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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WERNER LABER, RALF BESINGER,
ANDREAS HEINZMANN, CHRISTIAN HOFFMANN,
and JENS-PETER JENSEN

Appeal 2018-004139
Application 13/586,774
Technology Center 3600

Before CARL W. WHITEHEAD JR., NABEEL U. KHAN, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–20, which are all of the pending claims. *See* Appeal Br. 14–31 *and* Final Act. 1–17. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies SAP SE as the real party in interest. Appeal Br. 3.

Introduction

Appellant states the “disclosure relates to utilizing a Process Object Layer [(POL)] to mediate business services with backend systems.” Spec. ¶ 1. “Process objects” in the POL mediate between front-end applications and “business process objects” on backend systems for providing services such as bank account processing. *See* Figs. 1–5, Spec. ¶¶ 42–47. The POL process objects include a persistent local representation of data elements of backend system objects to provide a “local view” of the business process objects, which facilitates “efficient execution and/or orchestration of the tasks of the service by the [POL] process object.” *Id.* ¶ 46.

Independent claim 19 is illustrative, reproduced here with certain data structure-related limitations emphasized *in italics*:

19. A computerized method for providing a service, the method comprising:

instantiating, using at least one processor of a machine, an instance of a process object of a service infrastructure, *wherein the process object comprises a first data structure and is configured to manage two or more business process objects of the service infrastructure that reside external to the process object and on two or more heterogeneous backend systems, each of the two or more business process objects comprising a corresponding data structure containing information related to the corresponding business process object, the first data structure maintaining a local representation of at least a portion of the information in one of the corresponding data structures*, each of the heterogeneous backend systems providing different functionality; and

performing, using the one or more processors, the service utilizing the process object of the service infrastructure and at least one of the back end systems.

Appeal Br. 33 (Claims App’x).

Rejections & References

The Examiner rejected claims 1, 2, 4, 6, 9, 10, 12–15, and 18–20 under 35 U.S.C. § 103(a) as unpatentable over Zimmerman et al., *Service-Oriented Architecture and Business Process Choreography in an Order Management Scenario: Rationale, Concepts, Lessons Learned* (OOPSLA Oct. 16–20, 2005) (“Zimmerman”) and Lai (US 7,698,398 B1; Apr. 13, 2010). Final Act. 5–11.

The Examiner rejected claim 3 under 35 U.S.C. § 103(a) as unpatentable over Zimmerman, Lai, and Ohashi (US 2007/0214173 A1; Sept. 13, 2007). Final Act. 11–12.

The Examiner rejected claims 5, 7, 18, and 17 under 35 U.S.C. § 103(a) as unpatentable over Zimmerman, Lai, and Richter (US 2013/0031014 A1; Jan. 31, 2013). Final Act. 12–15.

The Examiner rejected claim 11 under 35 U.S.C. § 103(a) as unpatentable over Zimmerman, Lai, and Bornhoevd (US 7,779,383 B2; Aug. 17, 2010). Final Act. 15–16.

The Examiner rejected claim 16 under 35 U.S.C. § 103(a) as unpatentable over Zimmerman, Lai, and Bernardini (US 2010/0031090 A1; Feb. 4, 2010). Final Act. 17.

ANALYSIS

In rejecting claim 1, the Examiner relies on Zimmerman for teaching the claim’s “first data structure” limitations (shown in *italics* above in the Introduction). *See* Final Act. 3, 5–6. In particular, the Examiner finds that Zimmerman’s disclosure of storing a process’s context in a database inherently teaches the recited “first data structure . . . maintaining a local representation of at least a portion of the information in one of the

corresponding data structures,” as recited. *Id.* at 3 (citing Zimmerman 2 (§ 2.3), 6 (§ 3.4)). In particular, the Examiner maps the “business process” of Zimmerman to claim 1’s process object and finds, because Zimmerman discloses that “all parts of the business process . . . context are stored in a database . . . and can be restored at a later stage” (Zimmerman 6 (§ 3.4)), that Zimmerman’s business process inherently contains a data structure that “maintain[s] a local representation of at least a portion of the information in one of the corresponding data structures,” as recited. Final Act. 3.

Appellant contends, *inter alia*,² the Examiner errs in this inherency finding. Appeal Br. 17–19. In particular, Appellant argues “that a teaching that all parts of the business process *context* are stored *in a database* does not teach a data structure stored *in the process object* itself,” as recited. *Id.*; *see also id.* at 19 (contending “a disclosure of a ‘database’ is not equivalent to a data structure in a process object, as would be apparent to a person of ordinary skill in the art”).

The Examiner responds that because Zimmerman describes that its business processes can “live” within a system for indefinite periods (i.e., because they can be restored using the stored context), Zimmerman’s “business process context includes the business process itself,” and therefore Zimmerman necessarily teaches that the business process (i.e., that is stored in the database) includes claim 1’s recited “first data structure maintaining a local representation of at least a portion of the information in one of the corresponding data structures.” Ans. 5. As Appellant replies, however, and we agree, “[t]here is no indication that the database stores anything other

² Because we reverse the Examiner based on a dispositive issue, we do not address all of Appellant’s arguments.

than the business process context, as opposed to the business process itself. The Examiner has presented no evidence as to why the business process [itself] must be stored in the database.” Reply Br. 3–4.

Appellant further replies, and we also agree, that the Examiner’s inherency finding is flawed because the Examiner provides no evidence for why Zimmerman’s business process information cannot be stored externally to the business process (e.g., in a non-local, external database) as opposed to locally, as required by claim 1. Reply Br. 4. Thus, on this record, there are insufficient findings to show that Zimmerman teaches or suggests instantiating an instance of a process object that “comprises a first data structure” that “maintain[s] a local representation of at least a portion of the information in one of the corresponding data structures” that are comprised by two or more business process objects, as recited by claim 1.

Accordingly, we do not sustain the 35 U.S.C. § 103(a) obviousness rejection of claim 1. For the same reasons we do not sustain the § 103(a) rejection of independent claims 19 and 20, which include commensurate limitations for which their rejection relies on the same findings. We also, therefore, do not sustain the rejection of dependent claims 2–18.

DECISION

We reverse the rejections of claims 1–20 under 35 U.S.C. § 103(a).

In summary:

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1, 2, 4, 6, 9, 10, 12–15, 18–20	103(a)	Zimmerman, Lai		1, 2, 4, 6, 9, 10, 12–15, 18–20
3	103(a)	Zimmerman, Lai, Ohashi		3
5, 7, 18, 17	103(a)	Zimmerman, Lai, Richter		5, 7, 18, 17
11	103(a)	Zimmerman, Lai, Bornhoevd		11
16	103(a)	Zimmerman, Lai, Bernardini		16
Overall Outcome				1–20

REVERSED