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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 SUPPLEMENTAL REPLY

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I. SUMMARY

Following the *SAS* decision, the Board instituted claims 1-6, 12-14, and 21-24 (the "New Claims"). Paper 16 at 2.

Addressing Claim 1, the Board preliminarily asserted that *Cheriton* lacked: 1) a "comparison of values associated with a row in a cache," and 2) the subsequent comparison of a value within that row. Paper 11 at 3. The first step uses, e.g., a hash value as an index/address to "identify" a cache row that potentially has routing data for a packet. *E.g.*, '951 patent (EX1001), Fig. 7B. Notably, Claims 2 and 21 simply require that a row is "identif[ied]" without requiring comparing values. The second step retrieves an entry from that identified row and compares it to the incoming packet's destination address to see if the row contains the hoped-for routing data. *Id*., Claim 2, ll. 56-59.

These limitations comprise actions (identification and comparison) using particular data (values and destination addresses) stored in a specific structure (rows). The petition demonstrated that *Cheriton* explicitly taught the *actions* on the *particular data*, such as using a hash index to "identify" address data in an SRAM for element 2(f). Petition at 39-40. Hence, the Board's preliminary decision amounted to finding that *Cheriton* does not explicitly disclose that the acted-upon data was in a *row-based* structure. Paper 11 at 3.

But the petition and the as-filed record demonstrate that it would have been

obvious to use row-based SRAMs in *Cheriton* (addressed in Section II below). *E.g.*, Petition at 30-31. As a result, it would have been obvious for *Cheriton's* disclosed *actions* on its disclosed *data* to have been used in row-based SRAMs (the *structure* the record demonstrates was obvious) (addressed in Section III below). Seshan (EX1007) ¶¶ 62, 86-100, 105-106. This is why *Cheriton* renders the New Claims obvious.

For example, the Board does not appear to contest that *Cheriton* taught the action of retrieving and comparing destination addresses from multiple-entry elements in SRAM as per limitations 2(g) and 2(i). *See* Board Decision, Paper 8 at 14-15. If that SRAM was *row-based* (which the petition and the as-filed record demonstrate was obvious), the Petition showed that *Cheriton* rendered obvious retrieving that address from a *row*. Petition at 40-41.

II. ROW-BASED SRAMS IN VIEW OF *CHERITON* ARE OBVIOUS

A. Row-based SRAM memories were well-known, and are the only type of SRAMs described in the record.

There is no dispute that row-based SRAMs were well-known in the prior art. *See* Petition at 22-23; POPR at 6-8. To demonstrate the state of the art, the Petitioner provided both expert testimony and a corroborative reference, *Fujishima. See Fujishima* (EX1019); Seshan (EX1007) ¶¶ 62-64. As noted in the Petition, *Fujishima* teaches that "SRAM memory cell array 12 is provided with a cache row

decoder 43…. [which] is responsive to a cache row address signal … for selecting one row in the SRAM memory cell array." *Id*. at 12:49-54; *accord id. at* 5:38-44 ("The second [SRAM] memory cell array is divided into a plurality of regions each comprising the same number of a plurality of rows").

Row-based SRAMs are the only type of SRAM in the record. Such SRAMs were so common that Dr. Seshan explained that the POSA would understand *Cheriton's* SRAM's to be row based even if not explicitly stated. Seshan (EX1007) ¶ 62. Properly understood, even the *Ross* reference cited by Patent owner used row-based SRAMs. Specifically, *Ross* cited prior art algorithms to efficiently find data in "array" (row-based) environments. *See Ross* (EX2001) at 1:38-67 (listing pre-1990 "array binary searches" indexing); Summary of Invention; Fig. 9; 7:34.

B. It would have been obvious for *Cheriton's* SRAMs to have rows.

Responding to the arguments made in the POPR (p. 7), there were multiple reasons why it would have been obvious to use rows in *Cheriton's* SRAMs. First, row-based SRAMS were not just known, but common—indeed, they are the only type of SRAMs in evidence. *See, e.g., Cubist Pharms., Inc. v. Hospira, Inc.*, 805 F.3d 1112, 1129 (Fed. Cir. 2015) (affirming obviousness because claimed purification method was "known to be one of the most common" options); *Monsanto Tech. LLC v. E.I. DuPont de Nemours & Co.*, 878 F.3d 1336, 1346 (Fed. Cir. 2018) (a "patent can be obvious in light of a single prior art reference if it would have been

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