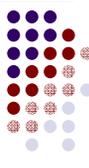




**Old is New again
(Williamson v. Citrix Online,
LLC) CAFC June 16, 2015**

Seth S. Kim
September 23, 2015




Williamson v. Citrix Online, LLC

- 1. Introduction
- 2. Statute
- 3. MPEP 2181
- 4. Williamson v. Citrix Online, LLC
- 5. Discussion
- 6. Conclusion



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Introduction

- On June 16, 2015, an en banc decision of the Federal Circuit decided that reciting a "module" in the context of a computer software patent did invoke means-plus-function claiming under 35 U.S.C. § 112, para. 6 even though the operative word "means-for" was not used.
- under the invoked means-plus-function claiming, the relevant claim was indefinite for failure to disclose corresponding structure in the specification, i.e., an algorithm.



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Introduction

- The en banc decision explicitly overturned more than a decade's worth of case law that held there exists a strong presumption that claims not employing the term "means" did not invoke the provisions of 35 U.S.C. § 112, para. 6.



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Statute

- 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, Sixth Paragraph
- 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.



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MPEP 2181

- MPEP 2181 Identifying and Interpreting a 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, Sixth Paragraph Limitation
- I. DETERMINING WHETHER A CLAIM LIMITATION INVOKES 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, SIXTH PARAGRAPH
- II. DESCRIPTION NECESSARY TO SUPPORT A CLAIM LIMITATION WHICH INVOKES 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, SIXTH PARAGRAPH
- III. DETERMINING 35 U.S.C. 112(b) or Pre-AIA 35 U.S.C. 112 SECOND PARAGRAPH COMPLIANCE WHEN 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112 SIXTH PARAGRAPH IS INVOKED
- IV. DETERMINING WHETHER 35 U.S.C. 112(a) or Pre-AIA 35 U.S.C. 112, FIRST PARAGRAPH SUPPORT EXISTS



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MPEP 2181

- I. DETERMINING WHETHER A CLAIM LIMITATION INVOKES 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, SIXTH PARAGRAPH
- If a claim limitation recites a term and associated functional language, it should be determined whether the claim limitation invokes [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph.
- The claim limitation is presumed to invoke [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph when it explicitly uses the term "means" or "step" and includes functional language.
- That presumption is overcome when the limitation further includes the structure necessary to perform the recited function.



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7

MPEP 2181

- By contrast, a claim limitation that does not use the term "means" or "step" will trigger the rebuttable presumption that [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph does not apply.
- This presumption may be overcome if the claim limitation is shown to use a non-structural term that is "a nonce word or a verbal construct that is not recognized as the name of structure" but is merely a substitute for the term "means" associated with functional language.
- The substitute term in such cases acts as a generic placeholder for the term "means" and would not be recognized by one of ordinary skill in the art as being sufficiently definite structure for performing the claimed function.



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8

MPEP 2181

- Accordingly, [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph will apply to a claim limitation if it meets the following 3-prong analysis:
- (A) the claim limitation uses the term "means" or "step" or a term used as a substitute for "means" that is a generic placeholder (also called a nonce term or a non-structural term having no specific structural meaning) for performing the claimed function;
- (B) the term "means" or "step" or the generic placeholder is modified by functional language, typically, but not always linked by the transition word "for" (e.g., "means for") or another linking word or phrase, such as "configured to" or "so that"; and
- (C) the term "means" or "step" or the generic placeholder is not modified by sufficient structure, material, or acts for performing the claimed function.



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9

MPEP 2181

- A. The Claim Limitation Uses the Term "Means" or "Step" or a Generic Placeholder (A Term That Is Simply A Substitute for "Means")
- With respect to the first prong of this analysis, a claim element that does not include the term "means" or "step" triggers a rebuttable presumption that [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph, does not apply.
- When the claim limitation does not use the term "means," it should be determined whether the presumption that [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), paragraph 6 does not apply is overcome.
- The presumption may be overcome if the claim limitation uses a generic placeholder (a term that is simply a substitute for the term "means").



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10

MPEP 2181

- The following is a list of non-structural generic placeholders that **may invoke** [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), paragraph 6:
- "mechanism for," "module for," "device for," "unit for," "component for," "element for," "member for," "apparatus for," "machine for," or "system for."
- However, [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), paragraph 6 will not apply if persons of ordinary skill in the art reading the specification understand the term to be the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function (e.g., "filters," "brakes," "clamp," "screwdriver," and "locks").



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11

MPEP 2181

- The following are examples of structural terms that have been found **not** to invoke [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), paragraph 6: "circuit," "detent mechanism," "digital detector," "reciprocating member," "connector assembly," "perforation," "sealingly connected joints," and "eyeglass hanger member."
- For a term to be considered a substitute for "means," and lack sufficient structure for performing the function, it must serve as a generic placeholder and thus not limit the scope of the claim to any specific manner or structure for performing the claimed function.



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12

MPEP 2181

- B. The Term "Means" or "Step" or the Generic Placeholder Must Be Modified By Functional Language
- With respect to the second prong of this analysis, it must be clear that the element in the claims is set forth, at least in part, by the function it performs as opposed to the specific structure, material, or acts that perform the function.



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MPEP 2181

- a claim limitation containing the term "means" does not invoke [35 U.S.C. 112](#), sixth paragraph, if the claim limitation does not link the term "means" to a specific function.
- claim elements do not invoke [35 U.S.C. 112](#), sixth paragraph, when the claims themselves contain sufficient structural limitations for performing those functions.



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MPEP 2181

- The mere use of the term "means" with no associated function rebuts the presumption that [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph, is invoked.
- Typically, the claim limitation will use the linking word "for" to associate "means" or a generic placeholder with the function.
- other linking words - "so that" or "configured to", if provides clear indication that the claim element is reciting a function..



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MPEP 2181

- C. The Term "Means" or "Step" or the Generic Placeholder Must Not Be Modified By Sufficient Structure, Material, or Acts for Achieving the Specified Function
- With respect to the third prong of this analysis, the term "means" or "step" or the generic placeholder recited in the claim must not be modified by sufficient structure, material, or acts for achieving the specified function.



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MPEP 2181

- To determine whether a word, term, or phrase coupled with a function denotes structure, it should be check whether:
 - (1) the specification provides a description sufficient to inform one of ordinary skill in the art that the term denotes structure;
 - (2) general and subject matter specific dictionaries provide evidence that the term has achieved recognition as a noun denoting structure; and
 - (3) the prior art provides evidence that the term has an art-recognized structure to perform the claimed function.



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MPEP 2181

- II. DESCRIPTION NECESSARY TO SUPPORT A CLAIM LIMITATION WHICH INVOKES 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112, SIXTH PARAGRAPH
- [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph states that a claim limitation expressed in means- (or step-) plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof." "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 the [35 U.S.C. 112\(b\)](#).



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MPEP 2181

- The Corresponding Structure Must Be Disclosed In the Specification Itself in a Way That One Skilled In the Art Will Understand What Structure Will Perform the Recited Function
- Also, the Supporting Disclosure Clearly Links or Associates the Disclosed Structure, Material, or Acts to the Claimed Function



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MPEP 2181

- In Computer-Implemented Means-Plus-Function Limitations
- “[W]hen the disclosed structure is a computer programmed to carry out an algorithm, ‘the disclosed structure is not the general purpose computer, but rather that special purpose computer programmed to perform the disclosed algorithm.’”
- An algorithm is defined, for example, as “a finite sequence of steps for solving a logical or mathematical problem or performing a task.”
- Applicant may express the algorithm in any understandable terms including as a mathematical formula, in prose, in a flow chart, or “in any other manner that provides sufficient structure.”



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MPEP 2181

- For a means- (or step-) plus- function claim limitation that invokes [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph, a rejection under [35 U.S.C. 112\(b\)](#) or [pre-AIA 35 U.S.C. 112](#), second paragraph, is appropriate if one of ordinary skill in the art cannot identify what structure, material, or acts disclosed in the written description of the specification perform the claimed function.



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MPEP 2181

- III. DETERMINING 35 U.S.C. 112(b) or Pre-AIA 35 U.S.C. 112 SECOND PARAGRAPH COMPLIANCE WHEN 35 U.S.C. 112(f) or Pre-AIA 35 U.S.C. 112 SIXTH PARAGRAPH IS INVOKED
- A rejection under [35 U.S.C. 112\(b\)](#) or [pre-AIA 35 U.S.C. 112](#), second paragraph may be appropriate in the following situations when examining means-plus-function claim limitations under [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph:



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MPEP 2181

- (1) when it is unclear whether a claim limitation invokes [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph;
- (2) when [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph is invoked and there is no disclosure or there is insufficient disclosure of structure, material, or acts for performing the claimed function; and/or
- (3) when [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph is invoked and the supporting disclosure fails to clearly link or associate the disclosed structure, material, or acts to the claimed function.



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MPEP 2181

- IV. DETERMINING WHETHER 35 U.S.C. 112(a) or Pre-AIA 35 U.S.C. 112, FIRST PARAGRAPH SUPPORT EXISTS
- A means- (or step-) plus-function limitation that is found to be indefinite under [35 U.S.C. 112\(b\)](#) or [pre-AIA 35 U.S.C. 112](#), second paragraph, based on failure of the specification to disclose corresponding structure, material or act that performs the entire claimed function may also lack adequate written description and/or not be sufficiently enabled to support the full scope of the claim.



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Williamson v. Citrix Online, LLC



- On June 16, 2015, an en banc decision of the Federal Circuit decided that reciting a "module" in the context of a computer software patent did invoke means-plus-function claiming under 35 U.S.C. § 112, para. 6 even though the operative word "means-for" was not used, and under the invoked means-plus-function claiming, the relevant claim was indefinite for failure to disclose corresponding structure in the specification, i.e., an algorithm.
- The en banc decision explicitly overturned more than a decade's worth of case law that held there exists a strong presumption that claims not employing the term "means" did not invoke the provisions of 35 U.S.C. § 112, para. 6.



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Williamson v. Citrix Online, LLC



- District Court proceeding.**
- Plaintiff-Appellant - Richard A. Williamson (trustee for the At Home Corporation Bondholders' Liquidating Trust)
- Defendants-Appellees - Citrix, Microsoft, Cisco, Adobe, and IBM
- U.S. Pat. No. 6,155,840, "System and method for distributed learning" ("the '840 Patent").
- Describes "a virtual classroom environment."
- The District Court decided that claims do not use the phrase "means for," but still invoked the "means-plus-function" rules under 35 U.S.C. § 112 para. 6, because use of term "module" was not structural, and further, the specification lacked a description of any corresponding structure, they were determined to be indefinite and invalid.



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Williamson v. Citrix Online, LLC



- The Prior Federal Circuit Decision**
- Williamson appealed, and in 2014, a Federal Circuit panel (Judges Moore, Linn, and Reyna) - reversed the District Court in entirety.
- The Federal Circuit panel explained that because the '840 Patent did not use the term "means for," the presumption that the claim was not a means-plus-function claim was very strong.
- Overcoming strong presumption required a showing that "skilled artisans, after reading the patent, would conclude that [the] claim limitation is so devoid of structure that the drafter constructively engaged in means-plus-function claiming.
- Appellees sought *en banc* review, arguing that the Federal Circuit's standard for overcoming the presumption was too high. The Federal Circuit granted review, sitting *en banc* (Chief Judge Prost; Circuit Judges Lourie, Linn, Dyk, Moore, O'Malley, Reyna, Wallach, Taranto, Chen, and Hughes) as to the 35 U.S.C. § 112 para. 6 issue, and withdrew and substituted the 2014 opinion with the 2015 opinion.



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Williamson v. Citrix Online, LLC



- Only the 35 U.S.C. § 112 para. 6 issue as to claim 8 was overturned.
- 8. A system for conducting distributed learning among a plurality of computer systems coupled to a network, the system comprising:
 - a presenter computer system of the plurality of computer systems coupled to the network and comprising:
 - a content selection control for defining at least one remote streaming data source and for selecting one of the remote streaming data sources for viewing; and
 - a presenter streaming data viewer for displaying data produced by the selected remote streaming data source;
 - an audience member computer system of the plurality of computer systems and coupled to the presenter computer system via the network, the audience member computer system comprising:
 - an audience member streaming data viewer for displaying the data produced by the selected remote streaming data source; and
 - a distributed learning server remote from the presenter and audience member computer systems of the plurality of computer systems and coupled to the presenter computer system and the audience member computer system via the network and comprising:
 - a streaming data module for providing the streaming data from the remote streaming data source selected with the content selection control to the presenter and audience member computer systems; and
 - a distributed learning control module for receiving communications transmitted between the presenter and the audience member computer systems and for relaying the communications to an intended receiving computer system and for coordinating the operation of the streaming data module.



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Williamson v. Citrix Online, LLC



- The Federal Circuit summarized the prior decisions on means-plus-function claiming as follows:
- Generally, the use of the word "means" in a claim element creates a rebuttable presumption that §112, para. 6, applies, and it also held that the absence of this term creates a rebuttable presumption that §112, para. 6, does not apply.
- However, in applying §112, para. 6, emphasized that the essential inquiry is whether the words of the claims are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.
- Traditionally, the presumption against a §112, para. 6, construction in the absence of the term "means" can be overcome if the claim term lacks "sufficiently definite structure" or recites "function without reciting sufficient structure for performing that function."



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Williamson v. Citrix Online, LLC



- But starting in 2004, in the Lighting World decision, the presumption against §112, para. 6, in the absence of the term "means," was that "the presumption flowing from the absence of the term „means“ is a strong one that is not readily overcome."
- Further, "without a showing that the limitation essentially is devoid of anything that can be construed as structure," it was unwilling to construe a term as invoking §112, para. 6.
- Thus, up to this point, the presumption against §112, para. 6, in the absence of the term "means" is a strong one, and the court noted that it has seldom held that a limitation that does not recite "means" is a means-plus-function limitation.
- But, in Williamson, the Federal Circuit held that the "strong" presumption against a §112, para. 6, construction in the absence of the term "means" is unjustified, unwarranted, uncertain in meaning and application, and "has the inappropriate practical effect of 35 U.S.C. §112, para. 6 placing a thumb on what should otherwise be a balanced analytical scale."



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Williamson v. Citrix Online, LLC

- The Federal Circuit now says that the expansion of this presumption has resulted, contrary to congressional intent, in a proliferation of functional claiming "untethered" to §112, para. 6.
- Thus, Federal Circuit now returns the case law back to before Lighting World.
- Under the revised formulation, Federal Circuit said there is little distinction between the terms "means" and "module," because "Module" is a well-known nonce word that can operate as a substitute for "means."
- Further, the prefix "distributed learning control" likewise fails to impart sufficient structure into the term "module."
- nothing in the specification or prosecution history would lead the court to construe this expression as the name of a structure sufficiently definite to take the overall claim limitation out of the bounds of §112, para. 6.

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Williamson v. Citrix Online, LLC

- The Federal Circuit thus held that the limitation "distributed learning control module" is subject to the provisions of §112, para. 6.
- Reviewing the specification, the Federal Circuit stated that the specification lacked structure sufficiently corresponding to one function of the recited "distributed learning control module."
- claim was indefinite because the Court noted the absence in the disclosure of an algorithm for performing this function.
- "The algorithm may be expressed as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." In that regard, the court found that images of computer displays of figures were insufficient to disclose the algorithm.

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Williamson v. Citrix Online, LLC

- on expert testimony that a skilled person would know how to program a computer to perform the recited functions, the Court held "[T]he fact that one of skill in the art could program a computer to perform the recited functions cannot create structure where none otherwise is disclosed."
- Thus, claim 8 is invalid as an indefinite means plus function claim.
- On the remaining claims, held District court erred in finding non-infringement based on erroneous claim construction – remanded.
- Judge Reyna concurred – but wondered whether the Federal Circuit should revisit the presumptions that it gives to claim terms that recite the statutory term "means" as opposed to module or other words. i.e., no preference should be given to "means".
- Judge Newman dissented - overruling of its precedent leads to "additional uncertainty of the patent grant, confusion in its interpretation, invitation to litigation, and disincentive to patent-based innovation." – Said bright line test gives more certainty.

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Discussion

- Accordingly, [35 U.S.C. 112\(f\)](#) or [pre-AIA 35 U.S.C. 112](#), sixth paragraph will apply to a claim limitation if it meets the following 3-prong analysis:
- (A) the claim limitation uses the term "means" or "step" or a term used as a substitute for "means" that is a generic placeholder (also called a nonce term or a non-structural term having no specific structural meaning) for performing the claimed function;
- (B) the term "means" or "step" or the generic placeholder is modified by functional language, typically, but not always linked by the transition word "for" (e.g., "means for") or another linking word or phrase, such as "configured to" or "so that"; and
- (C) the term "means" or "step" or the generic placeholder is not modified by sufficient structure, material, or acts for performing the claimed function.

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Discussion

- Means for displaying a result**
- Means configured to display a result**
- Module for displaying a result from a search query**
- Displaying means**
- A display means**
- A display means for displaying a result**
- A display for displaying a result**
- Prong A: Explicit operative word?
- Prong B: linked Functional?
- Prong C: any Structure?

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Conclusion

- Thank you

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