

Action: Notice

Summary: The U.S. Patent and Trademark Office (USPTO) is publishing the final supplemental examination guidelines to be used by Office personnel in their review of patent applications to determine (1) whether a claim limitation invokes 35 U.S.C. §112, ¶6, and (2) whether the written description describes adequate corresponding structure, material, or acts needed to support a claim limitation under 35 U.S.C. §112, ¶6. Because these supplemental examination guidelines are interpretive rules and general statements of policy, they are exempt from notice and comments rulemaking under 5 U.S.C. §553(b)(A).

Dates: The supplemental examination guidelines are effective June 21, 2000.

For Further Information Contact: Magdalen Greenlief, by mail addressed to Box Comments, 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 USPTO published “Interim Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. §112 ¶6” in the Federal Register on July 30, 1999, at 64 FR 41392, requesting comments from the public on the supplemental examination guidelines. The interim supplemental examination guidelines are adopted with modifications as suggested by some of the commentors noted below. In particular, (1) a statement has been added to the supplemental examination guidelines to clearly state that the guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law, (2) the third prong of the 3-prong analysis for determining whether a claim limitation invokes 35 U.S.C. §112, ¶6 has been modified to indicate that the phrase “means for” or “step for” must not be modified by sufficient structure, material, or acts for achieving the specified function, and (3) the last step of the process for making a prima facie case of equivalence of a prior art element during ex parte examination has been modified to state that where the examiner finds that the prior art element is an equivalent of the means-(or step-) plus-function limitation, the examiner should provide an explanation and rationale as to why the prior art element is an equivalent.
Discussion of Public Comments

Comments were received by the USPTO from three individuals, two bar associations, one law firm and one corporation in response to the request for comments on the interim supplemental examination guidelines. All comments have been fully considered. One comment was directed to Markush-type claims which is not germane to the subject matter addressed in these guidelines and thus, a response has not been included in the discussion below. One comment indicated that the supplemental examination guidelines will work well since under the supplemental examination guidelines applicants can clearly invoke or not invoke 35 U.S.C. §112, ¶6 and examiners can clearly determine whether or not 35 U.S.C. §112, ¶6 has been invoked. Other comments generally supported the 3-prong analysis, but with certain modifications.

Comment 1: One comment indicated that it is not clear whether the guidelines are interpretative and without force of law, or are intended to be rules or regulations (or their equivalent) issued under 35 U.S.C. §6 and having the force of law. The commentor suggested that a specific statement be made as to the intent of the Office.

Response: The suggestion has been adopted. As stated in the “Supplementary Information” portion of the interim supplemental examination guidelines, these supplemental examination guidelines are interpretative rules and general statements of policy, and therefore, are exempt from notice and comment rulemaking under 5 U.S.C. 553(b)(A). The USPTO will further include a statement in the body of the guidelines to clearly state that the guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law.

Comment 2: One comment stated that the proposed guidelines put a great deal of emphasis on form over substance since a “means” is a means whether one uses that word or not.


Comment 3: One comment stated that the guidelines are contrary to statute and to the court interpretations of the statute since the Federal Circuit has expressly held that a claim is to be interpreted as under 35 U.S.C. §112, ¶6 even if the word “means” is not used as long as there is an object disclosed (i.e., a means) coupled with a function (citing Raytheon Co. v. Roper Corp., 724 F.2d 951, 220 USPQ 592 (Fed. Cir. 1983)).

Response: The USPTO believes that the supplemental examination guidelines are consistent with the statute and controlling precedent. As noted by the Federal Circuit in Ethicon Inc. v. United States Surgical Corp., 135 F.3d 1456, 1463, 45 USPQ2d 1545, 1550 (Fed. Cir. 1998), cert. denied, 525 U.S. 923 (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.’ “ See also J. Rader’s concurring opinion in Seal-Flex, Inc. v. Athletic Track and Court Constr., 172 F.3d 836, 849–50, 50 USPQ2d 1225, 1233–34 (Fed. Cir. 1999), stating that 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. Because the scope of a claim limitation that invokes 35 U.S.C. §112, ¶6 is actually more limited than a claim limitation stated in structural terms, the Office wants to avoid inadvertent invocations of 35 U.S.C. §112, ¶6. Cf. Kemco Sales, Inc. v. Control Papers Co., 54 USPQ2d 1308, 1316 (Fed. Cir. 2000) (where sealing of a flap inside an envelope pocket was not equivalent to sealing it outside the pocket). If a claim limitation does not include the phrase “means for” or “step for,” the examiner will not treat that claim limitation as invoking 35 U.S.C. §112, ¶6. As noted in the supplemental examination guidelines, if applicant wants that claim limitation to be subject to the provisions of 35 U.S.C. §112, ¶6, applicant may do so by following the options set forth in the explanation portion of the first prong of the 3-prong analysis. By providing applicant with the option of making a showing that even though the phrase is not used, the claim limitation should be treated under 35 U.S.C. §112, ¶6 since it is written as a function to be performed and does not recite sufficient structure, material, or acts to perform the claimed function, these supplemental examination guidelines are consistent with the Federal Circuit’s interpretation of 35 U.S.C. §112, ¶6.

Comment 4: One comment suggested that to permit a claim drafter who does not use the phrase “means for” or “step for” to make a showing that the claim limitation should still be treated under 35 U.S.C. §112, ¶6, rather than amending the claim to include the “means for” or “step for” phrase, is unwise. The commenter suggested that the USPTO promulgate a rule to always require the use of the phrase “means for” or “step for” if applicant wishes to have a claim limitation be treated under 35 U.S.C. §112, ¶6. The commenter further stated that it is more important to have a clear and unambiguous, easily administered, bright-line rule for
claim interpretation than it is to have the rule fine-tuned for tolerating all conceivable caprice in claim drafting.

Response: The suggestion has not been adopted. To promulgate a rule to always require applicant to use the phrase “means for” or “step for” in order to invoke 35 U.S.C. §112, ¶6 without providing applicant with an option to make a showing that even though the phrase is not used, the claim limitation should be treated under 35 U.S.C. §112, ¶6 since it is written as a function to be performed and does not recite sufficient structure, material, or acts to perform the claimed function would be inconsistent with the Federal Circuit’s interpretation of 35 U.S.C. §112, ¶6. See, e.g., Mas-Hamilton Group v. LaGard, Inc., 156 F.3d 1206, 1213–14, 48 USPQ2d 1010, 1016–17 (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).

Comment 5: One comment suggested that examiners should be instructed not to require that “means for” or “step for” language be used since applicants should be able to decide what language they choose to use in a claim.

Response: The suggestion has not been adopted. The USPTO wants to provide reasonable certainty that 35 U.S.C. §112, ¶6 is not invoked unless applicant wants the claim limitation to be subject to that provision. To avoid inadvertent invocations of 35 U.S.C. §112, ¶6, the supplemental examination guidelines set forth a 3-prong analysis which must be met before a claim limitation is treated under 35 U.S.C. §112, ¶6. As noted in the supplemental examination guidelines, a claim limitation that does not include the phrase “means for” or “step for” will not be treated by the examiner as invoking the provisions of 35 U.S.C. §112, ¶6. In such a case, the examiner will apply prior art to the claim limitation without the invocation of 35 U.S.C. §112, ¶6. In reply to the examiner’s Office action, if applicant wishes to have the claim limitation treated under 35 U.S.C. §112, ¶6, applicant has the option to either amend the claim to include the phrase “means for” or “step for” or to make a showing 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 recite sufficient structure, material, or acts to perform the claimed function. If applicant does not wish to use the phrase “means for” or “step for,” under the supplemental examination guidelines, applicant must 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 recite sufficient structure, material, or acts for performing those functions. See Al-Site Corp. v. VSI Int’l, Inc., 174 F.3d 1308, 1318, 50 USPQ2d 1161, 1166–67 (Fed. Cir. 1999) (although the claim limitations “eyeglass hanger member” and “eyeglass contacting member” include a function, these claim limitations do not invoke 35 U.S.C. §112, ¶6 because the claims themselves contain sufficient structural limitations for performing those functions).

Comment 6: Two comments indicated that the presence of some structure should not prevent the invocation of the provisions of 35 U.S.C. §112, ¶6. The commentors suggested that the third prong of the 3-prong analysis be modified to read that “the phrase ‘means for’ or ‘step for’ must not be modified by sufficient structure, material, or acts for achieving the claimed function,” citing Seal-Flex, Inc. v. Athletic Track and Court Constr., 172 F.3d 836,
50 USPQ2d 1225 (Fed. Cir. 1999), and Unidynamics Corp. v. Automatic Prod. Int’l, 157 F.3d 1311, 48 USPQ2d 1099 (Fed. Cir. 1998).

Response: A review of the case law indicates that the recitation of some structure in means-(or step-) plus-function element does not preclude the applicability of 35 U.S.C. §112, ¶6 when the structure merely serves to further specify the function of that means. See Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1536, 19 USPQ2d 1367, 1369 (Fed. Cir. 1991). Therefore, the suggestion has been adopted to this extent.

Comment 7: One comment suggested that the guidelines be clarified to indicate what happens if the applicant neither amends the claim to include the phrase “means for” or “step for” nor makes a showing but stands firm on the claim that the applicant initially presented and insists that 35 U.S.C. §112, ¶6 authorizes the claim. The commentor indicated that explanation of this point will benefit the applicants and the examiners.

Response: If a claim limitation does not include the phrase “means for” or “step for,” the claim limitation will not be treated by the examiner as invoking the provisions of 35 U.S.C. §112, ¶6. The examiner in such case will apply prior art to the claim limitation without the invocation of 35 U.S.C. §112, ¶6. In reply to the examiner’s Office action, if applicant either refuses to amend the claim to include the phrase “means for” or “step for” or refuses to make a showing 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 recite sufficient structure, material, or acts to perform the claimed function, the next Office action may be made final in accordance with the practice of making a second or subsequent action final (see MPEP 706.07(a)). Applicant may appeal the examiner’s rejection to the Board of Patent Appeals and Interferences pursuant to 35 U.S.C. §134.

Comment 8: One comment suggested that the examining corps should be encouraged, and preferably required, to include a statement regarding 35 U.S.C. §112, ¶6 in all Office actions where appropriate so that applicants may agree with or argue against the examiner’s position.

Response: The suggestion is adopted in part. In those instances where a claim limitation meets the 3-prong analysis as set forth in the supplemental examination guidelines and is being treated under 35 U.S.C. §112, ¶6, the examiner will include a statement in the Office action that the claim limitation is being treated under 35 U.S.C. §112, ¶6. However, if a claim limitation does not use the phrase “means for” or “step for,” that is, the first prong of the 3-prong analysis is not met, the examiner will not treat such a claim limitation under 35 U.S.C. §112, ¶6. It will not be necessary to state in the Office action that 35 U.S.C. §112, ¶6 has not been invoked, since the presumption is that applicant did not intend to invoke the provisions of 35 U.S.C. §112, ¶6 because applicant did not use the specific phrase “means for” or “step for.” If a claim limitation does include the phrase “means for” or “step for,” that is, the first prong of the 3-prong analysis is met, but the examiner determines that either the second prong or the third prong of the 3-prong analysis is not met, then in these instances, the examiner must include a statement in the Office action explaining the reasons why a claim limitation which uses the phrase “means for” or “step for” is not being treated under 35 U.S.C. §112, ¶6.
Comment 9: One comment suggested that 35 U.S.C. §112, ¶6 was not intended to address functional language used for mere background and away from the point of novelty and that the Federal Circuit has not directly addressed the use of functional language other than when it occurs at the point of novelty. The commentor stated that examiners need not go through the 3-prong analysis where the functional claiming language is not at the point of novelty since 35 U.S.C. §112, ¶6 does not apply to such claim limitations. The commentor further stated that rejection for failure to use the “means for” or “step for” language of 35 U.S.C. §112, ¶6 would be proper for, and only for, a claim to subject matter that Congress intended 35 U.S.C. §112, ¶6 to address (at the point of novelty). The commentor suggested that the guidelines be modified accordingly.

Response: The suggestion has not been adopted. In a recent decision, Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 54 USPQ2d 1185, 1188–90 (Fed. Cir. 2000), the Federal Circuit held that the district court erred in concluding that the means limitations for the aerating system could only cover new elements of the preferred embodiment. The means-plus-function limitation was “means for aerating.” The written description disclosed both a new and inventive flexible-hose structure and a prior art, rigid-conduit structure as corresponding structures for performing the claimed function. The Federal Circuit read the means-plus-function terms for the aerating system in the claims as being capable of covering the old, rigid-conduit system as well as the new, flexible-hose system. Furthermore, it is noted that examiners do not reject a claim for failure to use the “means for” or “step for” language of 35 U.S.C. §112, ¶6. There is no statutory basis for such a rejection. If a claim limitation does not include the phrase “means for” or “step for,” the presumption is that applicant did not intend to invoke 35 U.S.C. §112, ¶6 and the examiner will not treat the claim limitation under 35 U.S.C. §112, ¶6.

Comment 10: One comment stated that where the examiner has concluded that one skilled in the art would recognize what structure, material, or acts perform the function, it does not make sense to require that the applicant amend the specification to expressly recite what corresponding structure, material, or acts perform the function recited in a claim element. Furthermore, the commentor finds it even more troubling to have the examiner, at his option, state on the record what structure, material, or acts perform the claimed function since there is a danger of unfairly limiting the scope of the claims.

Response: The USPTO disagrees with the comment. In B. Braun Medical, Inc. v. Abbott Lab., 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997) the Federal Circuit stated that “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 Section 112, Para. 6.” It is important to have a clear prosecution history file record. See Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 41 USPQ2d 1865 (1997); York Prods., Inc. v. Central Tractor Farm & Family Ctr., 99 F.3d 1568, 1575, 40 USPQ2d 1619, 1624 (Fed. Cir. 1996) (“the record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims”). 35 U.S.C. §112, ¶6 states that “[a]n 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). If the disclosure implicitly sets forth the structure, material, or acts corresponding to a means-(or step-) plus-function claim limitation and the examiner concludes that one skilled in the art would recognize what structure, material, or acts perform the claimed function, the examiner may still require applicant, pursuant to 37 CFR 1.75 (d)(1), to clarify the record by amending the written description such that it expressly recites what structure, material, or acts perform the claimed function. If applicant chooses not to amend the written description to clarify the record, it is incumbent upon the examiner in exercising his or her responsibility to see that the file history is as complete as is reasonably possible. The examiner may do so by stating on the record what structure, material, or acts perform the function recited in the means-plus-function limitation. If applicant disagrees with the examiner’s statement, applicant has the obligation to clarify the record by submitting a reply explaining the reasons why applicant disagrees with the statement made by the examiner.

Comment 11: One comment stated that “to use the convenience of functional claim elements under Section 112(6), an applicant, therefore, must explicitly describe and link structure within the specification with the corresponding functional claim element.” The commentor further stated that the USPTO’s reliance on the very fact specific decision of In re Dossel, to permit applicant to implicitly set forth the structure corresponding to a means-plus-function limitation in the written description, is misplaced. The commentor suggested that the guidelines be modified to state that where the written description only implicitly or inherently sets forth the structure, material, or acts corresponding to a means-(or step-) plus-function, the examiner must require applicant to explicitly describe or link a structure within the specification to the corresponding functional claim element.

Response: The comment has not been adopted. In a recent decision, Atmel Corp. v. Information Storage Devices Inc., 198 F.3d 1374, 1379, 53 USPQ2d 1225, 1228 (Fed. Cir. 1999), the Federal Circuit stated that “the ‘one skilled in the art’ mode of analysis applies with equal force when determining whether a §112 ¶6 means-plus-function limitation is sufficiently definite under §112 ¶2.” The court further stated that the interim supplemental examination guidelines published by the USPTO, which stated that the “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,” is consistent with the court’s holding in the case. In order to make the file record clear, the examiner should, pursuant to 37 CFR 1.75(d)(1), require applicant to amend the written description to expressly recite what structure, material, or acts perform the function recited in the claim or the examiner could state on the record what structure, material, or acts perform the function recited in the claim.

Comment 12: One comment was directed to the process for making a prima facie case of equivalence of a prior art element. The commentor stated that even though this process is not superseded by these interim supplemental guidelines, the commentor is of the opinion
that the process is inconsistent with the Federal Circuit ruling in *In re Donaldson*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). In particular, the guidelines state that if the examiner finds that the prior art element performs the claimed function and is not excluded by any explicit definition provided in the specification for an equivalent, the examiner has met the prima facie case of equivalence. The commentor stated that this amounts to ignoring the means disclosed in the specification contrary to *Donaldson*. The commentor suggested that the test for equivalents should be modified to require the examiner to provide a rationale for why the prior art element is an equivalent to the claimed means since such a rationale is necessary in order to make out a *prima facie* case of equivalence.

Response: The comment has been adopted. The supplemental examination guidelines have been modified to state that if the examiner finds that (1) a prior art element performs the claimed function, (2) the prior art element is not excluded by any explicit definition provided in the specification for an equivalent, and (3) the prior art element is an equivalent, the examiner should provide an explanation and rationale in the Office action as to why the prior art element is an equivalent to the claimed means. Factors that will support a conclusion that the prior art element is an equivalent are:

1. the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267, 51 USPQ2d 1225, 1229–30 (Fed. Cir. 1999);
2. a person of ordinary skill in the art would have recognized the interchangeability of the element shown in the prior art for the corresponding element disclosed in the specification. *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 83, 193 USPQ 449, 461 (Ct. Cl. 1977);
3. there are insubstantial differences between the prior art element and the corresponding element disclosed in the specification. *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436, 54 USPQ2d 1129, 1138 (Fed. Cir. 2000); *Valmont Indus. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043, 25 USPQ2d 1451, 1455 (Fed. Cir. 1993);
4. the prior art element is a structural equivalent of the corresponding element disclosed in the specification. *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).

A showing of at least one of the above-noted factors by the examiner should be sufficient to support a conclusion that the prior art element is an equivalent of the means-(or step-) plus-function limitation. The examiner should then conclude that the claimed limitation is met by the prior art element. In addition to the conclusion that the prior art element is an equivalent, examiners should also demonstrate, where appropriate, why it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute applicant’s described structure, material, or acts for that described in the prior art reference. See *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). The burden then shifts to applicant to show that the prior art element is not an equivalent of the structure, material, or acts disclosed in the application. See *In re Mulder*, 716 F.2d 1542, 1549, 219 USPQ 189, 196 (Fed. Cir. 1983). This three-step process is consistent with the requirement that the USPTO
gives claims their broadest reasonable interpretation. See In re Donaldson Co., 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (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 USPTO believes that this three-step process for making a prima facie case of equivalence is consistent with binding precedent of the Federal Circuit.

Comment 13: One comment stated the USPTO does not have the authority to alter substantive law, and thus, the USPTO must either go to the Supreme Court or to Congress to obtain an amendment to 35 U.S.C. §112, ¶6.

Response: The suggestion has not been adopted. As noted in the response to comment 12 above, the USPTO believes that these supplemental examination guidelines are consistent with the Federal Circuit’s interpretation of 35 U.S.C. §112, ¶6.

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


The 1994 Guidelines note that there is no “magic” language that invokes 35 U.S.C. §112, ¶6. However, to establish uniformity to the extent possible, in view of the recent case law, and to make the prosecution record clearer, these 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.

These supplemental examination guidelines are based on the Office’s current understanding of the law and are believed to be fully consistent with binding precedent of the Supreme Court, the Federal Circuit and the Federal Circuit’s predecessor courts. These supplemental examination guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law.

The USPTO 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

\(^1\)See 1994 Guidelines at 59.
the invention in the application. 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”;  
2. The “means for” or “step for” must be modified by functional language; and  
3. The phrase “means for” or “step for” must not be modified by sufficient structure, material, or acts for achieving the specified function.

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2See In re Donaldson Co., 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in 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 USPTO 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 Prods., Inc. v. Devon Indus., 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 USPTO have an opportunity and obligation to specify, consistent with these supplemental guidelines, when a claim limitation invokes 35 U.S.C. §112, ¶6.

3Cf. Seal-Flex, Inc. v. Athletic Track and Court Constr., 172 F.3d 836, 849–50, 50 USPQ2d 1225, 1233–34 (Fed. Cir. 1999) (Rader, 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), cert. denied, 525 U.S. 923 (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”).

4See York Prods., Inc. v. Central Tractor Farm & Family Ctr., 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).
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 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 recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. §112. ¶6.

5See Seal-Flex, 172 F.3d at 849, 50 USPQ2d at 1234 (Rader, 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 Tech., 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 sufficient structure, material, or acts for achieving the specified function, the USPTO will not apply 35 U.S.C. §112, ¶6 until such modifying language is deleted from the claim limitation. See also supra note 1.

6While 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 necessarily 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, 1356–57, 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 Int’l, Inc., 174 F.3d 1308, 1317–19, 50 USPQ2d 1161, 1166–67 (Fed. Cir. 1999) (although the claim elements “eyeglasses 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 (Rader, 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
Accordingly, these supplemental examination 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, material, or acts in the specification and “equivalents thereof.” 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].

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. However, 35 U.S.C. §112, ¶6 does not impose any requirements in addition to those

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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).


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).

imposed by 35 U.S.C. §112, ¶1. 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. Under certain limited circumstances, 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. 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. 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.

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, material, or acts to the function recited in a means-(or step-) plus-function claim limitation; or (2) it is clear based on the disclosure in the application that one skilled in the art would have known what structure, material, 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 [10]See In re Knowlton, 481 F.2d 1357, 1366, 178 USPQ 486, 492–93 (CCPA 1973).


[13]See Atmel Corp. v. Information Storage Devices Inc., 198 F.3d 1374, 1379, 53 USPQ2d 1225, 1228 (Fed. Cir. 1999) (stating that the “one skilled in the art” analysis should apply in determining whether sufficient structure has been disclosed to support a means-plus-function limitation and that the USPTO’s recently issued proposed Supplemental Guidelines are consistent with the court’s holding on this point); 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); Hill-Rom Co. v. Kinetic Concepts, Inc., 54 USPQ2d 1437 (Fed. Cir. 2000) (abstract); 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 1555, 1564, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991) (drawings); In re Wolfensperger, 302 F.2d 950, 955–57, 133 USPQ 537, 541–43 (CCPA 1962) (drawings).
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, material, or acts corresponding to a means-(or step-) plus-function, and the examiner concludes that one skilled in the art would recognize what structure, material, 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, material, or acts perform the function recited in the claim element or (2) state on the record what structure, material, or acts perform the function recited in the means-(or step-) plus-function limitation.

III. Making a Prima Facie Case of 35 U.S.C. §112, ¶6 Equivalence

If the examiner finds that a prior art element (1) performs the function specified in the claim, (2) is not excluded by any explicit definition provided in the specification for an equivalent, and (3) is an equivalent of the means-(or step-) plus-function limitation, the examiner should provide an explanation and rationale in the Office action as to why the prior art element is an equivalent. Factors that will support a conclusion that the prior art element is an equivalent are:

(1) the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification;

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15Even if the disclosure implicitly sets forth the structure, material, or acts corresponding to a means-(or step-) plus-function claim element in compliance with 35 U.S.C. §112, ¶¶1 and 2, the USPTO 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, material, 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 USPTO cannot enforce its requirement that the terms and phrases used in the claims find clear support or antecedent basis in the written description).

A showing of at least one of the above-noted factors by the examiner should be sufficient to support a conclusion that the prior art element is an equivalent. The examiner should then conclude that the claimed limitation is met by the prior art element. In addition to the conclusion that the prior art element is an equivalent, examiners should also demonstrate, where appropriate, why it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute applicant’s described structure, material, or acts for that described in the prior art reference. See In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). The burden then shifts to applicant to show that the prior art element is not an equivalent of the structure, material, or acts disclosed in the application. See In re Mulder, 716 F.2d 1542, 1549, 219 USPQ 189, 196 (Fed. Cir. 1983).

To the extent that the three-step process for making a prima facie case of equivalence of a prior art element during ex parte examination set forth in these supplemental examination guidelines is inconsistent with the 1994 Guidelines, the supplemental examination guidelines control. The supplemental examination guidelines are consistent with the requirement that the USPTO give claims their broadest reasonable interpretation.\(^{20}\) The specification need not describe the equivalents of the structures, material, or acts corresponding to the means-(or step-) plus-function claim element.\(^{21}\) Where, however, the specification is silent as to what constitutes equivalents and the examiner has made out a \textit{prima facie} case of equivalence, the burden is placed upon the applicant to show that a prior

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\text{\textcopyright Al-Site Corp. v. VSI Int’l, Inc.}, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); \text{Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.}, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); \text{Lockheed Aircraft Corp. v. United States}, 553 F.2d 69, 83, 193 USPQ 449, 461 (Cl. Ct. 1977).
\text{In re Bond}, 910 F.2d 831, 833, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).
\text{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 USPTO may construe means-plus-function language under the rubric of ‘reasonable interpretation’”).
\text{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). \text{Cf. Hybritech Inc. 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”).
\end{align*}\)
art element which performs the claimed function is not an equivalent of the structure, material, or acts disclosed in the specification.\textsuperscript{22}

June 15, 2000

Q. TODD DICKINSON

\textit{Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office}

\textsuperscript{22}See 1994 Guidelines at 60; see also \textit{In re Mulder}, 716 F.2d 1542, 1549, 219 USPQ 189, 196 (Fed. Cir. 1983).