March 8, 2019

The Honorable Andrei Iancu
Under Secretary of Commerce for Intellectual Property and Director of the United States
        Patent and Trademark Office
United States Patent and Trademark Office
600 Dulany Street
Alexandria, VA 22314

Via Email: *112Guidance2019@uspto.gov*

**Re: Comments on "Examining Computer-Implemented Functional Claim Limitations
for Compliance with 35 U.S.C. 112"**

Docket No. PTO-P-2018-0059

Dear Under Secretary Iancu:

    BSA | The Software Alliance welcomes the opportunity to provide comments on the
United States Patent and Trademark Office (USPTO) solicitation of comments regarding,
*Examining Computer-Implemented Functional Claim Limitations for Compliance with 35
U.S.C. 112,* 84 Fed. Reg. 57 (Jan. 7, 2019) (Section 112 Guidance). BSA appreciates the
USPTO's continued attention to improving examination processes and patent quality.
Improving the procedures for examining patent applications under Section 112 of the
Patent Act is an important part of this work.

    BSA[1] is an association of the world's leading software and hardware technology
companies. On behalf of its members, BSA promotes policies that foster innovation,
growth, and a competitive marketplace for commercial software, artificial intelligence, and
related technologies. BSA members are among the Nation's leading technology
companies, producing much of the hardware and software that power computer and
telecommunication networks. Due to the complexity and commercial success of their
products, these companies are frequently the subject of patent infringement claims.

    At the same time, by virtue of their inventions, BSA members rely heavily on intellectual
property for the viability of their business operations. Collectively, BSA members hold
hundreds of thousands of patents and invest billions of dollars in research and
development (R&D) every year. The software industry accounts for $63 billion in annual
US R&D investments and 20 percent of total US private sector R&D expenditures.

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[1] BSA's members include: Adobe, Akamai, Apple, Autodesk, Bentley Systems, Box, Cadence,
CNC/Mastercam, DataStax, DocuSign, IBM, Informatica, MathWorks, Microsoft, Okta, Oracle, PTC,
Salesforce, Siemens PLM Software, Slack, Splunk, Symantec, Trend Micro, Trimble Solutions
Corporation, Twilio, and Workday.

Because they are both innovators as well as substantial patent holders, BSA members have a particularly acute interest in clear USPTO guidance and properly calibrated mechanisms for ensuring patent quality. The key to promoting innovation is a predictable and well-functioning patent system that rewards innovators without fostering an environment in which a small number of actors can abuse the system to the detriment of responsible market participants and the economy at large.

BSA members have a variety of perspectives on how best to improve the patent system. At the same time, BSA members uniformly support the USPTO's ongoing efforts to improve patent quality, provide clear guidance to examiners, and increase the consistency and predictability of USPTO decision-making.

BSA supports the objectives underlying the Section 112 Guidance to achieve a more consistent examination of Section 112 issues during patent examination, so that only patents meriting protection are issued and enforced. Even when examiners fully evaluate claims and the sufficiency of the associated specification, the file histories for some patents may lack sufficient clarity to meaningfully ascertain the scope and meaning of the claims. These circumstances create ambiguity regarding the scope, validity, and enforceability of claims, resulting in uncertainty for the public, and for patent holders and other market participants.

BSA agrees with USPTO's conclusion that the requirements of Section 112 are "relevant to computer-implemented functional claims," and agrees that, in this context, under *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015), broad functional claiming without adequate structural support in the specification, as understood by persons of ordinary skill in the art, will be indefinite under 35 U.S.C. § 112(b). Under 35 U.S.C. § 112(f), such functional claim elements are properly treated as means (or step) plus function limitations and interpreted to cover the structure, materials, or acts received in the support specification or their equivalents.

BSA supports USPTO's view that examiners should carefully examine computer-implemented functional claim limitations – whether using "means" or other non-structural generic placeholders – under the 3-prong analytical framework, consistent with applicable caselaw. To ensure that examiners are consistently and properly applying the Section 112 Guidance in applications involving computer-implemented functional claiming, BSA encourages USPTO to provide examiners with additional training, useful guidance documents, and additional information resources to assist in examination, and to provide additional supervisory review, as needed, to assist examiners in applying the Section 112 Guidance.

Furthermore, BSA encourages USPTO to consider how to ensure the development of full and clear prosecution records, consistent with the Guidance. This could include ensuring that examiners receive regular training and skills assessments regarding, *inter alia*, their ability to identify non-structural generic placeholder terms and to read and understand algorithms that perform (or do not perform) a claimed function.[2] This could also include ensuring that examiners consistently record the resolution of any situations in which claim terms are unclear or otherwise raise questions, expressly state determinations that a claim is being interpreted according to 35 U.S.C. § 112(f), and otherwise maintain detailed records of reasons for allowance or rejection.

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[2] Additionally, some BSA members believe that the USPTO should consider additional steps to ease the burden on examiners, such as further structural or procedural changes in the examination process to help alert examiners to the presence of situations that implicate section 112(f) of the Patent Act.

Conclusion

    BSA supports USPTO's efforts to ensure that examiners consistently and correctly apply Section 112 to computer-implemented software inventions. BSA encourages USPTO to provide extensive training to examiners in this regard; and to take steps to ensure the standards are being consistently applied.