



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/681,965 11/20/2012 John Kliewe END920080431US2 2087

30449 7590 12/02/2016
SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110

EXAMINER

HUTTON, NAN

ART UNIT PAPER NUMBER

2154

NOTIFICATION DATE DELIVERY MODE

12/02/2016

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

30449@IPLAWUSA.COM

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN KLIEWE

Appeal 2015-006831
Application 13/681,965¹
Technology Center 2100

Before JEAN R. HOMERE, JOHN A. EVANS, and
DANIEL J. GALLIGAN, *Administrative Patent Judges*.

Per Curiam.

DECISION ON APPEAL

Appellant² seeks our review under 35 U.S.C. § 134(a) of the Examiner’s final rejection of claims 1, 3–6, 8–11, 13–16, and 18–20. We have jurisdiction under 35 U.S.C. § 6(b). Claims 2, 7, 12, and 17 have been canceled. App. Br. 1.

We affirm.

¹ Our Decision refers to Appellant’s Appeal Brief, filed October 2, 2014 (“App. Br.”); Appellant’s Reply Brief, filed July 14, 2015 (“Reply Br.”); the Examiner’s Answer, mailed May 15, 2015 (“Ans.”); and the Final Office Action, mailed April 10, 2014 (“Final Act.”).

² Appellant identifies International Business Machines Corporation as the real party in interest. App. Br. 1.

STATEMENT OF THE CASE

Claims on Appeal

Claims 1, 6, 11, and 16 are independent claims. Claim 1 is reproduced below:

1. A method for servicing a data query with access path security in a relational database management system (RDBMS) within a computer system that comprises a processor, said method comprising:

said processor receiving a configuration query from an administrator of the RDBMS, said RDBMS comprising a query processing module and a database, said configuration query being a database request to configure access path security corresponding to a user who originates the data query, wherein the configuration query specifies (i) a user identifier which identifies the user and (ii) a usable index field of a result table of the database, said usable index field enabling the user to access the result table of the database by use of the usable index field;

in response to said receiving the configuration query, said processor configuring the access path security;

after said configuring the access path security, said processor receiving the data query from the user,

wherein the data query comprises a search key and requests a value stored in a result field by specifying the result field and the result table of the database, wherein the result field is within a result record of the result table, and

wherein a condition is satisfied, the condition being that the search key comprises a name that is identical to the usable index field specified in the configuration query, wherein satisfaction of the condition enables the RDBMS to permit the user to search the result table.

Reference

Weissman et al.

US 2008/0082540 A1

Apr. 3, 2008

Examiner's Rejections

Claims 1, 4, and 5 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 2, 4, and 5 of U.S. Patent No. US 8,364,714 B2 (“the ’714 patent”). Final Act. 4.

Claims 6, 9, and 10 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 6, 7, 9, and 10 of the ’714 patent. Final Act. 4.

Claims 11, 14, and 15 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 11, 12, 14, and 15 of the ’714 patent. Final Act. 5.

Claims 16, 19, and 20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 16, 17, 19, and 20 of the ’714 patent. Final Act. 5.

Claims 1, 3–6, 8–11, 13–16, and 18–20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Weissman. Final Act. 6–12.

ANALYSIS

Double Patenting Rejections

Because Appellant does not address the merits of the Examiner’s double patenting rejections of claims 1, 4–6, 9–11, 14–16, 19, and 20, we summarily affirm the rejections.

Independent Claims 1, 6, 11, and 16

Appellant first argues the Examiner erred in finding Weissman describes “said processor receiving a configuration query from an administrator of the RDBMS [(relational database management system)],” as

recited in independent claims 1, 6, 11, and 16. App. Br. 9. In particular, Appellant contends Weissman discloses that a data request is received from the user and processed by query optimizer software to generate an optimized query which is subsequently received by the database system. App. Br. 10 (citing Weissman ¶ 79). Appellant further asserts Weissman describes the administrator as defining a new custom entity. App. Br. 10 (citing Weissman ¶¶ 56, 58). Appellant argues Weissman does not disclose that the administrator tunes or programs the optimized query or sends the optimized query. App. Br. 11. Appellant disputes the Examiner's characterization of the configuration query as the query hint in Weissman. Reply Br. 3 (citing Weissman ¶¶ 81–85). Appellant notes Weissman discloses that query hints enable choosing an improved query plan. Reply Br. 3 (citing Weissman ¶¶ 81–82). Appellant asserts Weissman does not describe a query hint having the claimed features of the configuration query. App. Br. 15; Reply Br. 3. Appellant additionally argues Weissman discloses that the query hint is created by a programmable SQL generator, rather than received from an administrator. Reply Br. 3 (citing Weissman ¶¶ 81–85).

The Examiner finds Weissman discloses the system receiving a query hint from the database administrator. Ans. 2 (citing Weissman ¶¶ 81, 83–85). The Examiner explains that the query hint includes the tenant-level statistics and the tenant level access path information. *Id.* According to the Examiner, the tenant-level statistics and the tenant level access path information in the query hint originates pursuant to a custom entity definition by the administrator of the RDBMS. Final Act. 6–7 (citing Weissman ¶¶ 13, 14, 31, 32, 56–60, 72–85). We agree with the Examiner because Weissman discloses that, “[w]hen an *organization administrator*

defines a new custom entity, the definition is stored in the metadata instead of the underlying data dictionary.” Weissman ¶ 56 (emphasis added). Thus, we are not persuaded the Examiner erred in finding that Weissman describes a configuration query received from the administrator of the RDBMS.

The Examiner further explains that the optimized query incorporating the query hint specifies the tenant identifier/org id (user identifier) to identify the user and the key (usable index field) that is used to determine if the user is permitted to access a custom object. Final Act. 6–7 (citing Weissman ¶¶ 13, 14, 31, 32, 56–60, 72–85). We agree with the Examiner because Weissman describes the optimized query resulting from the query hint specifies users and tenants/organizations (¶ 84) and a key (¶ 85). *Id.* We disagree with Appellant that a programmable SQL generator creates a query hint. Reply Br. 3 (citing Weissman ¶ 82). Rather, Weissman discloses that the programmatic SQL generator alters the query optimizer in conjunction with query hints supplied by the administrator. *See* Weissman ¶¶ 82–83.

Second, Appellant argues Weissman does not describe “in response to said receiving the configuration query, said processor configuring the access path security; after said configuring the access path security, said processor receiving the data query from the user,” as recited in independent claims 1, 6, 11, and 16. App. Br. 11. Appellant notes this limitation requires the data query to be received after the configuration query is received. *Id.* Appellant asserts Weissman describes receiving a data request from the user for accessing a custom object before optimizing the data request to generate an optimized query as a configuration query. App. Br. 11–12 (citing Weissman ¶ 72).

The Examiner finds Weissman describes a filtered sharing query is received from the user after the system receives hints from the administrator. Ans. 3 (citing Weissman ¶¶ 79–85). Specifically, the Examiner explains that the query optimizer first receives hints. Ans. 3 (citing Weissman ¶ 83); *see* Weissman ¶ 83 (“[A] query optimizer native to a RDBMS, may be configured or ‘tuned’ by supplying appropriate ‘hints’ to the native query optimizer.”). According to the Examiner, Weissman describes that, after the hints are received, the filtered sharing query is received from the user. Ans. 3 (citing Weissman ¶ 83); *see* Weissman ¶ 83 (“Then, when a filtered sharing query arrives, the dynamically generated SQL includes the appropriate hints and structure to force a query plan that is improved.”). We agree with the Examiner that the query optimizer receives hints as a configuration query before it receives the filtered sharing query from which it generates a dynamic SQL query. Ans. 3 (citing Weissman ¶¶ 83–84). Appellant replies that “Weissman does not explain what a ‘filtered sharing query’ is and does not teach that a ‘filtered sharing query’ is received from a user.” Reply Br. 4. We disagree with Appellant. Weissman states:

In step 750, the requested data of the first custom object to which the user can access is sent to the user. The requested data may be the result of a query with filter predicates that provide a selection of the data desired. The efficiency of the query can be benefited with additional access rights information, which may be statistical in nature.

Weissman ¶ 78. Weissman describes that data that the user requested is sent to the user as a result of a query with filter predicates indicating the data the user is requesting. *See id.* Thus, the “filtered sharing query” is a query received from the user and seeking data that the user is requesting. *See id.*

In Reply, Appellant argues for the first time that Weissman does not teach that access path security is configured in response to the configuration query being received and before the data sharing query is received, as recited in independent claims 1, 6, 11, and 16. Reply Br. 5. This argument was raised for the first time in the Reply Brief and is deemed waived. *See* 37 C.F.R. § 41.41(b)(2) (“Any argument raised in the reply brief which was not raised in the appeal brief, or is not responsive to an argument raised in the examiner’s answer, including any designated new ground of rejection, will not be considered by the Board for purposes of the present appeal, unless good cause is shown.”).

Third, Appellant argues Weissman does not describe “wherein the configuration query specifies (i) a user identifier which identifies the user and (ii) a usable index field of a result table of the database, said usable index field enabling the user to access the result table of the database by use of the usable index field,” as recited in independent claims 1, 6, 11, and 16. App. Br. 13 (emphasis omitted). In particular, Appellant contends Weissman discloses that the data request may include a key prefix as a usable index field. App. Br. 14 (citing Weissman ¶ 74). Appellant further asserts that Weissman does not describe that the optimized query as a configuration query includes the key prefix. *Id.* Appellant argues that the key prefix in Weissman does not enable the user to access the result table of the database. *Id.* According to Appellant, Weissman describes that table 600 contains information that determines permission for the user to access the custom object based on whether or not the key prefix in the data request matches a key prefix in table 600. App. Br. 14 (citing Weissman Fig. 6, ¶¶ 75–76). Appellant concludes that permission for the user to access the result

table is provided by table 600, not by the key prefix in the data request. App. Br. 14. Appellant additionally argues that Weissman does not describe that the query hint specifies the unique 3-character prefix. Reply Br. 6 (citing Weissman ¶¶ 56–59, 83, and 87–88).

The Examiner finds Weissman discloses that the database is indexed to track rows to which each user has access. Ans. 4 (citing Weissman ¶ 83). The Examiner further finds Weissman describes that the administrator defines a unique 3-character prefix for rows for a custom entity type. Ans. 4 (citing Weissman ¶¶ 56–59). Weissman describes this as access rights information specifying rows that the user can see. *See* Weissman ¶ 79. This information is used to optimize the data query. *See id.* This information is provided to the query optimizer as query hints, as discussed above. *See* Final Act. 6–7 (citing Weissman ¶¶ 13, 14, 31, 32, 56–60, 72–85). The Examiner explains that the system uses the prefix as a usable index field to enable the user to access the result table of the database. Ans. 4 (citing Weissman Figs. 4–7, ¶¶ 87–88). We agree with the Examiner that the query hint as the configuration query contains the prefix as a usable index field to enable user access to the result table.

Fourth, Appellant contends Weissman does not describe

wherein the data query comprises a search key and requests a value stored in a result field by specifying the result field and the result table of the database, wherein the result field is within a result record of the result table; and

wherein a condition is satisfied, the condition being that the search key comprises a name that is identical to the usable index field specified in the configuration query, wherein satisfaction of the condition enables the RDBMS to permit the user to search the result table,

as recited in claims 1, 6, 11, and 16. Appellant argues Weissman describes permitting the user access to the result table if the search key in the data request matches a search key in table 600. App. Br. 16 (citing Weissman Fig. 6, ¶¶ 75–76). Appellant asserts that the search key in the data request in Weissman is not compared with a search key in the optimized query to permit user access to the result table. App. Br. 16.

The Examiner responds that Weissman describes that the search key in the data request comprises a tenant’s name/id. Ans. 5 (citing Weissman ¶¶ 56–60, 72–85); *see* Weissman Fig. 4, ¶ 72 (“[A] request to access a first custom object (e.g. custom object **470**) is received from a user associated with a first tenant (e.g. organization with org id of ‘00dl’ from FIG. 4”). We agree with the Examiner that Weissman describes the request to access a first custom object comprising the tenant/organization id as the recited data query comprising a search key. The Examiner further finds Weissman discloses that the user is permitted access only when the tenant/organization id matches the tenant associated with the object/data specified in the optimized query pursuant to a custom entity definition of the RDBMS. Ans. 5 (citing Weissman ¶¶ 56–60, 72–85); *see* Weissman ¶ 79.

A query may be optimized using the access rights information as follows. When displaying a list of all rows that the current user can see (possibly with a filter on the entity rows, such as the name of the account or the dollar amount of the opportunity) the query optimizer will choose between accessing the custom entity share table **600** from the user side (i.e., Engineering or Bridge) or the entity side (i.e., “oodl” and/or “a0l”) of the relationship.

Weissman ¶ 79. We agree with the Examiner that Weissman describes the match of the tenant/organization id (“oodl”) as the search key in the query and the key prefix (“a0l”) as the usable index field. *See id.* As discussed

above, the query is the filtered sharing query described in the previous paragraph. *See* Weissman ¶ 78; *see* Reply Br. 7. As discussed above, the query optimizer obtains the key prefix from the query hint as the configuration query. *See* Final Act. 6–7 (citing Weissman ¶¶ 13, 14, 31, 32, 56–60, 72–85).

As such, we are not persuaded of error in the Examiner’s rejection of claims 1, 6, 11, and 16, and we sustain the rejection of claims 1, 6, 11, and 16.

Claims 4, 9, 14, and 19

Appellant contends Weissman does not disclose that the key prefix has a name and thus does not describe “the name of the search key,” as recited in claims 4, 9, 14, and 19. App. Br. 18. We are not persuaded because Weissman describes the key prefix identifying a user group id. *See* Weissman Fig. 6, item 540 (key prefix a01 identifies User Group ID Engineering; key prefix a02 identifies User Group ID Bridge). As such, we are not persuaded the Examiner erred in rejecting claims 4, 9, 14, and 19 as obvious. *See* Ans. 6 (citing Weissman Figs. 4–6, ¶ 88).

Claims 5, 10, 15, and 20

Appellant asserts Weissman does not describe a data query requesting the data without using any index field associated with the result table, as recited in claims 5, 10, 15, and 20. App. Br. 19. Specifically, Appellant contends Weissman does not disclose that the administrator has access to all of the rows of the data object without using the index field associated with the result table. App. Br. 20 (citing Weissman ¶¶ 58, 77). Appellant asserts

the rights of the database administrator are unrelated to the disputed limitation. Reply Br. 11.

We are not persuaded because Appellant's arguments fail to rebut the findings of the Examiner. The Examiner finds that Weissman describes the administrator as having access to all of the rows of the user system. Ans. 7 (citing Weissman ¶ 33). We agree with the Examiner because one skilled in the art would recognize that the administrator has access to all rows, all permissions, and all capabilities of the user system. Ans. 7 (citing Weissman ¶ 33). Weissman explains that in a hierarchical role model, users at one permission level have access to database information at that permission level and lower levels where the administrator has access to all database information. *See* Weissman ¶ 33. The Examiner further finds that Weissman discloses a user may have access rights to all of the rows of the custom object. Ans. 7 (citing Weissman ¶ 77). We agree with the Examiner that one skilled in the art would understand Weissman describes that a user, such as an administrator, having access rights to all of the rows may use a data query without a usable or any index field. *Id.* As discussed above, a usable index field is required for users with access rights to less than all of the rows to determine which rows the user may see. *See* Weissman ¶ 79. We agree with the Examiner that an administrator is an example of an entity in Weissman with access rights to all rows that submits a data query without any index field. Ans. 7. In view of the foregoing, we are not persuaded of error in the rejection of claims 5, 10, 15, and 20.

Appeal 2015-006831
Application 13/681,965

Claims 3, 8, 13, and 18

Appellant does not present additional persuasive arguments regarding dependent claims 3, 8, 13, and 18 (App. Br. 17; Reply Br. 8–9), and, therefore, we sustain the rejection of these claims.

DECISION

We affirm the Examiner’s rejections of claims 1, 3–6, 8–11, 13–16, and 18–20.

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).

AFFIRMED