow FPGA implementations to be orders of magnitude more efficient than implementing that algorithm as software on a CPU. *Id.*

In addition to FPGAs and CPUs, Application-Specific Integrated Circuits ("ASICs") can also be used to execute algorithms. *Id.* ¶ 16. ASICs use custom logic and are manufactured specifically to perform one application. *Id.* Because an ASIC is purpose-built for one application, it is very

DOCKET ALARM

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.