

## FUNCTIONAL LANGUAGE WORKSHEET ANSWER KEY

This worksheet is used in the **2016 Functional Language Workshop** to facilitate the discussion of the interpretation and definiteness under 35 U.S.C. 112(b) of hypothetical product claims reciting functional language. As every claim must be examined individually based on the particular elements recited therein, a separate worksheet should be used to analyze each claim. The use of this worksheet during examination is optional.

**Note:** This answer key includes answers to the questions on the worksheet, as well as additional explanations drawn from the MPEP and recent training. Although examiners should be familiar with the recent training prior to participating in this workshop, pertinent resources are referenced herein so that examiners can obtain more information if needed.

**Example:** \_\_\_\_\_

**Claim:** \_\_\_\_\_

### Part I: Identifying Functional Language

As a first step, functional limitations in the claim should be identified. A claim limitation is functional when it recites a feature by *what it does* rather than by *what it is*. Claims often use functional language to add further description to some structure or action, for example how elements or steps tie together, or to provide context to claim elements. Functional language can appear in limitations that invoke 35 U.S.C. 112(f) (“means-plus-function”), and in limitations that do not invoke § 112(f). Limitations that do not invoke § 112(f) are typically recited with some structure, material or action to define a particular capability or purpose served by the recited structure, material or action. For more information, refer to MPEP 2111 and 2181, and the following training modules: [Broadest Reasonable Interpretation \(BRI\) and the Plain Meaning of Claim Terms](#); [Examining Functional Claim Limitations: Focus on Computer/Software-related Claims](#); [35 U.S.C. 112\(f\): Identifying Limitations That Invoke 112\(f\)](#); and [35 U.S.C. § 112\(f\): Making the Record Clear](#).

**This claim includes at least one instance of functional language, which is:**

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#### 1. Does the claim element including this functional language invoke 35 U.S.C. 112(f)?

Use the three-prong analysis in MPEP 2181 to determine whether the claim limitation invokes § 112(f).

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	Prong A is met because:  Prong B is met because:  Prong C is met because:

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## Part II: Construing Functional Language

During examination, claims are given their broadest reasonable interpretation (BRI) in light of the specification as it would be interpreted by one of ordinary skill in the art. It is a best practice to make the record clear during prosecution by explaining the BRI of claim terms, as necessary, including explaining the BRI of any functional language. When § 112(f) is invoked, the BRI of the “means-plus-function” limitation is restricted to the corresponding structure in the supporting disclosure, and its equivalents (the corresponding specification that identifies and links the structure, material or act to the function recited in the claim is considered to be part of the claim limitation). When § 112(f) is not invoked and an element is recited along with a function, that element is construed as being capable of performing the function – in other words, the BRI of that element is limited by the function.

It should be kept in mind, however, that there is a distinction between reciting a function compared to reciting an intended use or result. A functional limitation can provide a patentable distinction (limit the claim scope) by imposing limits on the function of a structure, material or action. Typically no patentable distinction (no limit on the claim scope) is made by an intended use or result unless some structural difference is imposed by the use or result on the structure or material recited in the claim, or some manipulative difference is imposed by the use or result on the action recited in the claim.

For more information, refer to MPEP 2111 and 2181, and the following training modules: [Broadest Reasonable Interpretation \(BRI\) and the Plain Meaning of Claim Terms](#); [Examining Functional Claim Limitations: Focus on Computer/Software-related Claims](#); and [35 U.S.C. 112\(f\): Broadest Reasonable Interpretation and Definiteness of § 112\(f\) Limitations](#).

2. **What is the broadest reasonable interpretation (BRI) of the functional language?**  
**Answer part A if the functional language does not invoke § 112(f), and Part B if the functional language is part of a § 112(f) limitation.**

<b>A. BRI if § 112(f) is <u>not</u> invoked</b>
The structure, material or act in the claim that is connected to ( <i>i.e.</i> , performs) the recited function is:
The BRI of the functional language is:

<b>B. BRI if § 112(f) is invoked</b>
The corresponding structure, material or act in the specification that performs the recited function is:
The BRI of the § 112(f) limitation is:

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3. Does the functional language limit the claim scope (*i.e.*, must a prior art reference disclose this functional limitation in order to anticipate the claim)?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The reason why the functional language does (or does not) limit the claim scope is:

### Part III: Definiteness of Functional Language

While functional limitations may be properly used in claims, the boundaries imposed by a functional limitation must be clearly defined to be definite under 35 U.S.C. 112(b). Claim language that merely states a result to be obtained without providing boundaries on the claim scope (*e.g.*, by not specifying any way to achieve those results) is unclear. Consider the following to determine whether a claim limitation expressed in functional language has clear boundaries: whether one of ordinary skill in the art can determine what structure, material or act in the claim performs this function; whether the limitation has well defined boundaries or only expresses a problem solved or intended result; and what an anticipatory reference would need to disclose in order to satisfy this claim limitation. These considerations are not all-inclusive or limiting.

When § 112(f) is invoked, the specification must adequately disclose a corresponding structure, material or act that performs the function. For “means”-type claims, an adequate disclosure requires that the corresponding structure or material is: (a) disclosed in a way that one of ordinary skill in the art will understand what specific structure or material the inventor has identified to perform the recited function; (b) sufficient to perform the entire function recited in the claim limitation; and (c) clearly linked to the function in the written description.

When the examiner determines that the boundaries of a claim are not reasonably clear, a rejection under § 112(b) should be made. Such a rejection puts the applicant on notice that it must fulfill its statutory duty under § 112(b) to ensure that claim language clearly defines the boundaries of the claim scope sought. In making a rejection, the examiner must identify the specific claim language that is indefinite, and explain why that language renders the boundaries of the claim unclear. When possible, the examiner should suggest how the indefiniteness issues may be resolved.

For more information, refer to MPEP 2173.02, 2173.05(g), 2181 and 2182, and the following training modules: *Enhancing Clarity By Ensuring That Claims Are Definite Under 35 U.S.C. 112(b)*; [Examining Functional Claim Limitations: Focus on Computer/Software-related Claims; 35 U.S.C. 112\(f\): Broadest Reasonable Interpretation and Definiteness of § 112\(f\) Limitations](#); and [35 U.S.C. 112\(f\): Evaluating § 112\(f\) Limitations in Software-Related Claims for Definiteness under 35 USC 112\(b\)](#).

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For § 112(f) limitations:

4. If the functional language is part of a “means”-type § 112(f) limitation, answer the following questions about the corresponding structure or material. Otherwise, skip to Question 5.

- A) Does the specification disclose or describe a structure or material as performing the claimed function?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The corresponding structure or material is:

- B) Is the disclosed or described structure or material sufficient to perform the entire claimed function?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The reason is:

- C) Does the specification clearly link the structure or material to the claimed function?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The reason is:

For functional language that does not invoke § 112(f):

5. Are the boundaries of the functional language clear, *i.e.*, can one of ordinary skill in the art draw the boundary between what is covered by the claim and what is not covered?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The boundaries of the functional language are:

Following Question 4 or 5, for § 112(f) limitations and limitations that do not invoke § 112(f):

6. Should the claim be rejected as indefinite under 35 U.S.C. 112(b)?

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	The indefinite claim language is:

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Yes	No	Notes
		This limitation is unclear because:  A suggestion for how applicant could resolve the unclear boundaries is:

### Part IV: Addressing Functional Language

Examiners should keep in mind that, under the principles of compact prosecution, each claim should be examined for compliance with every statutory requirement for patentability in the initial review of the application. Thus, when the examiner determines that a claim term or phrase renders the claim indefinite, the examiner should make a rejection based on indefiniteness under 35 U.S.C. 112(b), as well as any other applicable rejection (*e.g.*, under 35 U.S.C. §§ 101, 102, 103, and/or 112).

When functional claim language is found indefinite, it typically lacks an adequate written description under § 112(a), because an indefinite, unbounded functional limitation would cover all ways of performing a function and indicate that the inventor has not provided sufficient disclosure to show possession of the invention. Thus, in most cases, a § 112(b) rejection that is based on functional language having unclear (or no) claim boundaries should be accompanied by a rejection under § 112(a) based on failure to provide a written description for the claim.

Because functional claim language that is not limited to a specific structure covers all devices that are capable of performing the recited function or all materials that have the functional characteristic, a rejection under §§ 102 or 103 may be appropriate if the prior art discloses a device that can inherently perform the claimed function or a material that inherently has the functional characteristic. When making a rejection, it is important that the examiner state on the record how the functional claim term or phrase is being interpreted with respect to the prior art applied in the rejection.

For more information, refer to MPEP 2173.05(g), 2182, and 2183, and the following training modules: [Examining Functional Claim Limitations: Focus on Computer/Software-related Claims](#); and [35 U.S.C. 112\(f\): Broadest Reasonable Interpretation and Definiteness of § 112\(f\) Limitations](#).

#### Group Discussion:

Assume that prior art reference X was published by another several years prior to applicant's earliest filing date (*i.e.*, X qualifies as prior art under § 102) and teaches elements that meet all the structural elements recited in this claim.

Using the BRI of this claim taking into account any limits imposed by the functional language, what prior art rejections would be appropriate? Consider scenarios where X explicitly discloses the recited function or where the structure in X performs the function with the same means, an equivalent means or a different means. If the claim has been found indefinite, assume that the best possible understanding of the claim is being used in the prior art rejection for purposes of compact prosecution.