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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SUDHAKAR PAULZAGADE, AJAY KUSHWAH,
and CAO WU

Appeal 2015-006770
Application 13/305,964¹
Technology Center 2100

Before MICHAEL J. STRAUSS, HUNG H. BUI, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1, 3, 5–7, 10, and 23, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

Technology

The application relates to creating a synthetic backup of data using only metadata rather than accessing the backup data itself. Abstract.

Representative Claim

Claim 1 is representative and reproduced below with the limitations at issue emphasized:

¹ Appellants state the real party in interest is Quantum Corp. Br. 3.

1. A method, comprising:

accessing first information associated with an existing backup data set, the first information being stored on a non-transitory computer-readable medium, the existing backup data set residing on a backup appliance, where the existing backup data set comprises one or more blocklets arranged in one or more binary large objects;

the first information being metadata concerning a binary large object location, a binary large object size, a binary large object identifier, a binary large object order, a blocklet location, a blocklet size, a blocklet identifier, and a blocklet order;

instantiating, on a non-transitory computer-readable medium, second information associated with a synthetic backup data set to be created; and

selectively manipulating the second information to create the synthetic backup data set, where the manipulating is based, at least in part, on the first information, and where the synthetic backup data set includes just metadata,

where the synthetic backup data set is logically created from one or more elements of the existing backup data set without physically reading data from the existing backup data set from the backup appliance and without physically writing a backup data set to the backup appliance.

Rejection

Claims 1, 3, 5–7, 10, and 23 stand rejected under 35 U.S.C. § 102(e) as anticipated by Parab (US 2011/0161297 A1; June 30, 2011). Final Act. 5.

ISSUE

Did the Examiner err in finding Parab discloses “selectively manipulating the second information to create the synthetic backup data set, where the manipulating is based, at least in part, on the first information, and where the synthetic backup data set includes just metadata,” and “where the synthetic backup data set is logically created from one or more elements of the existing backup data set without physically reading data from the

existing backup data set from the backup appliance and without physically writing a backup data set to the backup appliance,” as recited in claim 1?

ANALYSIS

Parab discloses creating a “synthetic backup” for cloud storage. Parab ¶ 15. Specifically, Parab discloses:

A synthetic backup is a complete backup data set created by *copying portions of data* from two or more previous backup data sets, including one full backup data set followed by one or more incremental backup data set. An embodiment of the invention can efficiently create synthetic backups from previously created backup data sets stored locally within a cloud data storage *without accessing backup data*, retrieving backup data from the cloud storage service, transferring additional backup data to the cloud storage service, or requiring extensive data processing at the cloud storage service.

Id. ¶ 14 (emphasis added). Appellants focus on the first sentence, arguing Parab defines synthetic backup as *copying* data. Br. 12–14. The Examiner focuses on the second sentence, finding a synthetic backup is created *without accessing backup data*. Ans. 3–5. Appellants argue the latter merely means “without moving data from the cloud to a local processor” because the goal of Parab is minimizing traffic to and from the cloud, so backup data is still copied within the cloud, according to Appellants. Br. 14.

We have fully considered Appellants’ arguments but are not persuaded of Examiner error. Even if a synthetic backup is created by “copying portions of data from two or more previous backup data sets,” Appellants have not sufficiently persuaded us *what* data is copied, nor how that relates to the claim terms used in Appellants’ claim 1.

In Parab, data originally comes in the form of a data stream, which the system then divides (i.e., “segments”) into multiple data segments. Parab

¶¶ 63–65. “Each segment is associated with a label.” *Id.* ¶ 65. A “[l]abel map includes a sequence of labels corresponding with the sequence of data segments identified in the segmented data stream.” *Id.* Thus, the system “can reconstruct the original data stream by matching in sequence each label in a label map with its corresponding segment data.” *Id.* “Because the label is smaller than the corresponding segment data, representing redundant segment data using multiple instances of the same label results in a substantial size reduction of the data stream.” *Id.* ¶ 66.

Backup systems store data in “backup data sets.” Parab ¶¶ 2–3. Parab’s “backup data sets” include “data segments, labels, and label maps.” *Id.* ¶ 86; Br. 16. Appellants assume Parab copies the data segments (i.e., the underlying backup data), but we agree with the Examiner that “nowhere is there any mention of actually *READING or Writing* the backup data,” and instead “the copying is of the information regarding the backup data [i.e., the labels] and not the actual backup data.” Ans. 4; *see also id.* at 5. Specifically, Parab discloses “access[ing] the label map for the previously created backup data set” and “add[ing] the identified labels to a new label map representing the synthetic backup.” Parab ¶¶ 90–91; Ans. 5. Thus, “there is no need to directly copy or otherwise access *the backup data* or corresponding *data segments* from previously created backup data sets. Instead, the creation of the synthetic backup can be performed as a manipulation of labels and label maps.” Parab ¶ 95 (emphasis added); Ans. 5. We therefore find that Parab creates the synthetic backup data set from labels and label maps, not data segments.

Although not expressly argued by Appellants, in the interests of furthering prosecution, we address whether Parab’s labels and label map fall

within the claim scope of “data from the existing backup data set,” as this influences whether Parab discloses creating a synthetic backup data set “without physically reading data from the existing backup data set.” *Cf.* Br. 16 (asserting “[a] backup data set *includes label maps* and data segments”) (emphasis added). We note Parab in some cases uses the same terms as the present application but gives them a broader or narrower interpretation. For purposes of anticipation, the terminology of the claims of the present application controls, not the prior art. *See In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998) (“the name of the game is the claim”). We find that Parab’s label map constitutes what the present application calls metadata. For example, Parab’s label map “includes a sequence of one or more labels corresponding with the sequence of data segments in all or a portion of a deduplicated data stream,” Parab ¶ 78, which is the same as how the present application describes metadata: “The metadata may include, for example, a list of blocklets stored in the BLOB.” Spec. ¶ 23, claim 1 (“the first information being metadata concerning . . . a blocklet order”). Consistent with Appellants’ disclosure, “existing backup data set” excludes such “metadata.” *See* Spec. FIG. 6 (showing “Backup Data Set₁” as excluding “Metadata₁”), claim 1 (having “first information *associated with* an existing backup data set,” and “the first information being metadata”) (emphasis added). Thus, as applied to Parab, the claimed “existing backup data set” includes Parab’s data segments but excludes Parab’s label map. As discussed above, Parab’s synthetic backup data set is created by accessing label maps but not data segments. Therefore we find Parab’s synthetic backup data set is created “without physically reading data from the existing backup data set” (i.e., without reading the data segments).

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Accordingly, we sustain the Examiner's rejection of claim 1, and claims 3, 5–7, 10, and 23, which Appellants argue are patentable for similar reasons. *See* Br. 19; 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

For the reasons above, we affirm the Examiner's decision rejecting claims 1, 3, 5–7, 10, and 23.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED