

## Chapter 11

### Claims

- 11.01 Basic requirements
- 11.02 Principles of construction
- 11.03 Clarity
  - 11.03.01 Antecedents
  - 11.03.02 Ambiguity in claims
  - 11.03.03 Negative limitations
- 11.04 Completeness of claims
- 11.05 Support
  - 11.05.01 Claims referring to description or drawings
  - 11.05.02 Scope in relation to description
  - 11.05.03 Ranges not specifically described
- 11.06 Dependent claims
- 11.07 Combinations
  - 11.07.01 Exhaustive combinations
  - 11.07.02 Aggregation
- 11.08 Product claims
  - 11.08.01 Product-by-process claims
- 11.09 Means claims
- 11.10 Process, Method, Method of Use and Use Claims
  - 11.10.01 Process and method claims
  - 11.10.02 Method of use and use claims
- 11.11 Markush claims
- 11.12 Selection patents
- 11.13 Jurisprudence

## Chapter 11

### Claims

#### 11.01 Basic requirements

The claims must define distinctly and in explicit terms the subject matter of the invention for which protection is sought (section 27(4) of the *Patent Act*). Patentable claims must define novel subject matter. To be considered novel the whole of subject matter defined by a claim shall not form part of the state of the art. With respect to each claim in an application for patent in Canada the state of the art may be defined generally as everything disclosed in such a manner that it became available to the public in Canada or elsewhere before the **CLAIM DATE**. The **CLAIM DATE** of a claim in a Canadian patent application is the filing date of the application in Canada, unless, priority is claimed on an earlier filed application in Canada or elsewhere. In the latter case, the claim date is the filing date of the earliest application which supports the subject matter of the claim Sections 2 and 28.1 of the *Patent Act* and Chapter 15 for more detail. The claims should also specify in a positive manner all the elements, features, and critical aspects of the invention which are necessary to ensure the result as set forth in the description. Each claim (read with the introduction to the claims) must be restricted to a single sentence.

Claims may be drafted to contain the three following major parts:

- 1) preamble or introductory phrase
- 2) transitional phrase
- 3) body (or purview)

The preamble identifies the category of the invention and may state the purpose of the invention with regard to this category.

Examples:

A machine for waxing paper ...

A composition for fertilizing the soil ...

The transitional phrase joins the preamble to a recitation of the elements of the invention to be protected. It also indicates, in an abbreviated way, whether the recitation is left open or closed to additional elements.

Examples:

which comprises, comprising, including, having ...  
consisting of, consisting essentially of ...

The body of the claim lists the main elements of the invention, such as, parts of a device, steps of a process or method, ingredients of a composition, or groups in the chemical formula of a compound.

Notwithstanding the above, the Patent Office will accept any form of claim that conforms to section 27(4) of the *Patent Act* and that sets forth an invention in distinct and explicit terms and otherwise conforms to the *Patent Act* and the *Patent Rules*.

For a consideration of claims with respect to the prior art (novelty and non-obviousness) see Chapter 15.

For consideration of claims with respect to utility, operability and non-patentable subject matter (section 2 of the *Patent Act*) see Chapter 16.

## **11.02 Principles of construction**

Claims are the starting point for construing a patent as they define the invention and exclusive right sought. The relevant date for the analysis of a claim is the claim date (see Chapter 15). When construing a claim the essential elements must be determined. However, in order to determine the nature of the invention and the essential elements of the invention, the specification must be construed as a whole. Analysis of a patent is to be determined from the point of view of one skilled in the art, with a mind willing to understand the invention.

Even though claims are construed with reference to the description, reference to the description is only permitted to assist the understanding of terms used within the claims

if these terms have a unique meaning. Reference to the description is not permitted for terms that have a plain, common, and unambiguous meaning as these terms would be known to someone of skill within the art, nor is reference to stray phrases within the description considered support for terms within the claims. Furthermore, reference to the description cannot be used to vary the scope of the claims.

The application of these principles can be found in the following: *Beecham v Procter Gamble* 1982; *AT &T v Mitel* 1989; *Airscal v M&I Heat* 1993; *Hi-Quail v Rea's Welding* 1994; *Mobil Oil v Hercules* 1994; *Cochlear v Cossem*; and *Almecon v Nutron* 1996.

### **11.03 Clarity**

No speculation should be necessary to determine what is covered by each claim. It must not define some parts of the desired monopoly while only alluding to or vaguely mentioning others. If the invention is difficult to claim, due allowance is given for the limitations of language but involved language should not be used when the invention can be claimed simply. Wording should not be so flexible that several interpretations of it are possible, i.e. the claim should not have more than one meaning or be capable of both broad and narrow interpretations.

#### **11.03.01 Antecedents**

When an element is referred to in definite terms without having been introduced previously, the claim is objectionable under section 27(4) of the *Patent Act*. An example of this is, "A device for cracking nuts comprising a cup shaped base and a striker element, said lever tripping the hammer at timed intervals". In this claim there are no proper antecedents for "said lever" and "the hammer".

Implied antecedents may be permitted where the word or phrase, by definition, always contains the missing antecedent. For example, a claim beginning with: "A wheel, the axis being..." or "A compound having the formula I..." are acceptable.

### 11.03.02 Ambiguity in claims

The claims must be framed in distinct and clear language. They should not include vague or equivocal forms of wording which will create doubt. Examples of unclear language are relative terms or expressions such as "thin", "strong", "a major part", "if desired". If such expressions appear in a claim, they must be further defined in clear and distinct terms or be removed from the claim.

The following are some of the most commonly used imprecise terms that may be encountered in claims:

- a) "Such as", "Or the like", "For example".
- b) "If desired", "When required".
- c) "About", "Approximately", "More or less".
- d) "Preferably".

Other terms which in certain circumstances may be indefinite are:

- a) "Containing as an active ingredient".
- b) "Therapeutically effective amount".
- c) "A major part".
- d) "Of the character described", "As herein described".
- e) "At least", "At least one of".
- f) "And/or", "Either....or".
- g) "An effective amount", "A sufficient amount", "A synergistic amount".
- h) "Not being...", "Not having...", "Not requiring...".

Whenever any of the above terms is encountered in a claim, a possibility exists that the claim may not satisfy the requirements of the *Patent Act* and Rules. Specifically, subsection 27(4) of the *Patent Act* and Section 84 of the *Patent Rules* should be considered.

Some of these terms have been considered in decisions by the courts or by Commissioner's decisions.

- a) "Containing as an active ingredient"

This phrase should, in some circumstances be refused as being ambiguous and indefinite because "an" implies the presence of other unspecified active ingredients in addition to the one specified in the claim.

Note: This phrase would be acceptable in a claim if "an" is changed to "the" and the other ingredients of the composition are specified while the utility for which the composition is intended is either inherent from the wording of the claim or expressly stated therein (Rohm & Haas v. Commissioner of Patents 30 C.P.R. 113, Ex.C.).

(b) "Therapeutically effective amount"

As was stated in Gilbert v. Sandoz 64 C.P.R. 14, Ex.C., this is an ambiguous term in a claim. The claims in suit included this phrase in conjunction with a particular phenothiazine derivative when produced by specified process claims in association with a pharmaceutical carrier. While it is recognized that the essence of a great many inventions based on compounds for medicinal purposes resides more in the discovery of the unexpected medicinal utility of the compound than in its effective dose, nevertheless, when such a functional statement occurs in a claim, the medicinal utility of the composition of matter must be stated or be inherent from the preamble of the claim.

A particular amount of an active ingredient in combination with another compound (X) may have an entirely different therapeutic value than a very different amount of the same active ingredient in combination with compound X. Therefore, this functional phrase should only be permitted in a composition of matter claim when the utility of the composition of matter is indicated in the claim and provided that the actual amount taught and prescribed in the disclosure is not an important aspect of the invention. This amount may vary over a considerable range apparent to one skilled in the art because of similar known ranges for analogous compounds for the same purpose. However, if the disclosed range is an important feature of the invention or if the invention is only operable within a prescribed range so as to produce the promised results, then of course

this disclosed range must be included in all of the independent claims.

(c) "A major part"

This is an acceptable phrase in a claim if it is used in relation to one part of a two- part system where it is clear that it means more than 50%. However, when it refers to one part in a system consisting of three or more parts, it is refused as indefinite because it is not clear if it means a greater percentage than any of the other components or more than 50% of the overall total.

### **11.03.03 Negative limitations**

Claims containing negative expressions such as "not being...", "not having...", "not requiring..." may be objectionable under section 27(4) of the *Patent Act* in that claims should generally set forth what the invention is or does, and not what it is not or does not do, unless there is no positive way to describe it. Sometimes a dependent claim (Chapter 11.06) contains provisions which effectively cancel or negate some of the features of a preceding claim, thus making the dependent claim broader than the preceding claim. This is objectionable under section 87 of the *Patent Rules*.

### **11.04 Completeness of claims**

To define the invention distinctly and in explicit terms, it is required that sufficient elements be recited for operability. The inventive features must appear in each claim . In the case of a composition, a claim must define a minimum of two ingredients, at least broadly. If a claim does not do this, it is objected to as indefinite and contrary to subsection 27(4) of the *Patent Act*.

### **11.05 Support**

A claim must be fully supported by the description as required by section 84 of the

*Patent Rules*. All the characteristics of the embodiment of the invention which are set forth in the claim must be fully set forth in the description (Section 84 of the *Patent Rules*). However, since the claims included in the application at the time of filing are part of the specification (see definition of specification in section 2 of the *Patent Rules*), any matter in the originally filed claims that was not included in the description as filed may be added to the description.

A claim is objected to for lack of support by the description if the terms used in the claim are not used in the description and cannot be clearly inferred from the description. Terms used in the claims and in the description must be used in the same sense.

#### **11.05.01 Claims referring to description or drawings**

It is generally not acceptable for a claim to contain reference to the description or drawings (subsection 86(1) of the *Patent Rules*). However, in some instances, if the claim is complete in itself and can be read and understood without the reference, the claim is acceptable. The claims must not, in respect of the technical features of the invention, rely on references to the description or drawings except where absolutely necessary. In particular, they must not rely on references such as: "as described in the description " or "as illustrated in Figure 3". The following are examples of exceptions:

(a) Claims which include reference numerals

Reference numerals used in the drawings are permissible in a claim provided they are in brackets or parenthesis (subsection 86(2) of the *Patent Rules*), and the claim is otherwise explicit and complete. However, if a claim is not complete without referring to the parts of the drawings identified by numerals in brackets, it must be objected to as contravening subsection 27(4) of the *Patent Act*.

(b) Claims which make reference to charts, tables and graphs

Tabulations in the form of charts often appear in the descriptions of applications. Such tabulations may also be included in the drawings as are graphs, phase diagrams, absorption spectrograms and the like. In circumstances where the nature of the invention is very complex and it is practically impossible or extremely cumbersome to define the scientific relationship of the different factors



in a precise and distinguishing manner, without making reference to other parts of the application, then reference to charts, graphs or tables may be permitted in the claims. However, if such a chart or table, for example, is brief and concise, i.e. about 5-10 lines, the applicant may be required to enter it into the claims (subsection 86(1) of the *Patent Rules*).

(c) Reference to particular unconventional disclosed tests

If a test can be accurately defined in a few lines, then it must be included in the claim and a mere reference to such a test as described should not be permitted. However, when such a test is complex and lengthy to describe, for example if it requires more than one page of the description to characterize it, then the applicant may make reference to the test as therein defined rather than reproduce the test in the claim.

(d) Reference to Sequence listings and Biological Deposits

Reference may be made, within a claim, to sequence listing identifier numbers and biological deposit catalogue numbers (subsections 86(3) and (4) of the *Patent Rules*). These procedures are specified in detail in chapter 17 (Biotechnology).

### **11.05.02 Scope in relation to description**

A claim may be as narrow as the applicant wishes within the scope of the invention disclosed. It must not, however, be broader than the invention as described or supported by the description. Furthermore, a claim will fail if, in addition to claiming what is new and useful, it also claims something that is old or useless (*Mineral Separation v. Noranda Mines* 12 C.P.R. 99; 12 C.P.R. 182; 15 C.P.R. 133).

Each claim must be read giving its words the meaning and scope which they normally have in the relevant art, unless in particular cases the description gives the words a special meaning by explicit definition. If a claim covers subject matter outside the scope of the described invention, it should be objected to for failing to satisfy the provisions of section 84 of the *Patent Rules*.

### 11.05.03 Ranges not specifically described

When an application includes claims containing a specific limitation with respect to operating conditions, which limitation falls within a broader range described, no objection is made to the narrow claim solely on the grounds that it is not specifically shown in the description or that the description does not indicate the significance of the described range. For example, an application may describe a process carried out within certain temperature limits, e.g. between 500°C and 800°C. No objection is made if some claims are directed to the process carried out between 500°C and 800°C and others to the process carried out at a temperature falling within a smaller range within the described range, e.g. between 650°C and 700°C. However, should the broad claim fall in view of prior art, the narrower claim would also fall unless it can be shown that by restricting the process to the narrower range, a new and unobvious result is obtained.

### 11.06 Dependent claims

Section 87 of the *Patent Rules* permits a claim to refer to one or more other claims, in order to define an invention more narrowly by adding further characteristics to those already present in the claims to which reference is made. Such a claim is designated as a dependent claim.

Claims are also permitted to refer to other claims or parts of claims of the same or of another category, in order to avoid repeating lengthy definitions already given and to simplify claiming, provided they do not become ambiguous as a result of such dependency, thereby contravening section 27(4) of the *Patent Act*. Such claims however are not dependent claims and section 87 of the *Patent Rules* does not apply. The patentability of the claim referred to does not necessarily imply the patentability of the dependent claim containing the reference. The following example indicates the form of claiming that is acceptable.

Claim 1: A product comprising composition A.

Claim 2: A process for the production of the composition defined in claim 1 comprising reacting B with C.

An objection is made whenever there is uncertainty as to which part of a preceding claim reference is made or whenever a dependent claim of one category, such as a process, contains by reference so many limitations of another category, such as a product, that it becomes difficult to determine which category the claim covers.

A dependent claim usually refers to other claims in its preamble. In view of subsection 87(1) of the *Patent Rules*, a dependent claim must state the additional features claimed. According to subsection 87(3) of the *Patent Rules*, a dependent claim is understood as including all the limitations inherent in the particular claim or claims in relation to which it is considered. When a claim refers to other claims it must only refer to preceding claims and it must do so to by number.

Examples:

- Claim 1: The process of reacting A with B in the presence of a catalyst. (acceptable)
- Claim 2: The process of reacting A with B in the presence of a metal containing catalyst. (acceptable)
- Claim 3: The process of claim 2 in which the catalyst contains iron. (acceptable)
- Claim 4: The process of claim 3 in which the catalyst also contains copper. (acceptable)
- Claim 5: The process of claim 1, 2, 3, or 4 in which the catalyst also contains zinc. (acceptable)
- Claim 6: The process of any one of claims 1 to 5 in which the catalyst also contains cobalt. (acceptable)
- Claim 7: The process of any of the above claims in which the catalyst is supported on an inert carrier. (not acceptable)
- Claim 8: The process of claim 5 in which the catalyst is supported on an inert carrier. (acceptable)

Claim 9: The process of claim 6 in which the catalyst is supported on an inert carrier. (acceptable)

Claim 10: The process of claim 8 or 9 in which the inert carrier is a silica. (acceptable)

Claim 11: The process of claims 3 and 4 in which the catalyst also contains manganese. (acceptable)

In the examples given above, no objection would be taken to claims 1-6 and 8-10 in view of the provisions of section 87 of the *Patent Rules*. In contrast, claim 7 which does not refer to the preceding claims by number, would, consequently, violate subsection 87(1) of the *Patent Rules* and would therefore be objected to.

The form of dependent claims accepted under section 87 of the *Patent Rules* will be considered acceptable in all applications presently pending in the Patent Office.

### **11.07 Combinations**

A combination is a union of elements or process steps co-operating to produce a unitary and practical result that is not the sum of the known characteristics of the elements or steps.

A patentable combination is one in which the elements or steps cooperate in an unexpected manner or cooperate in a known way to give an unobvious result or effect. If all the requirements of the *Patent Act* and Rules are met, a claim to such a combination can be allowed.

A subcombination is part of a combination. It may be a single element or step of the combination or may, itself, be a combination.

#### **11.07.01 Exhaustive combinations**

Claims must not exceed the scope of the invention by going further than the protection to which the inventor is entitled. Generally, an inventor is entitled to claim the invention,

be it apparatus, product or method and its immediate and cooperating environment. For example, claims to a new accelerator pump and the carburetor containing it are permitted. Also, claims to a new type of radio tube grid may be permitted with claims to the tube containing the grid. But claims to a new pump in a carburetor which is attached to an engine or claims to a radio receiver accommodating a tube having a new grid would be objected to unless the overall combination produced new and unexpected results, amounting to further invention, that may require restriction under section 36 of the *Patent Act*.

### **11.07.02 Aggregation**

An aggregation is not a true combination. It consists of the juxtaposition of parts that do not cooperate to produce a result that is other than the sum of the results of the parts. The function of an aggregation is the sum of the functions of the parts and its result is the predictable sum of the separate results. A mere aggregation of old parts cannot form the basis of a patentable invention.

Claims are objected to when the inventive matter is claimed in association with other elements and it is clear that there is no invention in the aggregation so resulting apart from the inventive matter itself. An applicant who submits claims to a new radio receiver may not submit claims that further define the receiver in terms of a standard chassis or cabinet housing the receiver. However, a new combination of container and receiver that unexpectedly gives new and useful results may be made the subject of a separate application.

### **11.08 Product claims**

In product claims, the product may be defined in three ways:

- (i) By structure. In the chemical field this includes empirical formulae, structural formulae, and chemically acceptable names.

- (ii) In terms of the process by which it is made. These are known as product-by-process claims.
- (iii) In terms of physical or chemical properties.

A claim that defines a product by a mixture of two or three of these forms is also possible.

The most explicit and definite form of claims for a product defines the product by structure. Since, under subsection 27(4) of the *Patent Act*, the applicant is required to distinguish any new product from all other products by claiming it distinctly and explicitly, the structure, if known, should be given in the claim.

#### **11.08.01 Product-by-process claims**

A product-by-process claim defines the claimed product wholly or partly in terms of the process used to produce the product. The process limitations may be included within the product claim itself or the whole claim may be made dependent upon another claim directed to the process. The following examples show the two possible forms:

- (i) The product made by heating A with B.
- (ii) The product when made by the process of claim 1.

The use of past participle adjectives, such as welded, bent, molded or coated, is not construed as changing a product claim into a product-by-process claim.

A product-by-process claim, where permitted, must define the product explicitly and distinguish it from all other products. Hence, products that are already known may not be claimed by making them dependent on a new process (*Hoffman-La Roche v. Commissioner of Patents* 23 C.P.R. 1).

A product-by-process claim must be directed to the final product of the process claim upon which the product claim is made dependent.

## 11.09 Means claims

A "means" claim is one in which at least part of an invention is defined as a means or mechanism for performing an act, instead of reciting the element that performs the action.

Invention may exist in a new combination of old means (*Lightning Fastener v. Colonial Fastener* 51 RPC 349; *Martin and Biro Swan v. H. Millwood* 1956 RPC 125). Claims composed of more than one statement of old means are allowable, without defining structure, if there is invention in the new combination.

If a claim is composed of a single statement of means, it is objected to for being indefinite and contrary to subsection 27(4) of the *Patent Act*. The report of the examiner should indicate in detail why the claim contravenes subsection 27(4) of the *Patent Act*. It may, for example, be directed to the result desired rather than to the combination developed and illustrated to achieve that result.

A claim is also objected to if it contains a broad means statement at the point of invention, i.e., a statement that distinguishes the claim from the prior art, but which is so broad that it embraces all possible means without qualification for solving the problem facing the inventor and is in effect no more than a restatement of the problem or desired result.

### Examples:

An application describes a sanding device that may be used in a direct-drive mode for removing stock from a work piece at a rapid rate or in an orbital mode for removing stock at a much slower rate to provide a smooth finish. The invention lies in the combined use of a known one-way clutch and a known reversible motor in an otherwise conventional rotary sander. Under prior art conditions, either two sanders were used or an attachment was employed to convert a device from a direct-drive sander to an orbital sander.

Claim (i) Means for operating a sanding device in either a direct-drive mode or an orbital mode.

This claim would be objected to under section 27 of the *Patent Act*. The applicant should claim a sander having the combination of a one-way clutch with a reversible motor.

Claim (ii) A surface-finishing device comprising a drive shaft, a driven element connected to receive drive from the drive shaft, a driven shaft mounted for rotation in said driven element about an axis eccentric to the axis of the drive shaft, means connecting the driven shaft to the driven element, a surface-finishing tool connected to be driven by the driven shaft, and automatic means for selectively connecting the surface-finishing tool directly to the drive shaft, or allowing said tool to rotate freely in an orbital path about the drive shaft axis.

This claim would be objected to for merely restating the desired result.

Claim (iii) A surface-finishing device comprising a drive shaft, a driven element connected to receive drive from the drive shaft, a driven shaft mounted for rotation in said driven element about an axis eccentric to the axis of the drive shaft, one-way clutch means connecting the driven shaft to the driven element, a surface-finishing tool connected to be driven by the driven shaft, and means for selectively driving the drive shaft in one direction or in an opposite direction.

This claim would be accepted as a novel combination of known means giving a new and unexpected result.

## **11.10 Process, method, method of use and use claims**

The Patent Office accepts process, method, method of use and use claims as explained under the following subheadings.

### **11.10.01 Process and method claims**

A method is the series of steps to be followed either alone or in conjunction within a process in order to achieve a desired result. A method should be distinguished from a process, which includes the method and the substances to which it is applied. The



overall process may be new even though the method is old.

A claim to a process which consists of applying a known method to chemically react known substances is patentable, providing the method has never before been applied to these substances and results in new, useful and unobvious products. (Ciba Ltd. v. Commissioner of Patents 27 C.P.R. 82; 30 C.P.R. 135).

### **11.10.02 Method of use and use claims**

When a claim to a compound has been found allowable in an application, then a claim to a method of use of that compound or a claim to the use of that compound is also allowable in the same application. When a claim to a compound has been found allowable to the inventor in one application, then claims in a different application of the same inventor to a use of that compound or methods of using that compound which are obvious from the utility disclosed for the compound, and upon which utility the patentability of the compound was predicated, are not allowed.

When a compound has been patented previously or is in the public domain, claims directed to the obvious use of this compound should be objected to for lacking patentable subject matter. Claims directed to a new and unobvious use of the same compound are allowable. Likewise, claims directed to a method of using the compound for a new unobvious purpose are allowable. Furthermore, when an invention is directed to a novel and unobvious use of a known compound, claims to this known compound with the further recitation of a novel use are allowable (re application for patent of Wayne State University 22 C.P.R. (3d) 407).

When a device or machine is only a new instrument for carrying out an old method, only the device or machine can be patented. Since the utility of a device or machine is obvious from the description of the device or machine, the patentability of a method using such device or machine is determined by the state of the art.

#### Guidelines for method of use claims

- (i) Method of use claims directed to medicinal use are rejected under Section 2 of the *Patent Act* in view of *Tennessee Eastman v. Commissioner of Patents* (1970) 62 C.P.R. 117; (1974) S.C.R. 111.

Example: Method of treating the symptoms of cognitive decline in a patient comprising administering to a patient an effective amount of compound X wherein said compound is used as a cholinergic agent. (rejected)

- (ii) Method of use claims directed to a medicinal treatment should be interpreted to include only those methods directed to curing or preventing diseases in humans or animals. Method claims directed to an industrial use should not be rejected.

Example: Method for enhancing the dressed carcass weight of meat-producing animals by increasing lean meat deposition and improving the lean meat to fat ratio comprising administering to said animals, before slaughter, either orally or parenterally, an effective amount of a compound X. (accepted)

- (iii) Other types of method of use claims directed to an industrial use are allowable but must include manipulative steps. (The reasoning for the requirement of the presence of manipulative steps is to distinguish method of use claims from use claims.)

Example: Method of using compound X as an intermediate to prepare compound Y wherein compound X is reduced by hydroboration or catalytic hydrogenation. (accepted)

- (iv) Method of use claims incorporating a use are also acceptable as long as they meet the requirement of a proper method claim (i.e., include a manipulative step). (accepted)

Example: Method of controlling agricultural bacteria which comprises incorporating into the locus to be treated an effective amount of compound X wherein said compound is used as a bacterial agent. (accepted)

- (v) Similarly, product claims containing either a use or method definition are acceptable, provided that the method is not a method of medical treatment).

Example: Compound X for the use as an insecticide wherein said compound is applied

to the locus of a tree trunk, (accepted).

Example: Compound Y for the treatment of viruses wherein said compound is administered to a patient intravenously, (not accepted because it contains a method of medical treatment).

#### Guidelines for use claims

- (i) Use claims are permitted. Moreover, use claims incorporating method steps are acceptable as long as the use has been clearly identified and it is not a method of medical treatment. If the claim is complete and understandable without the method steps, then the claim as a whole is acceptable. The method steps merely provide a restriction to the previously recited use.

Example: Use of compound X as a herbicide. (accepted)

Use of compound X as a herbicide wherein an effective amount of the compound X is incorporated into the locus to be treated. (accepted)

Use of compound Y as an antiarrhythmic agent. (accepted)

Use of compound Y as an antiarrhythmic agent wherein an effective amount of the compound Y is administered to a patient. (not accepted). The addition of the "wherein" clause makes the use a method of medical treatment.

Use of machine Z for cutting. (accepted)

Use of machine Z for cutting wherein ... (accepted)

### 11.11 Markush claims

In chemical cases, a claim directed to a genus expressed as a group consisting of certain specified materials is allowable (Ex parte Markush 1925, 340 U.S.O.G. 839) provided it is clear from the known nature of the alternative materials or from the prior art that the materials in the group possess at least one property in common which is mainly responsible for their function in the claimed relationship. Therefore, a Markush

claim will generally be construed with a generic expression covering a group of two or more different materials (elements, radicals, compounds) as illustrated in the following examples:

A solvent selected from the group consisting of alcohol, ether and acetone...

A strip of a conductive metal selected from the group consisting of copper, silver and aluminium...

Occasionally, the Markush format may be used in claims directed to subject matter in the mechanical or electrical fields in a manner such as that illustrated in the example below:

A means for attaching a wall panel to a framework wherein the attaching means is **selected from group consisting of** nails, rivets **and** screws...

### 11.12 Selection patents

A selection from members of a previously known class of substances may be patentable if the substance selected is unobvious and affords a new and useful result. There must be a special advantage arising from the selected substance and any advantage, novel property or use must be fully characterized in the description. The substance should be defined in an explicit manner within the claim.

### 11.13 Jurisprudence

The following decisions of the courts are of importance in considering the subject matter of this chapter:

#### claims construction

Mineral Separation v Noranda

12 CPR 99 1950  
69 RPC 81 1952

|                             |             |     |      |
|-----------------------------|-------------|-----|------|
| O'Cedar v Mallory Hardware  | ExCR        | 299 | 1956 |
| McPhar v Sharpe             | 35 CPR      | 105 | 1960 |
| Metalliflex v Wienerberger  | 35 CPR      | 49  | 1961 |
|                             | SCR         | 117 | 1961 |
| Lovell v Beatty             | 41 CPR      | 18  | 1962 |
| Burton Parsons v Hewlet     | 1 SCR       | 555 | 1976 |
| Xerox v IBM                 | 33 CPR (2d) | 24  | 1977 |
| Cutter v Baxter Travenol    | 68 CPR (3d) | 179 | 1983 |
| Johnston Controls v Varta   | 80 CPR (2d) | 1   | 1984 |
| Reading & Bates v Baker     | 18 CPR (3d) | 181 | 1987 |
| AT&T Tech v Mitel           | 26 CPR (3d) | 238 | 1989 |
| Energy v Boissonneault      | 30 CPR (3d) | 420 | 1990 |
| Lubrizol v Imperial Oil     | 33 CPR (3d) | 11  | 1990 |
|                             | 45 CPR (3d) | 449 | 1992 |
| Computalog v Comtech        | 32 CPR (3d) | 289 | 1990 |
|                             | 44 CPR (3d) | 77  | 1992 |
| Procter & Gamble v Kimberly | 40 CPR (3d) | 1   | 1991 |
| Welcome v Apotex            | 39 CPR (3d) | 289 | 1991 |
| TRW Inc v Walbar            | 39 CPR (3d) | 176 | 1991 |
| Martinray v Fabricants      | 14 CPR (3d) | 1   | 1991 |
| Reliance v Northern Tel     | 47 CPR (3d) | 55  | 1993 |
| Airseal v M&I Heat          | 53 CPR (3d) | 259 | 1993 |
| Dableh v Ont Hydro          | 50 CPR (3d) | 290 | 1993 |
| Unilever v Procter & Gamble | 47 CPR (3d) | 479 | 1993 |
|                             | 61 CPR (3d) | 499 | 1995 |
| Nekoosa v AMCA Int          | 56 CPR (3d) | 470 | 1994 |
| Anderson v Machineries      | 58 CPR (3d) | 449 | 1994 |
| Pallmann v CAE              | 62 CPR (3d) | 26  | 1995 |
| Hi-Quail v Rea's Welding    | 55 CPR (3d) | 224 | 1994 |
| Feherguard v Rocky's        | 53 CPR (3d) | 417 | 1994 |
|                             | 60 CPR (3d) | 512 | 1995 |
| Cochlear v Coseum           | 64 CPR (3d) | 10  | 1995 |
| Pallmann v CAE              | 62 CPR (3d) | 26  | 1995 |
| Almecon v Nutron            | 65 CPR (3d) | 417 | 1996 |

positive recitation

|                              |             |     |      |
|------------------------------|-------------|-----|------|
| Mineral Separation v Noranda | 12 CPR      | 99  | 1950 |
|                              | 69 RPC      | 81  | 1952 |
| Burton Parsons v Hewlet      | 1 SCR       | 555 | 1976 |
| Eli Lilly v O'Hara           | 20 CPR (3d) | 342 | 1988 |
|                              | 26 CPR (3d) | 1   | 1989 |
| Hi-Quail v Rea's Welding     | 55 CPR (3d) | 224 | 1994 |
| Pallmann v CAE               | 62 CPR (3d) | 26  | 1995 |

antecedents

|                      |             |     |      |
|----------------------|-------------|-----|------|
| Mobil Oil v Hercules | 57 CPR (3d) | 488 | 1994 |
|                      | 63 CPR (3d) | 473 | 1995 |

preamble

|                             |             |     |      |
|-----------------------------|-------------|-----|------|
| Re: Lelke                   | 72 CPR (2d) | 139 | 1981 |
| Shell Oil v Comm of Pat     | 2 SCR       | 536 | 1982 |
| Rucker V Gavels Vulcanizing | 7 CPR (3d)  | 294 | 1985 |
| Permacon v Enterprises      | 19 CPR (3d) | 378 | 1987 |
| Re: Neuro Med Inc           | 28 CPR (3d) | 281 | 1988 |
| Computalog v Comtech        | 44 CPR (3d) | 77  | 1992 |

explicit, distinct v ambiguous/several interpretations

|                               |             |      |      |
|-------------------------------|-------------|------|------|
| Rohm & Haas v Comm of Patents | 30 CPR      | 113  | 1959 |
| Xerox v IBM                   | 33 CPR (2d) | 24   | 1977 |
| Monsanto v Comm of Pat        | 42 CPR (2d) | 161  | 1979 |
|                               | 2 SCR       | 1108 | 1979 |
| Ciba Geigy v Comm of Pat      | 65 CPR (3d) | 73   | 1982 |
| Pioneer Hi-Bred v Com of Pat  | 14 CPR (3d) | 491  | 1987 |
|                               | 25 CPR (3d) | 257  | 1987 |
| Reliance v Northern Tel       | 28 CPR (3d) | 397  | 1989 |
|                               | 44 CPR (3d) | 161  | 1992 |
|                               | 47 CPR (3d) | 55   | 1993 |
| Risi Stone v Groupe Peracon   | 29 CPR (3d) | 243  | 1990 |

|                      |             |     |      |
|----------------------|-------------|-----|------|
|                      | 65 CPR (3d) | 2   | 1995 |
| Allied v Du Pont     | 52 CPR (3d) | 351 | 1993 |
|                      | 50 CPR (3d) | 1   | 1993 |
| Mobil Oil v Hercules | 57 CPR (3d) | 488 | 1994 |
|                      | 63 CPR (3d) | 473 | 1995 |

insufficient/sufficient/essential elements

|                                |             |     |      |
|--------------------------------|-------------|-----|------|
| BVD Co V Canadian Celanese     | ExCR        | 139 | 1936 |
|                                | SCR         | 221 | 1937 |
| Mineral Separation v Noranda   | 12 CPR      | 99  | 1947 |
|                                | 15 CPR      | 133 | 1952 |
| Curl Master v Atlas Brush      | SCR         | 514 | 1967 |
| Burton Parsons v Hewlet        | 1 SCR       | 555 | 1976 |
| Re: Farbwerke Hoechst          | 13 CPR (3d) | 212 | 1980 |
| Ciba Geigy v Comm of Pat       | 65 CPR (3d) | 73  | 1982 |
| Consolboard v MacMillan        | 56 CPR (2d) | 145 | 1981 |
|                                | 1 SCR       | 504 | 1981 |
| Ductmate v Exanno              | 2 CPR (3d)  | 289 | 1984 |
| Amfac Foods v Irving Pulp      | 12 CPR (3d) | 193 | 1986 |
| Cri-la Plastics v Ninety Eight | 10 CPR (3d) | 226 | 1986 |
|                                | 18 CPR (3d) | 1   | 1987 |
| Reliance v Northern Tel        | 28 CPR (3d) | 397 | 1989 |
|                                | 44 CPR (3d) | 161 | 1992 |
|                                | 47 CPR (3d) | 55  | 1993 |
| TRW Inc v Walbar               | 39 CPR (3d) | 176 | 1991 |
| Atlas v CIL                    | 41 CPR (3d) | 348 | 1992 |
| Airseal v M&I Heat             | 53 CPR (3d) | 259 | 1993 |
| Mobil Oil v Hercules           | 57 CPR (3d) | 488 | 1994 |
|                                | 63 CPR (3d) | 473 | 1995 |
| Feherguard v Rocky's           | 53 CPR (3d) | 417 | 1994 |
|                                | 60 CPR (3d) | 512 | 1995 |

operability

|                                |      |     |      |
|--------------------------------|------|-----|------|
| Union Carbide v Trans Canadian | ExCR | 884 | 1965 |
|--------------------------------|------|-----|------|

|                              |             |      |      |
|------------------------------|-------------|------|------|
| Mineral Separation v Noranda | 12 CPR      | 99   | 1950 |
|                              | 69 RPC      | 81   | 1952 |
| Gilbert (Gillcross) v Sandoz | 64 CPR      | 14   | 1970 |
|                              | SCR         | 1336 | 1974 |
| Burton Parsons v Hewlet      | 1 SCR       | 555  | 1976 |
| Sandvick v Windsor           | 8 CPR (3d)  | 433  | 1986 |
| Mahurkar v Vas-Cath          | 18 CPR (3d) | 417  | 1988 |
| Welcome v Apotex             | 39 CPR (3d) | 289  | 1991 |
| TRW Inc v Walbar             | 39 CPR (3d) | 176  | 1991 |
| Feherguard v Rocky's         | 53 CPR (3d) | 417  | 1994 |
|                              | 60 CPR (3d) | 512  | 1995 |
| Mobil Oil v Hercules         | 57 CPR (3d) | 488  | 1994 |
|                              | 63 CPR (3d) | 473  | 1995 |

broad

|                                |             |      |      |
|--------------------------------|-------------|------|------|
| BVD Co V Canadian Celanese     | ExCR        | 139  | 1936 |
|                                | SCR         | 221  | 1937 |
| Trubenizing v John Forsyth     | 2 CPR       | 1    | 1943 |
| O'Cedar v Mallory Hardware     | ExCR        | 299  | 1956 |
| Lovell v Beatty                | 41 CPR      | 18   | 1962 |
| Boehringer v Bell-Craig        | 39 CPR      | 201  | 1962 |
| Union Carbide v Trans Canadian | ExCR        | 884  | 1965 |
| Hoechst v Gilbert              | SCR         | 189  | 1966 |
| Gilbert v Sandoz               | 64 CPR      | 14   | 1970 |
| Burton Parsons v Hewlet        | 1 SCR       | 555  | 1976 |
| Monsanto v Comm of Pat         | 42 CPR (2d) | 161  | 1979 |
|                                | 2 SCR       | 1108 | 1979 |
| Re: American Home Products     | 55 CPR (2d) | 238  | 1980 |
| Re: Farbwerke Hoechst          | 13 CPR (3d) | 212  | 1980 |
| Cutter v Baxter Travenol       | 50 CPR (2d) | 163  | 1980 |
|                                | 68 CPR (3d) | 179  | 1983 |
| Johnston Controls v Varta      | 80 CPR (2d) | 1    | 1984 |
| Sandvick v Windsor             | 8 CPR (3d)  | 433  | 1986 |
| Amfac Foods v Irving Pulp      | 12 CPR (3d) | 193  | 1986 |
| Cabot Corp v 318602 Ont        | 20 CPR (3d) | 132  | 1988 |



Claims

---

|                             |                 |     |      |
|-----------------------------|-----------------|-----|------|
| Mahurkar v Vas-Cath         | 18 CPR (3d)     | 417 | 1988 |
| Reliance v Northern Tel     | 28 CPR (3d)     | 397 | 1989 |
|                             | 44 CPR (3d)     | 161 | 1992 |
|                             | 47 CPR (3d)     | 55  | 1993 |
|                             | 55 CPR (3d)     | 299 | 1994 |
| Risi Stone v Groupe Peracon | 29 CPR (3d)     | 243 | 1990 |
| Lubrizol v Imperial Oil     | 33 CPR (3d)     | 1   | 1990 |
|                             | 45 CPR (3d)     | 449 | 1992 |
| Welcome v Apotex            | 39 CPR (3d)     | 289 | 1991 |
| Dableh v Ont Hydro          | 50 CPR (3d)     | 290 | 1993 |
| Unilever v Procter & Gamble | 47 CPR (3d)     | 479 | 1993 |
|                             | 61 CPR (3d)     | 499 | 1995 |
| Mobil Oil v Hercules        | 57 CPR (3d)     | 488 | 1994 |
|                             | 63 CPR (3d)     | 473 | 1995 |
| Nekoosa v AMCA              | Int 56 CPR (3d) | 470 | 1994 |
| Pallmann v CAE              | 62 CPR (3d)     | 26  | 1995 |
| Almecon v Nutron            | 65 CPR (3d)     | 417 | 1996 |

selection/improvement

|                            |        |     |      |
|----------------------------|--------|-----|------|
| Sherbrooke v Hydraulic     | Ex CR  | 114 | 1927 |
| Bergeon v De Kermor        | Ex CR  | 181 | 1927 |
| Western Electric v Bell    | Ex CR  | 213 | 1929 |
| Wandscheer v Sicard        | SCR    | 1   | 1948 |
| K v Uhleman Optical        | Ex CR  | 142 | 1950 |
|                            | 1 SCR  | 143 | 1952 |
| O'Cedar v Mallory Hardware | Ex CR  | 299 | 1956 |
| Ciba Geigy v Comm of Pat   | 27 CPR | 82  | 1957 |
|                            | 30 CPR | 135 | 1959 |

aggregation/combination

|                               |        |     |      |
|-------------------------------|--------|-----|------|
| Lightning Fastener v Colonial | Ex CR  | 89  | 1932 |
|                               | SCR    | 63  | 1933 |
|                               | 51 RPC | 349 | 1934 |
| Crosley Radio v CGE           | SCR    | 551 | 1936 |

Classification

---

|                               |             |     |      |
|-------------------------------|-------------|-----|------|
| Lanlois v Roy                 | Ex CR       | 197 | 1941 |
| Lester v Comm of Pat          | Ex CR       | 603 | 1946 |
| Wandscheer v Sicard           | Ex CR       | 112 | 1946 |
|                               | SCR         | 1   | 1948 |
| R v Uhleman Optical           | Ex CR       | 142 | 1950 |
|                               | 1 SCR       | 143 | 1952 |
| Defrees v Dominion Auto       | Ex CR       | 331 | 1963 |
| Barton v Radiator Specialty   | 44 CPR      | 1   | 1965 |
| Gibney v Ford                 | 2 Ex CR     | 279 | 1972 |
| Rubbermaid v Tucker Plastics  | 8 CPR (2d)  | 6   | 1972 |
| Agripat v Comm of Patents     | 52 CPR (2d) | 229 | 1977 |
| Domtar v MacMillan            | 33 CPR (2d) | 182 | 1977 |
| Xerox v IBM                   | 33 CPR (2d) | 24  | 1977 |
| Ductmate v Exanno             | 2 CPR (3d)  | 289 | 1984 |
| Windsurfing v Triatlantic     | 3 CPR (3d)  | 95  | 1984 |
| Hy Kramer v Lindsay           | 9 CPR (3d)  | 297 | 1986 |
| Crila Plastics v Ninety Eight | 10 CPR (3d) | 226 | 1986 |
|                               | 18 CPR (3d) | 1   | 1987 |
| Hoffman-La Roch v Apotex      | 15 CPR (3d) | 217 | 1987 |
|                               | 24 CPR (3d) | 289 | 1989 |
| Standal v Swecan              | 28 CPR (3d) | 261 | 1989 |
| Imperial Tobacco v Rothmans   | 47 CPR (3d) | 188 | 1993 |