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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte XIN PENG LIU, XI NING WANG, LIANG XUE,
KE XIN ZHOU, and YU CHEN ZHOU

Appeal 2013-005461
Application No. 12/277,934
Technology Center 2100

Before JOHN A. JEFFERY, MARC S. HOFF, and ERIC B. CHEN,
Administrative Patent Judges.

HOFF, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1–21. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

Appellants' invention is a method for enforcing context model based policies with forward chaining and a policy engine, especially in a Service Oriented Architecture system. Spec. 2. The invention includes applying a policy set including a plurality of policies to an instantiated context model, which includes a set of referenced instance documents in XML formats. The method further includes determining whether the instantiated context model

should be updated, and if so, executing an updating operation. Next, a new instantiated context model is generated according to the updated instance documents and the instantiated context model, and the policy set is applied to the new instantiated context model. Abstract.

Claims 1 and 11 are exemplary of the claims on appeal:

1. A method for enforcing a number of context model based policies with forward chaining, the method comprising:

applying a policy set, including a plurality of policies each having a condition part and an action part, to an instantiated context model, in which the instantiated context model is derived by replacing each document in an abstract context model with a corresponding instance document, and in which the instantiated context model comprises a number of referenced instance documents;

determining whether the instantiated context model should be updated; in response to said determination indicating that the instantiated context model should be updated, executing an updating operation to produce updated instance documents;

generating a new instantiated context model according to the updated instance documents; and

applying the policy set to the new instantiated context model to facilitate communication among components in a Service Oriented Architecture.

11. A computer-implemented policy engine for enforcing a number of context model based policies with forward chaining, the policy engine comprising:

at least one processor; and

a memory communicatively coupled to said at least one processor, said memory storing machine-executable instructions that, when executed by said at least one processor, cause said at least one processor to implement:

a policy application device that applies a policy set including a plurality of policies to an instantiated context model, the instantiated context model comprising a set of referenced instance documents in XML format, the set of referenced instance documents comprising inter-document references among the instance documents within the set of referenced instance documents;

an updating determining module that determines whether the instantiated context model should be updated;

an updating module that executes an updating operation;
a context model regenerator that re-generates a new instantiated context model according to the updated instance documents and the instantiated context model; and

in which the new instantiated context model is provided to the policy application device and the policy application device applies the policy set to the new instantiated context model; and

in which the policies include a condition part and an action part.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Yoshimura	US 2002/0169753 A1	Nov. 14, 2002
Wang	US 2005/0204054 A1	Sep. 15, 2005
Graves	US 2005/0234682 A1	Oct. 20, 2005
Zondervan	US 2006/0106879 A1	May 18, 2006
Vinberg	US 2008/0059214 A1	Mar. 6, 2008
Comstock	US 2008/0120685 A1	May 22, 2008

Claim 21 stands rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1–4, 6, 10, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg and Wang.

Claims 11–14, 16, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, and Yoshimura.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, and Zondervan.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, Yoshimura, and Zondervan.

Claims 7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, and Graves.

Claims 17 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, Yoshimura, and Graves.

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, Graves, and Comstock.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vinberg, Wang, Yoshimura, Graves, and Comstock.

Throughout this decision, we make reference to the Appeal Brief (“App. Br.,” filed December 7, 2012), the Reply Brief (“Reply Br.,” filed March 14, 2013), and the Examiner’s Answer (“Ans.,” mailed January 31, 2013) for their respective details.

ISSUES

Appellants argue that the phrase “computer readable storage medium” must be construed so as to exclude transitory embodiments. *See App. Br. 13.*

Appellants contend, inter alia, that Vinberg fails to disclose an instantiated context model that is derived by replacing each document in an abstract context model with a corresponding instance document. App. Br. 14, 10. Further, Appellants argue that even if Vinberg can be read to replace a single document with a corresponding instance document, Vinberg does not disclose replacing *each document in an abstract context model*. App. Br. 15, 16.

Appellants assert that the combination of Vinberg, Wang, and Yoshimura fails to disclose or suggest a set of referenced instance documents comprising inter-document references among the instance documents. App. Br. 24–25.

With respect to dependent claim 15, Appellants further argue that Vinberg, Wang, Yoshimura, and Zondervan fail to disclose or suggest a determining unit “that determines whether there is a modification operation of which the modification content equals or contains the modification contents of other modification operations.” App. Br. 29. (Emphasis omitted).

Appellants’ contentions present us with the following issues:

1. Does claim 21 recite nonstatutory subject matter?
2. Does Vinberg disclose an instantiated context model derived by replacing each document in an abstract context model with a corresponding instance document?
3. Does the combination of Vinberg, Wang, and Yoshimura disclose or suggest a set of referenced instance documents in XML format, the set of referenced instance documents comprising inter-document references among the instance documents?

4. Does the combination of Vinberg, Wang, Yoshimura, and Zondervan disclose or suggest determining whether there is a modification operation of which the modification content equals or contains the modification contents of other modification operations?

ANALYSIS

SECTION 101 REJECTION OF CLAIM 21

We are not persuaded by Appellants' contention that "computer readable storage medium" must be construed in such a way that excludes propagation media. See App. Br. 13. Subsequent to the non-precedential decision in *Ex parte Hu* cited by Appellants (App. Br. 13), 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 paragraphs [0024] and [0025], does not disclaim propagation media or transitory propagating signals from the meaning of "computer readable storage medium." Without any such disclaimer in the Specification, we agree with the Examiner that the broadest reasonable interpretation of "computer readable storage medium" includes non-statutory embodiments such as transitory propagating signals.

We conclude that the Examiner did not err in rejecting claim 21 as being directed to nonstatutory subject matter. We sustain the § 101 rejection.

PRIOR ART REJECTION OF CLAIMS 1–4, 6, 10, AND 21

The Examiner finds that Vinberg discloses an instantiated context model derived by replacing each document in an abstract context model with a corresponding instance document. Ans. 6–7. We do not agree.

Vinberg discloses a system definition model (SDM) that describes a system that can be managed. ¶ 0021. In an example, “SDM 200 includes a component corresponding to each of one or more software and/or hardware components being managed in a system.” ¶ 0038. In certain embodiments, “[e]ach component in the SDM corresponds to or is associated with a type, an instance, and possibly one or more configurations.” ¶ 0058. Associated with each component in SDM 200 is one or more information pages. ¶ 0045. Even if we construe the information pages of Vinberg as correspondent to the claimed instance documents, we agree with Appellants that Vinberg’s SDM is not derived by replacing each document in an *abstract context model* with a corresponding *instance document*. App. Br. 15–16.

We do not agree with the Examiner that Vinberg discloses the claimed replacement in paragraph [0058]. There, Vinberg discloses that each component in the SDM corresponds to or is associated with a type, and instance, and possibly one or more configurations. ¶ 0058. The Examiner states that “the SDM is implemented by replacing the a (sic) general template or a class type having a general information page[s] or a general information document[s] with an instance, which is a specific instance or an occurrence of a type which corresponds to an actual physical component.” FinalAct. 6 (emphasis omitted). The Examiner cites to Vinberg paragraphs [0045] and [0058], but neither paragraph supports the Examiner’s position

that, as claimed, “each document in an abstract context model” is *replaced* with “a corresponding instance document.”

We thus conclude that the Examiner erred in combining Vinberg and Wang to achieve the invention recited in claims 1–4, 6,¹ 10, and 21. We do not sustain the Examiner’s § 103 rejection.

CLAIM 5

Claim 5 depends from claim 1, whose § 103 rejection we do not sustain *supra*. We have reviewed Zondervan and we find that it does not remedy the deficiencies of Vinberg and Wang. Therefore, we do not sustain the rejection of claim 5 over Vinberg, Wang, and Zondervan, for the reasons given with respect to the rejection of claim 1, *supra*.

CLAIMS 7–9

These claims depend from claim 1, whose § 103 rejection we do not sustain *supra*. We have reviewed Graves and Comstock and we find that they do not remedy the deficiencies of Vinberg and Wang. Therefore, we do not sustain the rejection of claims 7–9, for the reasons given with respect to the rejection of claim 1, *supra*.

¹ Claim 6 recites “the method according to any one of claim 1,” language similar to that ordinarily used in a multiple dependent claim. Because claim 6 only mentions claim 1 as a parent claim, however, we treat it as an ordinary dependent claim.

CLAIMS 11–14 AND 16–20²

We do not agree with Appellants’ argument that the combination of Vinberg, Wang, and Yoshimura fails to disclose all the limitations of claim 11. Appellants argue what the Examiner already concedes, namely that Vinberg and Wang do not disclose a set of referenced instance documents “comprising inter-document references among the instance documents.” App. Br. 24–25. Appellants then simply assert that Yoshimura “also fails to teach or suggest this subject matter.” However, we agree with the Examiner’s finding that Yoshimura discloses a document management database that “manages inter-document relation information ... made up of a document template type 111, a keyword 112, and a relation 113 between the document template types.” *See* Final Rej. 11; Yoshimura ¶ 0040.

Appellants’ argument that Wang is silent regarding a referenced instance document of any kind, or regarding referenced instance documents comprising inter-document references among the instance documents (App. Br. 25), is also not persuasive to show Examiner error. The Examiner relied on Vinberg to disclose instance documents, and on Yoshimura to show a set of documents with inter-document references. The Examiner only relied on Wang to disclose documents in XML. Final Rej. 11, citing Wang ¶ 0029.

We conclude that the Examiner did not err in combining Vinberg, Wang, and Yoshimura to arrive at the invention recited in claim 11, and we sustain the § 103 rejection. We also sustain the § 103 rejection of claims 12–14 and 16–20, not separately argued with particularity.

² Claims 16, 17, and 20, similar to claim 6, recite “any one of claim 11.” Because these claims mention only one parent claim, we treat claims 16, 17, and 20 as ordinary dependent claims.

CLAIM 15

Appellants argue that the Examiner erred in finding that paragraph 0082 of Vinberg discloses the claimed determining unit “that determines whether there is a modification operation of which the modification content *equals or contains the modification contents of other modification operations* when the confliction detecting unit detects that the plurality of modification operations with conflicted modification contents is to be executed on one instance document.” *See* App. Br. 29–30. Appellants focus on the italicized portion, “equals or contains the modification contents of other modification operations,” and allege that “Vinberg simply fails to teach or suggest this determination process.” App. Br. 30. (Emphasis omitted).

In contrast to Appellants’ general allegation, the Examiner finds that Vinberg discloses “whenever a new policy is associated with a component it is added as a new policy information page.” If a component has multiple policy information pages, these pages “can be analyzed by a conflict resolution agent in order to combine the policies into a single policy information page . . . in a manner which satisfies all the policies.” Alternately, the conflict resolution agent “may flag certain conflicts for human resolution.” Vinberg ¶ 0082. We agree with the Examiner that Vinberg’s teaching of combining policies into a single policy information page in a manner which satisfies all the policies corresponds to the claim limitation of determining whether there is a modification operation, of which the modification content equals or contains the modification contents of other modification operations. We find that this section of Vinberg also

discloses detecting that a plurality of modification operations with conflicted modification contents are to be executed on one instance document.

We find that the combination of Vinberg, Wang, Yoshimura, and Zondervan discloses all the limitations of claim 15, and therefore that the Examiner did not err in rejecting claim 15. We sustain the § 103 rejection.

CONCLUSIONS

1. Claim 21 recites nonstatutory subject matter.
2. Vinberg does not disclose an instantiated context model derived by replacing each document in an abstract context model with a corresponding instance document.
3. The combination of Vinberg, Wang, and Yoshimura discloses a set of referenced instance documents in XML format, the set of referenced instance documents comprising inter-document references among the instance documents.
4. The combination of Vinberg, Wang, Yoshimura, and Zondervan suggests determining whether there is a modification operation of which the modification content equals or contains the modification contents of other modification operations.

The Examiner's rejection of claims 11–21 is affirmed. The Examiner's rejection of claims 1–10 is reversed.

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