

DEPARTMENT OF COMMERCE

Patent and Trademark Office

[Docket No: 990406087-9087-01]

RIN 0651-ZA03

Interim Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112 ¶ 6

AGENCY: Patent and Trademark Office, Commerce.

ACTION: Notice.

SUMMARY: The Patent and Trademark Office (PTO) requests comments from the public regarding interim supplemental examination guidelines to be used by office personnel in their review of patent applications to determine when 35 U.S.C. 112 ¶ 6 should be applied to a given claim limitation.

DATES: The interim supplemental examination guidelines are effective July 30, 1999.

Written comments on the interim supplemental examination guidelines will be accepted by the PTO until September 28, 1999.

ADDRESSES: Written comments should be addressed to the attention of Magdalen Greenlief, Box Comments, Assistant Commissioner for Patents, Washington, DC 20231 or to Ray Chen, Office of the Solicitor, P.O. Box 15667, Arlington, Virginia 22215, or by facsimile transmission to (703) 305-8825, or by electronic mail at magdalen.greenlief@uspto.gov or ray.chen@uspto.gov.

Written comments will be made available for public inspection in Suite 910, Crystal Park 2, 2121 Crystal Drive, Arlington, Virginia 22202. In addition, comments provided in machine readable format will be available through the PTO's Website at <http://www.uspto.gov>.

FOR FURTHER INFORMATION CONTACT: Magdalen Greenlief, Box Comments, Assistant Commissioner for Patents, Washington, DC 20231 or Ray Chen, Office of the Solicitor, P.O. Box 15667, Arlington, Virginia 22215, or by facsimile transmission to (703) 305-8825, or by electronic mail at magdalen.greenlief@uspto.gov or ray.chen@uspto.gov.

SUPPLEMENTARY INFORMATION: The following interim supplemental examination guidelines are being published for public comment. In May 1994, the PTO issued guidelines implementing the change in examination practice necessitated by the Federal Circuit's decision in *In re*

Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994)(en banc). Since *Donaldson*, several decisions by the Federal Circuit have analyzed: (1) When a particular claim limitation invokes 35 U.S.C. 112 ¶ 6; and (2) the duty of the applicant to describe the corresponding structure, material, or acts that perform the function recited in a means-plus-function limitation. In order to clarify these issues, the PTO is issuing these interim supplemental examination guidelines to assist PTO personnel in the examination of patent applications to determine: (1) Whether a claim limitation invokes 35 U.S.C. 112 ¶ 6; and (2) whether the written description adequately describes the corresponding structure, material, or acts needed to support a claim limitation under 35 U.S.C. 112 ¶ 6.

It has been determined that these interim supplemental examination guidelines are not a significant rule for purposes of Executive Order 12866. Because these supplemental examination guidelines are interpretive rules and general statements of policy, they are exempt from notice and comment rulemaking under 5 U.S.C. 553(b)(A). The collection of information for the filing and processing of a patent application has been reviewed and previously approved by the Office of Management and Budget under the following control numbers: 0651-0031 and 0651-0032. These supplemental examination guidelines involve no additional collection of information subject to the Paperwork Reduction Act, 44 U.S.C. ch. 35. Notwithstanding any other provision of law, no person is required to respond nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

Members of the public may present written comments on these supplemental examination guidelines. Written comments should include the following information:

- Name and affiliation of the individual responding; and
- An indication of whether the comments offered represent views of the respondent's organization or are the respondent's personal views.

The PTO is particularly interested in comments relating to the 3-prong analysis as to when a claim limitation will be interpreted by PTO personnel to invoke 35 U.S.C. 112 ¶ 6. The PTO is also interested in comments relating to the analysis as to when a "means-" (or "step-") plus-function claim limitation

satisfies the requirements of 35 U.S.C. § 112 ¶ 2.

I. Interim Supplemental Examination Guidelines for Claims Subject to 35 U.S.C. 112 ¶ 6

In February 1994, the Court of Appeals for the Federal Circuit (Federal Circuit) held in an *en banc* decision that "the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in [35 U.S.C. 112 ¶ 6] * * * [T]he PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination." *In re Donaldson Co.*, 16 F.3d 1189, 1194-95, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (en banc). In May 1994, the PTO issued guidelines implementing changes in examination practice in response to *Donaldson*. See *Means or Step Plus Function Limitation Under 35 U.S.C. § 112, ¶ 6*; Notice, 1162 *Off. Gaz. Pat. Office* 59 (May 17, 1994) ("1994 Guidelines").

The 1994 Guidelines note that there is no "magic" language that invokes 35 U.S.C. 112 ¶ 6.¹ However, to establish uniformity to the extent possible, in view of the recent case law, and to make the prosecution record clear, these interim guidelines supplement the 1994 Guidelines in assisting examiners to determine when 35 U.S.C. 112 ¶ 6 should be applied. To the extent these supplemental guidelines are inconsistent with the 1994 Guidelines, the supplemental guidelines are controlling.

The PTO must apply 35 U.S.C. 112 ¶ 6 in appropriate cases, and give claims their broadest reasonable interpretation, in light of and consistent with the written description of the invention in the application.² Thus, a claim limitation will be interpreted to invoke 35 U.S.C. 112 ¶ 6 if it meets the following 3-prong analysis:

- (1) the claim limitations must use the phrase "means for" or "step for";³
- (2) the "means for" or "step for" must be modified by functional language;⁴ and
- (3) the phrase "means for" or "step for" must not be modified by structure, material or acts for achieving the specified function.⁵

With respect to the first prong of this analysis, a claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112 ¶ 6. If an applicant wishes to have the claim limitation treated under 35 U.S.C. 112 ¶ 6, applicant must either: (1) Amend the claim to include the phrase "means for" or "step for" in accordance with these interim

guidelines; or (2) show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not provide any structure, material, or acts which would preclude application of 35 U.S.C. 112 ¶ 6.⁶

Accordingly, these interim guidelines provide applicants with the opportunity to either invoke or not invoke 35 U.S.C. 112 ¶ 6 based upon a clear and simple set of criteria.

II. Procedures for Determining Whether the Written Description Adequately Describes the Corresponding Structure, Material, or Acts Necessary To Support a Claim Limitation Which Invokes 35 U.S.C. 112 ¶ 6

If a claim limitation invokes 35 U.S.C. 112 ¶ 6, it must be interpreted to cover the corresponding structure, materials, or acts in the specification and "equivalents thereof."⁷ If the written description fails to set forth the supporting structure, material or acts corresponding to the means- (or step-) plus-function, the claim may not meet the requirement of 35 U.S.C. 112 ¶ 2:

Although [35 U.S.C. 112 ¶ 6] statutorily provides that one may use means-plus-function language in a claim, one is still subject to the requirement that a claim 'particularly point out and distinctly claim' the invention. Therefore, if one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by [35 U.S.C. 112 ¶ 2].⁸

Whether a claim reciting an element in means- (or step-) plus-function language fails to comply with 35 U.S.C. 112 ¶ 2 because the specification does not disclose adequate structure (or material or acts) for performing the recited function is closely related to the question of whether the specification meets the description requirement in 35 U.S.C. 112 ¶ 1.⁹ However, 35 U.S.C. 112 ¶ 6 does not impose any requirements in addition to those imposed by 35 U.S.C. 112 ¶ 1.¹⁰ Conversely, the invocation of 35 U.S.C. 112 ¶ 6 does not exempt an applicant from compliance with 35 U.S.C. 112 ¶¶ 1 and 2.¹¹

The written description does not have to explicitly describe the structure (or material or acts) corresponding to a means- (or step-) plus-function limitation to particularly point out and distinctly claim the invention as required by 35 U.S.C. 112 ¶ 2.¹² Rather, disclosure of structure corresponding to a means-plus-function limitation may be implicit in the written description if it

would have been clear to those skilled in the art what structure must perform the function recited in the means-plus-function limitation.¹³ However, the claims must still be analyzed to determine whether there exists corresponding adequate support for such claim under 35 U.S.C. 112 ¶ 1.¹⁴

Therefore, a means-(or step-) plus-function claim limitation satisfies 35 U.S.C. 112 ¶ 2 if: (1) The written description links or associates particular structure, materials, or acts to the function recited in a means-(or step-) plus-function claim limitation; or (2) it is clear based on the facts of the application that one skilled in the art would have known what structure, materials, or acts perform the function recited in a means- (or step-) plus-function limitation.

37 CFR 1.75(d)(1) provides, in part, that "the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." In the situation in which the written description only implicitly or inherently sets forth the structure, materials, or acts corresponding to a means- (or step-) plus-function, and the examiner concludes that one skilled in the art would recognize what structure, materials, or acts perform the function recited in a means- (or step-) plus-function, the examiner should either: (1) Have the applicant clarify the record by amending the written description such that it expressly recites what structure, materials, or acts perform the function recited in the claim element;¹⁵ or (2) state on the record what structure, materials, or acts perform the function recited in the means- (or step-) plus-function limitation.

In implementing the change in examination practice necessitated by *Donaldson*, the PTO set forth a two-step process for making a *prima facie* case of equivalence of a prior art element during *ex parte* examination. First, the examiner must find that the prior art element performs the function specified in the claim element, and, second, the examiner must find that the prior art element is not excluded by any explicit definition provided in the specification for an equivalent.¹⁶ This two-step process is not superseded by these interim supplemental guidelines, and is consistent with the requirement that the PTO give claims their broadest reasonable interpretation.¹⁷ The specification need not describe the equivalents of the structures, materials, or acts corresponding to the means- (or step-) plus-function claim element.¹⁸

Where, however, the specification is silent as to what constitutes equivalents, the burden is placed upon the applicant to show that a prior art element which performs the claimed function is not an equivalent of the structure, material, or acts disclosed in the specification.¹⁹

Endnotes

¹ See 1994 Guidelines at 59.

² See *In re Donaldson Co.*, 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (en banc) (stating that 35 U.S.C. 112 ¶ 6 "merely sets a limit on how broadly the PTO may construe means-plus-function language under the rubric of 'reasonable interpretation'"). The Federal Circuit has held that applicants (and reexamination patentees) before the PTO have the opportunity and the obligation to define their inventions precisely during proceedings before the PTO. See *In re Morris*, 127 F.3d 1048, 1056-57, 44 USPQ2d 1023, 1029-30 (Fed. Cir. 1997) (35 U.S.C. 112 ¶ 2 places the burden of precise claim drafting on the applicant); *In re Zletz*, 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (manner of claim interpretation that is used by courts in litigation is not the manner of claim interpretation that is applicable during prosecution of a pending application before the PTO); *Sage Products Inc. v. Devon Industries Inc.*, 126 F.3d 1420, 1425, 44 USPQ2d 1103, 1107 (Fed. Cir. 1997) (patentee who had a clear opportunity to negotiate broader claims during prosecution but did not do so, may not seek to expand the claims through the doctrine of equivalents, for it is the patentee, not the public, who must bear the cost of its failure to seek protection for this foreseeable alteration of its claimed structure). Thus, applicants and reexamination patentees before the PTO have an opportunity and obligation to specify, consistent with these supplemental guidelines, when a claim limitation invokes 35 U.S.C. 112 ¶ 6.

³ Cf. *Seal-Flex, Inc. v. Athletic Track and Court Construction*, 172 F.3d 836, 849-50, 50 USPQ2d 1225, 1233-34 (Fed. Cir. 1999) (Radar, J., concurring) (use of the phrase "step for" in a method claim raises a presumption that 35 U.S.C. 112 ¶ 6 applies, whereas, use of the word "step" by itself or the phrase "step of" does not invoke a presumption that 35 U.S.C. 112 ¶ 6 applies); *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1463, 45 USPQ2d 1545, 1550 (Fed. Cir. 1998) ("use of the word 'means' gives rise to 'a presumption that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses'"); *O.I. Corp. v. Tekmar*, 115 F.3d 1576, 1583, 42 USPQ2d 1777, 1782 (Fed. Cir. 1997) (method claim that paralleled means-plus-function apparatus claim but lacked "step for" language did not invoke 35 U.S.C. 112 ¶ 6). Thus, absent an express recitation of "means for" or "step for" in the limitation, the broadest reasonable interpretation will not be limited to "corresponding structure * * * and equivalents thereof." Cf. *Morris*, 127 F.3d at 1055, 44 USPQ2d at 1028 ("no comparable mandate in the patent statute that relates the claim scope of non-§ 112 ¶ 6

claims to particular matter found in the specification”).

⁴ See *York Prod., Inc. v. Central Tractor Farm & Family Center*, 99 F.3d 1568, 1574, 40 USPQ2d 1619, 1624 (Fed. Cir. 1996) (holding that a claim limitation containing the term “means” does not invoke 35 U.S.C. 112 ¶ 6 if the claim limitation does not link the term “means” to a specific function).

⁵ See *Seal-Flex*, 172 F.3d at 849, 50 USPQ2d at 1234 (Radar, J., concurring) (“Even when a claim element uses language that generally falls under the step-plus-function format, however, 112 ¶ 6 still does not apply when the claim limitation itself recites sufficient acts for performing the specified function”). Cf. *Rodime PLC v. Seagate Technology, Inc.*, 174 F.3d 1294, 1303–04, 50 USPQ2d 1429, 1435–36 (Fed. Cir. 1999) (holding “positioning means for moving” does not invoke 35 U.S.C. 112, ¶ 6 because the claim further provides a list of the structure underlying the means and the detailed recitation of the structure for performing the moving function removes this element from the purview of 35 U.S.C. 112, ¶ 6); *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531, 41 USPQ2d 1001, 1006 (Fed. Cir. 1996) (holding “perforation means * * * for tearing” does not invoke 35 U.S.C. 112 ¶ 6 because the claim describes the structure supporting the tearing function (i.e., perforation)). In other cases, the Federal Circuit has held otherwise. See *Unidynamics Corp. v. Automatic Prod. Int'l*, 157 F.3d 1311, 1319, 48 USPQ2d 1099, 1104 (Fed. Cir. 1998) (holding “spring means” does invoke 35 U.S.C. 112 ¶ 6). During examination, however, applicants have the opportunity and the obligation to define their inventions precisely, including whether a claim limitation invokes 35 U.S.C. 112 ¶ 6. Thus, if the phrase “means for” or “step for” is modified by structure, material or acts for achieving the specified function, the PTO will not apply 35 U.S.C. 112 ¶ 6 until such modifying language is deleted from the claim limitation. See also *supra* note 1.

⁶ While traditional “means for” or “step for” language does not automatically make an element a means-(or step-) plus-function element, conversely, lack of such language does not prevent a limitation from being construed as a means-(or step-) plus-function limitation. See *Signtech USA, Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1356, 50 USPQ2d 1372, 1374–75 (Fed. Cir. 1999) (“ink delivery means positioned on * * *” invokes 35 U.S.C. 112 ¶ 6 since the phrase “ink delivery means” is equivalent to “means for ink delivery”); *Al-Site Corp. v. VSI International Inc.*, 174 F.3d 1308, 1318, 50 USPQ2d 1161, 1166–67 (Fed. Cir. 1999) (although the claim elements “eyeglass hanger member” and “eyeglass contacting member” include a function, these claim elements do not invoke 35 U.S.C. 112 ¶ 6 because the claims themselves contain sufficient structural limitations for performing those functions); *Seal-Flex*, 172 F.3d at 849, 50 USPQ2d at 1234 (Radar, J., concurring) (“claim elements without express step-plus-function language may nevertheless fall within 112 ¶ 6 if they merely claim the underlying function without recitation of acts for performing that function * * * In general terms, the

‘underlying function’ of a method claim element corresponds to what that element ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish. ‘Acts,’ on the other hand, correspond to how the function is accomplished.”); *Personalized Media Communications LLC v. ITC*, 161 F.3d 696, 703–04, 48 USPQ2d 1880, 1886–87 (Fed. Cir. 1998); *Mas-Hamilton Group v. LaGard Inc.*, 156 F.3d 1206, 1213, 48 USPQ2d 1010, 1016 (Fed. Cir. 1998) (“lever moving element for moving the lever” and “movable link member for holding the lever * * * and for releasing the lever” were construed as means-plus-function limitations invoking 35 U.S.C. 112 ¶ 6 since the claimed limitations were described in terms of their function not their mechanical structure).

⁷ See 35 U.S.C. 112 ¶ 6. See also *B. Braun Medical, Inc. v. Abbott Lab.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1899 (Fed. Cir. 1997).

⁸ See *Donaldson*, 16 F.3d at 1195, 29 USPQ2d at 1850; see also *B. Braun Medical*, 124 F.3d at 1425, 43 USPQ2d at 1900; and *In re Dossel*, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884–85 (Fed. Cir. 1997).

⁹ See *In re Noll*, 545 F.2d 141, 149, 191 USPQ 721, 727 (CCPA 1976) (unless the means-plus-function language is itself unclear, a claim limitation written in means-plus-function language meets the definiteness requirement in 35 U.S.C. 112 ¶ 2 so long as the specification meets the written description requirement in 35 U.S.C. 112 ¶ 1).

¹⁰ See *In re Knowlton*, 481 F.2d 1357, 1366, 178 USPQ 486, 492–93 (CCPA 1973).

¹¹ See *Donaldson*, 16 F.3d at 1195, 29 USPQ2d at 1850; *Knowlton*, 481 F.2d at 1366, 178 USPQ at 493.

¹² See *Dossel*, 115 F.3d at 946, 42 USPQ2d at 1885. Under proper circumstances, drawings may provide a written description of an invention as required by 35 U.S.C. ¶ 112. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1565, 19 USPQ2d 1111, 1118 (Fed. Cir. 1991).

¹³ See *Dossel*, 115 F.3d at 946–47, 42 USPQ2d at 1885 (“Clearly, a unit which receives digital data, performs complex mathematical computations and outputs the results to a display must be implemented by or on a general or special purpose computer (although it is not clear why the written description does not simply state ‘computer’ or some equivalent phrase.)”).

¹⁴ In considering whether there is 35 U.S.C. 112 ¶ 1 support for the claim limitation, the examiner must consider not only the original disclosure contained in the summary and detailed description of the invention portions of the specification, but also the original claims, abstract, and drawings. See *In re Mott*, 539 F.2d 1291, 1299, 190 USPQ 536, 542–43 (CCPA 1976) (claims); *In re Anderson*, 471 F.2d 1237, 1240, 176 USPQ 331, 333 (CCPA 1973) (claims); *In re Armbruster*, 512 F.2d 676, 678–79, 185 USPQ 152, 153–54 (CCPA 1975) (abstract); *Anderson*, 471 F.2d at 1240, 176 USPQ at 333 (abstract); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d at 1564, 19 USPQ2d at 1117 (drawings); *In re Wolfensperger*, 302 F.2d 950, 955–57, 133 USPQ 537, 541–43 (CCPA 1962) (drawings).

¹⁵ Even if the disclosure implicitly sets forth the structure, materials, or acts corresponding to a means-(or step-) plus-function claim element in compliance with 35 U.S.C. 112 ¶¶ 1 and 2, the PTO may still require the applicant to amend the specification pursuant to 37 CFR 1.75(d) and MPEP 608.01(o) to explicitly state, with reference to the terms and phrases of the claim element, what structure, materials, or acts perform the function recited in the claim element. See 35 U.S.C. 112 ¶ 6 (“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” (emphasis added)); see also *B. Braun Medical*, 124 F.3d at 1424, 43 USPQ2d at 1900 (holding that “pursuant to this provision [35 U.S.C. 112 ¶ 6], structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the quid pro quo for the convenience of employing 112, paragraph 6.”); *Wolfensperger*, 302 F.2d at 955, 133 USPQ at 542 (just because the disclosure provides support for a claim element does not mean that the PTO cannot enforce its requirement that the terms and phrases used in the claims find clear support or antecedent basis in the written description).

¹⁶ See *Means or Step Plus Function Limitation Under 35 U.S.C. 112, ¶ 6*; 1162 Off. Gaz. Pat. Office at 59–60.

¹⁷ See *Donaldson*, 16 F.3d at 1194, 29 USPQ2d at 1850 (stating that 35 U.S.C. 112 ¶ 6 “merely sets a limit on how broadly the PTO may construe means-plus-function language under the rubric of ‘reasonable interpretation’”).

¹⁸ See *Noll*, 545 F.2d at 149–50, 191 USPQ at 727 (the meaning of equivalents is well understood in patent law, and an applicant need not describe in his specification the full range of equivalents of his invention) (citation omitted). Cf. *Hybritech Incorporated v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986) (“a patent need not teach, and preferably omits, what is well known in the art”).

¹⁹ See 1994 Guidelines at 60; see also *In re Mulder*, 716 F.2d 1542, 1549, 219 USPQ 189, 196 (Fed. Cir. 1983).

Dated: July 21, 1999.

Q. Todd Dickinson,

Acting Assistant Secretary of Commerce and Acting Commissioner of Patents and Trademarks.

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