

Guidelines on Writing Patent Specification

Indian Patent Application / PCT Application / USPTO Application




INTRODUCTION

A well drafted application decides the fate of an invention. Drafting plays a vital role in the success of an invention during its prosecution, management and maintenance during its tenure and turning it into cash. Drafting a patent application is one of the most important and at the same time one of the most difficult process.

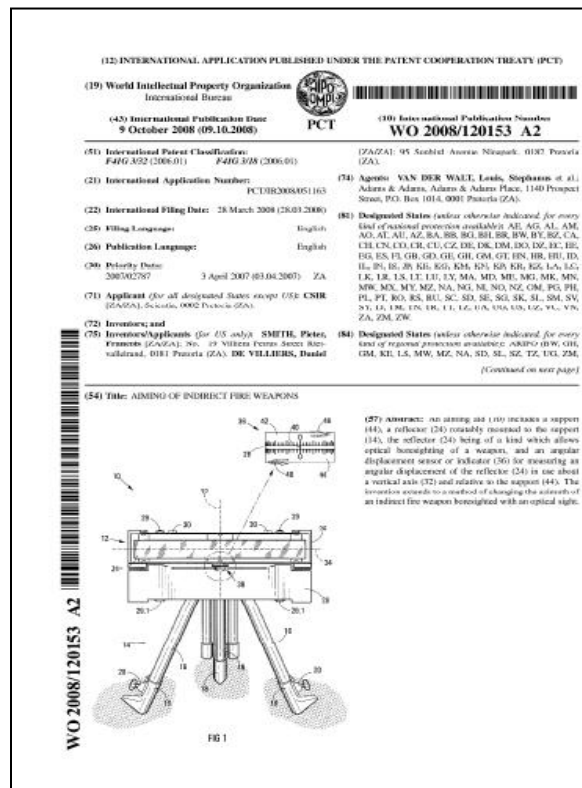
UNDERSTANDING OF A PATENT DOCUMENT

A typical patent document available or published in the any Official Journals mainly consists of following sections:

Cover Page/First Page/Front Page: It includes all the factual information of the invention which is called bibliographic information of the patent. Although, a typical cover page consists of the name of applicant, inventor and title of the invention, date of priority, filing, publication, and grant of the patent, and abstract of the invention. However, different Patent Offices have unique sets of bibliographic information. Some of the standard bibliographic information is reproduced below:

 US0006730332B2	
(12) United States Patent Agarwal et al.	(10) Patent No.: US 6,730,332 B2 (45) Date of Patent: May 4, 2004
(54) HERBAL COMPOSITION HAVING ANTIALLERGIC PROPERTIES AND A PROCESS FOR THE PREPARATION THEREOF	
(75) Inventor: Ravindra Kumar Agarwal , Bangalore (IN), Anurag Agarwal , Bangalore (IN)	
(73) Assignor: Natural Remedies Pvt. Ltd. , Bangalore (IN)	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 120 days.	
(21) Appl. No.: 10/019,389 (22) PCT Filed: Feb. 23, 2001 (86) PCT No.: PCT/IN01/00021 8371 (GCC), (2), (4) Date: Dec. 28, 2001 (87) PCT Pub. No.: WO01/64163 PCT Pub. Date: Sep. 7, 2001	
(65) Prior Publication Data US 2003/019452 A1 Oct. 16, 2003	
(30) Foreign Application Priority Data Feb. 28, 2000 (IN) 1969MAS/2000	
(51) Int. Cl. ⁷ A61K 35/78 (52) U.S. Cl. 424/769; 424/734; 424/756 (58) Field of Search 424/769, 734, 424/756	
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Bhisagratna, "Bhisagprakash of Sri Bhisavmika," <i>The Kashi Sanskrit Series</i> L39, 11 pages (1980). Bose, B. et al., "Pharmacological Study of Carica Papaya Seeds With Special Reference to its Anthelmintic Action," <i>Ind. J. Med. Sci.</i> , vol. 15, pp. 889-895 (1991). Connell, R. et al., "Results of a Large Scale Screen of Microalgae for the Production of Protease Inhibitors," <i>Planta Medica</i> , vol. 54, pp. 10-14 (1988). Chakravarty, H., "Herbal Heritage of India," <i>Bull. Botanic Soc. Bengal</i> , vol. 29, pp. 97-103 (1973). Chopra, R. et al., <i>Glossary of Indian Medicinal Plants</i> , pp. 10-11 (1959). Cotnan, R. et al., <i>Robbins Pathologic Basis of Disease</i> , 5th Edition, pp. 177-195, 355, 356, 382, 683, 689-693, and 741-742 (1998). Dabsonkar, S. et al., "Efficacy of Piper Longum in Childhood Asthma," <i>Indian Drugs</i> , vol. 21, pp. 384-386 (Jun. 1984). Dabsonkar, S. et al., "Evaluation of Antiallergic Activity of Piper Longum," <i>Indian Drugs</i> , vol. 21, pp. 377-380 (Jun. 1984). Das, S.N. et al., "Effect of Palmoxer (Research Name AAC-400) on Mast Cell Stabilization," <i>Indian J. Indig. Med.</i> , vol. 17, No. 1, pp. 79-82 (Apr. 1995-Sep. 1995). Deka, L. et al., "Some Ayurvedic Important Plants From District Kamrup (ASSAM)," <i>Ancient Science of Life</i> , vol. 11, No. 2, pp. 108-115 (Oct. 1983). Dhar, M. et al., "Screening of Indian Plants for Biological Activity: Part I," <i>Indian J. Exp. Biol.</i> , vol. 6, pp. 232-247 (Oct. 1968). Firozqi, M. et al., <i>J. Sci. Indust. Res.</i> , vol. 21B, pp. 454-455 (Sep. 1982). Fernandez, A. et al., "Asthma in Children, A Clinical Controlled Study of Piper Longum in Asthma," <i>Pediatric Clinics of India</i> , vol. 15, No. 4, pp. 45-52 (Oct. 1980). George, M. et al., "Investigations on Plant Antibiotics," <i>J. Sci. Ind. Res.</i> , vol. 68, No. 3, pp. 42-48 (Mar. 1947).	
(List continued on next page.)	
ABSTRACT	
The present invention relating to a herbal anti-allergic composition which comprises a synergistic mixture of extracts from the fruits of <i>Terminalia chebula</i> , bark of <i>Albizia lebbek</i> , <i>Terminalia bellerica</i> and <i>Emblic officinalis</i> . The present invention also contains the fruits of <i>Piper longum</i> , <i>Piper nigrum</i> and of rhizomes of <i>Zingiber officinale</i> and thoroughly mixed to get the final composition which has potent anti-allergic activity. The invention also relates to a process for the preparation of such composition. The composition is particularly useful for the treatment of allergic conditions.	
19 Claims, 1 Drawing Sheet	

(12) PATENT APPLICATION PUBLICATION (19) INDIA (22) Date of filing of Application: 24/04/2001		(21) Application No.: 369/MUM/2001 (43) Publication Date: 20/01/2006 A
(54) Title of the invention: ECP MANIFOLD VENT VALVE INSERT		
(51) International classification : F16K 63/12, B60T 17/22, B60T 13/66, B60T 13/68 (31) Priority Document No : 09/605,439 (32) Priority Date : 28/06/2000 (33) Name of priority country : U.S.A. (86) International Application No and Filing Date : NIL (87) International Publication No : NIL (61) Patent of addition to Application No Filed on : NIL (62) Divisional to Application No Filed on : NIL, N.A.	(71) Name of Applicant: WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION Address of the Applicant: 1001 AIR BRAKE AVENUE, WILMERDING, PENNSYLVANIA 15148, U.S.A. (72) Name of the Inventor: GARY M. SICH Filed US 5/2 before The Patents (Amendment) Act, 2005: NO	
(57) Abstract: The invention relates to a vent valve insert comprising a bushing assembly, a piston assembly and a spring. It is designed to fit snugly and axially within a suitable borehole, such as the vent borehole of an ECP manifold assembly. The bushing assembly defines a longitudinal bore within which the piston assembly is situated. When pilot pressure is applied to its top surface, the piston assembly is forced to an open position wherein fluid is allowed to flow through the vent valve insert. Absent pilot pressure acting against upward within the longitudinal bore. Secured to the bottom portion of the piston assembly, an annular sealing member is carried upward so that its flat surface seats against a raised inner portion of an annular valve seat. The vent valve insert is thus normally biased to the closed position. The vent valve insert also features a mechanism for preventing non-longitudinal movement of the piston assembly as it is moved longitudinally within the longitudinal bore. The mechanism not only guides the movement of the piston assembly within the bushing assembly but also prevents the bell clapper effect inherent to the vent valve insert currently used in the industry.		
Drafting: 05 Sheets Total Page: 46		



WIPO

Patent Specification/Disclosure/Description: The written description followed by the front page is called a patent specification. Basically, a patent specification is a written description of the invention and the way of representation and process of making and using the same. A patent specification consists of general description of the invention, claims and drawings.

ANATOMY OF A PATENT SPECIFICATION

A Patent Specification has several sections and seems more complicated unless you understand the basic structure of a patent application. Some of the basic structures are reproduced below:

Indian Patent Office (IPO)

A typical patent specification has the following sections:

1. Title of invention;
2. Field of invention;
3. Background of invention with regard to the drawback associated with known art;
4. Object of invention;
5. Statement of invention;
6. A summary of invention;
7. A brief description of the accompanying drawing;
8. Detailed description of the invention with reference to drawing/examples;
9. Claim(s); and
10. Abstract.

Patent Co-operation Treaty (PCT)

A typical patent specification has the following sections:

1. Technical Field;
2. Background Art;
3. Disclosure of Invention;
4. Brief Description of Drawings;
5. Best Mode(s) for Carrying out the Invention;
6. Industrial Applicability; and
7. Claims.

United States Patent & Trademark Office (USPTO)

A typical patent specification has the following sections:

1. Title of invention
2. Cross-reference to related applications;
3. Statement regarding federally sponsored research or development (if any);
4. Reference to a Sequence Listing (if any);
5. Background of the invention;
6. Brief summary of the invention;
7. Brief description of the several views of the drawing (if any);
8. Detailed description of the invention;
9. Claims; and
10. Abstract of the Disclosure.

TITLE OF INVENTION

Title of invention should reflect the main art of the invention. It should be precise, meaningful and should be normally within 15 words. A title can be used for more than one invention.

FIELD OF INVENTION

Field of invention should describe the scope of the invention and subject matter of the invention on which it relates. Basically, it should be crisp and clear enough so that the Examiner of patent easily understands the nature of the invention and classifies the technology according to its genera.

BACKGROUND OF THE INVENTION

This section describes the state of the art in the particular technical area to which the patent relates and what problems remain to be solved or disadvantages accompanying the prior art solutions. In other words, Background of the invention should describe what others have done in the field, and what problems have not been solved by this prior work. It is always better to mention the status of the closest technology, experiments, patents and patent applications in this section.

OBJECT OF INVENTION

Object of invention should clearly reflect the advantages of the invention. It should describe the solution of the existing technical problem associated with the existing field of art. Each and every object and advantages of the invention should be described in a separate sentence. Basically, this portion is a comparative analysis of the inventive technology over the existing one.

STATEMENT OF INVENTION

Statement of invention describes the exact novel features of the invention. It should clearly reflect the inventive feature of the invention over the existing one. This part is very useful to declare inventiveness of the invention and also relates exactly to the independent claims and to complement the omnibus claim in situations of infringement proceedings.

SUMMARY OF INVENTION

Summary of invention describes a broad overview of the invention and, thus, provide a structure for understanding the Detailed Description and Claim sections of the specification. The summary of the invention describes the invention overall, e.g., the purpose of the invention, problems solved, advantages offered, and so forth.

BRIEF DESCRIPTION OF DRAWINGS

The brief description of drawings includes a written description of the invention that explains how to make and use it. It should point the reference numerals used in the drawings and should be specific. The details should be sufficient enough for a person skilled in the art to understand and perform the invention.

DETAILED DESCRIPTION OF THE INVENTION

The detailed description describes in detail what the invention is and how it is made and used. Examples showing how the invention works in a particular application may or may not be present. It should reflect the complete picture of the invention and should be sufficient for a person skilled in the art to perform the invention by developing necessary technical know-how.

CLAIMS

Claims are the essence of a patent. The claims define the invention which the inventor holds as his exclusive property and has the right to exclude others from making, using and selling. The claims specify the scope of ownership in a piece of property, i.e. Intellectual Property. These claims are of paramount importance in both

patent prosecution in the Patent Office and patent litigation in the courts. Therefore, during claim drafting the choice of words used in the patent claims should be dealt in a great understanding and thought.

Following points should be considered while drafting patent claims:

- ✓ Each claim should be a single sentence and should be clearly worded.
- ✓ Each claim should be precise and without unnecessary repetition.
- ✓ Rights are given to claims only, not for any matter described in the complete specification.
- ✓ Claims define the boundaries of legal protection and form a protective fence around the invention.
- ✓ Each claim is evaluated on its own merit and, therefore, if one of the claims is objected, it does not mean that the rest of the claims are invalid.

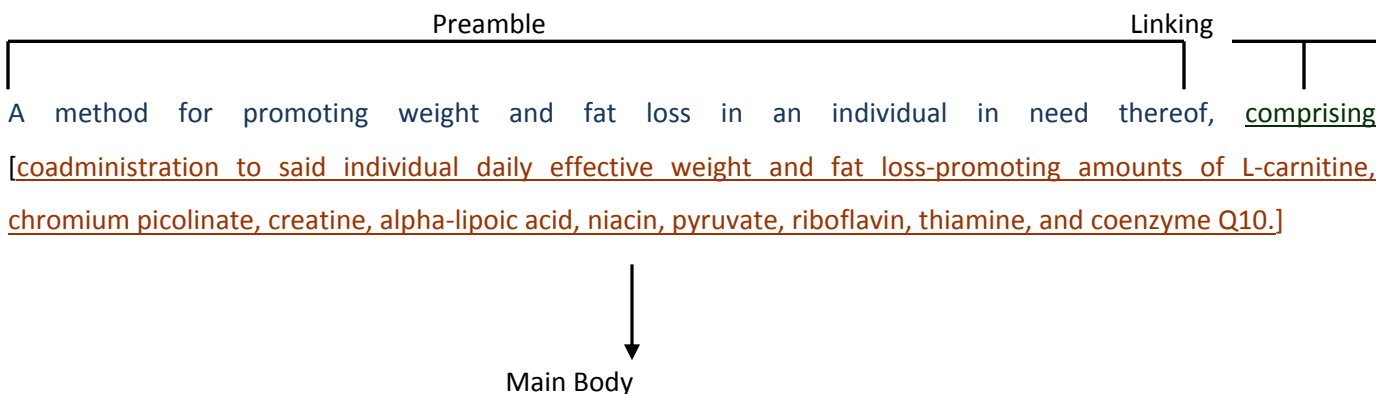
Tips on Drafting Claims

- ✓ Figure out the all essential features or elements of your invention that you want to claim rights to.
- ✓ Start with broadest claims of your invention and then progress to narrower claims.
- ✓ Start claims on a new page and number each claim using Arabic numbers starting with 1.
- ✓ Precede your claims with a short statement such as "I/We claim: ..."
- ✓ Each claim should consist of an introduction, linking word, and body.
- ✓ The first claim would be the Independent claim and subsequent claim would be dependent claims. And, these claims should be linked so as to form a single inventive concept.
- ✓ There is no restriction to the number of claims to be incorporated in the specification. But the applicant has to pay additional fee, if there are more than ten claims.
- ✓ Claims must be supported by the description and should be based on the description. This means that all the characteristics of the invention that form the part of the claims must be fully explained in the description.

BASIC STRUCTURE OF CLAIMS

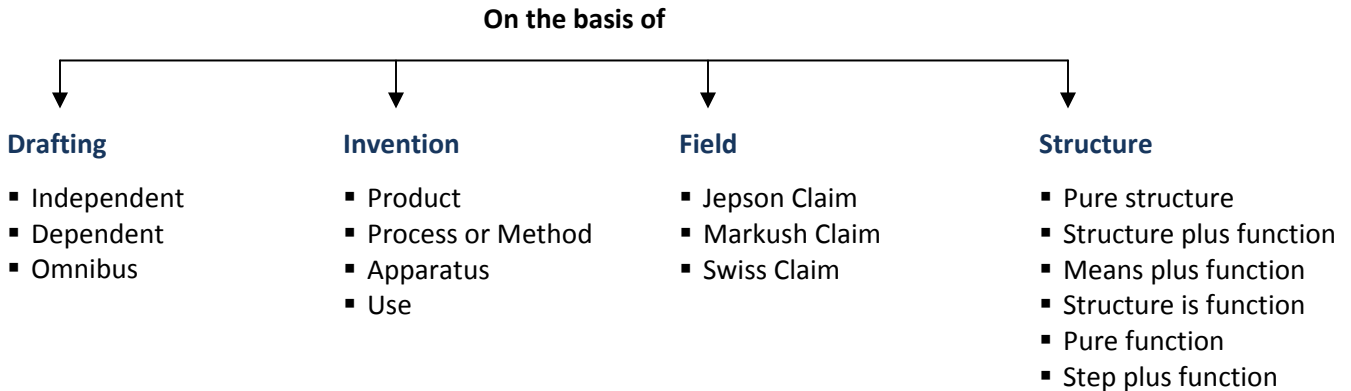
A patent claim is composed of three parts:

1. Preamble/Introductory Phrase/Prior Art;
2. Main body of the claim or Inventive part of the claim; and
3. The linking word that joins the two.



Types of Claims

There are many types of claims used in the patent specification and are differentiated as below:



Independent Claim: The claim which covers all the significant characteristics of the invention is called Independent Claim. Generally, the first claim is Independent Claim which reflects the whole picture of the invention.

1. *A method of preparing an electronic device comprising:*

providing a metal-containing substance;

converting the metal-containing substance into a non-stoichiometric non- equilibrium crystalline nanomaterial; and

processing the nanomaterial into an electronic component, wherein the domain size of the nanomaterial is confined to a dimension less than the mean free path of electrons in the material composition.

Dependent Claim: The claim which depends on a claim or several claims is called dependent claim. Generally, the subsequent claims of an Independent claim are Dependent Claim.

2. *The method of claim 1 wherein the nanomaterial comprises a metal.*

Omnibus Claim: Omnibus claim is used to broaden the scope of the invention beyond the claims section. In other words, Omnibus claim claimed the other parts of the invention which is disclosed in the specification or drawing but not claimed in the above mentioned claims. The words such as "substantially as described" or "substantially as described with reference to the drawings" or "substantially as described herein" are commonly used to claim as Omnibus Claim.

Product Claim: The claim which claims the actual product of the invention is called Product Claim. For example: a chemical compound, compound used as pharmaceuticals, composition mixtures such as alloy, food, drink etc.

A pharmaceutical composition comprising: a) an amido-amine polymer comprising an amido-amine dendrimer derived from:

(i) a multi-amine; and

(ii) a multifunctional compound comprising two or more amine-reactive groups; and b) a pharmaceutically acceptable excipient.

Process Claim: The claim which claims a new process or method to achieve the desired result is called Process Claim. For example: Methods of preparation, methods of analysis, method of treatment etc.

*A bio-assisted **method for treatment** of hydrocarbon-contaminated soil employing a blend of selective microbes, **the method comprising**; isolating the microbes, which are capable of releasing oil from the contaminated soil/gravel particles, adding the isolated microbes into said soil to release the oils, adding separately isolated microbes, which are capable of degrading the released oils, providing optimized nutrient for the microorganisms, and aerating the same by periodic mixing of the oil contaminated soil-water slurry or by air sparging to treat the contaminated soil.*

Apparatus Claim: The product claim claimed for a device or a system or an article is called Apparatus Claim.

*A **vehicle comprising** a chassis, a front axle means and a rear axle means suspended from the chassis by rear axle suspension means, the rear axle suspension means being non-reactive and there being a towing means secured to the rear axle by which an implement may be towed.*

Use Claim: The process claim claimed for use of the products or application of the process is called Use Claim.

***Use of the compound** of Claim 1 for the manufacture of a medicament.*

Jepson Claim: Jepson claim style is used in the process or product claim where the invention is a modification or the improvement of the existing technology. The word “wherein...” often used to structure the Jepson Claim.

*An assembly of blanks for a smoking article package comprising: an outer shell blank comprising two major panels and two minor panels; and at least one inner compartment blank comprising two major panels and two minor panels; **wherein** a plurality of inner shells are formable from the at least one inner compartment blank.*

Markush Claim: Markush Claim is generally used to structure the chemical invention where the composition of the invention has to be described in a structural diagram or formula based.

*A compound having the formula: $R-CH=N-S-X$, where: R is an alkyl group selected from the group consisting of methyl, ethyl and isopropyl; and X is a halogen selected from the group **consisting of** chlorine and bromine.*

Swiss Claim: The structure of claim used to claim the second or new medicinal use of the known substances or compositions is known as Swiss type claim. India does not allow this type of claim under the provision of section 3 (d) of the Patent Act, 1970.

*"Use of taxol and sufficient medications to prevent severe anaphylactic reactions, for manufacturing a medicamentation for simultaneous, separate, or sequential application of from 135mg/m² up to 175mg/m² taxol over a period of about 3 hours or less as a means for **treating cancer and simultaneously reducing neutropenia.**"*

Pure Structure: A method of structuring claim where the part of an invention 'A' is structurally linked to the part 'B'.

Example: *A switch connected to a lamp*

Structure plus function: A method of structuring claim where the part of an invention 'A' is functionally linked to the part 'B'.

Example: *A switch for controlling a signal to a lamp*

Means plus function: A method of structuring claim where the part of an invention 'A' is an element for achieving the part 'B'.

Example: *Means for signaling with a lamp*

Structure is function: A method of structuring claim where invention defines structure and/or function.

Example: *Signal Lamp*

Pure function: A method of structuring claim where the part of an invention 'A' is functioning with the part 'B'.

Example: *Signaling lamp with the switch*

Step plus function: A method of structuring claim where the part of an invention 'A' is a step for the function of part 'B'.

Example: *Step for signaling the lamp with the switch*

ABSTRACT

An abstract should be drafted in such a manner to make it reflect the technical field of the invention with the existing technical problems and the solution to overcome such problems. It should be briefly drafted and within the limit of 150 words. The aim of abstract should be to provide the better information to third parties.

Disclaimer: The above guidelines are the general information to understand the drafting of a patent specification. Patent specification is a techno legal document and the drafting of such document would require lot of experience and skill. Therefore, we would highly recommend you to take help of Specialists and experts [IP Professionals, Patent Attorney and Patent Agent] in this area while drafting and filing of a patent application.