DOCKET NO.: 2211726-00145
Filed on behalf of Unified Patents Inc.
By: David L. Cavanaugh, Reg. No. 36,476
Daniel V. Williams, Reg. No. 45,221
Matthew J. Leary, Reg. No. 58,593
Wilmer Cutler Pickering Hale and Dorr LLP
1875 Pennsylvania Ave., NW
Washington, DC 20006
Tel: (202) 663-6000
Email: david.cavanaugh@wilmerhale.com

Roshan Mansinghani, Reg. No. 62,429
Jonathan Stroud, Reg. No. 72,518
Unified Patents Inc.
1875 Connecticut Ave. NW, Floor 10
Washington, DC, 20009
Tel: (202) 805-8931
Email: roshan@unifiedpatents.com
Email: jonathan@unifiedpatents.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC.
Petitioner

v.

PLECTRUM LLC
Patent Owner

IPR2017-01430
Patent 5,978,951

PETITIONER'S REPLY

TABLE OF CONTENTS

Page

I. INTRODUCTION

The Board found that Petitioner demonstrated a reasonable likelihood of prevailing on Petitioner's assertion that claims 8 and 11 are obvious over *Cheriton* and *Jain*. Decision (Paper 8) at 18. The Patent Owner does not challenge the Board's findings with respect to most of the limitations of those claims. With respect to the two remaining limitations—for which the Board found ample evidence of disclosure in the prior art—the Patent Owner's attorney arguments are both legally and factually insufficient. These deficiencies are underscored by the Patent Owner's lack of expert testimony to rebut *any* position taken by Petitioner or Petitioner's expert, Dr. Seshan.

First, Patent Owner mistakenly argues that there is insufficient evidence to show that it would have been obvious to use the cyclic redundancy check (CRC) hash function of *Jain* in place of the XOR hash function of *Cheriton*. That argument is (a) based on a legal premise long-rejected by courts, and (b) is not supported by the intrinsic or extrinsic evidence nor by expert testimony—it should be rejected.

Second, Patent Owner disputes that *Cheriton* discloses an "input packetizer" and an "output packetizer." But Patent Owner improperly ignores the specific disclosure of these limitations that Petitioner (and the Board) cites in *Cheriton*, including ample disclosure under the Board's description of "packetizer."

Finally, the Petitioner has properly identified the real party-in-interest (RPI).

Patent Owner has failed to proffer any evidence that reasonably brings into question Petitioner's identification.

II. CLAIMS 8 AND 11 ARE OBVIOUS IN VIEW OF *CHERITON* AND *JAIN*

Patent Owner disagrees for two reasons, both of which are wrong. First, there are many reasons to combine *Cheriton* and *Jain* contrary to the Patent Owner's attorney arguments. Second, *Cheriton* discloses what Patent Owner calls the "Input Packetizer/Output Packetizer" of claim 8, including under the Board's view of "packetizer."

A. It was obvious to use *Jain*'s CRC hash function in place of *Cheriton*'s XOR hash function.

Instituted claims 8 and 11 both claim a data unit forwarding device with "a cyclic redundancy code (CRC) generator" that is used to generate "CRC encoded addresses" from "received source and destination addresses." The generated CRC is used as a hash index "lookup" into a cache of address information. '951 Patent (EX1001), Fig. 7a, 5:45-57, 8:5-56. The resulting address information can be used to determine, for example, where to forward the received data units. *See* Seshan (EX1007), ¶¶ 33-34, 63.

As the Board reasoned, it would have been obvious to combine *Cheriton* (which discloses every limitation except for using an "XOR" hash function to look up network information) with *Jain* (which discloses using a CRC for that same

purpose). Decision at 20 (noting the "interchangeability of hashing functions"); Seshan Dec. (EX1007), ¶ 82.

Patent Owner asserts that the petition does not "sufficiently explain a rationale for combining *Cheriton* and *Jain*." Resp. 5. Patent Owner provides no support for its allegations—indeed, the opposite is true. There are multiple motivations to combine the teachings of these references. The use of a CRC would also have been at least (a) obvious to try and (b) obvious as a substitution of one known element for another to obtain predictable results.

Patent Owner offers no affirmative evidence that a POSA would not have been motivated to substitute CRCs for XOR functions. Patent Owner points to no secondary considerations of non-obviousness. And Petitioner's expert testimony is unrebutted by any documents or expert testimony.

1. A POSA would have been motivated to use *Jain*'s CRC hash function in place of *Cheriton*'s XOR hash function.

A POSA would have been motivated to use the CRC that *Jain* discloses as a hash function instead of the XOR that *Cheriton* discloses. As explained below, high-performance CRC functions can lower undesirable hashing "collisions" and were known to be nearly 'optimal' mathematically when compared to XOR functions. *See Hashing Comparison* (EX1021), § IV ("CRC provides an almost optimal hashing function"). CRC functions can also beneficially re-use existing resources in

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.