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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* IDO BENZION, EFRAIM ZEIDNER,  
and LEO CORRY

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Appeal 2017-009904  
Application 13/403,032  
Technology Center 2100

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Before JOHNNY A. KUMAR, JASON J. CHUNG, and  
STEVEN M. AMUNDSON. *Administrative Patent Judges.*

KUMAR, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants<sup>1</sup> appeal under 35 U.S.C. § 134(a) from the Examiner's  
Final Rejection of claims 1–41. We have jurisdiction under 35 U.S.C.  
§ 6(b).

We affirm.

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<sup>1</sup> Appellants identify Infinidat Ltd. as the real party in interest (Br. 3).

## INVENTION

Claim 1 is representative of the invention and reproduced below, with bracketed matter and emphasis added:

1. A method for pre-fetching, comprising:

presenting, by a storage system and to at least one host computer, a logical address space; wherein the storage system comprises multiple data storage devices that constitute a physical address space; wherein the storage system is coupled to the at least one host computer;

determining, by a fetch module of the storage system, to fetch a certain data portion from a data storage device to a cache memory of the storage system;

determining, by a pre-fetch module of the storage system, whether to [1] *pre-fetch* at least one additional data portion from at least one data storage device to the cache memory [2] *based upon* at least one [3] *characteristic* of a [4] *mapping tree* that maps one or more contiguous ranges of addresses related to the logical address space and one or more contiguous ranges of addresses related to the physical address space; and

*pre-fetching* the at least one additional data portions *if it is determined* to pre-fetch the at least one additional data portions.

## REJECTIONS AT ISSUE<sup>2</sup>

Claims 1–12, 18–29, 35 and 39–41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis et al. (US 7,383,391 B2, issued June 3, 2008) (hereinafter “Davis”) in view of Gammel et al. (US 7,124,275

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<sup>2</sup> Throughout this opinion we refer to the Examiner’s Answer mailed on December 8, 2016.

B2, issued Oct. 17, 2006) (hereinafter “Gammel”) and Sun (US 2009/0172293 A1, published July 2, 2009) (hereinafter “Sun”).

Claims 13–17 and 30–34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis in view of Gammel and Sun as applied in the rejection of claims 1 and 18 above, and further in view of Nomura et al. (US 2007/0220208 A1, published Sept. 20, 2007) (hereinafter “Nomura”).

Claims 36–38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis in view of Gammel and Weinberger et al. (US 6,453,389 B1, issued Sept. 17, 2002) (hereinafter “Weinberger”).

#### ANALYSIS

Appellants have presented several arguments (Br. 16–21) as to why the combination of the references does not teach or suggest the features recited in independent claims 1, 18, and 35.

These contentions present us with the issue: did the Examiner err in finding that the combination of Davis, Gammel, and Sun teaches or suggests the features recited in limitations [1] to [4] of representative claim 1, *supra*, and similarly recited in independent claims 18 and 35?

We have reviewed the Examiner’s rejections in light of Appellants’ contentions that the Examiner has erred. The Examiner cited Davis for all the claim limitations including limitations [1] and [3] except for limitations [2] and [4]. The Examiner cited Sun for limitation [2] and Gammel for limitation [4]. Ans. 12–17.

Further, we have reviewed the Examiner’s response to Appellants’ arguments. The Examiner has provided on pages 12–17 of the Answer a comprehensive response to each argument presented by the Appellants. We

have reviewed this response and concur with the Examiner's findings and conclusions. We adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken and (2) the reasons set forth by the Examiner in the Examiner's Answer in response to Appellants' Appeal Brief. Ans. 12–17.<sup>3,4</sup>

Regarding the dependent claims, while Appellants raised additional arguments for patentability (Br. 21–40), we find that in the Answer the Examiner has rebutted with sufficient evidence each and every one of those arguments. Ans. 17–31. Therefore, we adopt the Examiner's findings and underlying reasoning, which are incorporated herein by reference.

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<sup>3</sup> Regarding the conditional “pre-fetching” step of method claim 1, we note that **conditional steps** employed in a method claim **need not be found in the prior art if**, under the broadest reasonable interpretation, **the method need not invoke those steps**. See *Ex parte Schulhauser*, No. 2013-007847, 2016 WL 6277792, at \*4 (PTAB Apr. 28, 2016) (precedential) (holding “[t]he Examiner did not need to present evidence of the obviousness of the remaining method steps of claim 1 that are not required to be performed under a broadest reasonable interpretation of the claim . . .”) (hereinafter, “*Schulhauser*”); see also *Ex parte Katz*, No. 2010-006083, 2011 WL 514314, at \*4–5 (BPAI Jan. 27, 2011). We note that *Schulhauser* applies only to method claims.

<sup>4</sup> We observe that Appellants' arguments ignore the actual reasoning of the Examiner's rejections. Instead, Appellants attack the reference singly for lacking a teaching that the Examiner relied on a combination of references to show. It is well established that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 426 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Appellants are raising and then knocking down a straw-man rejection that was never made by the Examiner. Appellants argue Examiner's findings that were never made. This form of argument is unavailing to show Examiner error.

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Application 13/403,032

We observe that no Reply Brief is of record to rebut such findings, including the Examiner's responses to Appellants' arguments.

DECISION

We affirm the Examiner's rejection of claims 1–41.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED