

## Some preliminary tips

Certain precautions can be taken so that the steps to protect your invention be as effective as possible and thus the fees be kept to their minimum.

Before meeting us, you should therefore:

- put your relevant documents in order and make copies that may be handed over to us;
- prepare and provide us with a document complying as much as possible with the below comments;
- write down all the points on which you want clarifications.

During the first meeting, you should:

- explain your situation while keeping to the facts;
- reveal all information that you have, no matter it is negative or positive – let us taking care of appraising what might be relevant or not for defending your interests;
- ask all your questions and make sure that you fully understand the explanations.

## Basic rules regarding the document to be prepared

Fundamentally, only the subject matter disclosed in a patent application may be claimed for protection. Conversely, anything not disclosed is not protected. The document should enable someone unfamiliar with the invention to understand it and make it work. The document will form the basis for drafting the patent application. It must thus be as complete as possible. It should be noted that no supplementary information relating to the invention can be added in an application once it is filed.

## The drawings

Any element being a part of the invention must be illustrated in one way or another to eventually be claimed. The drawings thus play a crucial role in a patent application.

Make your drawings with dark black lines, without shades of grey, and do not use colors. Use hatchings (thin parallel lines) to indicate a cross section. Draw up each element in proportion with the other ones.

You must number each drawing or figure (e.g. Fig. 1, Fig. 2, etc.) and each element and mechanism (e.g. 2, 4, 6, etc.). Make sure that the characters are legible (preferably having at least 3.2 mm in height). A same element appearing in several drawings must always bear

the same number. Several drawings may be laid on a same page.

## The description

You must refer to the drawings and to the elements illustrated in them to explain the invention. If necessary, insert chemical or mathematical formulae in the description. The text should preferably be formed of complete sentences. Normally, the text should not contain confidentiality or copyright notices, generic warnings, acknowledgements, a preface, a personal introduction, or statements like “patent pending”. The page header and footer should be exclusively reserved for page numbering, without reference to any company or commercial denominations.

The description should include, separately and preferably in order:

- a concise statement of the problem which the invention is intended to solve;
- a summary of the previous approaches to solving the problem;
- a statement of the disadvantages and shortcomings of the previous approaches;
- a statement of the aspects of the invention which solve the problem and overcome the disadvantages and shortcomings of the previous approaches;
- a detailed description of the invention, including its construction and operation modes, and its use, with reference to the drawings;
- a description of other possible embodiments of the invention.

The detailed description of the invention should explain:

- the technical, structural and functional features of each part, element or step present in the invention;
- the purpose for which each element or step is in the invention, what is its utility, its contribution and how it works or operates;
- to what each part reacts, how it is controlled or driven, and with what it interacts.

A common mistake is to describe the invention in a general and vague manner to avoid unduly limiting the invention by possible details. Such reasoning is not only incorrect and counterproductive, but such description could have the effect of compromising the value of the claims intended to protect the invention, which must be fully supported by the description and drawings.

Avoid general statements of the kind that the invention is better; explain what makes it better and why. Describe what the invention does (not what it does not) and how it does it. Use a consistent terminology throughout the text and drawings (use the same term to designate a same part or step) and see that any acronym or abbreviation used is defined at least once in the text under its full form.

Explain terms or expressions that are unusual, equivocal or used in an unusual way.

### Other information

The document must also include the following information:

- the names and personal addresses of all the inventors who took part in the creation of the invention, in the order in which they should appear in the application;
- the complete name (including the abbreviation "inc." if applicable) and the address of the applicant to whom the inventors are bound to assign all their rights in the invention and to whom the patent must eventually be issued; and
- an indication that the applicant is entitled or not to small entity status in Canada and in the United States – a small entity is a company who hires no more than 50 persons for Canada, and 500 persons for the United States (the status of any other company to whom the applicant has granted or would be bound to grant rights in the invention must also be verified if applicable).

### Some examples of patents

You may refer to any one of the below documents by going to the OPIC's Canadian patent database at the address <http://patents1.ic.gc.ca>. Select "number" among the possible searches, enter the number of the desired patent and then follow the instructions on screen.

These documents will possibly assist you in better understanding the type of information to provide and the prescribed kind of drawings to illustrate an invention in a patent application depending on the field of the invention. These documents should be considered only as examples and not as models, since each invention is in a class of its own. Furthermore, it is not necessary to spend time on the elaboration of a set of claims. However, we invite you to let us know what you consider to be the distinctive and inventive aspects and elements of the invention.

<b>Field</b>	<b>Patent number</b>
mechanics	<a href="#">2552289</a>
electronics	<a href="#">2645392</a>
computers	<a href="#">2605633</a>
chemistry	<a href="#">2111305</a>

### Additional details

Depending on the field of the invention, we generally expect to receive the information as listed hereinafter.

In the case of a mechanical invention:

- figures illustrating the object, the machine, the apparatus, the system or the device, with a perspective illustrating the object in its whole, and cross section or exploded views illustrating the internal elements of the object and their arrangements;
- a description of all the pieces, their name, the materials used, how they are arranged and combined together, how they operate to obtain the intended result, the steps of the manufacturing process carried out by the system if applicable.

In the case of an electronic invention:

- functional schematic blocks illustrating the circuits, schematic diagrams illustrating the useful signals at different points in the circuits;
- a description of each of the blocks, their function, their input and output signals.

In the case of a computer-related invention:

- functional schematic diagrams with at least one figure showing the hardware even if it is made only of a computer, flowcharts illustrating the processes, algorithms and functions of the product and the information and data processing, figures showing the user interfaces appearing on the screen;
- a description of all the functional features of the product, the procedures, functions, information and data processing involved from beginning to end to obtain the desired results.

In the case of a chemical invention:

- figures if any of the required equipment for preparation of the product, and graphs of experimental or practical results obtained if possible;
- a description providing examples of product preparation, the required conditions, the precautions to be taken, the possible parameter ranges, the chemical compositions, the involved processes.