

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CORELOGIC, INC.,
Petitioner,

v.

BOUNDARY SOLUTIONS, INC.,
Patent Owner.

Case IPR2015-00219
Patent 8,065,352 B2

Before LYNNE E. PETTIGREW, PETER P. CHEN, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

PETTIGREW, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, CoreLogic, Inc. (“CoreLogic”) challenges the patentability of several claims of U.S. Patent No. 8,065,352 B2 (Ex. 1001, “the ’352 patent”), owned by Boundary Solutions, Inc. (“BSI”). We have jurisdiction under 35 U.S.C.

§ 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, CoreLogic has not shown by a preponderance of the evidence that claims 12–15 and 17–21 of the ’352 patent are unpatentable.

A. Procedural History

CoreLogic filed a Petition for *inter partes* review of claims 1–23 of the ’352 patent. Paper 1 (“Pet.”). BSI filed a Preliminary Response. Paper 5 (“Prelim. Resp.”). On May 21, 2015, we instituted an *inter partes* review of claims 12–15 and 17–21 of the ’352 patent based on the asserted ground of anticipation by Oosterom.¹ Paper 6 (“Dec.”).

After institution, BSI filed a Patent Owner Response, Paper 22 (“PO Resp.”), and CoreLogic filed a Reply to the Patent Owner Response, Paper 35 (“Reply”). CoreLogic filed a Motion to Exclude Evidence, Paper 37 (“Mot. Excl.”), BSI filed an Opposition to the Motion to Exclude, Paper 41, and CoreLogic filed a Reply in support of its Motion to Exclude, Paper 42.

An oral hearing was held on February 11, 2016.² A transcript of the hearing has been entered into the record. Paper 47 (“Tr.”).

B. Related Matters

The parties state that BSI has asserted the ’352 patent against CoreLogic in *Boundary Solutions, Inc. v. CoreLogic, Inc.*, No. 3:14-cv-

¹ P.J.M. van Oosterom et al., *Spatial data management on a very large cadastral database*, 25 COMPUTERS, ENVIRONMENT AND URBAN SYSTEMS 509 (2001) (Ex. 1010, “Oosterom”).

² A consolidated oral hearing was held for this proceeding and Cases IPR2015-00222, IPR2015-00226, and IPR2015-00228. See Paper 40.

00761 (N.D. Cal.) (filed Feb. 19, 2014). Pet. 59; Paper 4 (Patent Owner’s Mandatory Notices). BSI also has asserted related U.S. Patent No. 7,499,946 (“the ’946 patent”) and U.S. Patent No. 7,092,957 (“the ’957 patent”) in that proceeding. Pet. 59; Paper 4. The ’946 patent and the ’957 patent are the subject of *inter partes* reviews in Cases IPR2015-00226 and IPR2015-00228, respectively, based on petitions filed by CoreLogic.

CoreLogic filed two additional petitions for *inter partes* review of the ’352 patent. In Case IPR2015-00222, each of claims 1–23 of the ’352 patent is the subject of an *inter partes* review based on two asserted grounds of unpatentability. *CoreLogic, Inc. v. Boundary Solutions, Inc.*, Case IPR2015-00222 (PTAB May 21, 2015) (Paper 7). In Case IPR2015-00225, we did not institute an *inter partes* review because the information presented in the petition did not establish a reasonable likelihood CoreLogic would prevail. *CoreLogic, Inc. v. Boundary Solutions, Inc.*, Case IPR2015-00225 (PTAB May 21, 2015) (Paper 7).

CoreLogic also has filed petitions for covered business method patent review of the ’957 patent, ’946 patent, and ’352 patent, which are pending in Cases CBM2015-00016, CBM2015-00017, and CBM2015-00018, respectively.

C. The ’352 Patent

The ’352 patent relates generally to Geographic Information Systems (“GIS”) and, in particular, to a National Online Parcel-Level Map Data Portal (“NPDP”) that provides online delivery of parcel-level map data. Ex. 1001, Abstract, 1:22–37. The ’352 patent describes the NPDP as an electronic repository for parcel-level maps and linked attribute data acquired from public and private entities. *Id.* at 2:41–53. Databases from different

jurisdictions are assembled and stored in a standard format, with each jurisdictional database placed in an individual directory. *Id.* at 4:8–10, 7:22–30. Information is normalized to a single universal spatial protocol. *Id.* at 3:16–19, 7:33–54. Parcel-level information includes parcel boundaries and geocodes, which are linked using a parcel identifier to a non-graphic database containing property tax records. *Id.* at 1:60–64, 4:10–17, 8:14–25.

The '352 patent describes retrieving a parcel-level map based on the address of a parcel requested by an end user. *Id.* at 1:65–2:1, 4:52–56. A jurisdictional lookup table is searched to identify, for example, the jurisdiction in which the requested parcel is located. *Id.* at 8:26–30. The non-graphic database for that jurisdiction is searched for a record matching the address, and the parcel identifier for that record is used to access a graphic database containing the selected parcel. *Id.* at 3:56–63. The selected parcel and surrounding parcels may be displayed, with the selected parcel shown as a highlighted polygon. *Id.* at 4:61–63. The parcel's linked data (e.g., tax record) also may be displayed. *Id.* at 4:63–64.

D. Illustrative Claim

Among the claims at issue in this proceeding, only claim 12 is independent. Claim 12 reads:

12. A method for retrieving and displaying geographic parcel boundary polygon maps comprising:

receiving, by a server, a request for a parcel boundary polygon map for a selected parcel;

searching, by the server, using a jurisdictional identifier[,] a multi-jurisdictional digital parcel map database for the selected parcel boundary polygon and the parcel boundary polygons of adjacent and surrounding parcels, the database having information about individual land parcels normalized to a

common spatial data protocol, including polygon data used to describe the boundaries of a plurality of properties; and,

transmitting the parcel boundary polygon map data for the selected parcel along with the adjacent and surrounding parcels for display, wherein the parcel boundary polygon map includes the selected parcel polygon along with adjacent and surrounding parcel boundary polygons around the selected parcel.

Ex. 1001, 17:13–30.

II. DISCUSSION

A. Claim Construction

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Consistent with the broadest reasonable construction, claim terms generally are given their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may provide a meaning for a term that is different from its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In the Institution Decision, we construed “jurisdictional identifier” to mean “a number or other name, code, or description that identifies a jurisdiction.” Dec. 6. We based our construction on the only appearance of

“jurisdictional identifier” in the written description of the ’352 patent, which states:

FIG. 3 illustrates a USA County Boundary Map (USACM). This is a public domain boundary file of each and every of the 3140 counties within the United States. Each of these polygons is geocoded with its county name and FIPS number, a numerical *jurisdictional identifier*, as illustrated in the figure.

Ex. 1001, 8:48–53 (emphasis added).³

BSI does not challenge our construction of “jurisdictional identifier” in its Patent Owner Response, *see* PO Resp. 6, nor does CoreLogic challenge the construction in its Reply, *see* Reply 10. For this Final Written Decision, after considering the complete record, we maintain our construction of “jurisdictional identifier” as “a number or other name, code, or description that identifies a jurisdiction.”

B. Asserted Anticipation by Oosterom

CoreLogic contends that claims 12–15 and 17–21 are unpatentable under 35 U.S.C. § 102(a) as anticipated by Oosterom. Pet. 43–50. In support of this asserted ground of unpatentability, CoreLogic relies on the testimony of Dr. Michael F. Goodchild. *Id.* (citing Ex. 1006 ¶¶ 86–99). In response, BSI argues that Oosterom fails to disclose certain limitations of the challenged claims. PO Resp. 25–38.

To prevail in challenging BSI’s claims on this ground, CoreLogic must show by a preponderance of the evidence that Oosterom anticipates the claims. 35 U.S.C. § 316; 37 C.F.R. § 42.1(d). A claim is anticipated if a

³ According to the ’352 patent, the Federal Information Processing Standards (“FIPS”) number “is used nationally to numerically identify specific county jurisdictions.” Ex. 1001, 7:27–30.

single prior art reference either expressly or inherently discloses every limitation of the claim. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 975 (Fed. Cir. 2010).

1. Overview of Oosterom

Oosterom describes features of a spatial data management system used in the Netherlands. Ex. 1010, 509.⁴ The disclosed system includes a cadastral database⁵ containing parcel data for the entire nation, with data for about seven million parcels obtained from fifteen provincial databases. *Id.* at 509, 511. Oosterom discloses a query tool for querying spatial cadastral and administrative databases to obtain parcel information and display parcel maps. *Id.* at 522–25. Oosterom further explains that about 4,000 external customers have access to the cadastral database via a network and that applications on web servers may access the database to provide on-line cadastral information to customers. *Id.* at 518–19.

Oosterom describes configuring a relational database using nationwide unique identifiers for all geographic objects, including parcels and parcel boundaries. *Id.* at 511–13. The data model for parcels includes a parcel table with attributes such as “ogroup” (a Group Id indicating to which group the record belongs), “object_id” (a nationwide unique identifier), and “municip” (a municipality code, which is part of a “parcel identifier”).

⁴ Citations are to page numbers in the underlying reference rather than exhibit page numbers added by CoreLogic.

⁵ A cadastral database contains map information relating to property boundaries. *See* Ex. 1006 ¶ 23; *see also* <http://www.merriam-webster.com/dictionary/cadastral> (last visited May 6, 2016) (defining “cadastral” as “showing or recording property boundaries, subdivision lines, buildings, and related details”).

Id. at 513 (Table 1, definition of parcel table); *see also id.* at 512 (describing “object_id”); *id.* at 519 (describing “ogroup”). The data model for parcel boundaries includes a boundary table with attributes such as “ogroup,” “object_id,” “L_municip” (municipality code, part of the parcel identifier to the left side of the boundary), and “R_municip” (municipality code, part of the parcel identifier to the right side of the boundary). *Id.* at 514 (Table 2, definition of boundary table). A boundary-based approach uses attributes from boundary and parcel tables to form boundary chains, based on relationships between a parcel and its boundary edges, to locate and provide map data for parcels and surrounding parcels. *Id.* at 512–15.

Oosterom also discloses the use of indexes for efficient retrieval of data. *Id.* at 512–14, 518–20. In particular, Oosterom describes spatial clustering and spatial indexing based on a Spatial Location Code (“SLC” or “slc”) in combination with a traditional indexing method such as a b-tree index or an R-tree index. *Id.* at 518–20. In one example, a b-tree index is used on “slc, ogroup.” *Id.* at 519. Oosterom also describes a secondary index based on object_id. *Id.* at 520.

2. Analysis

CoreLogic contends that Oosterom discloses all of the limitations of independent claim 12, which is directed to a “method for retrieving and displaying geographic parcel boundary polygon maps.” Pet. 43–47. Among other things, Claim 12 requires searching a multi-jurisdictional digital parcel map database for a selected parcel boundary polygon and the parcel boundary polygons of adjacent and surrounding parcels “using a jurisdictional identifier.” As discussed above, we have construed

“jurisdictional identifier” to mean “a number or other name, code, or description that identifies a jurisdiction.”

CoreLogic asserts that the database described in Oosterom is a multi-jurisdictional parcel map database because it contains parcel data obtained from fifteen provincial databases. *Id.* at 44 (citing Ex. 1010, 509–12; Ex. 1006 ¶ 88). With regard to the step of searching the database for a selected parcel boundary polygon “using a jurisdictional identifier,” CoreLogic begins its analysis by identifying some of the attributes in Oosterom’s parcel and boundary tables—“a Group Id attribute (Ogroup), object_id attribute (a unique nation-wide identifier), and a municipality attribute identifier that is part of a parcel identifier attribute.” *Id.* at 45 (citing Ex. 1010, 513–14, Tables 1, 2). According to CoreLogic, Oosterom’s system and processes search the database “using the disclosed identifiers” for boundary polygon data for a selected parcel and surrounding parcels. *Id.* (citing Ex. 1010, 514–15, 519–23).

CoreLogic further asserts that Oosterom’s indexing techniques use the ogroup attribute to locate a record in the database and that the relationship between parcels in the cadastral database and administrative database is through nationwide parcel identifiers. *Id.* (citing Ex. 1010, 519, 523). Thus, in CoreLogic’s view, “the identifiers associated with jurisdictions (e.g., municipality, group where a record may belong, boundaries classified by jurisdiction, etc.) are used to search the database for a parcel, and surrounding parcels.” *Id.* (citing Ex. 1010, 512). In support of these contentions, CoreLogic cites one paragraph of Dr. Goodchild’s declaration, which essentially duplicates the assertions made in the Petition. *Id.* (citing Ex. 1006 ¶ 89).

Having reviewed the arguments and evidence, we are not persuaded CoreLogic has demonstrated that Oosterom discloses searching the parcel map database “using a jurisdictional identifier” as recited in claim 12. Among the attributes in Oosterom’s parcel and boundary tables identified by CoreLogic in its analysis, only the municipality codes (i.e., “municip” in the parcel table and “L_municip” and “R_municip” in the boundary table) qualify as “jurisdictional identifiers.” *See* Ex. 1010, 513–14 (Tables 1, 2). The “object_id” of an object, e.g., a parcel or a boundary, is a nationwide unique identifier, but there is no indication in Oosterom that the object_id of a parcel or boundary identifies a jurisdiction. *See id.* at 512; *see also id.* at 513–14 (showing object_id attribute in parcel and boundary tables). As for the “ogroup” attribute in the parcel and boundary tables, Oosterom states only that it “indicates to which group the record belongs.” *Id.* at 519. Nothing in Oosterom describes the ogroup as identifying a jurisdiction.

Although the municipality code attributes in the parcel and boundary tables identify jurisdiction, CoreLogic does not cite any portion of Oosterom that illustrates the use of municipality codes in searching the database for selected parcels as required by claim 12. *See* Pet. 45. Dr. Goodchild opines that the “municipality code . . . would allow us to search [the] parcel table by that jurisdiction and to identify all the parcels in that jurisdiction.” Ex. 2010, 19:22–24. He further testifies that in his analysis, he “was concerned with the specific kind of query identified in the claim, which is much narrower than Oosterom’s discussion [and] much more specific than the broad range of queries discussed by Oosterom.” *Id.* at 21:14–25. Ultimately, he states that the “question [he] analyzed is whether [Oosterom’s] database is *capable of* supporting the type of query identified in the claim.” *Id.* at 22:14–16

(emphasis added). Dr. Goodchild’s testimony that municipality codes *could be* used in searching Oosterom’s database, however, is insufficient to establish for anticipation purposes that Oosterom discloses the step of searching a multi-jurisdictional digital parcel map database for a selected parcel boundary polygon “using a jurisdictional identifier.”

CoreLogic also submits that Oosterom discloses searching the database “using a jurisdictional identifier” because Oosterom uses ogroup and object_id attributes to index and locate records in the database. Pet. 45; Reply 15; Ex. 1006 ¶¶ 89, 98. According to CoreLogic and Dr. Goodchild, ogroup and object_id are “linked” to municipality identifiers in the parcel and boundary tables. Pet. 49; Ex. 1006 ¶ 98; Tr. 91:24–92:16, 93:8–12. Neither CoreLogic nor Dr. Goodchild, however, explains sufficiently how any linkage between the municipality code attributes and the ogroup and object_id attributes in the parcel and boundary tables establishes that a search of Oosterom’s cadastral database uses the municipality identifiers, even if the database is indexed based on ogroup and object_id. See Pet. 45, 49; Ex. 1006 ¶¶ 89, 98.

Finally, CoreLogic cites a sentence in Oosterom stating that the relationship between parcels in the spatial cadastral database and the administrative database is through nationwide unique parcel numbers. Pet. 45; see Ex. 1010, 522–23; Ex. 1006 ¶ 89. CoreLogic, however, fails to explain sufficiently how this statement supports its argument that Oosterom discloses searching a parcel database for a selected parcel using a jurisdictional identifier. Even if a nationwide unique parcel number is equivalent to the parcel identifier (of which the municipality code is a part) referred to in the definition of the parcel table, CoreLogic does not direct us

to any description in Oosterom of searching the cadastral database for a selected parcel using a parcel identifier, let alone a description of searching the database using a municipality code. *See* Pet. 45.

For these reasons, CoreLogic has not shown that Oosterom discloses “searching, by the server, using a jurisdictional identifier a multi-jurisdictional digital parcel map database for the selected parcel boundary polygon and the parcel boundary polygons of adjacent and surrounding parcels,” as recited in independent claim 12. The remaining challenged claims depend from claim 12. Accordingly, we find CoreLogic has not demonstrated that Oosterom discloses each and every limitation of the challenged claims. Therefore, CoreLogic has not shown by a preponderance of the evidence that Oosterom anticipates claims 12–15 and 17–21 of the ’352 patent.

C. CoreLogic’s Motion to Exclude Evidence

CoreLogic moves to exclude the redirect testimony of BSI’s expert, Mr. William Huxhold, on the ground that it was provided in response to leading questions. Mot. Excl. 1 (citing Ex. 1034, 150:6–153:8). The redirect testimony relates to a portion of Mr. Huxhold’s cross-examination testimony. *Id.* at 1–2 (citing Ex. 1034, 72:5–22). Because we do not rely on Mr. Huxhold’s testimony, CoreLogic’s motion is dismissed as moot.

III. CONCLUSION

Based on the evidence and arguments, CoreLogic has not demonstrated by a preponderance of the evidence that claims 12–15 and 17–21 of the ’352 patent are anticipated by Oosterom.

IV. ORDER

Accordingly, it is:

ORDERED that claims 12–15 and 17–21 of the '352 patent have not been shown to be unpatentable based on Oosterom;

FURTHER ORDERED that CoreLogic's Motion to Exclude is dismissed; and

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

FOR PETITIONER:

Joseph E. Palys
Naveen Modi
Daniel Zeilberger
Paul Hastings LLP
josephpalys@paulhastings.com
naveenmodi@paulhastings.com
danielzeilberger@paulhastings.com

FOR PATENT OWNER:

Lawrence Edelman
The Law Office of Lawrence Edelman
lawrence.edelman@comcast.net

Bruce J. Wecker
Hausfeld LLP
bwecker@hausfeld.com