

From: [Alvarez, Kira](#)
To: [112Guidance2019](#)
Subject: Comments from the ABA Section of IP Law on 112 Guidance
Date: Thursday, March 7, 2019 5:30:35 PM
Attachments: [ABA-IPL comments to USPTO on 112 Guidance - Final.pdf](#)

Attached please find the Comments of the ABA Section of IP law on the 112 Guidance.

If you have any questions, please feel free to contact me.

Thanks,

Kira

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AMERICAN BAR ASSOCIATION

March 7, 2019

Hon. Andrei Iancu

Under Secretary of Commerce for Intellectual Property and
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U.S. Patent and Trademark Office

Mail Stop: Comments—Patents, Commissioner for Patents

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Via email: 112Guidance2019@uspto.gov

**Re: Request for Comments on “Examining Computer-Implemented
Functional Claim Limitations for Compliance with 35 U.S.C. 112” Guidance,
84 FR 57 (Jan. 7, 2019)**

Dear Director Iancu:

I write on behalf of the American Bar Association Section of Intellectual Property Law (“Section”) to respond to the request for comments in the “Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. 112” Guidance (“112 Guidance”). *See* 84 FR 57 (Jan. 7, 2019). The views expressed herein are presented on behalf of the Section of Intellectual Property Law. They have not been approved by the House of Delegates or the Board of Governors of the American Bar Association and, accordingly, should not be construed as representing the position of the Association.

The Section generally supports the efforts of the United States Patent and Trademark Office (the “Office” or the “USPTO”) to provide a greater degree of certainty with examination of computer-implemented functional claim language. Indeed, we believe the rules outlined in the 112 Guidance are reasonable for proper efficiency of Office operations and common fairness to applicants. The Section also acknowledges the USPTO’s concerns over functional claim language and the effect that such claim language has on claim interpretation. Finally, the Section recognizes that the law in this area has evolved in recent years. *See, e.g., Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (*en banc*) (overruling the Federal Circuit’s previous application of a “strong” presumption that claim limitations lacking the word “means” are not subject to 35 U.S.C. 112(f)). We welcome the Office’s efforts to keep examination practices current and consistent with these developments.

We also welcome the Office’s release of the 112 Guidance concurrently with the “2019 Revised Patent Subject Matter Eligibility Guidance” relating to 35 U.S.C. 101 (“101 Guidance”). *See* 84 FR 50 (Jan. 7, 2019). As Director Iancu has acknowledged, the areas of 35 U.S.C. 101 and 35 U.S.C. 112 “are sometimes conflated but should be dealt with separately.”¹ We agree, and the concurrent release of the 101 Guidance and 112 Guidance expressly reaffirms to the examining corps and Patent Trial and Appeal Board that these areas should be analyzed separately and that they have different policy objectives.

Because the 112 Guidance focuses on computer-implemented inventions, the Section would welcome the Office providing similar 112 guidance and examples for life sciences and other inventions. The Section hopes that future guidance will be consistent with the Section’s longstanding view that Section 112 should not be applied more rigorously to computer-implemented inventions than inventions in other arts.

Beyond these general comments, specific comments of the Section are below.

I. Issues Under 35 U.S.C. 112(f) and 112(b) Related to Examination of Computer Implemented Functional Claim Limitations

The Section acknowledges that pure functional claiming may take the form of a computer-implemented limitation untethered to Section 112(f) or a computer-implemented limitation subject to Section 112(f) that lacks a corresponding structure disclosed in the specification and thus is indefinite under Section 112(b). To the extent the Office will treat the lack of disclosure of a corresponding structure as a written description problem under Section 112(a) as the 112 Guidance suggests, the Section favors the Office’s use of Section 112(a) alone as a ground for unpatentability to guard against overbroad functional claim limitations that merely recite a result or property.

A. Claim Interpretation

The Section continues its support of the Office’s 3-prong analysis of evaluating whether the claim language (1) uses the term “means” (or “step”) or a generic placeholder, (2) is modified by functional language, and (3) is not modified by sufficient structure, material or acts for performing the function. This analysis recognizes the need to determine if claim language in computer-implemented inventions invokes 35 U.S.C. 112(f).

The Office’s non-exhaustive list of non-structural generic placeholders that may invoke a claim interpretation under 35 U.S.C. 112(f) is helpful: “mechanism for,” “module for,” “device for,” “unit for,” “component for,” “element for,” “member for,” “apparatus for,”

¹ The Section is separately submitting comments relating to the 101 Guidance.

“machine for,” or “system for.” The Section recommends that the Office caution against treatment of “processor configured to,” “processor programmed to,” “processor adapted to” and the like as invoking Section 112(f) in light of these longstanding claim drafting terms that have produced identifiable metes and bounds. The Section also supports the Office providing a non-exhaustive list of examples when “device” terms would not invoke Section 112(f).

B. Indefiniteness under 35 U.S.C. 112(b)

As stated in the MPEP, “[t]he primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph with respect to the claimed invention.” MPEP Section 2173; *see also Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (definiteness requirement serves the dual purposes of “secur[ing] to the patentee all to which he is entitled” and of “appris[ing] the public of what is still open to them.”). A well-known case exemplifying the primary purpose held claims to substantially pure carbon black “in the form of commercially uniform, comparatively small, rounded smooth aggregates having a spongy or porous exterior” indefinite. *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 234 (1942).

The Section appreciates the 112 Guidance providing a dictionary definition of “algorithm” to help guide determinations of whether a specification discloses an algorithm for performing the claimed computer-implemented function. The Section however favors a broader focus on “sufficient structure” in the context of Section 112(a), which can moot the need for a narrower focus on a sufficient “algorithm” in the context of Section 112(b). In this regard, the Section supports a lenient approach to Section 112(b) because Section 112(a) is well equipped to guard against overbroad functional claim limitations that merely recite a result or property. The Section request that the Office provide a non-exhaustive list of examples, if possible, demonstrating computer implemented functional claim language that would meet the requirements of Section 112(a), but not meet the requirements of Section 112(b).

The standard for “sufficient structure” for computer-implemented inventions was correctly set forth by the Federal Circuit in *In re Dossel*, 115 F.3d 942, 946 (Fed. Cir. 1997). In *Dossel*, the Federal Circuit found that, although the specification of the patent at issue “[did] not disclose exactly what mathematical algorithm will be used to compute

the end result,” the fact that it did “state that ‘known algorithms’ can be used to solve standard equations” was sufficient structure to support a “reconstruction means” claim limitation. *Id.* Under the “one skilled in the art” standard, the corresponding structure is sufficient if it has an “understood meaning in the art” such that one skilled in the art can identify and understand the boundaries of the claim. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359 (Fed. Cir. 2002); *In re Aoyama*, 656 F.3d 1293 (Fed. Cir. 2011) (“Sufficient structure must simply ‘permit one of ordinary skill in the art to know and understand what structure corresponds to the means limitation’ so that he may ‘perceive the bounds of the invention.’”) (citing *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1340-41 (Fed. Cir. 2008)). Just as an “attachment means” defined as including a “bolt” should include the universe of bolts known by one skilled in the art, an “encryption means” defined as an encryption algorithm should include all possible encryption algorithms known by one skilled in the art, including any suitable encryption algorithm useful in implementing the claimed function.

Finally, although novelty and nonobviousness under 35 U.S.C. 102 and 103 are separate patentability requirements, they should still be relevant to the analysis of patentability for computer-related inventions under 35 U.S.C. 112(b) (and also 112(a)). If a claim element (as construed under BRI) is not very novel (*e.g.*, “module for storing information”), then 35 U.S.C. 102 and 103 should take center stage, and the disclosure needed for “sufficient structure” should be less. However, if a claim element is novel (*e.g.*, “module for interpreting inputs” from a new widget), then more disclosure should be needed.

II. Issues Under 35 U.S.C. 112(a) Related to Examination of Computer Implemented Functional Claim Limitations

A. Written Description Requirement of 35 U.S.C. 112(a)

The written description requirement ensures that claims do not “overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.” *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345 (Fed. Cir. 2000). As part of the quid pro quo of the patent system, the public must receive a “meaningful disclosure” of the invention. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1354 (Fed. Cir. 2010) (en banc).

Part II-A of the 112 Guidance on the written description requirement tracks the prior guidance from 2011, with updates to reflect subsequent Federal Circuit case law. *Compare* 84 FR 57, 61-62 *with* 79 FR 7162, 7170-71. However, the Section notes that the 112 Guidance has eliminated all references to *Hayes Microcomputer Products*, which was a prominent part of the prior guidance, and may unintentionally signal a belief by the

Office that the law has changed. *See In Re Hayes Microcomputer Products, Inc.*, 982 F.2d 1527 (Fed. Cir. 1992); 76 FR 7162. In *Hayes*, a limited amount of disclosure still satisfied written description because, as stated in the prior guidance, “the specification disclosed the specific type of microcomputer used in the claimed invention as well as the necessary steps for implementing the claimed function. The disclosure was in sufficient detail such that one skilled in the art would know how to program the microprocessor to perform the necessary steps described in the specification.” 76 FR 7162, 7171 (citing *Hayes Microcomputer Products*, 982 F.2d at 1533-34). The prior guidance continued as follows:

Two additional observations made by the Federal Circuit in *Hayes* are important. First, the Federal Circuit stressed that the written description requirement was satisfied because the particular steps, *i.e.*, algorithm, necessary to perform the claimed function were ‘described in the specification.’ Second, the Court acknowledged that the level of detail required for the written description requirement to be met is case specific.

Id. (citations omitted). *Hayes* exemplifies that the quantity of disclosure is not controlling, and that the knowledge of one skilled in the art can be relied upon to help satisfy the written description requirement. While the Section appreciates the effort, appropriateness and desire to cite more recent Federal Circuit decisions in the 112 Guidance, *Hayes* remains controlling Federal Circuit law. Accordingly, the examining corps and Patent Trial and Appeal Board should be encouraged to continue relying on *Hayes*.

B. Enablement Requirement of 35 U.S.C. 112(a)

Federal Circuit precedent acknowledges that the enablement requirement under 35 U.S.C. 112(a) is separate from the written description requirement under 35 U.S.C. 112(a). *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1341 (Fed. Cir. 2010) (*en banc*) (holding that pre-AIA 35 U.S.C. 112 first paragraph contains both a written description requirement *and* an enablement requirement). The enablement requirement ensures that the claimed invention is described with sufficient detail so the relevant person of skill in the art or technology area will understand both how to make and use what has been actually claimed in the patent. *See, e.g., CFMT Inc. v. Yieldup Int’l Corp.*, 349 F.3d 1333 (Fed. Cir. 2003). Just as the enablement requirement is well equipped to address when a specification does not enable the full breadth of a functional claim limitation, the written description requirement is well equipped to address when a specification does not describe the invention in a manner demonstrating the inventor had possession of the full breadth of the invention. *See, e.g., LizardTech Inc. v. Earth Resource Mapping Inc.*, 424 F.3d 1336 (Fed. Cir. 2005) (written description); *Sitrick v. Dreamworks, LLC*, 516 F.3d 992 (Fed. Cir. 1999) (enablement). As stated previously, in the context of sufficient

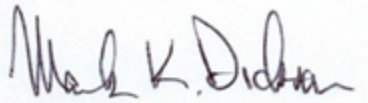
disclosure of computer-related inventions, it is difficult to envision a situation where the twin requirements of 112(a) are satisfied, but 112(b) is not satisfied. Accordingly, we suggest analyzing 112(a) before 112(b).

Part II-B of the 112 Guidance relating to enablement generally tracks the prior guidance from 2011, and includes updates to more recent Federal Circuit precedent. *Compare* 84 FR 57, 63 *with* 79 FR 7162, 7171-72. While the updates are helpful and appropriate, the Section notes that the continued citation and reliance in the new 112 guidelines on the *In re Wands* factors is reassuring as they continue to be at the core of the enablement analysis. *See In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

If you have any questions on our comments or would wish for us to further explain any of our comments, please feel free to contact me. Either I or another member of the leadership of the Section will respond to any inquiry.

The Section thanks the Office for the opportunity to submit these comments. We would be pleased to further discuss these comments with the Office and others as appropriate.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Mark K. Dickson". The signature is fluid and cursive, with the first name "Mark" being the most prominent.

Mark K. Dickson
Chair, ABA Section of Intellectual Property Law