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EXAMINER
NGUYEN, MINH CHAU

ART UNIT	PAPER NUMBER
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte WILSON CHENG-YI HSIEH and PETER HOCHSCHILD

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Appeal 2020-002897
Application 15/374,722
Technology Center 2400

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Before ROBERT E. NAPPI, JAMES W. DEJMEK, and
JOYCE CRAIG, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1 through 20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a) (2019). According to Appellant, Google LLC is the real party in interest. Appeal Br. 1.

INVENTION

The invention is directed to a method for use in a distributed database system in which, while the written data is being committed to the memory, the lock on the server is released and a commit wait time is imposed on the other servers or clients. Spec. ¶ 3. Claim 1 is illustrative of the invention and is reproduced below.

    1. A system, comprising:
        a server device, the server device including at least one input/output to communicate with other servers and clients in a distributed computing environment, the server device comprising:
        one or more processors, and
        one or more memories storing instructions to be executed by the one or more processors to:
            receive a request to write data;
            write the data to a memory in the distributed computing environment;
            while the written data is being committed to the memory, release a lock on the server; and
            while the written data is being committed to the memory, impose a commit wait time for the written data on at least one of a client library, the other servers, or the clients, wherein the commit wait time is an interval of time that must pass before the at least one of the client library, the other servers, or the clients can see the effects of the written data.

EXAMINER'S REJECTION[2]

The Examiner has rejected claims 1 through 20 under 35 U.S.C. § 103

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[2] Throughout this Decision we refer to the Appeal Brief filed October 15, 2019 ("Appeal Br."); Reply Brief, filed March 9, 2020 (Reply Br.); Final Office Action mailed March 6, 2019 ("Final Act."); and the Examiner's Answer mailed January 9, 2020 ("Ans.").

as being unpatentable over Veach (WO 2013/184712; Dec. 12, 2012) and
Chandler (US 7,822,728 B1; Oct. 26, 2010). Final Act. 4–10.

ANALYSIS

We have reviewed Appellant's arguments in the Briefs, the
Examiner's rejections, and the Examiner's response to Appellant's
arguments. Appellant's arguments have persuaded us of error in the
Examiner's rejection of all of the disputed claims under 35 U.S.C. § 103.

Appellant presents several arguments with respect to the Examiner's
obviousness rejection of independent claim 1, based on Veach and Chandler,
on pages 3 through 6 of the Appeal Brief, and pages 3 through 5 of the
Reply Brief. The dispositive issue presented by these arguments, is whether
the Examiner erred in finding the combination of Veach and Chandler
teaches while the written data is being committed to memory, imposing a
commit wait time for the written data as recited in independent claim 1.

With respect to this disputed limitation, the Examiner cites to
Chandler's method of pipelining metadata such that some metadata commit
sequences take longer than others as teaching the claimed commit wait time
for the written data. Ans. 4–5 (citing Chandler, Fig. 7, col. 1. ll. 54–56, col. 7
ll. 25–48, col. 8, ll. 25–36, ll. 55-col. 9, ll. 11, col. 10, ll. 7–11).

We have reviewed the cited teachings of Chandler and disagree with
the Examiner that the reference teaches the disputed limitation. Claim 1
recites "impose a commit wait time for the written data on at least one of a
client library, the other servers, or the clients, wherein the commit wait time
is an interval of time that must pass before the at least one of the client
library, the other servers, or the clients can see the effects of the written

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data." Appellant's Specification identifies this is an interval of time, imposed on the various devices, which they must wait to pass before the effects of the data transaction in memory are seen. Specification ¶ 3. Although the metadata commit sequences shown in Figure 7, and described in the paragraphs of Chandler cited by the Examiner, may result in some sequences taking longer than others; we do not find that Chandler teaches a time interval is imposed on the devices as claimed. The differences between some metadata commit sequences is the byproduct of a pipeline, and is not because of an imposed commit wait time (imposed time interval). As such we do not sustain the Examiner's rejection of independent claims 1, and dependent claims 2 through 11.

With respect to independent claim 12, Appellant argues the combination of Veach and Chandler does not teach "releasing, by the first computing device, the write lock without waiting for a commit wait time for the write to expire, such that the commit wait time is imposed on at least one of a client library, other servers, or the clients, wherein the commit wait time is an interval of time that must pass before the at least one of the client library, the other servers, or the clients can see the effects of the write" as recited in claim 12. Appeal Br. 7; Reply Br. 6. Appellant asserts that for the reasons discussed with respect to claim 1, Chandler does not teach imposing a commit wait time. Appeal Br. 7.

The Examiner, in response to Appellant's arguments, cites to the same teachings discussed above to support the finding that Chandler teaches the claimed commit wait time. Ans. 6–7.

Appellant's arguments have persuaded us of error in the Examiner's

rejection of claim 12. The scope of claim 12 differs from claim 1, however claim 12 similarly recites a commit wait time is imposed on at least one of a client library, other servers, or the clients. As discussed above with respect to claim 1, we do not find the teachings cited by the Examiner support a finding that Chandler teaches this limitation. Accordingly, we do not sustain the Examiner's rejection of independent claim 12 or dependent claims 13 through 20.

<div align="center">CONCLUSION</div>

We reverse the Examiner's rejections of claims 1 through 20 under 35 U.S.C. § 103.

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–20	103	Veach, Chandler		1–20

<div align="center">REVERSED</div>