United States District Court,
C.D. California.

Carlos Armando AMADO,
Plaintiff.
v.
MICROSOFT CORPORATION,
Defendant.

No. SACV 03-0242 DOC ANX

Aug. 20, 2004.

A. Max Olson, Charles S. Barquist, Hector G. Gallegos, Nicole M. Smith, Scott C. Moore, Vincent J. Belusko, Morrison & Foerster, Los Angeles, CA, for Plaintiff.

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ORDER ADOPTING, IN PART, REPORT AND RECOMMENDATION BY THE SPECIAL MASTER REGARDING CLAIMS CONSTRUCTION

CARTER**, J.**

Before the Court is the dispute over the proper definitions of numerous contested terms in the patents at issue in this case, United States Patents No. 5,293,615 (" '615 Patent"), No. 5,537,590 (" '590 Patent"), and No. 5,701,400 (" '400 Patent").

On September 12, 2003, the Court signed a jointly stipulated "Order of Reference of Claim Construction to Special Master." This order referred the process of claims construction to the appointed Special Master, Alan H. MacPherson. The Special Master, having reviewed numerous filings from the party, as well as having conducted a one-day hearing on December 5, 2003, filed his Report and Recommendation ("R & R") on June 7, 2004. Both parties have filed timely objections to the R & R. After conducting a *de novo* review including further argument on August 16, 2004, the Court adopts the Report and Recommendation of the Special Master with changes and comments as outlined below.

I. PROSECUTION HISTORY DISCLAIMER

In general, the Court finds that the Special Master was too quick to apply the prosecution history to limit the scope of otherwise ordinary terms used by Amado in his application. While an applicant can narrow his claims by disclaiming certain breath of coverage to the examiner, the disclaimer must be "both clear and unmistakable." Omega Eng., Inc. v. Raytek Corp., 334 F.3d 1314, 1326 (Fed.Cir.2003). The doctrine of

prosecution history disclaimer, which is relevant to claims construction, is not the same as prosecution history estoppel which limits the range of equivalents under the doctrine of equivalents and is relevant to infringement analysis. *See generally* Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1578 (Fed.Cir.1995).

In the R & R, the Special Master sometimes used a variant of the phrase "prosecution history estoppel" in narrowing the claims, but he also often described Amado's purported disclaimers as "clear and unmistakable." The Court believes that the Special Master was applying the appropriate standard even if he sometimes was not as careful with the terminology. Even though the Special Master generally applied the appropriate standard, the Court disagrees with many of his conclusions in this area.

A. Data

Amado contends that "data" should be given its ordinary meaning. Microsoft contends that "data" should be limited to mean "quantitative data" which presumably means numerical data. The Special Master agreed with Microsoft.

The Special Master should not have limited the term "data" to mean numerical data. Amado contends that "data" should be given its ordinary and accustomed meaning while Microsoft argues, and the Special Master accepted, that Amado limited the scope of data covered by the patent in communication with the examiner to "quantitative data" which the Court assumes is to mean "numerical" data. See R & R at 128 ("a fair conclusion from the applicant's description of the invention is that quantitative databases contain numbers ...")

The Special Master cites a number of passages from Amado (or his attorney) to the examiner which differentiate the prior art. Amado does repeatedly limit his invention to "quantitative data" and "quantitative databases." However, Amado only clearly and unmistakably defines "quantitative data" or "quantitative database" once.

The invention only refers to (a) a quantitative database storing ordinary business data in ordinary database formats.

(Amado Decl at p. 11.)

Thus, Amado defined "quantitative data" as "ordinary business data" which can clearly include text as well as numbers.

The best argument that "quantitative data" should be limited to numbers comes from the following statement from Amado's attorney to the examiner. "The claimed invention uses a quantitative database that has numerical data in it." (February 28, 1995 Amendment, p. 8 AA02393). The passage further states that, "these diagnostics form a word picture of English language descriptions of what a company's financial data shows." (Id. at 9 AA02394.) The Court finds that these statements do not rise to a clear and unmistakable disclaimer of scope beyond numerical data. Note that the "quantitative database has numerical data in it," it does not only have numerical data in it. Perhaps most importantly, the preferred embodiment described in the specification includes data that is not numerical. ('590 Patent, Col. 14 14-16, '590 Patent, Figure 15 (Sheet 9 of 43).)

At the August 16th hearing, Microsoft stated that it did not contest that the database could contain non-numerical data, its position is that the analysis rules can only be applied to numerical data. The Court rejects this position for at least two reasons (1) if Microsoft's desire is to only restrict the application of the analysis rules, the definition of the term "data," which is used in a number of contexts, is not the appropriate place to do so, and (2) Microsoft's arguments with regard to the analysis rules are the same arguments based in the prosecution history that the Court has rejected when considering whether the database can hold non-numerical data.

The Court defines "data" to be "ordinary business data" pursuant to Amado's clear and unmistakable statements to the examiner.

B. Data from Said Memory

"Data" for the purposes of this phrase is also "ordinary business data."

C. Data from First/Second Database Files

"Data" for the purposes of this phrase is also "ordinary business data."

D. Expert Test

Amado contends that "expert test" means "[a] test that operates on diagnostic records and returns one or more results depending on the state of the diagnostic records to which it is applied." Microsoft contends the term means "tests that include analysis rules that are applied to diagnostics after all analysis rules have been applied to data. Expert tests are programmed by the user and implement If-Then rules defined by the manager to analyze the diagnostics in the diagnostic database and generate new superdiagnostics to be added to a separate superdiagnostic database." The Special Master recommended Microsoft's definition.

The Court agrees with Amado that the Special Master unnecessarily limited the term "expert test" based on Amado's description of one envisioning of the invention. Nowhere in the cited portion of Amado's March 6, 1995 Declaration does Amado clearly and unmistakably limit the meaning of "expert test."

In addition, the manager can define his or her own expert system to analyze the diagnostic database through user defined expert tests that combine diagnostics from the diagnostic database using Boolean or other logical functions to generate 'super diagnostics.' That is, the expert tests programmed by the user implement If-Then rules defined by the manager to analyze the diagnostics is the diagnostic database and generate new super diagnostics to be added to a separate superdiagnostic database. These new super diagnostics generated by the expert system are of the exact same nature as other diagnostics, i.e., they are text strings which are programmable by the manager and are generated when certain logical conditions relating various other diagnostics exist. In the current embodiment, the expert tests combine the diagnostics using Boolean or other logic functions and return true or false results.

(Id. at p. 3.)

The Court adopts Amado's proposed definition as consistent with the claims and specification. FN1 An expert test is "a test that operates on diagnostic records and returns one or more results depending on the state of the diagnostic records to which it is applied."

FN1. With regard to Microsoft's proposed definition, it strikes the Court that a paragraph-long description of exactly how 'X' operates would rarely be an appropriate definition for 'X' consistent with the canons of claims construction.

E. Recalculation Command

Amado argues that "recalculation command" means "a command that causes data to be loaded from the database into the spreadsheet and invokes the spreadsheet's recalculation routine." Microsoft argues that the phrase means a "command issued in the spreadsheet program in execution and received by the spreadsheet recalculation routine when the user presses a recalculation key, which spreadsheet command also automatically loads the selected record from the database into the selected range of the spreadsheet." The Special Master recommended Microsoft's definition.

The Special Master improperly imported limitations from Amado's description of how his invention operates into the definition of "recalculation command." Neither of the portions of Amado's statements to the examiner are a clear and unmistakable limitation on the term "recalculation command." As the Special Master noted, Amado is discussing much more than just the recalculation command in the passages that the Special Master quotes. The Court sees no reason to import the detailed operations of the invention into the term "recalculation command."

The Court adopts Amado's definition for "recalculation command". "A command that causes data to be loaded from the database into the spreadsheet and invokes the spreadsheet's recalculation routine."

F. Subset of Items of Data From Said Array of Data

The dispute over the phrase is concentrated on the word "subset." Amado argues that "subset" should be given its ordinary meaning while Microsoft contends that it should be defined as "a collection of items containing fewer than the complete [set]." The Special Master recommended Microsoft's definition.

The Court also finds no reason to limit the term "subset of items of data from said array of data" to mean a "collection of items of data *containing fewer than the complete array* of quantitative database items" (emphasis added). No one contests that a subset of set S normally may include all of the items of set S. *Cf.* a "proper subset" of S, which may include any numbers of items of S except for all of the items of S.

The Special Master essentially changed the word "subset" to "proper subset" in order to interpret the significance of a change in wording made by the examiner. The examiner changed the phrase "one or more items of data" to "subset." As Amado points out, there is nothing in the prosecution history to indicate that this was intended to be a substantive change or a change to overcome prior art.

The Court declines the invitation to attempt to read the examiner's mind in this case. The examiner is a technically trained individual who undoubtably would know that a subset can include all of the elements of the given set. Therefore, the Court rejects the Special Master's recommendation and adopts the ordinary meaning of the term "subset" which recognizes that a subset can include all of the items in the set.

G. Event Disclaimer

The Court declines to apply the so-called "event disclaimer" advocated by Microsoft. The sum of

Microsoft's argument is that Amado clearly and unmistakably stated that his invention does not respond to events and his invention should be so limited.

The Court does not adopt Microsoft's position for two reasons. The first is that this issue is not brought in the correct procedural posture. The alleged event disclaimer is not associated with the definition of any term in the patent and is not suitable for disposition in the claims construction process. The argument is essentially an estoppel argument-that Amado should be estopped from claiming infringement by an accused device that only responds to events. Second, the Court does not agree with Microsoft's substantive points. Amado stated that, "in [his] invention, data is read and processed irrespectively [sic] of any related events." (Amado July 23, 1993 Decl at 4.) Amado simply does not say that his invention does not respond to events or cannot respond to events, he says that the invention reads and processes data *irrespectively* of any events. His invention does not *need* an event to read and process the data.

The Court declines to adopt Microsoft's proposed event disclaimer.

H. Point and Shoot User Interface

Microsoft contends that the phrase "point and shoot interface" contained in the preamble to Claims 1 and 21 of the '615 Patent should be recognized as claim limitations and construed. Amado believes that the phrase is not a claim limitation and should not be construed. The Special Master agreed with Microsoft and offered a construction.

The preamble of a patent claim is only in rare circumstances a limitation on the scope of the claim. However, "clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention." Catalina Mktg. Int'l v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed.Cir.2002).

It is true that Amado stated that a difference between his invention and the Dysart et al. reference was "reflected in the structure of new claim 11 [Claim 1 of the '615 Patent as issued] which defines a very simple 'point and shoot' link definition user interface (see lines 64-71 above)." (February 4, 1993 Amendment at 11.) The problem is that the Special Master overlooked the explicit reference to "see lines 64-71 above." Those lines refer to the language of the "second means" limitation. Amado was providing a "point and shoot user interface" label for the "second means." He was not relying on the preamble to distinguish the prior art, but instead was relying on the "second means" limitation that was given the shorthand label of a point and shoot user interface.

Since Amado did not clearly rely on the preamble to distinguish the prior art, the preamble should not be considered a limitation on these claims.

II. LIMITATIONS FROM SPECIFICATION

In claim construction, the ordinary and accustomed meaning is usually given to claim terms. However, a patentee may act as his own lexicographer and give his own special meaning to terms used in the patent. This use must be "clearly inconsistent with the ordinary meaning" of the terms, Texas Digital Sys., Inc. v. Telegenix, Inc.., 308 F.3d 1193, 1204 (Fed.Cir.2002), and the court must find an "express intent to impart a novel meaning to claim terms," Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed.Cir.2002).

A. Recalculation

Amado contends that this term should be given its ordinary meaning. Microsoft argues that "recalculation" means "user-activated procedure that performs two functions, (a) a write operation to the database of the updated active record, if permitted by the current record's mark record flag, and (b) executes all formulas defined in the spreadsheet cells as performed in the LOTUS 1-2-3 TM release 201 and 22 spreadsheet programs." The Special Master agreed with Microsoft.

Microsoft argued, and the Special Master agreed, that the definition of "recalculation" in the "Glossary" appendix to the specification should limit the term as used in the claims. While the patentee can be his own lexicographer and, thus, the specification can provide novel meanings to the claims, in this case there is an explicit definition of "recalculation" in the claims themselves. The Court agrees with Amado that the definition given in the claim itself should take precedence over a single definition given in the specification. *See* Reinshaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed.Cir.1998) ("First, it is manifest that a claim must explicitly recite a term in need of definition before a definition may enter the claim from the written description. This is so because the claims define the scope of the right to exclude, the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim.")

At worst, Amado has used the term "recalculation" in a sloppy way in his patent, using it in some instances to refer to the common meaning of recalculation (the definition given in the claim) and sometimes to refer to the common recalculation accompanied by a "write-back" operation. As the Federal Circuit has admonished numerous times, when a patentee uses a term in several, non-contradictory ways, a definition should be given that encompasses both. *See, e.g.,* Enercon GmbH v. Int'l Trade Comm'n, 151 F.3d 1376, 1385 (Fed.Cir.1998), Johnson Worldwide Associates, Inc. v. Zebco Corp., 175 F.3d 985, 991 (Fed.Cir.1999). There is nothing inherently contradictory about the two definitions of recalculation. The result of "recalculation" with either definition is basically in accord with the plain meaning of the term within its context-application of formulas associated with given cells of the spreadsheet to the data currently in the cells of the spreadsheet. Microsoft's definition (the one contained in the "Glossary") only adds on the "write-back" that occurs after the recalculation in the invention. But, since the "write-back" operation is already specified in Claim 1 of the '615 Patent, Microsoft's definition would give the claim two "write-backs," a result not described anywhere in the specification.

Furthermore, there is no lack of clarity regarding which "recalculation" Amado is referring to in the claims because (a) recalculation is clearly described in the claims and (b) the write-back is clearly separately specified as the last clause of Claim 1. Therefore, the Court adopts Amado's broader proposed definition of recalculation as "an operation that causes all formulas associated with all cells of said spreadsheet to be recalculated using whatever the current values are for each said cell stored in the associated storage locations in said memory at the time said recalculation command is received" and rejects Microsoft's proposed inclusion of the "write-back." FN2

FN2. More accurately, the term requires no construction since it is defined in the claim, i.e. there is no clarity added by replacing the term in the claim with the given definition since the definition is already in the claim.

B. Window

Amado defines "window" as "an-area of the display set aside for a particular purpose" which the Court

takes to essentially be the ordinary meaning of the term with computing. Microsoft argues that the term should mean "a viewable area that displays all records and the selected range linked to the active record." The Special Master recommended a third definition "a viewable area that displays all records except for those of the active record."

The Special Master's limitation of the term "window" was in error. The Special Master's limitation was explicitly based on his understanding of the invention's "browse view." "While the defendant's proposed definition reads into the concept of 'window' additional limitations from the specification, certain of these limitations are described unambiguously by Amado as inherent to the 'invention's browse view." ' (R & R at 66.) The Special Master never explains why these limitations to the "browse view" are properly incorporated into the definition of window. The Court sees no reason to do so and adopts the plain and ordinary meaning of "window" within the computing arts as proposed by Amado "an area of the display set aside for a particular purpose."

C. Bidirectional Pointer Data

Amado contends that "bidirectional pointer data" means "data that associates each said diagnostic statement defined by user input for an analysis rule with one or more user defined items of data to which said analysis rule is to be applied." Microsoft states that the term means

pointer between diagnostics and underlying raw data as well as superdiagnostics and underlying diagnostics that permits a user to examine underlying data. Bidirectional pointers contain a test code and a data item identifier and are stored to a diagnostic database. When a particular test turns out to be true, then a new record is added to the diagnostic database (result dbf).

The Special Master recommended Microsoft's definition.

As in the case of "recalculation," the Special Master imported restrictions from the specification into the meaning of a term that is defined in the claims themselves. The Court rejects the Special Master's recommendation and accepts Amado's definition which is directly from the claims "data that associates each said diagnostic statement defined by user input for an analysis rule with one or more user defined items of data to which said analysis rule is to be applied."

III. MEANS PLUS FUNCTION ISSUES

Means-plus-function limitations are construed in a two step process. Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc., 296 F.3d 1106, 1113 (Fed.Cir.2002). First, the appropriate claimed function is identified. *Id*. Then, the court identifies the structure from the specification associated with the function. *Id*.

A. First Means ... ('615 Patent**, Cl. 1 and 21)**

Claims 1 and 21 of the '615 patent include the following means-plus-function limitation

First means in execution on said computer for controlling said computer so as to display on said display one or more of said records of said database file within a window while said spreadsheet program is in execution,

Id.

Microsoft notes that the Special Master did not specify a function for this limitation. Surprisingly, there does not appear to be much concrete guidance in the caselaw for determining the function of a means-plus-function claim limitation. The Federal Circuit has stated that

The phrase "means for" generally invokes 35 U.S.C. s. 112, para. 6, and is typically followed by the recited function and claim limitations. In identifying the function of a means-plus-function claim, a claimed function may not be improperly narrowed or limited beyond the scope of the claim language. Conversely, neither may the function be improperly broadened by ignoring the clear limitations contained in the claim language. The function of a means-plus-function claim must be construed to include the limitations contained in the claim language.

Lockheed Martin Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1319 (Fed.Cir.2003) (internal citations omitted).

Despite the seemingly absolute statement that, "The function of a means-plus-function claim *must* be construed to include the limitations contained in the claim language," *id*. (emphasis added), the Federal Circuit has not always included limitations from the claim language in the function of the means-plus-function claim. In BBA Nonwovens Simpsonville, Inc. v. Superior Nonwovens, LLC, 303 F.3d 1332 (Fed.Cir.2002), the court needed to determine the function for the following means-plus-function limitation

corona means cooperating with said attenuator and positioned for electrostatically charging the filaments so that repelling forces are induced in the filaments to more uniformly spread the filaments before they are deposited on said collection surface to form a web.

Id. at 1343. The court concluded, with little discussion, that the language following "positioned for ..." was not properly part of the function.

Superior's proposed construction ignores the word "positioned" in claim 1, as the district court observed. Rather than reciting the function of the corona means, the expression following the word "positioned" describes where the corona means is located and is a separate limitation not subject to section 112, paragraph 6. What the "corona means" is and where it is located are two different things.

Id.

The *BBA Nonwovens Simpsonville* court appears to have implicitly decided that the limitation on the location of the "corona means" was not central to the function of the corona means. This Court can certainly imagine situations where the location in which a function takes place is absolutely essential to the execution of the function-in other words, a situation where the whole trick of the invention is to perform the stated function within some limited location.

In the construction of the "first means ..." limitation, as well as in the later discussed "write-back means," the Court must decide whether limitations on when a given process is carried out are properly incorporated into the function. Since neither party has given the Court much guidance that would lead the Court to choose one preferred function over the other party's preferred function, the Court bases its decision on its understanding of the invention as described in the patents and in the other materials presented by the parties.

In the case of the "first means ..." the Court finds that the temporal limitation is properly incorporated into the function. Amado's invention does not cover the operation of a spreadsheet and a database separately, but instead covers, in part, the *interaction between a spreadsheet and a database*. This functionality is even incorporated into the title of the '615 Patent "Point and Shoot Interface for Linking Database Records to Spreadsheets Whereby Data of a Record is Automatically Reformatted and Loaded Upon Issuance of a Recalculation Command." As is further seen in the discussion of the structure for this function, in Amado's invention the display of database records is inextricably intertwined with the operation of the spreadsheet program. To truncate the "while the spreadsheet program is in execution" language from the definition of the function would improperly ignore the interactions between the spreadsheet and database programs. Therefore, the Court adopts Microsoft's proposed function which includes the "while said spreadsheet program is in execution" portion of the claim limitation.

The next question is the appropriate corresponding structure for the function. Microsoft argues that the structure should take into account the unique feature of the "browse view"-that the browse view shows the contents of the database records except for the active database record. For the active database record, the browse view shows spreadsheet contents (col_prog range).

Amado proposed a structure, which the Special Master accepted, that apparently selectively limits the structure to portions of the specification "described at 22 65-23 47 that cause the display of database records, or the portions of the computer programming of the browse views of the database programs described at 1 30-2 30 and 24 10-22 that cause the display of database records." Apparently, Amado wishes to restrict the "First means ..." to cover only display of database records. The rationale behind this argument is that the "first means ..." function only specifies display of "records of said database file" and does not discuss display of spreadsheet data.

Amado's argument is not persuasive because the display of "col_prograng" in place of the active record is central to the way in which the disclosed invention displays database records. When a patentee chooses to invoke the simplicity of means-plus-function language, he is limited to the structure disclosed in the patent for implementing the function along with equivalents to that structure. In leaving out the display of spreadsheet information in place of database information for the active record, Amado proposes leaving out key limitations of his implementation of the "first means ..." by which he would be able to claim a range of structures for implementing the claimed function much broader than the structure he discloses in the specification.

The Court adopts as the structure the portion of the computer programming of the Browse View described at 22 65-23 47 that causes the display of database records as well as the portion that causes the display of col_prog range in place of the active record (23 3-12).

B. Second Means ... ('615 Patent**, Cl. 1)**

Microsoft claims that there is no structure in the specification that corresponds to a portion of the function of the "second means ..." limitation in Claim 1 of the '615 Patent. Specifically, Microsoft claims that the specification does not provide structure for "controlling said computer to recognize a select command entered by said user such that any said data record pointed to by said cursor at the time said select command is given by said user is selected." That is, there is no "Select Command" for selecting the database record that the cursor currently points to.

The Court understands Amado's disclosed program, as relevant to this discussion, to function in the following way (1) a "current record dynamic link" is set to the value of the record pointed to by the cursor with the current record dynamic link updated as the user moves the cursor, (2) when the user chooses to recalculate, the current record (as pointed to by the cursor and identified by the current record dynamic link) is loaded into the spreadsheet and recalculated.

The Court finds that the "second means ..." limitation as a whole has a structure described in the specification-namely the parts of the specification pointed out by Amado. In other words, the Court finds that if one skilled in the art implemented the structure advanced by Amado, the resulting program would have the functionality that Amado claims. The dispute over the structure of the "select command" only arises when the various clauses, or "subfunctions," of the "second means ..." limitation are examined separately and the parties attempt to point out the specific parts of the specification that correspond to the specific sub-functions of the "second means ..." clause. FN3

FN3. By "sub-function," the Court refers to the breakdown of the "second means ..." limitation into three separate functions in the Joint Claims Construction Chart of which the "select function" is function number two.

The dispute concerns the structure of the "select command entered by said user" described in the function of the claim limitation. There are only two actions taken by the user in this sequence, the movement of the cursor and the invocation of the recalculation. The movement of the cursor updates the current record dynamic link, but, according to the terms of the claim, cannot act as the "select command" because the select command selects the data record pointed to by the cursor "at the time the select command is given." When the user moves the cursor, the current record dynamic link is set to the data record pointed to by the cursor *after* the cursor is moved.

The invocation by the user of the recalculation is the remaining possible "select command." More precisely, the Court finds that the pressing of the "calc_key" by the user should be considered to be the "select command." (See '615 Patent, Col. 30 52-54.) Note that the Court does not consider "invocation by the user of the recalculation" to be exactly the same thing as the "recalculation command" described in the patent-a distinction that the Court hopes to clarify in the next passages.

Part of this confusion comes from a mixing of the perspective of the user and the perspective of the computer. The user gives the "select command," the computer executes the "recalculation command." (Note that the recalculation command is not defined necessarily to be user input.) As described by the specification

When the user presses the calc_key, the program begins procedure calc. Procedure calc executes two basic operations

a) a read operation of the current record to the col_prog range, if allowed by the current record's mark_record flag, and

b) a spreadsheet recalc

'615 Patent, Col. 30 52-58. By the Court's reading, the pressing of the calc_key is the "select command entered by said user" and Procedure Calc is the recalculation command. While these are essentially the same

event, they are the same event from different points of view. The pressing of the calc_key is the user's point of view and the execution of Procedure Calc is the computer's point of view.

Now that this analysis is complete, its artificiality should be evident. *The structure described by Amado does what the "second means ..." claims*. The argument about the select command is only a matter of semantics. What part of the specification are we going to label as the "select command"? Does this really matter if the specification provides an implementation of the functionality claimed? Nonetheless, the Court has identified what it believes can best be labeled as the "select command entered by said user" the pressing of the calc_key by the user. This then invokes the execution of Procedure Calc by the computer-the "recalculation command."

Microsoft makes a final argument that even if the Court's identification of the structure for the "select command" is accurate, the structure is not clearly associated with the performance of the function. *See* Cardiac Pacemakers, 296 F.3d at 1113 ("In order to qualify as corresponding, the structure must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function."). The Court rejects this argument for two reasons. First, the structure for the "second means ..." function as a whole is clearly associated with Amado's proposed structure which does perform the claimed function as a whole. Second, as discussed above, the Court believes that much of the confusion here is caused by an artificial method of breaking down sub-functions of the "second means ..." function and then attempting to artificially label pieces of the structure in accordance with terms in the "second means ..." limitation. Microsoft implied at the August 16th hearing that the mere fact that everyone involved has had a difficult time isolating the structure of the "select command" must mean that the requirement that function and structure be clearly associated is not met. But the parties' method of analysis, which was in part encouraged by Amado, caused the confusion, not the language of the patent.

While Amado's proposed structures for each of the proposed "sub-functions" may not be precisely accurate, the structure designated by Amado, taken as a whole, is sufficient to describe the structure of the "second means ..." limitation.

C. Database Record Identifier Means

The Court agrees with Microsoft that the term "controlling" in the limitation

database record identifier means for controlling said computer to maintain data pointing to the last database record loaded from said database file into said selected range of said spreadsheet

('615 Patent, CI, 1) implies some form of active maintenance and not merely a data storage element.

The Court finds the structure for controlling the computer to maintain the data pointing to be at '615 Patent, Col. 23 56-62

When the contents from the current record the case_db file are loaded to the col_prog range (step 'c' above), the active record's dynamic link is changed to the contents of the current record's dynamic link

Id.

D. Write-Back Means

Microsoft argues that the Special Master improperly shortened the function of the so-called "write-back means" limitation. The write-back means limitation states

means for controlling said computer to load original contents of said storage locations associated with the cells of said selected range of said spreadsheet back into the database record pointed to by said database record identifier means *before the contents of said selected database record are loaded into the cells of said selected range when said recalculation command is issued and before the recalculation is carried out*

'615 Patent, Cl. 1 (emphasis added).

Amado argues, and the Special Master agrees, that the portion of the limitation from "before the contents of ..." (italicized above) should not be part of the function of the means-plus-function limitation. Amado does not argue that the limitation does not exist, only that it is not part of the function for the purposes of means-plus-function analysis.

This is basically the same question as was encountered in the "first means ..." function above. Is the "before the contents of ..." language is part of the function or a limitation on when the function will occur? FN4 The Court agrees with Microsoft that the "before the contents of ..." language is properly part of the function. A reading of the context surrounding the operation described in this claim limitation (Column 31 of the specification) illustrates that a concern present in the design of the write-back means is the possible loss of data or improper modification of data when the data is written back and forth between the database and spreadsheet. For example,

FN4. The function definition question appears to be ripe for a bright-line rule stating that limitations following the "means ... for" language are always part of the function. Amado chose to draft his claims in the manner in which they are drafted. If he did not want the temporal limitation to be part of the function, he could have easily truncated the means-plus-function limitation to state his desired function and added another limitation to the effect of
where said means for controlling said computer occurs before the contents of said selected database record

If the need_spreadsheet_calc flag is TRUE, then the spreadsheet needs to be recalculated, since one or more spreadsheet data have been changed with no subsequent spreadsheet recalc. In this case, a spreadsheet recalc is executed before the col_prog range is unloaded. Otherwise, the col_prog range's results would not be correct when written back to the active record.
('615 Patent, Col. 31 24-31.) Also,
A special consideration has to be made when the current record is loaded (read) from the database file into the col_prog range. The col_prog range may contain permanent data, texts, and formulas, and this read operation may not modify permanent cells in the col_prog range.

('615 Patent, Col. 43-48.)
While the Court is by no means an expert in computer science or computer programming, the plain language of the specification cited makes clear that the order in which the write-back operations are done impacts the functionality. If you do things in the wrong way or in the wrong order, data will be lost or improperly overwritten. Therefore, the Court adopts the following function which includes the temporal limitation on when the write-back occurs

controlling said computer to load original contents of said storage locations associated with the cells of said selected range of said spreadsheet back into the database record pointed to by said database record identifier means before the contents of said selected database record are loaded into the cells of said selected range when said recalculation command is issued and before the recalculation is carried out.FN5

FN5. The Court agrees with the Special Master and sees no reason to reword the claim as Microsoft proposes. While the claim language is not exactly a paragon of clarity, "simplifying" it may result in unforseen changes in meaning or scope.

The structure associated with this function is described at '615 Patent, Col.31 17-48.

E. First Program ... ('590 Patent, CI. 1)

The Special Master concluded that the limitation of the '590 Patent, Claim 1 that begins, "a first program in execution on said computer for controlling said computer to ..." qualified as a means-plus-function limitation. The Court disagrees.

Whether or not a claim limitation is a means-plus-function limitation pursuant to 35 U.S.C. s. 112, para. 6 is, in part, governed by the patentee's intent. When a patentee invokes the language "means ... for ..." there is a presumption that section 112, para. 6 applies. Conversely, when the term "means" is absence from the claim limitation, section 112, para. 6 is presumed not to apply. Claim limitations are sometimes found to invoke section 112, para. 6 even if the term "means" is not used. This occurs

[w]hen it is apparent that the element invokes purely functional terms, without the additional recital of specific structure or material for performing that function, the claim element may be a means-plus-function element despite the lack of expressed means-plus-function language.

Al- Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1318 (Fed.Cir.1999).

Initially, it is clear that Amado did not intend to invoke section 112, para. 6 for this limitation. Amado uses "means ... for" language in a similar claim limitation in the '590 Patent, Claim 8. The question then is if the "element invokes purely functional terms, without the additional recital of specific structure or material for performing that function." *Id*. The Court finds that it does not.

The question of function versus structure is especially difficult in the area of software patents since the "structure" of a piece of software is essentially its function, or the structure is at least the steps needed to allow a computer to perform the function.

The claim limitation at issue here conveys a long series of steps, with some degree of detail, that the "first program" will undertake

a first program in execution on said computer for controlling said computer to receive user input defining one or more analysis rules to be performed on a subset of data, also specified by said user input, from said array of data stored in said quantitative databases and for controlling said computer so as to analyze selected ones of said user specified subset of data items in accordance with selected ones of said one or more user

specified analysis rules so as to generate one or more diagnostic records the text of which is also defined by said user input, each diagnostic record corresponding to a possible result of the application of a particular user specified analysis rule to the corresponding user selected subset of items of data from said array of data in said quantitative database, and wherein said first computer program controls said computer so as to automatically generate one or more link pointers for each said diagnostic record, each said link pointer linking a diagnostic record to the corresponding user selected subset of items of data from said quantitative database from which said diagnostic record was generated

This language is "functional" in the sense that any algorithm is functional. But it also provides a fair degree of guidance in how to exactly create the piece of programming that Amado envisions. This is in accord with the uncontroverted expert testimony that Amado presented stating that one skilled in the art would be able to construct the "first program" given this description.

Microsoft bears the burden of showing that the "first program" claim limitation is purely functional and, thus, section 112, para. 6 should apply. Microsoft has presented no evidence that the claim limitation in question does not provide sufficient structure to allow one skilled in the art to create the "first program," Instead, it relies purely on argument.

Since Microsoft, who bears the burden, has provided no evidence that section 112, para. 6 applies, Amado has presented expert testimony that it should not apply, and the Court independently agrees with Amado's expert that the limitation imparts sufficient structure, section 112 para. 6 should not apply to this claim. *Accord Linear Tech. Co. v. Impala Linear Corp.,* 371 F.3d 1364, 1371-1373 (Fed.Cir.2004) (finding sufficient structure in claim limitation where patentee presents apparently uncontroverted testimony of one skilled in the art that sufficient structure exists).FN6

FN6. The Court believes that Microsoft's failure to meet its evidentiary burden regarding the lack of structure is sufficient to warrant a finding in favor of Amado on this issue. The Court independently opines on the sufficiency of the structure only because the *Linear Tech.* court appears to make such an independent determination even with no evidence to the contrary. *See Linear Tech,* 371 F.3d at 1372-73.

F. Second Program ... ('590 Patent, CI. 1)

Similar to the "first program ..." limitation, Microsoft has not met its burden of showing that the "second program ..." limitation should invoke section 112, para. 6 where the term "means" was not used.

G. Program in Execution ... ('400 Patent, CI. 1 and 12)

Similar to the "first program ..." limitation, Microsoft has not met its burden of showing that the "program in execution ..." limitations should invoke section 112, para. 6 where the term "means" was not used.

IV. DISPOSITION

After a *de novo* review, the Court adopts the Report and Recommendation of the Special Master except as noted above.

IT IS SO ORDERED

C.D.Cal.,2004.
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