

Exhibit D

355 Fed.Appx. 389, 2009 WL 4458527 (C.A.Fed. (Tex.))
(Not Selected for publication in the Federal Reporter)
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This case was not selected for publication in the Federal Reporter.

Not for Publication in West's Federal Reporter See Fed. Rule of Appellate Procedure 32.1 generally governing citation of judicial decisions issued on or after Jan. 1, 2007. See also Federal Circuit Rule 32.1 and Federal Circuit Local Rule 32.1. (Find CTAF Rule 32.1)

United States Court of Appeals,
 Federal Circuit.
 ENCYCLOPAEDIA BRITANNICA, INC.,
 Plaintiff-Appellant,
 v.
 ALPINE ELECTRONICS, INC. and Alpine Elec-
 tronics of America, Inc., Defendants-Appellees,
 and
 Denso Corporation and Toyota Motor Sales,
 U.S.A., Inc., Defendants-Appellees,
 and
 American Honda Motor Co., Inc., Defendant-Appel-
 lee,
 and
 Garmin International, Inc., Defendant-Appellee.
No. 2009-1087.
 Dec. 4, 2009.

Background: Owner of patents directed to computerized multimedia search system with multiple separate and independent entry paths for searching and retrieving textual and graphical information filed infringement action against manufacturers and sellers of computerized navigation systems. The United States District Court for the Western District of Texas, [Lee Yeakel, J., 2008 WL 7328271](#), entered summary judgment of invalidity, and owner appealed.

Holding: The Court of Appeals, [Prost](#), Circuit Judge, held that computer-implemented means-plus-function limitations of claim lacked sufficient

disclosure of structure without algorithm.
 Affirmed.

West Headnotes

Patents 291 ↪101(8)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(8) k. Functions, advantages or results of invention. **Most Cited Cases** Computer-implemented means-plus-function claims, for patent directed to computerized multimedia search system with multiple separate and independent entry paths for searching and retrieving textual and graphical information, lacked sufficient disclosure of structure without algorithm used to perform claimed functions, and thus patent was invalid for indefiniteness, even if specification disclosed to one of ordinary skill in art class of algorithms whereby textual information and related graphical information could be retrieved from database, and computer function being performed was well known, where specification failed to disclose anything more than computer designed to perform particular function. [35 U.S.C.A. § 112](#).

Patents 291 ↪328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original utility. **Most Cited Cases** [5,241,671](#). Invalid.

Patents 291 ↪328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original utility. **Most Cited**

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Cases

7,051,018. Cited.

***390** Appeal from the United States District Court for the Western District of Texas in case no. 05-CV-359, Judge [Lee Yeakel](#). [David G. Wille](#), Baker Botts LLP, of Dallas, TX, argued for plaintiff-appellant. With him on the brief were Matthew A. Hayenga, [Scott F. Partridge](#) and [Michael Hawes](#), of Houston, TX, and [Kevin M. Sadler](#), of Austin, TX.

[Christopher A. Harkins](#), Brinks Hofer Gilson & Li-one, of Chicago, IL, argued for defendants-appellees Alpine Electronics, Inc., et al. With him on the brief were [Gary M. Ropski](#), [Cynthia A. Homan](#), and [Laura Beth Miller](#).

[Paul R. Steadman](#), Kirkland & Ellis LLP, of Chicago, IL, argued for all defendants-appellees DENSO Corporation., et al., and for all appellees. With him on the brief was [Shira J. Kapplin](#).

[John T. Johnson](#), Fish & Richardson P.C., of New York, NY, for defendant-appellee American Honda Motor Co., Inc. With him on the brief were [Thomas S. McClenahan](#), of Minneapolis, MN, and [Robert E. Hillman](#), of Boston, MA.

[Raymond W. Mort, III](#), Shook, Hardy & Bacon LLP, of Kansas City, MO, for defendant-appellee Garmin International, Inc. With him on the brief were [George B. Butts](#) and [Courtney Paige Thornton Stewart](#), DLA Piper LLP (US), of Austin, TX.

Before [LOURIE](#), [FRIEDMAN](#), and [PROST](#), Circuit Judges.

[PROST](#), Circuit Judge.

****1** Appellant Encyclopaedia Britannica, Inc., (“Britannica”) is the assignee of [U.S. Patent No. 5,241,671](#) (“[671 patent](#)”), which is directed to a computerized multimedia search system with multiple separate and independent entry paths for

searching and retrieving textual and graphical information. The Appellees, Alpine Electronics, Inc., Alpine Electronics of America, Inc., Denso Corp., Toyota Motor Sales, U.S.A., Inc., American Honda Motor Co., Inc., and Garmin International, Inc. (“Garmin”) (collectively, “Appellees”), manufacture and sell computerized navigation systems. Britannica brought this infringement action against Appellees in the United States District Court for the Western District of Texas. On summary judgment, the district court held claim 1, the only independent claim, of the '[671 patent](#) invalid for indefiniteness. The district court then dismissed Britannica's infringement claims with respect to a second patent, [U.S. Patent No. 7,051,018](#) (“[018 patent](#)”), without ***391** prejudice. Britannica now appeals. For the reasons set forth below, we *affirm*.

BACKGROUND

The '[671 patent](#) was prosecuted for four years prior to issuance by the U.S. Patent and Trademark Office (“PTO”). After a nine year reexamination that was initiated by the Commissioner of Patents, the PTO was reversed and ordered to grant the '[671 patent](#) in a civil action in the United States District Court for the District of Columbia pursuant to [35 U.S.C. § 145](#).

The '[671 patent](#) provides a user-friendly way to search a multimedia database with textual and graphical information. The invention enables users to find and obtain information quickly and efficiently, such as textually searching for information by entering search terms or by browsing a list of text items and selecting an item for which the user would like more information, or graphically searching for information by moving around a map. The entry paths are interrelated “such that textual information is fully accessible from the graphical entry paths and graphical information is fully accessible from the textual entry paths” without performing separate searches. For example, when a textual search is conducted, the system provides access to textual information of interest as well as any

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related graphical information available, and vice versa. The user can click on the icon or label to retrieve the related information.

Garmin filed a motion for summary judgment of invalidity alleging that two means-plus-function elements, i.e., “accessing means” and “first retrieving means,” in claim 1 of the '671 patent were indefinite under 35 U.S.C. § 112 ¶ 2. Claim 1, as amended during the reexamination proceedings, recites:

A computer search system for retrieving information, comprising:

storing means for storing interrelated textual information and graphical information; *said storing means including at least one database*;

means for interrelating said textual and graphical information;

**2 a plurality of *independently accessible and separately and independently usable* entry path means for searching said stored interrelated textual and graphical information, said entry path means comprising:

textual browse entry path means for textually browsing said textual information;

textual search entry path means for *textually* searching said textual information [and for retrieving interrelated graphical information to said searched text]; *and*

graphics *search* entry path means for *graphically* searching said graphical information [and for retrieving interrelated textual information to said searched graphical information];

selecting means for providing a menu of said plurality of entry path means for selection;

each of said textual search entry path means and graphics search entry path means including a processing means for executing inquiries provided by a user in order to search said textual

and graphical information through *each of* said selected entry path means;

each of said textual browse entry path means including means for allowing a user to select textual information from a predetermined list of textual information;

each of said textual search entry path means and graphics search entry path means including an indicating means for indicating a pathway that *392 accesses information related in one of said *independently accessible* entry path means to information accessible in another one of said entry path means;

each of said textual search entry path means and graphics search entry path means including an accessing means for providing access to said related information in said another entry path means; [and]

said textual search entry path means including first retrieving means for retrieving said textual information and interrelated graphical information to said searched textual information;

said graphics search entry path means including second retrieving means for retrieving said graphical information and interrelated textual information to said searched graphical information; *and*

output means for receiving search results from said processing means and said related information from said accessing means and for providing said search results and received information to such user.

(alterations in original). The district court held that where the disclosed structure is a computer, programmed to carry out the respective function, a specific algorithm must be disclosed in the specification to provide corresponding structure. The court found that the specification of the '671 patent did not disclose such an algorithm for either of the claim terms “accessing means” or “first retrieving

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means.” Therefore, the court explained that claim 1 lacked sufficient corresponding structure for both of these means-plus-function elements, which rendered the claim indefinite under 35 U.S.C. § 112 ¶ 2.

After the district court granted Garmin's summary judgment motion and issued a final order, the court amended the final judgment. The amended order dismissed without prejudice Britannica's infringement claims with respect to the '018 patent, which had been added in an amended complaint. After the district court issued a second amended final judgment, which dismissed Appellees' counterclaims, the patent owner appealed.

**3 We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

On appeal, the parties agree that the two means-plus-function elements at issue in claim 1 of the '671 patent, namely “accessing means” and “first retrieving means,” are governed by 35 U.S.C. § 112 ¶ 6. Britannica argues that these elements are not indefinite under 35 U.S.C. § 112 ¶ 2 for failure to disclose an algorithm. Further, Britannica asserts that the district court judge abused his discretion when he dismissed sua sponte its infringement claims relating to the '018 patent.

I. Indefiniteness

Indefiniteness is an issue of patent claim construction and a question of law that we review de novo. *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319 (Fed.Cir.2009).

Means-plus-function claim limitations “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6. “During claim construction, the court must identify the claimed function and determine the corresponding

structure disclosed in the specification.” *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1430 (Fed.Cir.2000). For computer-implemented inventions with means-plus-function claiming, the particular structure disclosed *393 in the specification must be more than the general purpose computer or microprocessor. *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed.Cir.2008) (“*Aristocrat II*”).

As “general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to ‘the corresponding structure, material, or acts’ that perform the function, as required by section 112 paragraph 6.” *Id.* Thus, we require “that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure and its equivalents to avoid pure functional claiming.” *Id.* Where “the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” *Id.* (quoting *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed.Cir.1999)). Indeed, the corresponding structure for such claims is the algorithm disclosed in the specification. *See id.*; *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1249 (Fed.Cir.2005) (citing *WMS Gaming*, 184 F.3d at 1348-49). “[T]he patent must disclose, at least to the satisfaction of one of ordinary skill in the art, enough of an algorithm to provide the necessary structure under § 112, ¶ 6.” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed.Cir.2008); *see Aristocrat Techs. Austl. Pty Ltd. v. Multimedia Games, Inc.*, 266 Fed.Appx. 942, 946 (Fed.Cir.2008) (“*Aristocrat I*”). If the algorithm is not adequately disclosed in the specification, the claim is invalid for indefiniteness. 35 U.S.C. § 112 ¶¶ 2, 6; *Aristocrat II*, 521 F.3d at 1338.

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****4** We turn first to Britannica's argument that the means-plus-function element "first retrieving means" in claim 1 of the '671 patent is not indefinite. Britannica asserts that the corresponding structure for this element is a general purpose computer performing the recited function of "retrieving said textual information and interrelated graphical information to said searched textual information." Britannica's arguments suggest that the disclosure of corresponding structure within the patent is sufficient, regardless of whether it is implicit, explicit, or not required. Britannica contends that the specification is not indefinite with respect to this element because it: (1) implicitly discloses a class of algorithms, to a person of ordinary skill in the art, corresponding to the recited function, and implicit disclosure of structure is sufficient; (2) discloses, at a minimum, a one-step algorithm for the recited function; and (3) need not disclose an algorithm where the computer function being performed is well known. We address each point in turn.

The "first retrieving means" is a computer program or function capable of retrieving textual and graphical information from a database and equivalents thereof. Britannica argues that the specification discloses sufficient corresponding structure for this element because a person of ordinary skill in the art would recognize that the specification inherently discloses a class of algorithms for retrieving this information from a database on a general purpose computer. We disagree.

As a preliminary matter, we have held that where the disclosed structure in a means-plus-function claim is a computer programmed to perform a function, the structure is a special purpose computer programmed to perform the disclosed algorithm, not a general purpose computer. *Id.* at 1333; *WMS Gaming*, 184 F.3d at 1349. Furthermore, we have explained ***394** that an assertion, such as Britannica's, even where supported by evidence showing that one of ordinary skill in the art could build the device claimed in the patent based on the disclosure in the specification, conflates the disclosure re-

quirement of § 112 ¶ 6 and the enablement requirement of § 112 ¶ 1. *Aristocrat II*, 521 F.3d at 1336. "The understanding of one of skill in the art does not relieve the patentee of the duty to disclose sufficient structure to support means-plus-function claim terms." *Lucent Techs., Inc. v. Gateway, Inc.*, 543 F.3d 710, 719 (Fed.Cir.2008) (citations omitted). "It is not enough for the patentee simply to state or later argue that persons of ordinary skill in the art would know what structures to use to accomplish the claimed function." *Aristocrat II*, 521 F.3d at 1337. Indeed, where the patent, like the '671 patent, does not disclose an algorithm to perform the claimed function, it does not disclose sufficient corresponding structure. See *id.* at 1333; *Harris*, 417 F.3d at 1249 (citing *WMS Gaming*, 184 F.3d at 1348-49).

****5** Britannica's first argument also encompasses its contention that there is sufficient corresponding structure when the specification implicitly discloses to a person of ordinary skill in the art a class of algorithms. In support, Britannica relies on *In re Dossel*, 115 F.3d 942 (Fed.Cir.1997), and *AllVoice Computing PLC v. Nuance Communications, Inc.*, 504 F.3d 1236 (Fed.Cir.2007). As evidence that the specification of the '671 patent has such an implicit disclosure, Britannica cites to its expert, Dr. Nathaniel Polish, who opined that interrelated information is retrieved from a database and "[b]y indicating that interrelated information is stored in a database and retrieved in a database, the specification discloses to one of ordinary skill in the art a class of algorithms whereby textual information and related graphical information could be retrieved from a database."

However, the cases upon which Britannica relies are distinguishable here because algorithms were in fact disclosed in those cases. For example, in *Dossel*, the specification disclosed known algorithms even though it did not explicitly mention a computer. 115 F.3d at 946. Similarly, in *AllVoice*, the specification disclosed a sufficient algorithmic structure. 504 F.3d at 1245-46. In sum, *Dossel* and

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AllVoice are consistent with our holding, in *Aristocrat II*, that means-plus-function limitations for computer-implemented functions require that *some* algorithm be disclosed in the specification. *Aristocrat II*, 521 F.3d at 1337. It is the sufficiency of the algorithm that may be determined by one of ordinary skill in the art. *Id.* Therefore, claim 1 of the '671 patent must explicitly disclose an algorithm in the specification for performing the claimed function for a computer-implemented invention to have sufficient corresponding structure for the “first retrieving means” limitation. Such an algorithm is not disclosed here because the specification fails to disclose anything more than a computer designed to perform a particular function-retrieving textual and graphical information from a database.

Second, Britannica contends that the specification does sufficiently disclose, at a minimum, a “one-step” algorithm for performing the recited function of retrieving information from a database. Britannica argues that “the specification discloses the retrieval of information performed by a computer.” In *Aristocrat II*, we reiterated that the “corresponding structure for a § 112 ¶ 6 claim for a computer-implemented function is the algorithm disclosed in the specification.” *Id.* at 1333 (citations omitted). Further, we explained that the patentee must disclose such structure in the specification and the scope of the patent claims must be limited to that structure, and its equivalents, to avoid pure functional claiming. *Id.* Britannica's purported*395 “one-step” algorithm, however, is not an algorithm at all. Rather, it is simply a recitation of the claimed function. At best, the specification for the '671 patent discloses only the functional result claimed by this limitation. Neither the written portions of the specification, nor the specification's figures, disclose any structure or algorithm employed by the system. Thus, Britannica's proposed one-step algorithm amounts to pure functional claiming, which does not comply with the disclosure requirement of § 112 ¶ 6. *Id.* Indeed, it is irrelevant that one of ordinary skill in the art would understand the specification to disclose a “one-step algorithm” for

performing the function and teaching how to implement the claimed device on a computer, where, as here, the specification does not disclose a program or algorithm. Accordingly, this argument too fails.

**6 Finally, Britannica asserts, in the alternative, that the specification need not disclose any algorithm so long as the computer function being performed is well known. Britannica asserts that we should not extend *Aristocrat II* to well-known computer functions, such as retrieving data from a database, because the disclosure of a general purpose computer to perform these functions is sufficient to satisfy § 112. Contrary to Britannica's contention, we are not broadening *Aristocrat II* here. Rather, we are applying our previous holding that when a means-plus-function limitation is a computer programmed with software to carry out the claimed function, a recitation of the corresponding algorithm is required to provide sufficient disclosure of structure under § 112 ¶ 6 to avoid indefiniteness under § 112 ¶ 2. *See id.* at 1337-38.

Indeed, it is well settled that the specification must disclose “the algorithm that transformed the general purpose microprocessor to a ‘special purpose computer programmed to perform the disclosed algorithm,’ ” regardless of its simplicity. *Id.* at 1338 (quoting *WMS Gaming*, 184 F.3d at 1349). Because claim 1 of the '671 patent fails to explicitly disclose any algorithm or any class of algorithms in the specification for performing the claimed function for a computer-implemented invention, it lacks sufficient corresponding structure for the “first retrieving means” limitation. 35 U.S.C. § 112 ¶ 6. Thus, the patent is invalid for indefiniteness. ^{FN1} 35 U.S.C. § 112 ¶ 2.

FN1. In light of our determination that the specification fails to provide sufficient structure for the “first retrieving means” limitation, we need not reach the issue of whether the “accessing means” limitation in claim 1 also renders the patent indefinite under § 112 ¶ 6.

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II. Dismissal of Unrelated Claims

We review a dismissal without prejudice of a cause of action for infringement under the law of the pertinent regional circuit. *L.E.A. Dynatech, Inc. v. Alilina*, 49 F.3d 1527, 1530 (Fed.Cir.1995). The Fifth Circuit, the pertinent regional circuit here, reviews a dismissal without prejudice for abuse of discretion. See *Ikospentakis v. Thalassic S.S. Agency*, 915 F.2d 176, 177 (5th Cir.1990). A reasonable likelihood of prejudice supports a finding of abuse of discretion. *United States v. Simmons*, 374 F.3d 313, 320 (5th Cir.2004).

Britannica argues that the district court abused its discretion when it dismissed without prejudice the '018 patent claims from the instant action sua sponte and cited no legal authority. Britannica contends that it could be unfairly prejudiced because Appellees could pursue a laches defense.

After the district court entered the judgment dismissing the claims arising under the '018 patent, it considered Britannica's arguments, by way of a motion to amend, that dismissal was improper and could *396 harm Britannica. The district court, acting within its broad discretionary powers to control its docket, determined that dismissal of these unrelated '018 patent claims without prejudice was "judicially efficient" and would "not unfairly prejudice" Britannica. After filing its notice of appeal here, Britannica was granted leave and amended its complaint to assert the '018 patent claims in a pending case, case no. 06-CV-578, in the same district court, before the same district judge, and against the same parties. Thus, because Britannica has failed to show that there is a reasonable likelihood of harm, Britannica has not met the high standard for demonstrating that the district court abused its discretion here.

CONCLUSION

**7 For the reasons set forth above, we affirm the district court's finding that claim 1 of the '671 pat-

ent is invalid for indefiniteness. We conclude that it was not abuse of discretion to dismiss the '018 patent claims without prejudice.

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