

# PATENT DISCLOSURE: Meeting Expectations in the USPTO



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# USPTO Expectations for Patent Disclosure

- The U.S. patent system is designed to promote the progress of science and the useful arts.
- This concept is rooted in the United States Constitution, Article I, Section 8:

***“The Congress shall have the power.... to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries;...”***



# USPTO Expectations for Patent Disclosure

- A U.S. patent grants an inventor the right to exclude others from making, using, or selling the invention in the United States.  
(35 U.S.C. § 271)
- In exchange, an inventor must:
  - disclose the manner and process for making and using the invention (35 U.S.C. § 112, ¶1), and
  - particularly point out and distinctly claim the subject matter the applicant regards as the invention.  
(35 U.S.C. § 112, ¶2).



# USPTO Expectations for Patent Disclosure

35 U.S.C. §112, ¶ 1

Disclosure Requirement



# USPTO Expectations for Patent Disclosure

- The disclosure requirement ensures that the public is fully informed of the details of the invention.
- The purpose is to promote further innovation.



# USPTO Expectations for Patent Disclosure

- The disclosure requirement has three separate components, set forth in the first paragraph of 35 U.S.C. § 112:
  - Written description
  - Enablement
  - Best Mode



# USPTO Expectations for Patent Disclosure

- For written description, the specification must use full, clear, concise, and exact terms to explain the manner of making and using the invention.
- For enablement, the specification must describe how to make and use the invention without undue experimentation.
- For best mode, the specification must set forth the best mode contemplated by the inventor of carrying out the invention.



# USPTO Expectations for Patent Disclosure

- All three requirements must be met by the application upon filing.
  - The application includes the written specification, the drawings, and the claims present on the filing date.
- All three requirements are evaluated from the perspective of one of ordinary skill in the art to which the invention pertains or with which it is most nearly connected.



# USPTO Expectations for Patent Disclosure

- The Court of Appeals for the Federal Circuit (CAFC) recently affirmed that the written description requirement is a separate and distinct requirement from the enablement requirement.
- See *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1353 (Fed. Cir. 2010) (en banc).



# USPTO Expectations for Patent Disclosure

- The difference between the written description requirement and the enablement requirement:
  - Written description requires the specification to:
    - Describe the claimed invention in a manner understandable to a person of ordinary skill in the art, and
    - Show that the inventor actually invented the claimed subject matter.
  - Enablement requires the specification to:
    - Teach one of ordinary skill in the art how to make and use the claimed invention without undue experimentation.
      - Various factors are weighed to determine whether undue experimentation is needed, for example the nature of the invention, level of predictability in the art, and existence of working examples.



# USPTO Expectations for Patent Disclosure

- Failure to disclose best mode is **no longer a basis** on which a patent claim may be canceled or held invalid or otherwise unenforceable. America Invents Act, Sept. 16, 2011
- During examination, application of the best mode requirement is very limited.
  - Requires evidence of concealment.
  - Requires knowledge of what the inventor considers the best mode.
  - These factors are rarely present.



# USPTO Expectations for Patent Disclosure

35 U.S.C. § 112, ¶ 2

Claiming Requirement



# USPTO Expectations for Patent Disclosure

- The claiming requirement ensures that the public fully understands the extent of exclusive rights granted to the inventor, or in other words, the clear boundary of subject matter that is protected against infringement.
- The purpose is to provide the public with notice of the patent rights so that infringement can be avoided.



# USPTO Expectations for Patent Disclosure

- The requirement that an applicant claim the subject matter regarded as the invention has two components, as set forth under the second paragraph of 35 U.S.C. § 112:
  - The claim(s) must particularly point out and distinctly claim the invention.
    - This is often referred to as the definiteness requirement.
  - The claim must be directed to the subject matter that applicant regards as his or her invention.



# USPTO Expectations for Patent Disclosure

- The boundaries of the claim coverage **MUST** be clear.
  - The claim language is interpreted based on the context of the claim, the supporting disclosure, and the state of the art, including extrinsic sources when appropriate.
  - The evaluation is not based on breadth of coverage, but rather whether one of ordinary skill in the art can understand what subject matter is covered by the claim.



# USPTO Expectations for Patent Disclosure

## Recent Initiatives at the USPTO



# USPTO Expectations for Patent Disclosure

- As part of the USPTO's ongoing efforts to enhance patent quality and continually improve patent examination, supplementary examination guidelines were issued last spring for ensuring compliance with:
  - 35 U.S.C. § 112, ¶ 1 for clear support of claim language in the specification;
  - 35 U.S.C. § 112, ¶ 2 for definite claim language; and
  - 35 U.S.C. § 112 ¶ 1 and 2 for functional language compliance, especially with computer-implemented invention claims.



# USPTO Expectations for Patent Disclosure

- The Supplementary §112 Examination Guidelines were published in the Federal Register on February 9, 2011.
  - See Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications, 76 FR 7162 (Feb. 9, 2011), available at <http://www.uspto.gov/patents/law/notices/2011.jsp>.
  - The corresponding Memoranda to the Examining Corps is available at <http://www.uspto.gov/patents/law/exam/memoranda.jsp>.
  - Additional guidance is found in the MPEP: see MPEP § 2161 et seq. for 35 U.S.C. § 112, ¶ 1; MPEP § 2111 for claim interpretation; MPEP § 2173 et seq. for 35 U.S.C. § 112, ¶ 2.



# USPTO Expectations for Patent Disclosure

- The Supplemental Guidelines emphasize that claims should be given the Broadest Reasonable Interpretation (BRI) consistent with the specification as it would be interpreted by one of ordinary skill in the art.
  - During patent examination the pending claims are interpreted as broadly as their terms reasonably allow - the USPTO uses a lower threshold of ambiguity than courts.
  - This is because applicant has an opportunity and a duty to amend ambiguous claims to clearly and precisely define the metes and bounds of the claimed invention during prosecution.



# USPTO Expectations for Patent Disclosure

- Claim terms will be given their plain meaning unless the application clearly sets forth a different definition in the specification as filed.
  - Plain meaning means the ordinary and customary meaning given to that term by those of ordinary skill in the art at the time of the invention.
  - Sources of the meaning include words of the claims, specification, drawings, the prior art, and when appropriate extrinsic sources.
  - BRI does not mean the broadest possible interpretation, but rather what would be reasonable to one of ordinary skill in the art.



# USPTO Expectations for Patent Disclosure

- When drafting claims it is important that the claim language find clear support in the specification.
  - The meaning of the terms should be able to be ascertained by reference to the specification.
  - The specification must provide guidance on the meaning of the terms (e.g., by using clearly equivalent terms).
  - The exact terms, however, are not required to be used in the specification.



# USPTO Expectations for Patent Disclosure

- Types of claim language that can raise issues of definiteness and disclosure:
- Functional claim language
  - A claim term is functional when it recites a feature “by what it does rather than by what it is.”
  - There is nothing intrinsically wrong with the use of such claim language. In fact, § 112, 6<sup>th</sup> paragraph, expressly authorizes a form of functional claiming.
  - Issues arise when the boundaries of the claim are unclear, especially when there is no structure with the claimed function.



# USPTO Expectations for Patent Disclosure

- When a functional claim is not limited to a particular structure for performing the claimed function, the claim may cover all devices that perform the claimed function.
- This raises a concern regarding whether the scope of enablement provided by the disclosure is commensurate with the scope of protection sought by the claim.
- The knowledge of one skilled in the art cannot be relied upon to supply information on the novel aspects of the claimed invention.



# USPTO Expectations for Patent Disclosure

- **“Means plus function” claim limitations**
- Claims that invoke 35 U.S.C. 112, 6<sup>th</sup> paragraph can raise issues when the disclosure does not provide structure that clearly supports the claimed function.
  - This type of claim limitation should recite a non-structural term (such as “means”) coupled with a function.
  - The scope of the claim is interpreted to include the structure specifically disclosed in the specification for achieving the recited function and equivalents to that structure.



# USPTO Expectations for Patent Disclosure

- Subjective Terms and Terms of Degree
  - A term of degree must have a standard for measuring the degree.
  - A subjective term must have an objective standard for measuring the scope of the term.
  - The standard must be clearly set forth in the specification or be recognized in the art.



# USPTO Expectations for Patent Disclosure

**TIPS FOR ENSURING THE  
DISCLOSURE IS ADEQUATE AND  
THE CLAIMS ARE DEFINITE AND  
FULLY SUPPORTED**



# USPTO Expectations for Patent Disclosure

1. Ensure that there is adequate written description under §112, 1<sup>st</sup> paragraph.
  - The specification should set forth the specific details of how the invention is accomplished, rather than simply the desired results.
2. Determine whether the full scope of the limitation is enabled.
  - The entire scope of the claim, under the broadest reasonable interpretation, must be enabled; so, claims with a very broad scope must teach how the full breadth of the invention can be made and used.



# USPTO Expectations for Patent Disclosure

## 3. Ensure the claims are definite.

- Review the claim terms in light of the disclosure to ensure that the boundaries of the claims are clear based on the words themselves and the supporting disclosure.
- The test is whether a clear boundary can be drawn between what is covered by the claim and what is not covered by the claim.



# USPTO Expectations for Patent Disclosure

## 4. Respond appropriately to the deficiency

- New matter cannot be added to an application after filing to remedy an inadequate disclosure.
- Evidence of facts known in the art can be provided to show that the original disclosure or claims are adequately supported.
- Claims can be amended to clarify the language, remove ambiguous terms, or make consistent with the original disclosure.



# USPTO Expectations for Patent Disclosure

## 5. Assist the Examiner in making a clear record

- Examiners are required to ensure that the record is clear regarding how a disclosure or claim issue has been resolved.
- Remarks can be added by applicant to explain, for example, that a term is known in the art or that the specification was adequate at filing.
- For means-plus-function claims, identification of the supporting structure can be provided to ensure that the claim interpretation is consistent with applicant's intent.



# USPTO Expectations for Patent Disclosure

## 6. Open a line of communication with the Examiner

- Examiners are encouraged to work with applicants to resolve issues, particularly issues involving disclosure and claim interpretation.
- Often, disclosure and claiming issues can be resolved by an amendment or explanation once the applicant and the examiner come to a common understanding. This can often be achieved more quickly through personal interaction.



Thank You

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