



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes application details for 13/455,309 and examiner information for VU, TUAN A.

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ibmptomail@iplawpro.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILFRED CADELINA JAMISON

Appeal 2014-008926
Application 13/455,309
Technology Center 2100

Before LINZY T. McCARTNEY, MONICA S. ULLAGADDI, and
JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 24–43, which constitute all of the claims pending in this application.² We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

¹ According to Appellant, the real party in interest is IBM Corporation. App. Br. 1.

² Claims 1–23 have been canceled. App. Br. 2.

INVENTION

Appellant's invention relates to determining a benefit of reducing the memory footprint of a Java-based computer application. Abstract. Claim 24 is illustrative and reads as follows:

24. A method, within a computer hardware system having a heap, of improving performance in a Java-based computer program, comprising:

executing the computer program within a virtual machine;

identifying when the computer program enters a steady state;

only after the computer program being within the steady state, obtaining information regarding garbage collection associated with the computer program; and

predicting, based upon the information, changes in performance of the computer program that will result from modifying the computer program.

REJECTIONS

Claims 37–43 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 24–28, 30–35, 37–41, and 43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Sumit Chawla, *Fine-tuning Java Garbage Collection Performance*, Jan. 2003, 1–10 (“Chawla”), Findeisen (US 2004/0181562 A1; published Sept. 16, 2004), Garthwaite (2004/0111448 A1; published June 10, 2004), and Lewis et al. (US 6,493,730 B1; issued Dec. 10, 2002) (“Lewis”).

Claims 29, 36, and 42 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Chawla, Findeisen, Garthwaite, Lewis,

and SunMicrosystems, “*Tuning Garbage Collection with the 5.0 Java™ Virtual Machine*,” Copyright 2003, pp. 1-15 (“SunMicSys”).

Claims 26, 27, 33, 34, 39, and 40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 3, 4, 10, 11, 16, and 17 of U.S. Patent No. 8,245,213.

Claims 26, 27, 33, 34, 39, and 40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over the combination of claim 1 of U.S. Patent No. 7,434,214, Findeisen, and Garthwaite.

ANALYSIS

Rejection of Claims 37–43 under 35 U.S.C. § 101

Claims 37–43 recite a “computer usable storage medium.” App. Br. 28–31. The Examiner rejected those claims as directed to non-patentable subject matter because the recited term “medium” does not preclude a transitory container of signals. Final Act. 2. Appellant contends the Examiner’s interpretation of the recited “storage medium” is “per se . . . unreasonable.” App. Br. 11.

We agree with the Examiner. The Board held in a precedential decision that a recited machine-readable storage medium, having a program stored thereon, and absent an express limitation of scope to non-transitory storage media, is ineligible under § 101 because it encompasses transitory media. *Ex parte Mewherter*, 107 USPQ2d 1857, 1862 (PTAB 2013) (precedential). Appellant’s Specification, particularly at pages 24 and 25, does not disclaim propagation media or transitory propagating signals from

the meaning of “computer readable storage medium.” Spec. 24–25. The Specification describes “signal bearing media” using transmission forms, such as, for example, radio frequency and light wave transmissions, which we find encompasses transitory media, which is not patent eligible. *See id.*

Accordingly, we sustain the Examiner’s 35 U.S.C. § 101 rejection of independent claim 37 and claims 38–43, which depend from claim 37.

Rejection of Claims 24–43 under 35 U.S.C. § 103(a)

With regard to the obviousness rejection of claim 24, Appellant contends neither the “ready state” nor the “stable heap size” taught in Chawla teaches or suggests the “steady state” recited in claim 24. App. Br. 12–16. Appellant further argues that the cited portions of Chawla, Findeisen, Garthwaite, and Lewis do not teach or suggest the steps of “only after the computer program being within the steady state, obtaining information regarding garbage collection associated with the computer program” and “predicting, based upon the information, changes in performance of the computer program that will result from modifying the computer program,” recited in claim 24. *Id.* at 11–22.

The Examiner interprets “steady state” in a running software program to mean “a SW state that cannot be deemed unstable, or still subjected to changes or ongoing sub-processes having effect on a usable part of memory.” Ans. 17. Claims, however, must be given their broadest reasonable interpretation “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). We find the Examiner’s

interpretation overly broad in view of the explicit definition of “steady state” set forth in Appellant’s Specification:

- A steady state is defined as occurring when:
- the standard deviation from GCINTavg<5%
 - the standard deviation from GCavg<5%
 - the standard deviation from GARBAGEavg<5%
 - the standard deviation from LIVEMEMavg<5%
 - the HeapSize is the same all throughout.

Spec. 20, lines 6–12.

In view of the definition of “steady state” in Appellant’s Specification, the Examiner’s findings with regard to Chawla, Findeisen, Garthwaite, and Lewis do not sufficiently show that the cited portions of each reference teach or suggest a “steady state” as Appellant defines the term.

For these reasons, we do not sustain the 35 U.S.C. § 103(a) rejection of representative claim 24, or of independent claims 31 and 37, which contain similar limitations. We also do not sustain the 35 U.S.C. § 103(a) rejections of claims 25–30, 32–36, and 38–43, which depend from claims 24, 31, and 37, respectively. *See* App. Br. 11, 22.

Provisional Double Patenting Rejections of Claims 26, 27, 33, 34, 39–40

With respect to the rejections based upon the judicially created doctrine of obviousness-type double patenting, Appellant has not contested or identified an error in the Examiner’s rejections. *See* App. Br. 3 n.1. Thus, we treat any argument with respect to those rejections as waived and affirm the rejections. *Hyatt v. Dudas*, 551 F.3d 1307, 1314 (Fed. Cir. 2008). Accordingly, we summarily sustain the Examiner’s nonstatutory double patenting rejections of claims 26, 27, 33, 34, and 39–40.

DECISION

We affirm the Examiner's decision rejecting claims 37–43 under 35 U.S.C. § 101.

We reverse the Examiner's decision rejecting claims 24–43 under 35 U.S.C. § 103(a).

We affirm the Examiner's decision provisionally rejecting claims 26, 27, 33, 34, 39, and 40 under the doctrine of obviousness-type double patenting.

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-IN-PART