UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION, Petitioner,

v.

FG SRC LLC, Patent Owner.

IPR2018-01594 Patent 6,434,687 B1

Before KALYAN K. DESHPANDE, JUSTIN T. ARBES, and CHRISTA P. ZADO, *Administrative Patent Judges*.

DESHPANDE, Administrative Patent Judge.

DOCKET

Δ

JUDGMENT Final Written Decision Determining Some Challenged Claims Unpatentable 35 U.S.C. § 318(a)



I. INTRODUCTION

A. Background

Microsoft Corporation ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–25 of U.S. Patent No. 6,434,687 B1 (Ex. 1001, "the '687 patent"). Paper 1 ("Pet."). FG SRC LLC ("Patent Owner") filed a Preliminary Response pursuant to 35 U.S.C. § 313. Paper 15 ("Prelim. Resp.").¹ Pursuant to our authorization, Petitioner also filed a Reply (Paper 19) and Patent Owner filed a Sur-Reply (Paper 20).

On April 12, 2019, we issued a Decision ordering that an *inter partes* review of claims 1–25 of the '687 patent "is hereby instituted with respect to all grounds set forth in the Petition." Paper 21 ("Dec."), 47. After institution, Patent Owner filed a Patent Owner's Response (Paper 36, "PO Resp."). Petitioner filed a Petitioner's Reply to Patent Owner's Response (Paper 50, "Pet. Reply") and Patent Owner filed a Patent Owner's Sur-Reply (Paper 59, "PO Sur-Reply). Petitioner and Patent Owner also filed Motions to Exclude Evidence (Papers 60 ("Pet. Mot."), 61 ("PO Mot.")), Oppositions to the Motions (Papers 62 ("Pet. Opp. Mot."), 63) and Replies to the Oppositions (Papers 66, 65). Petitioner and Patent Owner presented oral arguments on February 4, 2020, and a transcript has been entered into the record. Paper 71 ("Tr.").

The Board has jurisdiction under 35 U.S.C. § 6. In this Final Written Decision, after reviewing all relevant evidence and arguments, we determine

¹ Saint Regis Mohawk Tribe, originally named as Patent Owner, assigned the '687 patent to DirectStream, LLC on May 21, 2019. Paper 33, 1. DirectStream, LLC assigned the '687 patent to FG SRC LLC on January 22, 2020. Paper 69, 1.

that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 1-17 of the '687 patent are unpatentable, but has not met its burden with respect to claims 18-25.

B. Related Proceedings

The parties indicate that the '687 patent currently is involved in *SRC Labs, LLC et al. v. Microsoft Corp.*, Civil Action No. 2-18-cv-00321 (W.D. Wash.), which was transferred from *SRC Labs, LLC et al. v. Microsoft Corp.*, Civil Action No. 1-17-cv-01172 (E.D. Va.). Pet. 3; Prelim. Resp. 4–5. The following proceedings, before the Board, also involve the same parties: IPR2018-01599, IPR2018-01600, IPR2018-01601, IPR2018-01602, IPR2018-01603, IPR2018-01604, IPR2018-01605, IPR2018-01606, and IPR2018-01607.²

C. The '687 Patent (Ex. 1001)

The '687 patent discloses "systems and methods for accelerating web site access and processing utilizing a computer system incorporating reconfigurable processors operating under a single operating system image." Ex. 1001, 1:30–34. The '687 patent discloses that many electronic commerce web sites use various methods to vary content based on the demographics of a user. *Id.* at 1:37–40. Such demographic data can be obtained by requesting that the visitor respond to one or more questions or using "click stream" processing to infer the interests of the visitor from previous sites they have visited. *Id.* at 1:41–47. However, according to the '687 patent, studies show that the average user waits only a maximum of

 $^{^2}$ We consolidated IPR2018-01602 and IPR2018-01603 with IPR2018-01601. We also consolidated IPR2018-01606 and IPR2018-01607 with IPR2018-01605.

IPR2018-01594 Patent 6,434,687 B1

twenty seconds or so for a web page to be updated. *Id.* at 1:52–54. In view of this, the '687 patent discloses it is vitally important for the updating of page content (e.g., according to the visitor's interests) to be completed as rapidly as possible. *Id.* at 1:54–55. The '687 patent discloses that known web servers use standard microprocessor based servers, which limits their maximum performance due to the inherent limitations of such devices. *Id.* at 1:58–63.

The '687 discloses "a system and method for accelerating web site access and processing utilizing a multiprocessor computer system incorporating one or more microprocessors and a number of reconfigurable processors operating under a single operating system image." Id. at 2:6–10. As a result, algorithms for processing demographic data may be loaded into the reconfigurable processors (e.g., specially adapted field programmable gate arrays ("FPGAs")), which permits an algorithm to be implemented in hardware gates instead of software. Id. at 2:18-25. This allows the processing of data up to 1000 times faster than a standard microprocessor based server. *Id.* The '687 patent also states that reconfigurable processors can be used to accelerate electronic commerce in other ways, such as by performing decryption algorithms up to 1000 times faster than a conventional microprocessor, which allows for faster web site access and the use of more robust data encryption techniques. Id. at 2:48-60. According to the '687 patent, the use of "hybrid computer systems with a single system image of the operating system for web site hosting allows the site to employ user selected hardware accelerated versions of software algorithms currently implemented in a wide array of e-commerce related functions," which results in an easy to use system and shorter site visitor waiting periods. Id.

IPR2018-01594 Patent 6,434,687 B1

at 2:66–3:6.

A simplified illustration of a representative operating environment 300 is disclosed in Figure 12:

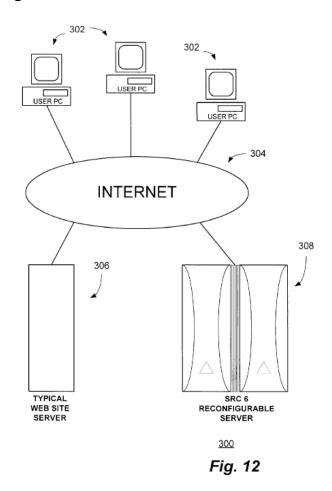


Figure 12 illustrates how "a number of personal computers 302 or other computing devices are coupled to either the typical web site server 306 (in a prior art implementation) or the reconfigurable server 308 (in accordance with the system and method of the present invention) through the Internet 304." *Id.* at 20:47–51. In the '687 patent, typical web site server 306 is replaced by reconfigurable server 308 including one or more industry standard processors and one or more reconfigurable processors, all of which

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.