

■ Topic 7: Specific Types of Claims

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Main Category of Claims

- Product
- Method
- Use
- Composition
- Product-by-Process
- Biotechnology claim
- Software
- Omnibus



Product Claim

- Physical entities: tools, devices, apparatus, chemical compounds, system, kits, etc

- Recite in preamble what the apparatus “is” and/or “does”
 - “A radio, comprising”
 - “A device for hearing music ...”

- Recite in the claim’s body the essential inventive elements

Product Claims

■ Example:

1. An apparatus for supporting a camera, comprising:
a pivotal mounting configured to hold the camera; and
a set of legs arranged to support the pivotal mounting.



Product Claims



- Means-plus-function
- Expresses a technical feature in functional terms
 - An apparatus comprising means for cooking rice...
 - A vehicle comprising means for propulsion...
- Idea: Cover any structure, whether known or unknown at the time of filing the application, that fulfils the claimed function (eg “propulsion”)
- Exercise caution using these claims



Product Claims (Means plus Function)

- Scope depends heavily on national law
- Make sure that the specification describes every “means” that you believe necessary
 - Eg If the claim recites “attaching means” then the specification may want to mention that suitable attaching means are “tape, glue, rivets, staples, etc.”



Product or component?

- Should you claim a novel component or a product containing the component?
 - The component should generally be claimed
 - Because the component may be applicable to more than a single product
 - The product should also be claimed if possible
 - Because it may be easier to license/exploit

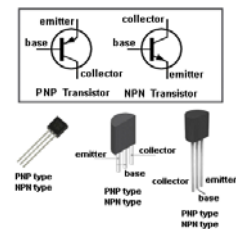
Product or Component

Example: A invents a novel transistor, which will replace a vacuum tube in an amplifier

1. A transistor, comprising:

...

2. An amplifier, comprising:
a transistor; and ...

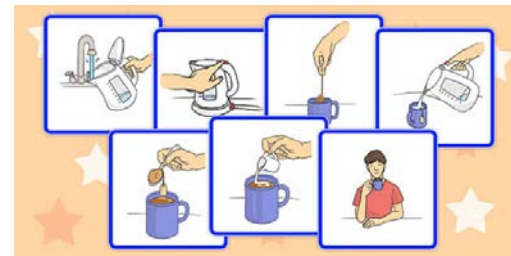


Method Claims

- Activities: methods of manufacture, methods of analysis, methods of medical treatment, etc.
- Recite a sequence of steps that complete a task or accomplish a result
- Think in terms of a recipe
- Steps may be recited in order of performance, but are usually interpreted as being performed in any order unless otherwise specified



Method Claims



Example:

1. A method of making tea, the method comprising:
boiling water;
adding sugar to the boiling water;
adding tea leaves to the boiling water to form a mixture;
filtering the mixture; and
adding milk to the mixture.

Product and Method Claims

- Often overlap
 - Product and method of making the product
 - Method of doing something and apparatus or system for performing the method

- Best to claim both method and apparatus
 - Helps avoid having to rely on indirect or contributory infringement

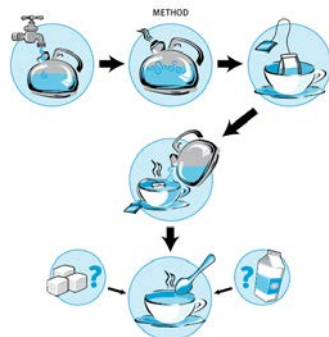
Product and Method Claims

Example:

1. A beverage comprising water, a tea extract and sugar.



2. A method of making a beverage including the steps of...



Use Claims



- An activity with a physical entity: use of a chemical compound in the treatment of disease, use of a tool to perform a task, etc

- Similar to method claims
 1. The use of substance X as an insecticide ...
 2. The use of a transistor in an amplifying circuit ...

- May be interpreted as method claims

- Not allowed in all jurisdictions

Use Claims

■ Medical “Use” Claims

- Suppose chemical compound XYZ is already known, and has been used to treat diabetes. Assume that Inventor A discovers that compound XYZ is an effective medicament for the treatment of malaria:

1. *Compound XYZ for use in the treatment of malaria.*

- Not all jurisdictions permit such types of claims

Use Claims

- “Swiss-type” claims

- Essentially protects the use of a known compound for in a new treatment:

1. The use of compound XYZ in the manufacture of a medicament for use in the treatment of ABC disease.

- Seen as a way of replacing/avoiding method of treatment claims
- Not all jurisdictions permit such types of claims

Composition Claims

- Used where claimed invention pertains to the chemical nature of the materials or components used
- Claims a “thing” like a device claim

Example

1. *A pharmaceutical composition comprising paracetamol, codeine and ibuprofen.*



Composition Claims



Example

Claim for a soldering flux composition might be:

1. *A soldering flux comprising:
a solvent;
an activator in the solvent; and
a cationic surfactant in the solvent, the surfactant selected from the group consisting of cationic quaternary ammonium fluoroalkyl compounds and cationic fluoroalkyl amine compounds.*

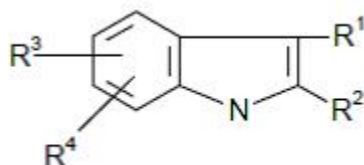
Markush Claims

- Recite a list of alternatively usable members
- Saves multiple claims
- Most often used in chemistry
- Need common property / structure

Markush Claims

Example

1. Compounds of the formula:



wherein

R¹ is selected from the group consisting of phenyl, pyridyl, thiazolyl, triazinyl, alkylthio, alkoxy, and methyl;

and

R²-R⁴ are selected from methyl, benzyl, and phenyl.

Product-by-Process Claims

- Claims a product defined in terms of a process of manufacture
- Some jurisdictions treat as product claims
- Other jurisdictions treat as method claims
- Verify that a product-by-process claim is the best approach for protecting an invention before employing this type of claim

Product-by-Process Claims

Example

1. A gold bar obtained by a process including the steps of...



Biotechnology claim

- relates to all practical uses of living organisms
- either commercial or therapeutic uses
- may include c DNA, recombinant DNA, DNA fragments, protein, monoclonal antibodies, anti sense DNA and RNA, Recombinant vectors and Expression vectors



Biotechnology claim

- Where an invention involves a biological material, and the material has been deposited, then the patent agent may often claim the material deposited.

Example

1. A seed of cotton cultivar designated PHY 78 Acala, wherein a representative sample of seed of said cultivar was deposited under ATCC Accession No. PTA-5666.

Software Claims

- Used where the claimed invention pertains to computer software and/or hardware
- Can use system, device and method claims to cover software inventions
- Note: Software *per se* not patentable in most jurisdictions – try frame as a hardware system

Software Claims

- Claim 1 is oftentimes a method claim

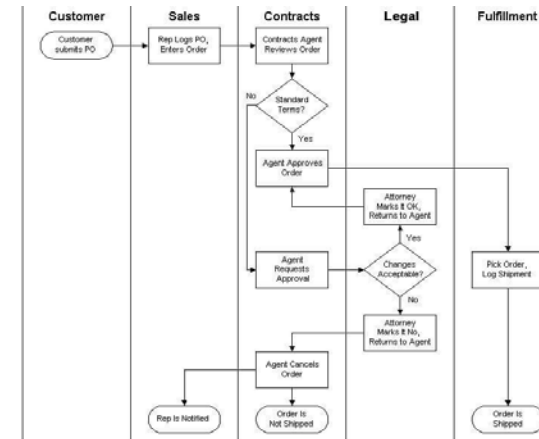
- Why?

- Most software patents protect the dynamic aspects (the behaviour) of computer programs. A computer program performs an algorithm, which is essentially a method.

- Method claims are the "natural" category for the protection of many software inventions

- Always mention a piece of hardware carrying out the method in the method claim

- Why?



Software Claims

- Device claims are also important
- Many jurisdictions, including the EPO, allow referring back to method claim(s)
 - Typically, software inventions are implemented on general-purpose hardware (e.g., PC or handheld electronic device), so no need to formulate special apparatus features.
 - Therefore, one way of drafting an apparatus/device/system claim is by simply referring to the method claim(s).
 - Can refer to the full set of (independent and dependent) method claims in 1 apparatus/device/system claim
 - have full set of dependent claims also for apparatus but avoid claim fees

Software Claims



Example

1. A computer-implemented method for transferring a server from a standby mode to a fully activated mode, the method comprising the steps of:
 - sending, from a client to the server, which is in a standby mode, an activation signal, wherein the activation signal is adapted to transfer the server from the standby mode to the fully activated mode;
 - receiving, by the server, the activation signal; and
 - transferring the server from the standby mode to the fully activated mode in response to the reception of the activation signal.

Software Claims

Example (assume claims 1 to 10 are method claims)

11. An apparatus/device/data-processing system comprising means for carrying out [each of the steps of] the method according to any one of claims 1 to 10.

12. An apparatus/device/data-processing system comprising a processor and a memory and being configured to perform [the steps of] the method according to any one of claims 1 to 10.

Software Claims

Alternative example, if referring back is not allowed:

11. *A data-processing system comprising:*

means for sending, from a client to the server, which is in a standby mode, an activation signal, wherein the activation signal is adapted to transfer the server from the standby mode to the fully activated mode;

means for receiving, by the server, the activation signal; and

means for transferring the server from the standby mode to the fully activated mode in response to the reception of the activation signal.

Software Claims

- Can also use specialised claim formats to provide an additional scope of protection

- “Computer readable media” format
 1. *A computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method for using a computer system to [a specified function], the method comprising:
[list the inventive method steps].*



Software Claims

■ “Data Structure” Format

1. *A memory for storing data for access by an application program being executed on a data processing system, comprising:
a data structure stored in the memory, the data structure including information resident in a database used by the application program and including:
 a first data object configured to ...
 a second data object configured to ...; and
 a third data object configured to*

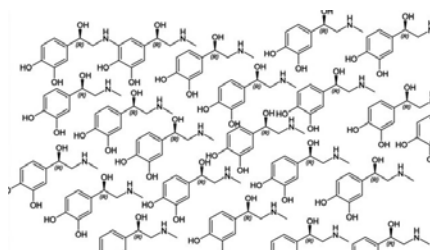
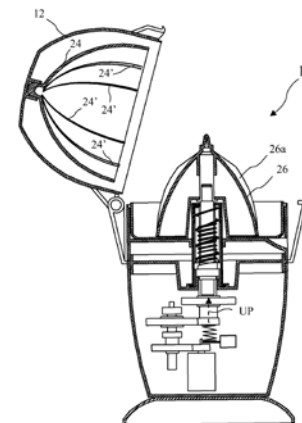
Omnibus Claims

■ Refer to the description, drawings or examples without providing any specific limitations

■ Narrowest claims

■ Straightforward:

1. A juice machine as shown in Figures 1 to 4.
2. A compound as illustrated in any one of Examples 1 to 20.



Omnibus Claims

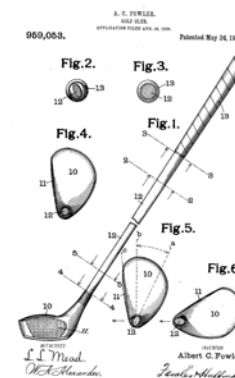
■ Separate different embodiments out:

1. A golf club substantially as herein described and as illustrated in Figures 1 and 2, or Figures 3 to 6, or Figure 7.

■ Not allowed in most jurisdictions (ARIPO, US, CN, JP)

■ Permitted in ZA and NZ and in exceptional cases in EPO

■ Be careful not to claim the prior art if included in examples



Thank you very much!