IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

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§	Case No. 2:17-CV-660-WCB-RSP
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CLAIM CONSTRUCTION OPINION AND ORDER

On October 17, 2018, the Court held a hearing to address the proper construction of the disputed terms of the patent at issue in this case, U.S. Patent No. 6,216,139 ("the '139 patent"). After considering the arguments made by the plaintiff IDB Ventures, LLC, and the defendants—The Buckle, Inc., and Academy, Ltd.—both at the hearing and in the claim construction briefing (Dkt. Nos. 71, 72, and 76), the Court issues this order setting forth the Court's construction of the one undisputed claim term and the six disputed claim terms identified by the parties.

I. Background

The '139 patent is entitled "Integrated Dialog Box for Rapidly Altering Presentation of Parametric Text Data Objects on a Computer Display." The specification of the '139 patent explains that at the time of the invention, database management systems and spreadsheet programs provided for the creation, storage, and display of large quantities of both numeric and text data. '139 patent, col. 1, ll. 15-17. The specification adds that, at that time, the ability to manipulate such databases or spreadsheets in order to reformat or rearrange the data was limited. Existing programs did not provide the possibility "to select different sort parameters and

differing subsets of the data without a series of precisely-specified steps that [could] frustrate a user." *Id.* at col. 2, ll. 15-18. Thus, "while computer database management systems and spreadsheet programs with data-sorting capability ha[d] been widely available, existing systems and programs for sorting data may not [have] adequately serve[d] the needs of some users." *Id.* at col. 2, ll. 6-9.

The invention sought to address those perceived shortcomings by "permit[ting] the use of a computer system rapidly to reformat displays of text data objects in terms of parameters chosen by the user, without the aid of an instruction manual and without extensive computer training." *Id.* at col. 2, 11. 49-52. The claims are therefore directed to an apparatus, method, and article of manufacture that enables the rapid formatting and reformatting of tabular displays of records or text data objects organized according to the preferences of the user.

With regard to the terms used in claims 1 and 19 of the '139 patent, the parties present one term as to which they agree on the proper construction and six terms as to which they disagree. The Court will first address the issue on which the parties agree and then address the construction of the remaining terms, on which the parties disagree, in the order presented in the claim construction briefs.

II. Agreed Constructions

The parties agree to the construction of the term "designated values," which they define to mean "designated parameter values." *See* Dkt. No. 71-1, at 1. The Court adopts that construction of the term.

Claim Term	Agreed Construction
designated values	Designated parameter values

III. Construction of Disputed Terms

a. "query dialog box"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more areas displayed on a monitor that	a screen or window that allows for user input
can be used to enter or select parameters	related to the text data objects and is separate
associated with text data objects and to specify	from the screen or window for displaying the
a sort order	text data objects

IDB argues that the term "query dialog box" means "one or more areas displayed on a monitor that can be used to enter or select parameters associated with text data objects and to specify a sort order." The defendants argue that the term means "a screen or window that allows for user input related to the text data objects and is separate from the screen or window for displaying the text data objects."

The Court is not satisfied that either party's proposed construction of the term query dialog box is correct. As for IDB's suggestion that the term means "one or more areas," there is no indication in the claims, the specification, or the prosecution history that the inventor contemplated that the query dialog box would comprise multiple areas. While the specification describes the query dialog box as displaying "a plurality of parameters," '139 patent, col. 3, line 16, and the sort order dialog box as "displaying a list of parameters," id. at col. 6, ll. 42-43, the components of the query dialog box are further described as integrated into a single, defined area. For example, the specification states that "a user viewing a display of text data objects may quickly return to the Query dialog box in order to change the values of the parameters of the text data objects to be selected and/or modify the construction of the sort order for the selected text data objects." Id. at col. 3. ll. 32-37; see also col. 3, ll. 62-64 ("FIG. 3 is an illustration of a display screen showing an exemplary Query dialog box for assigning values to parameters and choosing a sort order").

The prosecution history of the '139 patent also undermines IDB's proposed construction. In the Applicant's Response to Final Office Action, Dkt. No. 72-9 at 2, the inventor stated that the invention "provid[es] a single, integrated query dialog box from which the user specifies a sort order and sets a range of parameter values for each parameter." IDB's proposed construction of the query dialog box as "one or more areas displayed on a monitor" is thus contrary to the intrinsic evidence bearing on the claim construction issue.

IDB's proposed construction further states that the areas constituting the query dialog box "can be used to enter or select parameters associated with text data objects and to specify a sort order." In claims 1 and 19, however, the reference to the query dialog box is succeeded by the following language:

wherein the query dialog box displays each of a plurality of parameters associated with each of the text data objects, forms a plurality of spaces for listing values associated with each displayed parameter, and further forms a space for selecting a sort order.

'139 patent, at claims 1, 19. As noted by the defendants, Dkt. No. 72, at 13, IDB's proposed definition of "query dialog box," which includes a reworded version of the functions of the query dialog box that are recited in the claims, is either redundant of the functions set forth in the claims themselves, *see Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1290 (Fed. Cir. 2010), or would be confusing, to the extent that the language in the proposed construction differs from the language in the claims. The Court therefore rejects the portion of IDB's proposed construction that specifies the functions of the query dialog box.

The defendants' proposed construction of the term "query dialog box" is also flawed. First, the defendants propose that the term "a query dialog box" be narrowly defined as "a screen or window." The defendants argue that the specification "repeatedly describes the claimed invention as two separate screens or windows—one screen or window for the 'query dialog box'

and a second 'view query' screen or window for displaying a table listing the results of the user's query." Dkt. No. 72, at 5, citing '139 patent, col. 8, ll. 45-49 ("Clicking on this Return icon signals the computer system to return to the previously displayed screen . . . [which] is the Query dialog box illustrated in FIG. 3."). The specification, however, is not as limiting as the defendants suggest. Although the specification contains examples in which the query dialog box is referred to as a "screen," nothing in the specification (or the claim language) indicates that it is necessary for the query dialog box to occupy the entire screen of the display device. Thus, the defendants' argument that the query dialog box must be a "screen" is overly limiting.

The defendants' use of the term "window" in their proposed claim construction also results in an overly narrow construction of the term "query dialog box." The defendants find support for their introduction of the term "window" into the claim construction from a technical dictionary published at about the time the '139 patent application was filed. According to the cited dictionary, a "dialog box" is "[a] simple *window . . . [which] will normally allow no other actions to take place until a button has been pressed." OXFORD DICTIONARY OF COMPUTING 139 (4th ed. 1996), Dkt. No. 72-8. However, as noted by IDB, "the definition relied upon by Defendants includes an asterisk (*) next to the word 'window." Dkt. No. 76, at 3. The dictionary states that "[a]n asterisk (*) used before a word or group of words indicates to readers that they will find at the entry so marked further information relevant to the entry that is being

¹ IDB challenges the use of the defendants' dictionary on the ground that it was published after the filing date for the '139 patent. Absent some indication that the meaning of a particular term to persons of skill in the art changed between the date of the patent application and the publication date of the dictionary, a dictionary that is roughly contemporaneous with the application may be relied on as extrinsic evidence of the meaning of a term to one of skill in the art at that time. In this case there is no evidence of such a change in the meaning of the term in question, and the cited edition of the dictionary in question was published in 1996, while the patent application was filed in late 1995, strongly suggesting that the meaning of the term had not changed between those two dates.

read." Dkt. No. 76-1, at 5. The term "window" is further defined in the dictionary as "a rectangular *area* on a display screen inside which part of an image or file is displayed." Dkt. No. 76-1, at 7 (emphasis added). The Court concludes that the term "area" is more appropriate than "window" in the present context, as it fully captures the meaning of the phrase used in the claim without the risk of being given an unsuitably narrow interpretation based on lay familiarity of the term "windows" in the computer context.

Another element of the defendants' proposed claim construction is the requirement that the "screen or window that allows for user input related to the text data objects" is "separate from the screen or window for displaying the text data objects." This element finds support in the specification, which refers to the Query dialog box as an area distinct from the Viewing Ouery screen.² For example, the specification states that "a user viewing a display of text data objects may quickly return to the Query dialog box in order to change the values of the parameters of the text data objects to be selected and/or modify the construction of the sort order for the selected text data." '139 patent, col. 3, ll. 32-35. The specification also states that the invention "allows the user rapidly to switch from one tabular display to the next by allowing the user to switch back to a Query dialog box (300) with simply mouse action, change the assigned values . . . as desired in the Query dialog box (300), then, again with only simple mouse action, view the resulting table." Id. at col. 8, 11. 59-64. The prosecution history further contemplates that the area for user input is distinct from the area that displays the text data objects. See Dkt. No. 72-7 (Appeal Br. to PTO), at 13, 16 (stating that the invention "permit[s] a user to toggle quickly between a screen that enables a user to create a query and a screen that shows the results

² The Court finds the term "separate" rife with ambiguity, and believes the term "distinct" better describes the relationship between the two areas.

of the query" and that "the present invention enables the user to model data . . . using only two screens – the Query dialog box and the View Query screen").

IDB challenges this construction, arguing that the specification and prosecution history merely contemplate "using a novel Query dialog box and View Query screen combination," rather than requiring the query dialog box to be distinct from the query results. Dkt. No. 71, at 5–6 (quoting Dkt. No. 72-7, at 2).³ IDB argues that given the "screen combination" language, the defendants' competing prosecution history citations do not constitute a clear disavowal of Dkt. No. 71, at 6. But the Court reads the prosecution history "screen claim scope. combination" language as consistent with the defendants' construction. In fact, this "screen combination" language, used only once in the Summary of Invention section of the appeal brief to the USPTO, is described in greater detail in the Argument section of the same appeal brief using the language amenable to the defendants' proposed construction. See Dkt. No. 72-7, at 2, 12, 16. Additionally, while the specification does not use the word "separate" or the word "distinct" to describe the relationship between the query dialog box and the View Query screen, the specification repeatedly and consistently refers to the Query dialog box as an area distinct from the Viewing Query screen (as discussed above). See GPNE Corp. v. Apple Inc., 830 F.3d 1365, 1370 (Fed. Cir. 2016) ("[W]hen a patent 'repeatedly and consistently' characterizes a claim term in a particular way, it is proper to construe the claim term in accordance with that characterization").

Accordingly, the Court construes the term "query dialog box" to mean "a defined area displayed on a monitor that allows for user input related to the text data objects and is distinct from the defined area for displaying the text data objects."

³ IDB cites to Dkt. No. 71-4. However, Dkt. No. 71-4 and Dkt. No. 72-7 are the same document.

b. "designating, for each displayed parameter, a parameter value"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
assigning a value for each displayed parameter	a user assigning a value for all parameters that
	are displayed in the query dialog box

IDB argues that the term "designating, for each displayed parameter, a parameter value" means "assigning a value for each displayed parameter." The defendants argue that the "assigning a value" limitation means "a user assigning a value for all parameters that are displayed in the query dialog box." As the defendants note, "the parties' dispute here turns on whether a user must specify parameter values." Dkt. No. 72, at 15.

IDB insists that the specification merely permits, rather than requires, a user to assign values to parameters. Dkt. No. 71, at 10. In support of that argument, IDB cites the statement in the specification that "[t]he space under each parameter displayed in the Query dialog box permits the user to view the possible values for that parameter held by text data objects, and to assign to that parameter a value." '139 patent, col. 3, ll. 19-22. According to IDB, if the user does not assign values to the parameter, the computer will automatically select a value. See Dkt. No. 71, at 10–11; see also '139 patent, col. 6, ll. 27-30 ("In a preferred embodiment, if the user makes no selection for the value of a particular parameter, the value 'All' is automatically selected"). However, automatic selection is at odds with the purpose for which the invention was intended, i.e., to permit a user to rapidly "format and re-format displays of the same text data objects from several differing perspectives." Id. at col. 2, ll. 49-6. Furthermore, the specification makes clear that, even if the computer makes an automatic selection, the automatic selection must be "accepted" by the user. '139 patent, col. 6, ll. 6-10 ("When 'All' is accepted")

⁴ The Court is aware that displays can be formatted and re-formatted by adjusting the sort order, while leaving untouched an automatically selected value for each parameter. However, IDB argues that the sort order also does not require user specification. A system in which the user selects neither the parameters nor the sort order does not serve the purposes of the invention.

as the value for a parameter, *using a point-and-click or similar mechanism*, the computer will select for sorting all text data objects that satisfy the values assigned to each of the other parameters.") (emphasis added). Thus, the specification makes clear that, even if the computer offers a particular option, the user ultimately makes the selection decision.

IDB argues that because the term "user" is not recited in any claim of the '139 patent, the claim language must be read to allow for both embodiments (i.e., user-designated or computer-designated parameter values). *See* Dkt. No. 71, at 11–12. The emphasis in the specification regarding user-assigned (or, at minimum, user-accepted) values, however, undermines that argument.

IDB cites *Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509 (Fed. Cir. 2015), in support of its argument that the defendants' construction improperly limits the phrase "assigning a value for each displayed parameter term" to a single embodiment without evidence of a clear disavowal of claim scope by the patentee in the specification or the prosecution history. *See* 808 F.3d at 513 (holding that the specification may reveal an intentional disclaimer, or disavowal, but the standard of such a disavowal is exacting). Yet the Federal Circuit has explained that "when a patent 'repeatedly and consistently' characterizes a claim term in a particular way, it is proper to construe the claim term in accordance with that characterization." *GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1370 (Fed. Cir. 2016).

The '139 patent is characterized as user-focused throughout the specification and the prosecution history. *See e.g.*, '139 patent, col. 3, ll. 25-27 ("According to the present invention, the user selects values for each parameter in the spaces provided and constructs a sort order"); Dkt. No. 72-3, at 12 ("In the present invention . . . the user chooses the parameter values subset directly on the query dialog box, and can rapidly view and review data using different parameter

values subsets of the user's own design."). The clear import of the specification and prosecution history is that the invention contemplates user selection of parameters and not computer-only parameter selection without subsequent user acceptance.

Accordingly, the Court construes the phrase "designating, for each displayed parameter, a parameter value" to mean "a user assigning a value, or accepting a default value, for each displayed parameter."

c. "constructing a sort order from the displayed parameters in the space for selecting a sort order"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
specifying a sort order from one or more of the	a user specifying a sort order from one or more
parameters displayed in the space for selecting	of the parameters displayed in the space for
a sort order	selecting a sort order

IDB argues that the term "constructing a sort order from the displayed parameters in the space for selecting a sort order" means "specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order." The defendants argue that the "constructing a sort order" limitation means "a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order."

The question presented by this claim construction issue is whether user involvement is necessary to specify a sort order. IDB relies on substantially the same arguments it made with respect to the "assigning a value for each displayed parameter" limitation above, to justify a broad construction of the "specifying a sort order" limitation. According to IDB, the user is not required to input a sort order because a default sort order already exists. That much is true; the specification states, "the Sort Order dialog box . . . is initially displayed with the box adjacent to the first-listed parameter checked (314), and with no checks in any other boxes adjacent to listed parameters." '139 patent, col. 7, 1l. 2-6. However, IDB's conclusion that "the specification

discloses a preferred embodiment which performs [the sort] step automatically," Dkt. No. 71, at 17, is incorrect. It is the user, not the computer, that must determine whether to accept the default sort order or specify an alternative sort order. As the specification explains, "the mouse is used to click on the View box (322) in the Query dialog box (300) to signal the computer . . . to execute the Sort Data step." '139 patent, col. 7, ll. 37-44.

IDB again relies on the permissive language in the prosecution history. *See* Dkt. No. 71, at 17. For the same reasons given with respect to the "assigning a value for each displayed parameter" limitation, IDB's argument fails.

Accordingly, the Court construes the term "constructing a sort order from the displayed parameters in the space for selecting a sort order" to mean "a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order, or using the sort order initially displayed."

d. "means for imaging, on a display device controlled by the computer system, a query dialog box"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
35 U.S.C. 112, ¶ 6 (now 35 U.S.C. § 112(f))	function: imaging, on a display device
does not apply to this claim term	controlled by the computer system, a query
	dialog box
Alternatively,	
function: imaging a query dialog box	structure: a standalone computer including a monitor, a cathode ray tube, or liquid crystal display
structure: a display device controlled by the	
computer system, and equivalents thereof	

Although the "means for imaging" limitation uses the "means for" language that is typically associated with "means-plus-function" claiming pursuant to 35 U.S.C. § 112, ¶ 6 (now 35 U.S.C. § 112(f)), IDB argues that section 112, ¶ 6 does not apply to that limitation. Alternatively, IDB argues that if "means-plus-function" claiming is applicable to the "means for

imaging" limitation, the claimed function is "imaging a query dialog box," and the claimed structure for performing that function is "a display device controlled by the computer system, and equivalents thereof." The defendants argue that the limitation is subject to the principles applicable to means-plus-function claiming. According to the defendants, the claimed function is "imaging, on a display device controlled by the computer system, a query dialog box," and the claimed structure for performing that function is "a standalone computer including a monitor, a cathode ray tube, or liquid crystal display."

The Court must first address whether 35 U.S.C. 112, ¶ 6 applies to the "means for imaging" limitation. The Federal Circuit has held that "[i]f the word 'means' appears in a claim element in association with a function, this court presumes that § 112, ¶ 6 applies." *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 1368 (Fed. Cir. 2005) (internal quotations and citation omitted); *see also Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366 (Fed. Cir. 2008). That presumption is overcome, however, "if the claim itself recites sufficient structure, material, or acts to perform the claimed function." *Callicrate*, 427 F.3d at 1368 (internal quotations and citation omitted). Where the question is whether a claim recites sufficient structure to perform the claimed function, the court is required to examine whether the recited structure has an understood meaning in the art. *See Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003) (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880–81 (Fed. Cir. 2000)).

The presumption that § 112, ¶ 6 applies looms large in the '139 patent given the use of the "means for" language in each limitation of claim 19, and the parties' respective constructions applying § 112, ¶ 6 to limitations (b) and (c) of claim 19. The reference to a display device merely states where the imaging occurs, and the reference to the "computer system" does not add structure of sufficient specificity to overcome the presumption that the "imaging" limitation was

meant to invoke section $112 \, \P \, 6$. Because the presumption has not been overcome, 35 U.S.C. $112, \, \P \, 6$ applies to the "means for imaging" limitation.

Construing a means-plus-function claim term is a two-step process. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1351 (Fed. Cir. 2015). First, the court must identify the claimed function. Then, the court must determine what structure, if any, is disclosed in the specification that corresponds to the claimed function. *See id*.

It is undisputed that the claimed function of this term is imaging a query dialog box. *See* Dkt. No. 71, at 21 ("[T]he function of this term is imaging a query dialog box"); Dkt. No. 72, at 23 ("The parties agree that the function recited is imaging a query dialog box").

As for the claimed structure, "structure disclosed in the specification qualifies as 'corresponding structure' if the intrinsic evidence clearly links or associates that structure to the function recited in the claim." *Williamson*, 792 F.3d at 1351. IDB argues that the claim structure is a display device controlled by the computer system. The defendants disagree, and argue that the claimed structure is a standalone computer including a monitor, cathode ray tube, or liquid crystal display.

The specification explains that the imaging of the query dialog box occurs on a display device, such as a monitor, cathode ray tube, or liquid crystal display. *See* '139 patent, col. 3, ll. 14–15 ("a Query dialog box appears on a computer controlled display device, such as a monitor"); '139 patent, col. 5, 10–12 ("a display device (110) such as a cathode ray tube or liquid crystal display"). Furthermore, the display device is "controlled by the computer system." *See e.g.*, *id.* at col. 5, 33-34. With regard to the recited "computer system," the specification refers to "a computer system comprising means for effectuating the method of the present invention," *id.* at col. 3, ll. 38-40, which it identifies as "computer-readable memory encoded with a program

directing a computer system to effectuate the method of the present invention." *Id.* at col. 3, ll. 40-43. Thus, the claimed structure is a display device, such as a monitor, cathode ray tube, or liquid crystal display, on the computer system.

The defendants' construction confines the structure to a "standalone" computer. To support that construction, defendants argue that "the '139 Patent does not recite a server, a network, or the Internet to enable, for instance, one computer system to image a query dialog box . . . and separate computer systems to select and sort the parameters designated by the user." Dkt. No. 72, at 24. However, the specification contemplates a computer system with the ability to communicate with other computer systems. *See* '139 patent, col. 4, line 67 through col. 5, line 23 ("A computer system generally may compromise . . . a modem (118) for communicating with computer systems at remote locations"). Therefore, the Court finds the "standalone" construction improper.

As for the defendants' references to the monitor, cathode ray tube, or liquid crystal display device, to the extent that the defendants mean for the construction to be limited to those specific devices, the Court rejects that contention. The specification makes clear that the references to a monitor, cathode ray tube, or liquid crystal display device were not meant to be a closed set of display devices, but only examples of such devices, and that the recited structure was a display device that could include such exemplary devices.

Accordingly, the Court holds that the claimed function is "imaging a query dialog box" and the claimed structure is "a display device, such as a monitor, cathode ray tube, or liquid crystal display, controlled by the computer system, or structural equivalents thereof."

e. "means for designating, for each displayed parameter, a parameter value"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
function: assigning a value for each displayed	function: a user assigning a value for each
parameter	displayed parameter
structure: the computer system and equivalents thereof	structure: a signal from a mouse click or other point-and-click mechanism and a pulldown menu located below each parameter which lists values that may be assigned to a particular parameter (Fig. 3, item 308, Fig. 3(a), item 310), or alternatively, a user can also type in a value for a parameter (Fig. 3, "Due Date" field) using a keyboard; if the user makes no selection for the value, then values are automatically selected and accepted by the user via a point-and-click mechanism

IDB and the defendants agree that the limitation providing "means for designating, for each displayed parameter, a parameter value" is in means-plus-function form and thus invokes 35 U.S.C. § 112, ¶ 6. IDB argues that the claimed function is "assigning a value for each displayed parameter," and that the claimed structure is "the computer system and equivalents thereof." The defendants argue that the claimed function is "a user assigning a value for each displayed parameter," and that the claimed structure is "a signal from a mouse click or other point-and-click mechanism and a pulldown menu located below each parameter which lists values that may be assigned to a particular parameter (Fig. 3, item 308, Fig. 3(a), item 310)." Alternatively, the defendants contend that the structure that performs the "user assigning a value" function is a user typing in a value for a parameter (Fig. 3, "Due Date" field) using a keyboard (or, if the user makes no selection for the value, then the structure is the automatic selection of values by the computer and their acceptance by the user by way of a point-and-click mechanism).

First, as to the claimed function: The parties' respective arguments as to the function of the "means for designating" limitation are the same as for the term "designating, for each displayed parameter, a parameter value," set forth in Section III.b, above. The proper construction turns on whether the displayed parameter must be user-assigned. For the reasons set forth in Section III.b, the Court concludes that the term "designating" means the same thing in the "means for designating" limitation as it does in the "designating, for each displayed parameter" limitation. *See Paragon Sols., LLC v. Timex Corp.*, 566 F.3d 1075, 1087 (Fed. Cir. 2009) (there is a presumption that the same terms appearing in different portions of the claims should be given the same meaning). The Court therefore construes the claimed function of the "means for designating" limitation to be "a user assigning a value, or accepting a default value, for each displayed parameter."

Second, as to the claimed structure: A means-plus-function claim limitation is limited to the structures disclosed in the specification and their equivalents. *See Mettler-Toledo, Inc. v. B-Tek Scales, LLC*, 671 F.3d 1291, 1296 (Fed. Cir. 2012). "A court must look to the specification to determine the structures that correspond to the claimed function." *Id.* The specification explains that the "means for designating, for each displayed parameter, a parameter value" are either (1) a cursor control device or (2) an alphanumeric input device. With regard to a cursor control device, the specification states:

In a preferred embodiment, the space below a displayed parameter in the Query dialog box also provides means, using a point-and-click or similar mechanism, for the user to view all of the values that may be assigned to that parameter. To the right of each space below each parameter, an icon labeled with a down-arrow (308) preferably is displayed. In a preferred embodiment, clicking on such a down-arrow icon with the mouse signals the computer system to display a pull-down menu with all values that may be assigned to the particular parameter. . . . [T]he pull-down menu . . . permits the user to select as a value for the parameter none, all, or any subset of the listed values.

'139 patent, col. 3, ll. 15-27. The specification also recites an alternative assignment option (i.e., an alphanumeric input device):

In a preferred embodiment, if a desired value for a parameter is not listed in a pull-down menu of values for that parameter, the user may assign that desired value to that parameter by typing that desired value into the space below the parameter.

Id. at col. 3, ll. 32-36; *see also id.* at col. 12, ll. 64-67 ("the computer system may be signaled to execute selected commands by pressing appropriate keys on a keyboard communicating with the computer system"). IDB and the defendants argue for a claimed structure with a broader and narrower scope, respectively.

IDB's proposed construction fails because, in light of the specification's reference to the implementing structure, "the computer system" is too broad a characterization of the structure that performs the claimed function. In each embodiment, the user must employ either a cursor control device or an alphanumeric device to assign or accept a value, which is a narrower and more precise description of the enabling structure.

The defendants' proposed construction, on the other hand, is based on an overly narrow reading of the specification. The cursor control device is not limited to a "mouse click or other point-and-click mechanism and a pulldown menu." Rather, "a point-and-click mouse device" is just one of many examples of cursor control devices listed in the specification. In an important passage, the specification discusses the components of "[a] computer system [that] may . . . execute the present invention," including "a cursor control device (114), such as a point-and-click mouse device, trackball, joystick, or light pen." *Id.* at col. 5, ll. 15-17. The language from the specification that the defendants rely on to support their construction—"a point-and-click *or similar mechanism*"—also justifies a broader reading. *See* Dkt. No. 72, at 26, citing '139 patent, col. 6, line 17 (emphasis added). Additionally, "a pulldown menu" is not always required, such

as when the user accepts a default value offered by the system. *See* '139 patent, col. 6, ll. 6-8 ("[w]hen 'All' is accepted as the value for a parameter, *using a point-and-click or similar mechanism*") (emphasis added); *see also id.* at col. 6, ll. 28-30 ("if the user makes no selection for the value of a particular parameter, the value 'All' is automatically selected").

For similar reasons, "an alphanumeric input device" is a more appropriate construction of the claim language than "a keyboard." The specification does not limit the typing device to a keyboard. Instead, the specification recites "[a] computer system as may implement and execute the present invention . . . may comprise . . . an alphanumeric input device (112), such as a keyboard." *Id.* at col. 4, line 65, through col. 5, line 13. While the specification does not refer to any other alphanumeric input device, the "such as" language preceding the term "keyboard" is sufficient to indicate a broader, non-restrictive meaning for the structure at issue. *See id.* at col. 12, 11, 6, 12, 66.

Accordingly, the Court construes the claimed structure for performing the function of the "means for designating, for each displayed parameter, a parameter value" as "a cursor control device or an alphanumeric input device, and structural equivalents thereof."

f. "means for constructing a sort order from the displayed parameters in the space for selecting a sort order"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
function: specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order	function: a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order
structure: the computer system and equivalents thereof	structure: a signal from a keyboard, mouse click, or other point and click mechanism, and structural equivalents thereof

IDB and the defendants agree that "means for constructing a sort order from the displayed parameters in the space for selecting a sort order" is in means-plus-function form and

invokes section 112, \P 6. IDB argues that the claimed function is "specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order," and that the claimed structure is "the computer system and equivalents thereof." The defendants argue that the claimed function is "a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order," and that the claimed structure is "a signal from a keyboard, mouse click, or other point and click mechanism, and structural equivalents thereof."

First, as to the claimed function: The parties' respective arguments as to the function of the "means for constructing" limitation are the same as for the term "constructing a sort order from the displayed parameters in the space for selecting a sort order," addressed in Section III.c, above. The construction turns on whether the sort order must be user-specified. For the reasons discussed in Section III.c, the Court construes the claimed function for "constructing a sort order from the displayed parameters in the space for selecting a sort order" as "a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order, or using the sort order initially displayed."

Second, as to the claimed structure: The specification explains that the "means for constructing a sort order from the displayed parameters in the space for selecting a sort order" are either (1) a cursor control device or (2) an alphanumeric input device. With regard to a cursor control device, the specification states:

In a preferred embodiment, the Query dialog box (300) also includes a Sort Order dialog box (312) displaying a list of parameters for constructing a sort order. A sort order is constructed by assigning a priority number to each of the parameters displayed in the Sort Order dialog box (312). In a preferred embodiment, this is accomplished by using a mouse to click on the box adjacent to an identified parameter in the order according to which the text data objects are to be sorted.

'139 patent, col. 6, ll. 41-49. Addressing the alphanumeric input device, the specification states that "the computer system may be signaled to execute selected commands by pressing

appropriate keys on a keyboard communicating with the computer system." *Id.* at col. 12, ll. 64-67. Again, IDB and the defendants argue for a claimed structure with a broader and narrower scope, respectively.

IDB's construction is unduly broad, because the specification makes clear that the user must employ either a cursor control device or an alphanumeric device to specify or use a sort order. The defendants' construction is unduly narrow, because the specification does not limit cursor control devices and alphanumeric input devices to "a keyboard, mouse click, or other point and click mechanism." *Id.* at col. 5, Il. 12-17 ("an alphanumeric input device, such as a keyboard . . . and a cursor control device, such as a point-and-click mouse device, trackball, joystick, or light pen").

Accordingly, the Court construes the claimed structure for "means for constructing a sort order from the displayed parameters in the space for selecting a sort order" as "a cursor control device or an alphanumeric input device, and structural equivalents thereof."

IV. Summary of Court's Constructions

Claim Term	Court's Construction
"designated values"	Designated parameter values
"query dialog box"	a defined area displayed on a monitor that
	allows for user input related to the text data
	objects and is distinct from the defined area for
	displaying the text data objects
"designating, for each displayed parameter, a	a user assigning a value, or accepting a default
parameter value"	value, for each displayed parameter
"constructing a sort order from the displayed	a user specifying a sort order from one or more
parameters in the space for selecting a sort	of the parameters displayed in the space for
order"	selecting a sort order, or using the sort order
	initially displayed
"means for imaging, on a display device	function: imaging a query dialog box
controlled by the computer system, a query	
dialog box"	structure: a display device, such as a monitor,
	cathode ray tube, or liquid crystal display,
	controlled by the computer system, or
	structural equivalents thereof

"means for designating, for each displayed parameter, a parameter value"	function: a user assigning a value, or accepting a default value, for each displayed parameter
	structure: a cursor control device or an alphanumeric input device, and structural equivalents thereof
"means for constructing a sort order from the displayed parameters in the space for selecting a sort order"	function: a user specifying a sort order from one or more of the parameters displayed in the space for selecting a sort order, or using the sort order initially displayed
	structure: a cursor control device or an alphanumeric input device, and structural equivalents thereof

IT IS SO ORDERED.

SIGNED this 31st day of October, 2018.

WILLIAM C. BRYSON

UNITED STATES CIRCUIT JUDGE