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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JIN SONG JI, JIAN JIANG,
SI YUAN ZHANG, and HONG WEI ZHU

Appeal 2016-003602
Application 14/028,753
Technology Center 2100

Before MAHSHID D. SAADAT, JOHNNY A. KUMAR, and
JON M. JURGOVAN, *Administrative Patent Judges*.

KUMAR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Final Rejection
of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is IBM Corporation
(App. Br. 1).

STATEMENT OF THE CASE

Introduction

Appellants' invention relates to optimizing a parallel build of an application (Spec. ¶ 6). Exemplary claim 1 under appeal reads as follows:

1. A method for optimizing a parallel build of an application, comprising:

in parallel execution of commands, recording command sequence numbers and access information of the commands;

detecting an execution conflict based on the command sequence numbers and the access information of the commands using a processor; and

re-executing commands involved in the execution conflict serially.

The Examiner's Rejections

Claims 17–20 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter (Final Act. 3).

Claims 1–20 are rejected under 35 U.S.C. § 102(b) as anticipated by Melski et al. (US 2010/0262948 A1; publ. Oct. 14, 2010) (Final Act. 4–8).

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments that the Examiner has erred. We disagree with Appellants' conclusions. We adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and the reasons set forth by the Examiner in the Examiner's Answer in response to Appellants' Appeal Brief.

Rejection under 35 U.S.C. § 101

Based on Appellants' arguments, we decide the appeal of claims 17–20 on the basis of representative claim 17. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants contend the Specification clearly distinguishes a signal medium from a storage medium, and thus, one having ordinary skill in the art would not construe the claimed “storage medium” as consisting of a transitory, propagating signal (App. Br. 9–11; Reply Br. 2–5). However, Appellants' Specification does not explicitly define storage media to exclude transitory media. Consequently, the claimed “computer readable storage medium” encompasses transitory media, which is not patent eligible. *See Ex parte Mewherter*, 107 USPQ2d 1857 (PTAB 2013) (precedential).

Accordingly, we sustain the Examiner's rejection of claims 17–20 under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Rejection under 35 U.S.C. § 102(b)

Claim 1

Based on Appellants' arguments, we decide the appeal of claims 1, 3–10, 12–17, 19, and 20 on the basis of representative claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants contend Melski's job number “N” is not tracked or recorded, and does not specify an execution sequence of commands in serial execution, as the sequence of execution for each job shown in Figures 10a and 10b does not follow the job numbers (e.g., job 7 starts after job 8 and ends after job 8 ends) (App. Br. 15–16; Reply Br. 5–7). Appellants further argue the Examiner has not identified a portion of Melski that discloses “recording access information of the commands” (App. Br. 16; Reply Br. 7–

9). Thus, Appellants contend that, although Melski detects conflicts using sequential order (App. Br. 18 (citing Melski ¶¶ 93–95)), Melski does not disclose detecting execution conflicts based on recorded command sequence numbers and access information of the commands (App Br. 17–18; Reply Br. 8–9).

We are unpersuaded of Examiner error by Appellants’ contentions. Appellants’ Specification describes “command sequence numbers” as “represent[ing] a sequence of commands” (Spec. ¶ 53). Under the broadest reasonable interpretation consistent with Appellants’ disclosure, we agree with the Examiner’s finding that Melski’s job numbers represent a sequence of commands in a parallel build that are evaluated for conflict by the terminator module (Final Act. 4; Ans. 4–6 (citing Melski Fig. 3b; *see also* ¶¶ 93–95 for the description of Fig. 3b)). *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004) (“[T]he PTO is obligated to give claims their broadest reasonable interpretation during examination.”). Melski discloses recording of the job numbers, or command sequence numbers, is reflected in the file version numbers that are updated each time a particular job (i.e., Job N) is executed (*see* Final Act. 4–5; Ans. 5–7 (citing Melski Fig. 4a; *see also* ¶¶ 95–97 for the description of the modules of Fig. 4a)), therefore the file version number also “represents a sequence of commands.”

We further agree with the Examiner’s finding that Melski discloses recording access information of commands, as a “last modified” timestamp and a registry entry version are recorded during command execution (*id.*), and such information is consistent with Appellants’ description of “access information” (*see* Spec. ¶ 54 (“Access information of commands includes an

access timestamp, an accessed file ID, and an access type.”)). Melski’s terminator modules uses this recorded command sequence number and access information to determine and resolve conflicts in a parallel build (*see* Final Act. 4–5; Ans. 5–7 (citing Melski Fig. 4a; *see also* ¶¶ 95–97 for the description of the modules of Fig. 4a)), thus, we agree with the Examiner’s finding that Melski discloses detecting an execution conflict “based on” the claimed recorded information, and re-executing commands involved in the conflict serially (Final Act. 4 (citing Melski Fig. 3b, step 322; *see also* ¶ 118 for the description of step 322: job with conflict is re-executed while all other jobs are placed on hold)).

Accordingly, we sustain the Examiner’s rejection of claims 1, 3–10, 12–17, 19, and 20 under 35 U.S.C. § 102(b) as anticipated by Melski.

Claim 2

Based on Appellants’ arguments, we decide the appeal of claims 2, 11, and 18 on the basis of representative claim 2. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants contend that, although Melski discloses the use of a makefile, Melski does not disclose the command sequence numbers are allocated according to a makefile in a shared filed system (App. Br. 18; Reply Br. 9). The Examiner finds, and we agree, that the broadest reasonable interpretation of “allocating the command sequence numbers according to a makefile” does not preclude detecting command conflicts and correcting the file dependencies in the makefile, which is disclosed as using a shared filed system, the makefile then facilitating (i.e., allocating) the correct sequence number of the commands when accessed by the build

module (Final Act. 5 (citing Melski Fig. 4a and ¶ 88; *see also* ¶¶ 92–95 for the description of Fig 4a, makefile dependency errors and correction)). *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d at 1369. Therefore, we sustain the Examiner’s rejection of claims 2, 11, and 18 under 35 U.S.C. § 102(b) as anticipated by Melski.

DECISION

We affirm the Examiner’s rejection of claims 17–20 under 35 U.S.C. § 101.

We affirm the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 102(b).

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