

# TOPIC 9



## Drafting Description in Relation to Claims

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# CLAIMS VS REST OF THE SPECIFICATION

- The most important part of a patent specification is the claims.
  - “The name of the game is the claim.” Giles Rich, Chief Judge of US CAFC.
- The remaining parts of a patent specification function to support the claims. These:
  - explain the claims.
  - fulfil the “informing the public” element to receive a right to exclude (*quid pro quo*).

# PARTS OF SPECIFICATION – IN ORDER



- Title
- Field of the Invention
- Background
- Summary
- Brief Description of the Figures/Drawings
- Detailed Description (including examples)
- Claims
- Abstract
- Sequence Listing

# TITLE



- Short and precise
- Don't use words like “new” and “novel”
- Examples:
  - “Cheese product and process for production”
  - “Suitcase”
  - “Recombinant yeast”
  - “Semiconductor unit”
  - “Phenyl-substituted amides”

# FIELD OF INVENTION



- Specify the technical field to which the invention relates:
  - Place the invention in its proper setting.
  - Don't include a description of the invention, its objects and advantages.
- Examples:
  - “The present invention relates to shoes adapted for high impact sports.”
  - “The present invention relates to improved methods of making sheet metal for heavy machinery and other uses.”
  - “The present invention relates to a modified yeast having beta-galactosidase activity.”

# BACKGROUND



- Sets the scene and provides motivation for the invention
  - What is the state of the art in the field?
  - What are the problems or difficulties?
  - ... thus there is a need for something different.
- Some jurisdictions (e.g. Europe) request that the closest known prior art be mentioned.
- Anything in this section might be seen as an admission that it is prior art!
- Don't mention your invention in this section.
- Be careful that what you write here doesn't make the invention obvious.

# BACKGROUND (CONTINUED)

Example:

- Invention is the use of compound X for treating HIV.
- The most common method for treating HIV is to administer antiretrovirals (such as A, B and C) to HIV-positive patients with a CD4 count of less than 400. However, antiretrovirals have negative side-effects in many patients, are difficult to manufacture and are expensive.
- There is therefore a need for an alternative HIV-treatment.

# SUMMARY OF INVENTION



The Summary of the invention is usually a copy of the claims, but:

- Don't include claim numbers.
- Amend claim language:
  - delete the preamble from dependent claims.
  - change wording from “is/are” to “may be”.
- Consider mentioning features of the invention which haven't been claimed (as a basis for future amendments), e.g., they might seem too minor (at this stage!) to justify a dependent claim.



# SUMMARY OF INVENTION (CONTINUED)

Keep it consistent with the independent claims:

- In one aspect, the present invention provides a device comprising part A and part B, wherein (independent claim 1)...
- Part A can be may be a magnet, an adhesive or a hook.
- The adhesive may be a re-usable adhesive.
- ....
- In another aspect, the present invention provides (independent claim 2)...
- In a further aspect, the present invention provides (independent claim 3)...

# BRIEF DESCRIPTION OF THE DRAWINGS

- Briefly describe each of the Figures.
- Examples:
  - Figure 1 is a plan view of a suitcase according to the invention.
  - Figure 2 is a side elevation of the suitcase...
  - Figure 3 shows an end elevation looking at the direction of arrow "X" of Figure 2
  - Figure 4 shows a cross-section taken through AA of Figure 1
  - Figure 5 shows a bar graph of...

# DETAILED DESCRIPTION

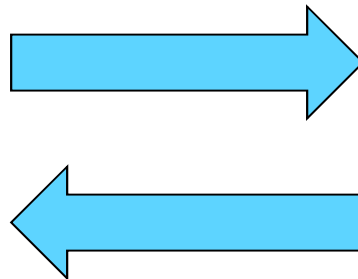


- Explains how the invention can be used.
- Describes and explains the meaning of the claim terms.
- Points out advantages of the invention over the art.
- Describes additional features and modifications of the general inventive idea, that are not thought necessary for novelty or inventiveness, but are preferred in some uses.
- Provides examples and experimental data, if available.
- If present, describes the drawings and all features from the drawings expected to be used in the claims.
- No new matter may be added after filing.

# CLAIMS AND DESCRIPTION

## Description:

- Invention disclosed in a sufficiently clear and complete manner so a person of ordinary skill can carry it out



## Claims:

- Clear and concise
- Fully supported by the description

No contradiction between the two parts

# ROLE OF DESCRIPTION

Two key requirements of description:

- Enabling disclosure (sufficiency)
- Support (written description)

Claims are no broader than justified by the invention's technical contribution

Can a skilled person perform the invention?

# ENABLING DISCLOSURE REQUIREMENTS (SUFFICIENCY)

The [claimed] invention shall be disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

- Enabling to “a person skilled in the art”
- On the basis of the information disclosed and the common general knowledge
- No undue burden / undue experimentation / inventive efforts required, e.g., some experimentation is allowed and even expected.

# SUPPORT REQUIREMENTS

- Claims should not be broader than the scope justified by the invention's technical contribution to the art
- Claims should not extend to subject matter, which, after reading the description, would not be at the disposal of a person skilled in the art if:
  - An essential feature is missing.
  - Contradiction between claims and description.
  - The scope of the claim covers an area which has not been invented (speculative).

# DETAILED DESCRIPTION – DESCRIPTION OF EMBODIMENTS

- Describes in detail the invention:
  - As many permutations of each element of the invention, and the invention as a whole as envisaged (and feasible) to include.
  - Avoid saying features are “essential” or “vital”.
  - All non-essential features (fallback-positions).
  - Refer to drawings and/or examples.
- Use reference numbers based on those used in the drawings.



# DETAILED DESCRIPTION – EXAMPLES

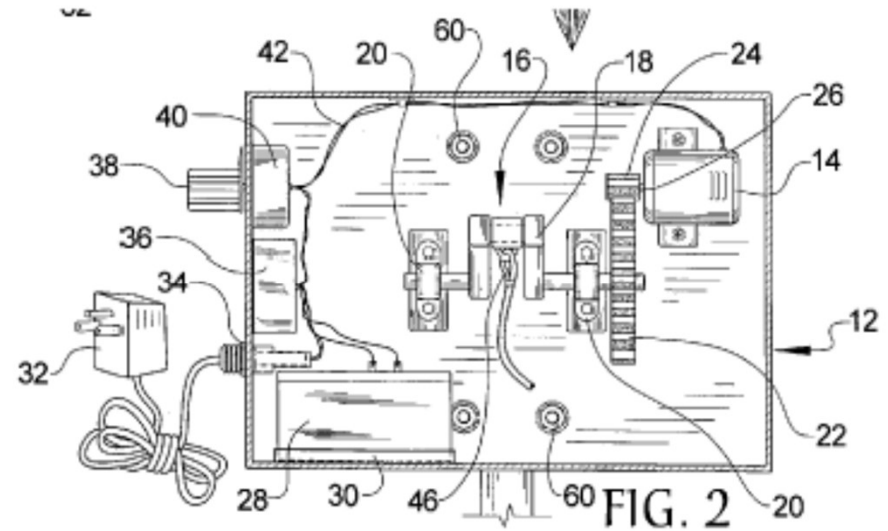
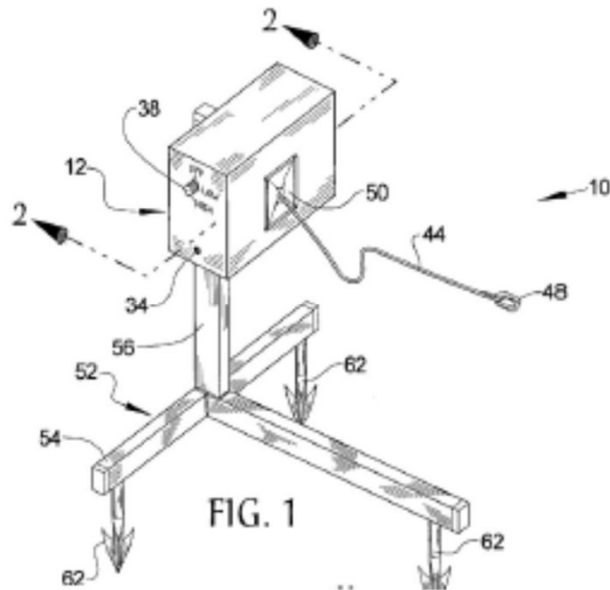
- A first embodiment of the suitcase 10 is shown in Figure 1, whereby the handle 4 includes a main shaft 6, and...
- “The fastening means as used in the present invention can comprise a screw, a bolt, a...
- The sheet metal of the present invention can comprise any suitable sheet metal with a hardness of xxx. Suitable sheet metals include, but are not limited to, steel, iron, ...

# DETAILED DESCRIPTION – ACTUAL EXAMPLE

US Patent No. 7,159,254

- [Claim 1] A swinging assembly comprising:
  - **a housing;**
  - **a motor** disposed within the housing;
  - a source of electrical power for powering the motor;
  - a crankshaft disposed within the housing and
  - operationally connected with the motor such that motor operation causes crankshaft rotation;
  - a cable having a first end...
- Description
  - Figures 1 and 2 show a swinging assembly 10 which comprises **a housing 12** having **a motor 14** located therein. A crank assembly 16 is located within **the housing 12** and is operatively connected with **the motor 14**. The crank assembly 16 includes a crankshaft 18 that has either end anchored within a crank bearing 20.

# DETAILED DESCRIPTION – ACTUAL EXAMPLE (CONTINUED)



# TIPS IN DRAFTING DETAILED DESCRIPTION

- Preferable order for explanation:
  - Structure → Action (How to use) → Advantages
- Start with explanation in general terms, then move on to the details (related to claims)
  - e.g. The swinging system 1 comprises ...
- Clarify the structure
  - e.g.: A assembly 10 includes a motor 14 located in a housing 12

# DRAWINGS



- In mechanical, electrical, and computer science inventions, drawings are usually considered necessary (not always in chem/bio).
- The drawings should be numbered with consistent reference numerals, also used in the detailed description - and in some jurisdictions, in the claims (10, 12, 14,...).
- All features necessary to explain the invention and recited in the claims should be numbered and described.
- Flow charts are often used for processes.

# DRAWINGS

- Drawings
- Flow sheets
- Diagrams
- Results (e.g. graphs)
- Photographs
- (Often a requirement that the drawings are readily reproducible by photocopying.)

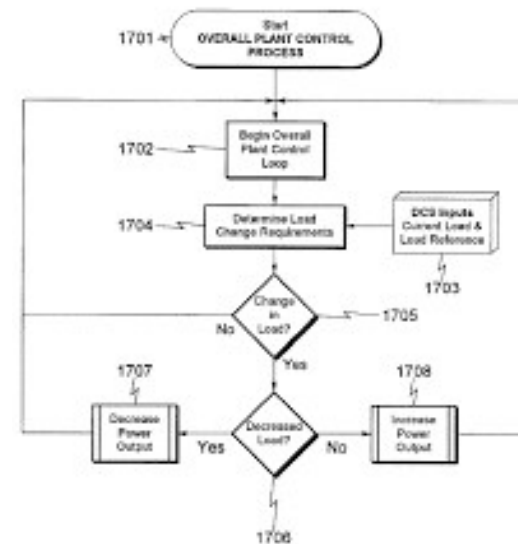


FIG. 1



FIG. 9

FIG. 17



# ABSTRACT



- A concise summary of the invention:
  - Claim language should be avoided.
  - Reference numerals can be used.
  - Short: try to limit to 150 words.
- Often used for classification of the patent or for another party to determine whether the patent is relevant to their product.

**Q&A?**



**Thank you for your attention!**

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