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22879 7590 03/13/2015 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528			EXAMINER	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PATRICK A. REYNOLDS, JANET L. WIENER, MARCOS K. AGUILERA and JEFFREY C. MOGUL

Application 11/148,482 Technology Center 2400

Before ANTON W. FETTING, BIBHU R. MOHANTY, and NINA L. MEDLOCK *Administrative Patent Judges*.

MOHANTY, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1–60, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM-IN-PART.

THE INVENTION

The Appellants' claimed invention is directed to systems and methods for inferring casual paths from messages communicated between nodes in a distributed computing environment (Spec. para. 1). Claim 1, reproduced below with the numbering in brackets added, is representative of the subject matter on appeal.

- 1. A method comprising:
- [1] evaluating messages between pairs of nodes of a distributed computing environment;
- [2] based on timing relationships of said messages, determining probability of a causal link between two or more of said messages;
- [3] based on said determined probability, inferring at least one causal path comprising a plurality of causal links; [4] and

determining an overall probability that the inferred causal path is accurate.

THE REJECTIONS

The following rejections are before us for review:

- 1. Claims 1–27 and 51–60 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.
- 2. Claims 1–50 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite.
- 3. Claims 1–60 are rejected under 35 U.S.C. § 103(a) as unpatentable over Przytula (US 2005/0091177 A1, pub. Apr. 28, 2005) and Papaefstathiou (US 6,925,431 B1, iss. Aug. 2, 2005).

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence.¹

ANALYSIS

Rejection under 35 U.S.C. § 101

The Appellants argue that the rejection of claims 1–27 and 51–60 is improper (Br. 1–13, Reply Br. 4–6).

In contrast the Examiner has determined that the rejection is proper (Ans. 5–6, 15–16).

We agree with the Examiner. In claim 1, the recited method steps can be performed essentially in a series of mere mental steps, i.e., claim 1 recites a mental process, which is patent-ineligible subject matter. *See*, *e.g.*, *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) ("Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."). None of the elements of the claim, individually or as an ordered combination, transforms the claim into patent-eligible subject matter.

Claim 51 and claim 55 similarly recite method steps, e.g., estimating an average causal delay, or standard delay, between nodes, that can be performed in a series of mere mental steps. Further in both of claims 51 and 55, none of the elements of either respective claim, individually or as an ordered combination, transforms the claim into patent-eligible subject matter.

¹ See Ethicon, Inc. v. Quigg, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

For these above reasons these rejections are sustained.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 1 and 28–30 as indefinite (Ans. 6). Specifically, the phrase "the inferred causal path is accurate" or similar phrases have been held indefinite because it is unclear how it is determined that the casual path is accurate (Ans. 6). The Examiner has also determined that the phrase "forming the causal path" in claims 42, 51, and 55 is indefinite because it is unclear how the system or software does this (Ans. 6, 17).

In contrast, the Appellant has determined that the cited rejections are improper (App. Br. 13–16, Reply Br. 6–9).

We agree with the Appellants. Here, in the instances cited above the claim limitations for both determining that "the inferred causal path is accurate" and "forming the causal path" are directed to issues of breadth, and not indefiniteness, and these rejections are not sustained.

Rejection under 35 U.S.C. § 103(a)

The Appellants argue that the rejection of claim 1 is improper because the prior art does not disclose claim limitation [2] (App. Br. 17–22, Reply Br. 10–13).

In contrast, the Examiner has determined that claim limitation [2] is shown by Przytula at Figs. 4–5 and paras. 54, 56, and 57 (Ans. 7–8, 18).

We agree with the Appellants. Claim limitation [2] requires "based on *timing relationships of said messages*, determining probability of a causal link between two or more of said *messages*." Here, the above citations to

Przytula disclose neither any specific relation to two or more *messages* or the *timing relationships of those messages* and the rejection of claim 1 and its dependent claims is not sustained. Claims 28, 42, 51, and 55 contain a similar limitation and the rejection of these claims and their dependent claims is not sustained for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that Appellants have not shown that the Examiner erred in rejecting the claims as listed above under 35 U.S.C. § 101.

We conclude that Appellants have shown that the Examiner erred in rejecting the claims as listed above under 35 U.S.C. § 112, second paragraph and 35 U.S.C. § 103.

DECISION

The Examiner's rejection of claims 28–50 is reversed. The Examiner's rejection of claims 1–27 and 51–60 is sustained.

AFFIRMED-IN-PART

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