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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KARAN GUPTA, MANOJ P. NAIK,
FRANK B. SCHMUCK, MANSI A. SHAH, and RENU TEWARI¹

Appeal 2019-000446
Application 14/969,574
Technology Center 2100

Before ERIC S. FRAHM, JOHN A. EVANS, and STEPHEN E. BELISLE,
Administrative Patent Judges.

EVANS, *Administrative Patent Judge.*

DECISION ON APPEAL
STATEMENT OF THE CASE

Jurisdiction.

Claims 1–20, all claims in the application, stand rejected, are
appealed, and are the subject of our Decision under 35 U.S.C. § 134(a).
Appeal Br. 5. We have jurisdiction over the pending claims under 35 U.S.C.
§ 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicants” as defined in
37 C.F.R. § 1.42(a). The Appeal Brief identifies International Business
Machines Corporation as the real party in interest. Appeal Br. 3.

Related Appeals.

Appellant states there are no related appeals or interferences. Appeal.
Br. 4.

Summary of the Invention.

The invention is directed to a method of synchronization of data in a shared pool of configurable computer resources. *See Abstract.*

Claims.

Claims 1, 9, and 16 are independent. Claim 1 is illustrative of the invention and is reproduced below with formatting added for clarity:

1. A method comprising:

creating one or more consistency points in a source filesystem, including creating a first consistency point at a first point-in-time and a second consistency point at a second point-in-time,

wherein each consistency point represents filesystem data and metadata at a point-in-time to establish a recovery point, and

wherein the first consistency point and the second consistency point are any two consistency points;

detecting a directory change at the source filesystem, including comparing the first consistency point with the second consistency point and identifying at least one difference between the first and second consistency points based on the comparison; and

communicating the detected directory change to a target filesystem including:

identifying a file level change-associated with a target filesystem directory based on the detected directory change and a mapping between the source and target filesystems; and

updating the target filesystem directory based on the file level change.

REJECTIONS² AT ISSUE³

References.

Name	Publication Number	Date
Karmarkar	US 7,809,691 B1	Oct. 5, 2010
Zheng	US 8,200,638 B1	June 12, 2012
Federwisch	US 2003/0182313 A1	Sept. 25, 2003
Carmel	US 2013/0036214 A1	Feb. 7, 2013

Rejections.

1. Claims 1, 2, 4, 9, 10, 12, 16, 17, and 19 stand rejected on the ground of nonstatutory double patenting over claims 1, 10, and 12 of U.S. Patent No. 9,235,594 B2.⁴ Final Act. 4. Withdrawn. Ans. 3.
2. Claims 1–3, 6, 7, 9–11, 13, 14, and 16–18 stand rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Zheng, Federwisch, and Carmel. Final Act. 7–13.

² The Application is being examined under the pre-AIA first to invent provisions. Final Act. 2.

³ Throughout this Decision, we refer to the Appeal Brief (“Appeal Br.”) filed May 29, 2018, the Reply Brief (“Reply Br.”) filed October 23, 2018, the Final Office Action (“Final Act.”) mailed December 29, 2017, the Examiner’s Answer (“Ans.”) mailed August 24, 2018, and the Specification (“Spec.”) filed December 15, 2015.

⁴ The Examiner has withdrawn the present double patenting rejection. Ans. 3.

3. Claims 4, 5, 12, and 19 stand rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Zheng, Federwisch, Carmel, and Karmarkar. Final Act. 13–14.
4. Claims 8, 15, and 20 stand rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Zheng, Federwisch, Carmel, and Karmarkar. Final Act. 15.

ANALYSIS

Overview.

We have reviewed Appellant’s arguments in the Briefs, the Examiner’s rejection, and the Examiner’s response to Appellant’s arguments. Appellant’s arguments have persuaded us of error in the Examiner’s obviousness rejection of Claims 1–20.

CLAIMS 1–3, 6, 7, 9–11, 13, 14, and 16–18: OBVIOUSNESS OVER ZHENG, FEDERWISCH, AND CARMEL.

Appellant argues these claims as a group in view of the limitations of Claim 1. Appeal Br. 24. Independent claims 9 and 16 are apparatus claims, and recite limitations commensurate with the limitations disputed as to method claim 1. Therefore, we decide the appeal of these claims on the basis of illustrative Claim 1 and refer to the rejected claims collectively herein as “the claims.” *See* 37 C.F.R. § 41.37(c)(1)(iv); *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

Consistency points.

Claim 1 recites, *inter alia*, “identifying at least one difference between the first and second consistency points.” Appellant discloses: “Each consistency point represents filesystem data and metadata at a point-in-time

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to establish a recovery point, and the first and second consistency points are any two consistency points. The first consistency point is compared with the second consistency point to detect a directory change at the source filesystem.” Spec., ¶ 5.

The Examiner finds Zheng discloses consistency points, but not in the claimed context. Final Act. 8. The Examiner find the deficiency of Zheng is remedied by Carmel’s teaching of:

[a] “comparing between any two topological snapshots” [and [b]] “[a] user may select two snapshots to compare, e.g. by making a selection in a first snapshot field (‘latest’ snapshot 602) and in a second snapshot field (data field 604). In some embodiments the user may move forward or backward in the date field by clicking on arrows 606.

Final Act. 9–10 (citing Carmel, ¶ 23, [a]; and ¶ 30, [b]). The Examiner finds the snapshots selected in the first and second snapshot field are any snapshots, where the forward and backwards arrows further allow the user to select any snapshots. *Id.*

Appellant contends the consistency points, as claimed and supported in the Specification, are directed at filesystem data and metadata. Appeal Br. 14 (citing n.20) (Claim 1, ll. 4–5; Spec., ¶ 40, ll. 3–7: “wherein each consistency point represents filesystem data and metadata at a point-in-time to establish a recovery point”). Appellant argues the snapshot, taught by Carmel, relates to the physical topology of the computer system, including high-level attributes, such as the operating system and application software. *Id.* Appellant argues Carmel is directed to a physical topology, but fails to teach filesystem data and metadata. *Id.*

Regarding the consistency limitation, the Examiner finds each of Zheng and Carmel provides the required teachings. Ans. 4. The Examiner

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finds: “Zheng discloses, ‘backup image 601 stores the entire data blocks of snapshot SS.sub.1, the difference (shown in FIGS. 6A and 6B as ‘diff’) between SS.sub.2 and SS.sub.1, and the difference between SS.sub.3 and SS.sub.2.[’]” Ans. 4. The Examiner further finds “Zheng teaches identifying changes between ‘any two consistency points’ where any two consistency points is interpreted as two different snapshots, regardless of whether they are successive or adjacent.” Ans. 5. The Examiner also finds Carmel discloses “comparing between any two topological snapshots.” *Id.*

Appellant contends the Examiner and Appellant agree that Zheng does not teach or suggest Appellant’s claim recitation: “wherein the first consistency point and the second consistency point are any two consistency points.” Reply Br. 2 (quoting Final Action, dated May 22, 2017).

In Final Actions dated May 22, 2017 and December 29, 2017, the Examiner finds Zheng does not teach consistency points, as claimed, but in the Answer, the Examiner now finds Zheng so teaches. Ans. 4. The Examiner has made “contradictory findings of technological facts based on shifting perceptions of the prior art” upon which we may not rely. *In re Vaidyanathan*, 381 F. App’x 985, 991 (Fed. Cir. 2010) (citing *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 496 (1951) (“[t]he agency’s contradictory findings of technological facts based on shifting perceptions of the prior art impeach the deference normally owed to administrative findings of fact.”)). We, therefore, decline to find Zheng teaches the claimed consistency points.

Appellant discloses each “consistency point represents filesystem data and metadata at a point-in-time to establish a recovery point, and the first and second consistency points are any two consistency points.” Spec., ¶ 5. In contrast, Carmel teaches a system which “may include a crawler

application that constantly, periodically or otherwise, searches an organization network to collect snapshots of the configuration status of its composite Cls.” Carmel, ¶ 29. Carmel further discloses: “[A] server may be regarded as a composite Cl, and it may include a root computer system object which may be related to various other items, such as hardware components, an operating system, software, and networking elements.” Carmel, ¶ 13. We find no disclosure in Carmel, nor does the Examiner so direct our attention, that teaches “represents filesystem data and metadata at a point-in-time to establish a recovery point,” as Appellant discloses and claims.

In view of the foregoing, we decline to sustain the rejection of Claims 1–3, 6, 7, 9–11, 13, 14, and 16–18.

CLAIMS 4, 5, 8, 12, 15, 19, and 20: OBVIOUSNESS OVER
ZHENG, FEDERWISCH, CARMEL, AND KARMAKAR.

Appellant contends Karmakar does not complete the teachings of the claimed consistency points. Appeal Br. 33–35. The Examiner does not apply Karmakar to this limitation. *See Answer.*

In view of the foregoing, we decline to sustain the rejection of Claims 4, 5, 8, 12, 15, 19, and 20.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–3, 6, 7, 9–11, 13, 14, 16–18	103(a)	Zheng, Federwisch, Carmel		1–3, 6, 7, 9–11, 13, 14, 16–18

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4, 5, 12, 19	103(a)	Zheng, Federwisch, Carmel, Karmakar		4, 5, 12, 19
8, 15, 20	103(a)	Zheng, Federwisch, Carmel, Karmakar		8, 15, 20
Overall Outcome				1–20

REVERSED