UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

ENFISH, LLC, Plaintiff, v. MICROSOFT CORPORATION; FISERV, INC.; INTUIT, INC.; SAGE SOFTWARE, INC.; and JACK HENRY & ASSOCIATES, INC., Defendant.	Case No. 12-cv-7360-MRP **Claim Construction Order**

I. Introduction

Enfish, LLC ("Enfish") has asserted U.S. Patent Nos. 6,151,604 and 6,163,775 (the '604 and '775 patents) against Microsoft Corp., Fiserv, Inc., Intuit, Inc., Sage Software, Inc., and Jack Henry & Associates, Inc. (collectively "Defendants"). In this Order, the Court construes certain claim terms in dispute.

II. Principles of Claim Construction

The purpose of claim construction is to determine the meaning and scope of the patent claims alleged to be infringed. *O2 Micro Int'l Ltd. v. Beyond Innovation*

Tech. Co., Ltd., 521 F.3d 1351, 1360 (Fed. Cir. 2008). Claim construction is a pure question of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). For purposes of claim construction, the Court reviews both intrinsic and extrinsic evidence, placing emphasis on the former.

A. Intrinsic Evidence.

i. Claim Language

"The words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*¸ 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citation omitted). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *Id.* "That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art." *Id.*

ii. Specification

The specification is "always highly relevant to the claim construction analysis." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995). As Judge Rich wrote shortly after the creation of the Federal Circuit, "the specification . . . is the primary basis for construing the claims." *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985). "[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. "In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor." *Id*. In such

cases, the inventor's intention as expressed in the specification "is regarded as dispositive." *Id.*

iii. Prosecution History

The Court also considers the patent's prosecution history, if it is in evidence. "The prosecution history, which we have designated as part of the "intrinsic evidence," consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Id.* The patentee created the prosecution history much like the specification in an attempt to explain and obtain the patent, and thus the prosecution history provides evidence about how the PTO and the inventor understood the patent. *Id.* "Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* "Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

B. Extrinsic Evidence

In addition to using intrinsic evidence, this Court is also authorized to use extrinsic evidence in claim construction. *Phillips*, 415 F.3d at 1317 ("[W]e have . . . authorized district courts to rely on extrinsic evidence . . . ."). Extrinsic evidence "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* While extrinsic evidence can shed light on claim meaning, it is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language.'" *Id.* (citation omitted). Finally, extrinsic evidence is "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319.

III. Technical Background

The asserted claims in the '604 and '775 patents are directed to methods and systems relating to data storage and retrieval. The invention improves upon prior art information search and retrieval systems by employing a "flexible" and "self-referential" table to store data.

The table of this invention is made up of rows and columns. Each row has an object identification number (OID) and the data therein describes an individual record spanning various attributes. Each column also has an OID and the data therein describes an individual attribute spanning various records.[1] The intersection of a row and a column comprises a cell which may contain data for a particular record. The content of a cell represents attribute data for a particular record. A cell may simply point to another record. To enhance searching and to provide for synchronization between columns, columns are entered as rows in the table. The record corresponding to a column contains information about the column. This renders the table self-referential.

The invention includes an index structure to allow for rapid searches. It also includes a thesaurus and knowledge base to enhance indexed searches. An application support layer includes a word processor, a password system, hypertext, and other functions. The integration of the word processor with the table allows editing cells with the word processor. The table may also be interfaced with external documents. This allows a user to retrieve data from external documents using the enhanced retrieval system of the invention.

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[1] An illustration is helpful. Consider two students John and Jane. John has a GPA of 3.0, majors in History, and is a freshman. Jane has a GPA of 4.0, majors in Mathematics, and is a sophomore. If one tabulated John and Jane as records represented as rows in a table, and stored all this information about them as attributes in columns, then one would have a basic table. Reading a row left to right narrates the story of John or Jane. Reading the GPA column top to bottom narrates the story of how John and Jane are doing in school.

IV. Claim Construction

A. "logical table"

The term "logical table" in the claims is followed by an open-ended list of claim elements. Enfish proposes importing limitations such as "self-referential," "appendable columns," and "capable of storing structured and unstructured data and different types of records" into the claim term "logical table" itself. This approach runs the risk of either: (1) depriving some subsequently listed claim element of its independent limiting effect;[2] or (2) importing a limitation from the specification into the claims. The Defendants propose limiting the logical table's data structure to a "sparse matrix." Here, the Court determines that the intrinsic record lacks a clear and unmistakable disclaimer or disavowal. As such, the Court rejects the proposed imported wordsby each party.

Instead, the Court finds that "logical table" refers to "a table with a data structure that is logical as opposed to physical, and therefore does not need to be stored contiguously in memory." This construction is based on the *only* reference in the specification which alludes to the "logical" nature of the table: "The structure of the table 100 is a logical structure and not necessarily a physical structure. Thus, the memories 26 and 32 configured according to the teachings of the present invention need not store the table 100 contiguously." '604 at 6:32-35.

Limiting the logical table to a table which does not need to be stored contiguously in memory does not rise to the level of an *improper* import of a limitation from the specification into the claims. The Court is merely referring to a portion of the specification which explains the concept of "logical" with respect to a table.

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[2] Consider Claim 1 of the '604 patent which recites the phrase "logical table including" followed by a list of three claim elements. One of those claim elements is "at least one of said logical rows has an OID equal to the OID of a corresponding one of said logical columns." This claim element itself renders the claimed "logical table" self-referential.

B. "a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells"

The intersection of a logical column and a logical row defines a logical cell. This claim expression is simply a pluralized form of the above statement. The Defendants argue that the word "said" which modifies the phrase "plurality of logical rows" limits the scope of this claim expression so as to exclude "crossword puzzle" type arrangements. Effectively, Defendants argue that the claim expression "columns intersecting said plurality of . . . rows" in light of the specification means "columns intersecting **[*each of*]** said plurality of . . . rows."

The claim language does not warrant such an import. The plain and ordinary meaning of this individual claim expression covers both tables and crossword arrangements. But some of the claims also contain the claim limitation "logical ***table***" which the Court has already construed as "a ***table*** with a data structure that is logical as opposed to physical, and therefore does not need to be stored contiguously in memory." *Supra* at 5.

Consequently, the Court finds that the plain and ordinary meaning of this expression suffices for claim construction purposes.

C. "logical column information defining / logical column information defines;" "attribute set information defining / attribute set information defines"

The relevant claim language recites "***at least one*** of said logical rows has an OID equal to the OID of a ***corresponding one*** of said logical columns, and ***at least one*** of said logical rows includes logical column information ***defining each*** of said logical columns." The Court finds that the bolded claim language surrounding the claim term under construction provides useful context for interpreting the disputed claim expressions. To convey a one-to-one mapping between one row and one column, the patentee invokes the phrase "corresponding one of said . . . columns." Consequently, when the patentee refers to "one . . . row[] . . . defining ***each of said***

logical columns," the implication is clear: at least one fully-populated row is required, *i.e.*, at least one row with values defined for each column. The patentee could have easily, in a manner consistent with the rest of the claim language in the *same* claim, recited "at least one of said logical rows including logical column information defining a ***corresponding one*** of said logical columns." She did not. Consequently, the Court construes the above claim terms as requiring at least one row with values defined for each column.

D. "a plurality of attribute sets"

The parties agree that an "attribute set" refers to a column. Defendants' Br. at 12. The Court thus construes "a plurality of attribute sets" as "a plurality of columns" or simply "columns." Defendants argue that this claim term is *indefinite* because it could mean either "columns" or "logical columns." A ruling of indefiniteness requires a showing that the claim term is insolubly ambiguous. Here, the term "a plurality of attribute sets" is hardly ambiguous, let alone insolubly so. To the extent the specification does not support the inventor's possession of columns of the non-logical variety, or does not enable such columns, that is not an issue for claim construction. The Court finds no ambiguity in this claim phrase.

E. "object identification number"

The Court finds that the "object identification number" refers to "a unique array of bits assigned to each row and each column in the logical table. The bit length (the number of bits used) is constant throughout a single database but may vary between databases."

The specification section entitled "Creating a Unique OID" explains that various factors, which themselves are bit arrays (like "010101") are *combined* to form the OID, which itself is a bit array. *See, e.g.*, '604 at 8:35-36 ("[T]he session identification, timestamp, and tiebreaker are combined into a bit array, which becomes the OID."). Further, the specification explains, "[The OID's] length is

constant throughout a single database but may vary between databases." *Id.* at 8:44-46.

The Defendants propose construing the OID as a "fixed number." This proposal deviates from the specification. The only thing that is fixed within a single database is the bit length, as captured by the Court's construction. Enfish proposes "a unique identifier . . . having a [constant] bit length throughout a single database *and, when stored as data, serving as a pointer to a row or column*." The italicized portion of Enfish's proposal is redundant, given the Court's construction which leaves no doubt that the OID is "a ***unique*** array of bits assigned ***to each row*** and ***each column*** in the logical table . . . ." The uniqueness of the OIDs to each row and to each column makes it clear that if OIDs are stored as data themselves, they serve as pointers to the corresponding row or column. An explicit definition to this effect is unnecessary.

F. "each said logical row [column] having [including] an object identification number (OID) to identify each said logical row [column]"

No construction is necessary for this claim expression in light of the Court's construction of "object identification number."

G. "wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets."

Again, no construction is necessary in light of the Court's construction of "attribute sets" and "OID."

H. "[means for] configuring said memory according to a logical table"

The Court finds that this claim element is subject to § 112 ¶ 6. The function is "configuring said memory according to a logical table." In Ex. 19, Enfish has *pieced together* various citations from the patent specification and arranged them such that taken together, they constitute the disclosure of an algorithm.

For functional claiming of software, the bar for adequacy of structure is low. Algorithms may be expressed in "any understandable terms including as a

mathematical formula, in prose, or as a flow chart, *or in any other manner that provides sufficient structure*" for a person of skill in the field to provide an operative software program for the specified function. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011). The Court determines that this disclosure provides sufficient structure for a PHOSITA to implement a software program and accomplish the function of "configuring said memory according to a logical table" as described in the patent.

As such, the scope of the claim term is the structure defined in Exhibit 19 and equivalents thereof.

I. "[means for] indexing data stored in said table"

The Court finds that this claim term is subject to § 112 ¶ 6. The function is "indexing data stored in the logical table." Again, Exhibit 21 satisfies the relaxed requirements of *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) when it comes to adequate structure. As such, the scope of the claim term is the structure defined in Exhibit 21 and equivalents thereof.

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V. Conclusion

Claim Term	Claim Construction
"logical table" '604 cl. 1, 2, 16, 17, 31, 32, 46, 47; '775 cl. 31, 32, 47	"a table with a data structure that is logical as opposed to physical, and therefore does not need to be stored contiguously in memory."
"a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells" '604 cl. 1, 2, 16, 17, 31, 32, 46, 47	plain and ordinary meaning
"logical column information defining / logical column information defines;" "attribute set information defining / attribute set information defines" '604 cl. 1, 2, 31; '775 cl. 31, 32	"at least one row with values defined for each column"
"a plurality of attribute sets" '775 cl. 31, 32, 47	columns
"object identification number" '604 cl. 1, 2, 16, 17, 31, 32, 46, 47; '775 cl. 31, 32, 47	"a unique array of bits assigned to each row and each column in the logical table. The bit length (the number of bits used) is constant throughout a single database but may vary between databases."
"each said logical row [column] having [including] an object identification number (OID) to identify each said logical row [column]" '604 cl. 1, 2, 16, 17, 31, 32, 46, 47	No construction is necessary for this claim term in light of the Court's construction of "object identification number."

Claim Term	Claim Construction
"wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets." '775 cl. 31, 32	No construction is necessary in light of the Court's construction of "attribute sets" and "OID."
"[means for] configuring said memory according to a logical table" '604 cl. 1, 2, 16, 17, 31, 32, 46, 47; '775 cl. 31, 32, 47	"configuring said memory according to a logical table." Exhibit 19 and equivalents thereof.
"[means for] indexing data stored in said table" '604 cl. 17, 47	"indexing data stored in said table" Exhibit 21 and equivalents thereof.

IT IS SO ORDERED.

DATED: July 15, 2013

Mariana R. Pfaelzer

Hon. Mariana R. Pfaelzer
United States District Judge