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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THERESA M. BROWN, EDUARD A. DIEL,
GREGORY E. MCBRIDE, and DAVID M. SHACKELFORD

Appeal 2018-005892
Application 14/029,237
Technology Center 2100

Before LARRY J. HUME, LINZY T. McCARTNEY, and
BETH Z. SHAW, *Administrative Patent Judges*.

SHAW, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants¹ appeal under 35 U.S.C. § 134 from a rejection of claims 1–3, 5–9, 11–15, and 17–20. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

The claims are directed to point-in-time copying of data within an asynchronous data mirroring environment. Spec. ¶ 1. Claim 1, reproduced below, is illustrative of the claimed subject matter:

A computer-implemented method for data mirroring, comprising:

receiving a request to initiate an asynchronous data mirroring operation associated with a first point-in-time copying process, the first point-in-time copying process being coordinated by a primary storage controller between a first primary volume and a second primary volume, the primary storage controller having an associated side file;

processing a first set of establish data to generate a point-in-time establish reservation, the first set of establish data associated with the first point-in-time copying process establish;

using the point-in-time establish reservation to generate a second set of establish data when the second point-in-time copying process can be performed; and

using the second set of establish data to initiate a second point-in-time copying process, the second point-in-time copying process being coordinated by a secondary storage controller between a first secondary volume and a second secondary volume; and

wherein the point-in-time establish reservation is assigned a point-in-time copy sequence number configured to coordinate a corresponding point-in-time copying process establish check-in, the point-in-time sequence number being generated by the

¹ Appellants are also the Applicants, International Business Machines Corporation, and the real party in interest (Br. 1).

primary storage controller at the time of Track Information Field creation, the point-in-time sequence number being included within a Track Information Field and point-in-time copy parameter list of the side file.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Micka	US 5,592,618	Jan. 7, 1997
Thompson	US 2012/0150811 A1	June 14, 2012
Gundy	US 2012/0254114 A1	Oct. 4, 2012

REJECTIONS

Claims 1–3, 5, 7–9, 11, 13–15, 17, 19, and 20 under 35 U.S.C. § 103 as being unpatentable over Gundy and Micka.

Claims 6, 12, and 18 under 35 U.S.C. § 103 as being unpatentable over Gundy, Micka, and Thompson.

CONTENTIONS AND ANALYSIS

Appellants argue the combination of Gundy and Micka do not teach the

point-in-time establish reservation to generate *a second set of establish data **when the second point-in-time copying process can be performed***, much less using the second set of establish data to initiate a second point-in-time copying process, the second point-in-time copying process being coordinated by a secondary storage controller between a first secondary volume and a second secondary volume.

Br. 4. In particular, Appellants argue, without more, that the “point-in-time copy sequence number configured to coordinate a corresponding point-in-time copying process establish check-in as disclosed and claimed is

patentably distinct from the self describing record of Micka.” *Id.* We are not persuaded by this conclusory argument. Rather, we agree with the Examiner’s finding that Gundy teaches generating a second point-in-time copy, and Micka teaches data consistencies through predetermined time intervals and a period schedule of consistency validation of the database through point-in-time comparisons. Ans. 3–6 (citing Gundy ¶¶ 21–24, 34–35; Micka 4:28–44, 8:47–15:5).

Appellants also argue that Gundy fails to teach this element of claim 1 because

a disclosure of a sequence number contained within a track information field is not a disclosure or suggestion of the point-in-time sequence number being generated by the primary storage controller *at the time of Track Information Field creation*, the point-in-time sequence number being included within *a Track Information Field and a point-in-time copy parameter list of the side file*,

as required by claims 1, 7, and 13. Br. 5. We are not persuaded by this unsupported argument because as the Examiner explains, “Micka teaches that a determination is made that the primary site and secondary site are out of synch and a failure has occurred,” and due to failure the primary site aborts or suspends copying, while Gundy teaches generating a second point-in-time copy and that point-in-time parameters are generated. Ans. 7 (citing Micka 3:32–47, 4:4–27; Gundy ¶¶ 21–24, 34–35, 44–46, Table 1). Gundy also explicitly teaches generating a side file entry having the parameters and a track information field associated with the point-in-time copy parameters. *Id.*; *see also* Gundy, Abstract, ¶¶ 6–8, 14–17, 44–46. We also agree with the Examiner’s findings that Gundy and Micka both disclose a determination regarding whether “second point-in-time copying process [will] be

successfully performed,” because Micka explains that determination is made that the primary site and secondary site are out of synch and a failure has occurred, and due to failure the primary site aborts or suspends copying. Ans. 8–9 (citing Micka 3:32–47, 4:4–27).

Absent persuasive rebuttal or technical arguments to the contrary, we find no error in the Examiner’s findings.²

Regarding Appellants’ cursory arguments with respect to dependent claims 2, 6, 8, 12, and 14 (Br. 5–6), the Examiner provides a comprehensive response to Appellants’ arguments. We agree with and adopt the Examiner’s findings and conclusions in the Final Rejection and Answer. Final Act. 7, 17; Ans. 8–9. In particular, the Examiner explains how Gundy teaches:

If the verification is unsuccessful, at 218, then the secondary host system 112 sends a response to the primary storage controller 104 indicating that the first secondary volume 116 cannot be point-in-time copied to the second secondary volume 118. At 220, the primary storage controller receives this response and in turn sends a response to the primary host system 102 that the point-in-time copy command cannot be fulfilled.

Ans. 8 (citing Gundy ¶ 57). Micka teaches that a determination is made that the primary site and secondary site are out of synch and a failure has occurred, and due to failure the primary site aborts or suspends copying. *Id.* at 8–9. Therefore, we agree with the Examiner that Gundy and Micka both teach a determination of “whether it is possible for the second point-in-time copying process to be successfully performed.”

² We note Appellants did not file a Reply Brief to rebut the Examiner’s factual findings and legal conclusions in the Answer.

We also agree that Gundy, Micka, and Thompson teach the claimed “the point-in-time establish reservation is synchronously established over a Peer-To-Peer Remote Copy (PPRC) [L]ink” at least because Thompson explains that the side file 110 is synchronously established and over a PPRC link. Ans. 9 (emphasis omitted) (citing Thompson ¶¶ 17, 54).

Accordingly, we sustain the Examiner’s rejection of claims 1, 2, 6, 8, 12, and 14 and under 35 U.S.C. § 103. Because Appellants have not presented separate patentability arguments or have reiterated substantially the same arguments as those previously discussed for patentability of the claims above, the remaining pending claims fall therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

For the above reasons, we affirm the Examiner’s rejection of claims 1–3, 5–9, 11–15, and 17–20.

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED