The contents of a patent specification, also called as ‘the disclosure’, are the ‘written description’ of an invention. The layout of specification varies from place to place, however the essence of contents of specification is same throughout the world, because disclosure of specification is the basis to establish novelty and non-obviousness of an invention which is essential to get grant of a patent. Moreover if any dispute arises, the Court of Law would settle the case based on contents of specification. Section 10 of Indian Patents (Amendment) Act, 2005 defines contents of specification; although it is not an exhaustive guideline to patent applicants, it gives an outline as to the layout of specification to express the technical output of invention into written description. Patent specification is equivalent to a scientific research article as both are written descriptions of inventions except the fact that patent specification is a techno legal document and the description of specification should establish novelty and non-obviousness of an invention. Therefore, as compared to scientific research article, description of patent specification is more comprehensive and requires some more elements to disclose invention. With the advent of Internet, granted patent specifications are available at free databases or websites of some Patent Offices. Patent statute and patent documents which are available on Internet provide vital guideline to transform novel invention into technical contents of patent specification. This article describes the statutes and the practice that may be regarded as guidelines to disclose an invention in a patent specification.

Keywords: Contents of specification, patent statute, written description, complete specification, disclosure, prior art search, statement of invention

Every application for a patent is essentially applied on Form 1, a provisional or complete specification on Form 2, an undertaking of information regarding foreign application for same or substantially same invention on Form 3. The patent applications accompanied by prescribed fees, should be filed at Patent Office. Patent Office publishes such applications in its Official Journal after 18 months from the date of filing. It is easy to publish an application in Official Journal of Patent Office if above mentioned three forms accompanied with fees as prescribed are being filed. But it is not easy to get grant of a patent for an invention if disclosure of the invention in Form 2 is not sufficient. Requirements relating to sufficient ‘disclosure’ of invention, which is also known as ‘contents of specification’, has been defined in Section 10 of Indian Patents (Amendment) Act, 2005 (herein after, the Act). Section 10(1) states that ‘every specification, whether provisional or complete, shall describe the invention and shall begin with a title sufficiently indicating the subject-matter to which the invention relates’.

The scientific research articles published by scientific journals also ‘describe’ inventions under the subtitles, such as, introduction, materials and methods, results, discussion, conclusion and references. Question is whether description of research article is similar to the description of a patent specification, particularly if both are related to same or substantially the same invention? Researchers and academicians often get confused by this question. Although the history of patent is long enough and patent filing is a routine activity in India since 1972, many researchers and mostly academicians are not well-versed of content of specification. This is because Section 10(1) of the Act does not provide any exhaustive guideline to inventors except that the description should begin with a title, where as every scientific journal provide instruction to authors relating to expression of the description and its different elements. There are many efforts to provide guidelines to the inventors to produce patent specifications.

Many patent offices and IPR organizations including World Intellectual Property Organization (WIPO, Geneva) organize training courses on patent
drafting to provide guidance to produce patent specification. However such training may not be available to all inventors including academicians. In this article the elements required to disclose an invention have been defined and discussed, particularly in the light of patent statute and the practice.

The basic question as to whether description of research article is similar to the description of a patent specification could be partially answered by Section 10(4) of the Act. This Section further defines the contents of specification which states that "every complete specification shall:

(i) fully and particularly describe the invention and its operation or use and the method by which it is to be performed,

(ii) disclose the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection,

(iii) end with claim or claims defining the scope of the invention for which protection is claimed, and

(iv) accompanied by an abstract to provide technical information for which protection is claimed".¹

Obviously the description of patent specification would differ from a research article because apart from 'describe the invention' [Section 10(1)] or 'fully and particularly describe the invention' [Section 10(4)(a)] which is common for both patent specification and research article, the content of patent specification should include 'the best method of performing the invention' [Section 10(4)(b)] and also include 'claim or claims defining the scope of the invention' [Section 10(4)(c)]. Claim or claims confer the techno legal character of a patent specification and a distinctive element which is not required to a research article 'to describe' or 'fully describe' an invention. Again as per the requirement of Section 13 of the Act, the claim or claims of the complete specification should not be anticipated by previous publication and by prior claim. This is very important to get grant of a patent. Essentially patent right is based on the claim or claims which in turn are based on technical contents of the patent specification. Therefore, there are many requirements relating to expression of the description of a patent specification so that claim or claims may be fairly constructed to avoid rejection under the clause of anticipation by previous publication or prior claim. Both Section 10(4) and Section 13 of the Act provide certain guidelines which may be regarded as indications of requirements relating to expression of the description. In practice, requirements are more than the guideline provided by the statute [Section 10(4) and Section 13]. Therefore, there is enough scope to discuss the contents of specification, notwithstanding the long history of patent filing and so many training courses are available on patent drafting.

**The Statute and the Practice**

Patent right is a statutory territorial right, accordingly patent statute differs from country to countries. Patentable subject matter also differs in different country. As per Indian statute, Section 3 defines the inventions which are not patentable. However, criteria for patentability are more or less similar throughout the world. To be patentable, an invention must be novel, non-obvious or involve an inventive step and useful or be susceptible of industrial application. Accordingly, essence of contents of specification is same in all parts of world.

As mentioned earlier, Section 10 of the Act defines the contents of patent specification. According to Section 10(1), a specification, whether it is complete or provisional, should describe the invention and should begin with a title. The Rule 13 of the Patent Rules, 2003 further prescribes the contents of specification which states that 'every specification whether provisional or complete shall be made in Form 2'.² The elements of Form 2 have been shown in the Fig. 1 for ready reference. According to Form 2, specification begins with a Title, followed by:

(i) Name, address and nationality of the applicants;

(ii) Preamble to the description;

(iii) Description;

(iv) Claims;

(v) Date and signature; and

(vi) Abstract of the invention.

It is apparent that above elements of Form 2 are the outline of the specification and not the actual layout of description of main invention which is equivalent to introduction, materials and methods, results, discussion and conclusion of a research article. Both the statute and the rule thereof are silent about elements required for expression of 'description' which are essential to disclose an invention so as to conform to the Section 10(4) and Section 13 of the Act, which follows:

(i) Title of the invention — describes technical field of invention.
FORM 2
THE PATENT ACT 1970
(39 of 1970)
&
THE PATENTS RULES, 2003
PROVISIONAL/COMPLETE SPECIFICATION
(See Section 10 and rule 13)

TITLE OF THE INVENTION
APPLICANT(S)
Name:
Nationality:
Address:

PREAMBLE TO THE DESCRIPTION

PROVISIONAL
The following specification describes the invention.

COMPLETE
The following specification particularly describes the invention and the manner in which it is to be performed.

DESCRIPTION (Description shall start from next page.)

CLAIMS (not applicable for provisional specification. Claims should start with the preamble—‘I/we claim’ on separate page)

DATE AND SIGNATURE (to be given at the end of last page of specification)

ABSTRACT OF THE INVENTION (to be given along with complete specification on separate page)

Note.—
*Repeat boxes in case of more than one entry.
*To be signed by the applicant(s) or by authorized registered patent agent.
*Name of the applicant should be given in full, family name in the beginning.
*Complete address of the applicant should be given stating the postal index no./code, state and country.
*Strike out the column which is/are not applicable.

Fig. 1 — Form 2 for Patent Specification

(ii) Background of invention—equivalent to ‘introduction’ of scientific research article.

(iii) Description of prior art—description of all patented and non-patented inventions that are already in public domain and are related or closely related to the instant invention.

(iv) Statement of invention—summary of the invention and verbatim to the claim;

(v) Detailed description of the invention—equivalent to materials and methods, results, discussion and conclusion of a research article.

(vi) Examples—describe ‘the method’ or ‘best method’ of performing the invention.

(vii) Advantages or uses of the invention—describe the economic importance of invention.

(viii) Claim or claims—define the legal boundary and the scope of an invention.

(ix) Abstract—equivalent to abstract of research article and provides technical gist of the invention.

If there is any drawing, which helps to describe the invention, such drawing would also form a part of description. The statute pertaining to drawing is clearer and has been defined in Section 10(2) and Rule 15 of the Act. Likewise statute is clear about biological material mentioned in the description [Section 10 (4)(ii) of the Act]. Another important fact is that unlike research article of scientific journal, the description does not contain an element as to ‘references’. The practice is to indicate the bibliographic reference in full detail at the descriptive part of said reference.

As essence of contents of specification is same in all parts of world, therefore to describe an invention, the above elements are more or less similar throughout the world. However, the US Patent
Rule [1.77(b)] prescribes the elements of specification in successive order as follows:

(i) Title of the invention, which may be accompanied by an introductory portion stating the name and residence of the applicant;
(ii) Cross-references to related application;
(iii) Statement regarding federally sponsored research or development;
(iv) Names of the parties to a joint research agreement;
(v) References to a ‘sequence listing’;
(vi) Background of the invention;
(vii) Brief summary of the invention;
(viii) Brief description of the several views of the drawing;
(ix) Detailed description of the invention;
(x) Claim or claims;
(xi) Abstract of the disclosure; and
(xii) ‘Sequence listing’ if on a paper.5

It is evident that US specification is not mere ‘description of invention’ but provides certain information as given at elements (ii) to (v). However the description as per elements (vi) to (xi) would be same as Indian patent specification. In fact, US statute has given distinct guideline as to expression of ‘description of invention’, which states that ‘the specification shall contain a written description of the invention and the manner and process of making and using it, in full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention’ [35 US:112].6 This is not only a patent statute but the philosophy behind the patent system. The description should be very clear and in exact terms so that other interested persons could make and use the same invention after the expiry of patent monopoly period. Also it is important for a patent Examiner; the description should be clear and in such terms that an Examiner of patent may understand it fully and satisfactorily during prosecution of the said patent application. Particularly the expression of the description that confer techno-legal character of patent specification should be very clear so that patent Examiner or other interested person can understand it fully and satisfactory and if any dispute arises, the Court of Law may interpret it easily. As mentioned earlier, that the essence of contents of specification is same in all parts of the world, therefore the US requirement has been cited here only by the way of exemplification.

**Drafting the Contents of Specification**

The US Patent Rule [1.77(b)] prescribes the elements for expression of the description of invention therefore subtitles such as background of the invention, object of the invention, summary, detailed description, claims etc. should be essential components of a US patent specification. In contrast, patent specification to be filed in India or many other countries does not require any subtitle, though as mentioned earlier, many elements are essential in the description of specification to disclose an invention fully as well as to conform to the Section 10(4) and Section 13 of the Act. Therefore, careful drafting of contents of specification only need to follow the elements mentioned here without mentioning them as subtitles in the specification.

**Title of the Invention**

As per statute it should also indicate the field of invention; however it is equivalent to title of a research article. For example, if title of invention is ‘a process for preparation of antibacterial agent B’, then the field of invention would be ‘antibacterial agent’. In that case, the description of specification would begin with the preamble ‘This invention relates to…..’ followed by the title of the invention ‘a process for preparation of antibacterial agent B’. It is not necessary to describe the field as ‘molecular biology’ or ‘microbiology’ or ‘synthetic chemistry’ etc.

**Description of Prior Art – the Decisive Factor for a Patent**

Description of prior art is an important element of disclosure. Prior art mainly comprises published, patented and non-patented inventions which are related or closely related to the instant invention. Description of prior art is comparable but not equivalent to literature review of a Ph D thesis, because literature review of a Ph.D. thesis depicts all published researches which are related to the instant research. Unlike literature review, each prior art description should include the problem or disadvantages associated with that particular prior art. The novelty of an invention depends upon the problems associated with prior art which has been solved by the claimed invention. Therefore, drawbacks of prior art are also an essential component
to describe the prior art. The inventor should pinpoint the advantage or novel features of his instant invention as compared to prior art. In other words, prior art description is the basis to establish novelty and non-obviousness of an invention. A good description of prior art helps the Examiner to analyse the specification which ultimately reduce the time and money during prosecution of patent application. Whether or not a specification contain relevant prior art description, the Examiner would conduct prior art search during examination of said specification and would reject or accept the claim or claims based on closely related prior art. This is as per Section 13 of the Act, which defines ‘search for anticipation by previous publication and by prior claim’, and directs the Examiner to make investigation to ascertain whether any claim of the invention has been anticipated by any other patent specification filed earlier than the applicant’s application. Also, as per Section 13(2) of the Act, ‘the Examiner shall, in addition, make such investigation for purpose of ascertaining whether the invention, so far as claimed in any claim of the complete specification, has been anticipated by publication in India or elsewhere in any document other than those mentioned in sub-Section (1) before the date of filing of the applicant’s complete specification.’ Thus the statute directs the Examiner to carry out prior art search relating to patent or non-patent literature published in India or elsewhere in the world before the filing of applicant’s specification. It is better, therefore, to cite all relevant prior art judicially and describe important features of each prior art indicating their disadvantage as compared to instant invention. A prior art search is necessary for this purpose. A closely related prior art may be regarded as an important decisive factor as to whether the patent application would get grant of a patent or would be rejected by patent Examiner.

Now question arises, which prior art would be regarded as closely related prior art? Suppose, an inventor has isolated a compound ‘A’ from a medicinal plant ‘X’, which is an effective drug against the disease ‘P’. There would be several publications such as inventions related to evaluation of medicinal properties of plant species ‘X’; inventions related to isolation of same compound ‘A’ or any other compound ‘B’, ‘C’, ‘D’ from plant species ‘X’; inventions related to other effective drugs against disease ‘P’; inventions related to isolation of compound ‘A’ from other medicinal plants such as ‘Y’, ‘Z’, etc. Out of such large number of previous publications which would be regarded as closely related prior art? Suppose ‘A’ is a known compound, then closely related prior art would be other reported methods of isolation of ‘A’ from the plant species ‘X’ or any other plant species. If ‘A’ is not known earlier, then closely related prior art would be inventions related to other effective drugs against disease ‘P’. Inventor needs to describe all the above prior arts and differentiate his instant invention with closely related prior art. In the first instance, inventor must differentiate the already known method of isolation of ‘A’ and his instant invention pinpointing the inventive step which resulted into better efficacy for isolation of ‘A’. In the second instance, where ‘A’ is not reported in prior art, inventor must characterize ‘A’ and differentiate it, in terms of effectiveness, from other inventions related to other drugs effective against disease ‘P’. Based on the drawback of closely related prior art, inventor may describe ‘the object’ of his invention which obviates the drawbacks of prior art.

With the advent of Internet it is rather easy now to carry out prior art search. A few years back research scholars/inventors had to visit Patent office, particularly for patent search, which was a difficult task for inventors. Now there are several free databases, such as, Pubmed (http://www.pubmed.gov), FreePatentsOnline (http://www.freepatentsonline.com), etc. which are available on the Internet for prior art search.1,7,8 Moreover, websites of some Patent Offices or international organizations, such as, US Patent Office (www.uspto.gov), European Patent Office (http://ep.espacenet.com), and World Intellectual Property Organization (www.wipo.int) provide full text of granted and/or published patent specification.9 Google is an extraordinary search engine for both patent and non-patent literature search.10 Some paid databases are also available at Internet, such as, STN, Delphi, Derwent, and Science Direct that may be used for advanced search, if necessary.11 So, with the help of Internet, it has become easy to write a good prior art description in the patent specification. Insufficient prior art description may attract litigation even after grant of the patent or after commercial exploitation of patented invention.

**Statement of Invention – the Techno – Legal Part**

The statement of invention, also known as ‘summary of the invention’ is one of the techno-legal
parts of patent specification, because the claim or claims being constructed are based on the summary of invention. In Indian practice it is verbatim to claim/claims.\(^3\) It may be noted, that ‘summary of invention’ is not an essential element of research article wherein an invention has to be described in detail under materials and methods; and results and discussion. On the other hand, the summary of invention is an essential element to define the scope of invention so as to provide a clear technical manifestation of invention to patent Examiner or other interested person. In fact, Examiner would reject a patent application if ‘summary of invention’ or ‘explicit statement of invention’ has not been provided by the inventor in his patent specification. Statement of invention is generally based on ‘object of invention’ which in turn is based on drawbacks of closely related prior art as mentioned earlier. Object of invention would be either to provide a process or to provide a product, because as per statute meaning new product or process [Section 2(1)(j) of the Act]. A mere study or analysis is not the subject of patentable invention, because to be patentable, an invention must be susceptible of industrial application. Some inventions are not patentable and have been defined by Section 3 of the Act. Therefore, object of invention must relate to a process or to a product of patentable invention. If the object is to provide a process, then statement of invention would start with the preamble ‘Accordingly the present invention provides a process….. which comprises ……’, and if object of invention is to provide a machine or a device, then the statement of invention would start with the preamble ‘Accordingly the present invention provides a device ….. comprising ……..’. Whether it is a process or a product, the statement of invention should clearly summarize the invention by enumerating all essential steps of the process or by providing all essential features of product or machine so as to define clearly the exclusive right required for economic exploitation of the patent. Again, as per Section 10(5) of the Act, which states that ‘the claim or claims of complete specification shall relate to a single invention, or to a group of inventions linked so as to form a single inventive concept, shall be clear, succinct and shall be fairly based on the matter disclosed in the specification’, the statement of invention should relate to a single invention. This means that one could not claim two processes in one patent application, for example, a compound ‘A’ can be prepared either through path comprising steps of p-q-r or through another path comprising steps of x-y-z, but it is not possible to claim all the steps p-q-r and x-y-z in a single patent application. However, it is possible to claim compound ‘A’ (if the compound ‘A’ has not been reported in prior art) and it’s preparation in the same patent specification (product by process claim). Likewise, if an enzyme ‘X’ has been prepared from a hybrid DNA sequence ‘Y’ using a synthetic primer ‘Z’, then it is possible to claim all the three different components ‘X’, ‘Y’ and ‘Z’, in one application because all three components together form a single inventive concept as per Section 10(5) of the Act. In this case, it is necessary to describe all the three components individually having the preambles such as ‘Accordingly present invention provides a process for preparation of an enzyme …… which comprises ……’; ‘Accordingly present invention provide a hybrid DNA sequences comprising ……..’; ‘Accordingly the present invention provides a primer comprising ……..’, etc. As ‘statement of invention’ is the summary of the invention, therefore, each component of statement should be fairly supported by detailed description of invention.

**Detailed Description of Invention**

In detailed description, an inventor could describe everything related to the invention; however, components of statement of invention or the components of claims should be there in the description. Legal protection would not be there for any matter described in detailed description of invention, until and unless it has been claimed.

There is no set format for expression of the detailed description; it depends upon the field of invention. Suppose, the invention relates to an improved composition to be used as tuberculosis drug; to prove that the composition is improved, the detailed description should be supplemented with comparative statistical data of the improved composition and the known composition, and if the invention relates to a machine or device, it must be described with the help of schematic drawings, and so on. In principle, detailed description of invention is equivalent to research article published by scientific journals; but as compared to research article, the expression of detailed description should be concise and clear. It is better to read published patent documents related to the same field of invention from Internet and follow the best format. Inventors would get granted patent
documents by visiting websites of USPTO or European Patent Office, followed by browsing the patent search and then by putting appropriate key words, to which the invention relate, in the search box. The published patent documents, which are not the granted patents, are also available on the Internet. In fact, European Patent Office publishes documents marked as, A, A1, A3 and B, where the category ‘B’ indicates the granted patents. A search for the best format, from the available granted patent specifications would help in the expression of the detailed description in a clear and concise manner so that ‘any person skilled in the art’ could make and use the invention after the monopoly term of patent and to satisfy patent statute which is meant for benefit of society.

Examples - The Legal Support for Claim

Examples are nothing but actual experiments done by the inventor and the results obtained thereof. As per statute they are ‘the method’ or ‘best method’ of performing the invention which has been described in detailed description of invention. Examples are the support for claims, if the claim is pertaining to a process for preparation of any chemical entity then example would contain all essential steps and ingredients for the said process and if claim is pertaining to a product useful as drug then example would contain detail experiments to prove that the product is useful as drug. Like detailed description, inventor may adopt best format to describe examples. Generally, examples begin with the preamble that states that ‘the following examples are given by way of illustration of the present invention and therefore should not be construed to limit the scope of the present invention’. This is only to ensure that claims may not be limited by examples, if support is not available in example for any matter claimed in claim. In practice, for every claim, support should be there in the examples. Whether it is pertaining to ‘inventive step’ or to ‘efficacy’ of any substance, examples should support the matter. ‘Inventive step’ is a feature of an invention that involves technical advance as compared to existing knowledge or having economic significance or both [Section 2(1)(ja) of the Act]. Generally ‘inventive step’ is only incremental improvement of existing art. Therefore, it is better to differentiate the invention with prior art at the prior art description indicating the incremental improvement and substantiate the same at example.

Advantages/Uses of the Invention

Usefulness of an invention is one of the criteria for patentability [Section 2(1)(j) of the Act]. However, some inventions are improvements of already available product or process. In that case, a brief description indicating the advantage of improved product or process provides information of economic importance of the patent application. Therefore, an inventor should describe judicially the advantage of the invention in the contents of specification. Use of invention can be described in this part of contents of specification if the product is new and has not been reported in prior art.

Claim – The Legal Part of Specification

Patent provides certain legal rights to inventor or patentee. Section 48 of the Act defines the legal rights of an inventor as ‘a patent granted under this Act shall confer upon patentee-

(i) Where the subject matter of the patent is a product, the exclusive right to prevent third parties, who do not have his consent, from the act of making, using, offering for sale, selling or importing for those purpose that product in India;
(ii) Where the subject matter of the patent is a process, the exclusive right to prevent third parties, who do not have his consent, from the act of using that process and from the act of using, offering for sale, selling or importing the product obtained directly by that process in India’.

The above legal rights that confer upon a patentee by a patent are provided by the claim or claims of a patent specification. Therefore, the claim should be constructed intelligently so that a third party could not infringe it easily. Claim is the legal boundary of a patent specification; anything which is a part of a process or a feature of a product and has been described in the description but not claimed in claim would not get legal protection in case of infringement. On the other hand, claim should not contain any matter which may infringe patent rights of third parties. This is possible by thorough prior art search which would indicate the ‘freedom to operate’ an invention without infringing the claims of third parties. The prior art search, therefore, is not only important to establish the novelty of an invention but also is relevant for drafting claim so that any matter of a claim does not infringe the patent rights of a third party.
Claim drafting needs special skills, however, an inventor knows the boundary of his invention who could draft claims better than others. Inventors may search related patent specification to get acquainted with text of the claim. Indian Patent Office website (www.ipindia.nic.in) provides principal claim along with bibliographic data of each granted patent in the Official Journal. Principal claim or 1st claim defines the scope of invention. It should be in a single sentence containing all essential features (in case of product) or steps (in case of process) which may be described with the help of punctuation marks. Principal claim is generally followed by subordinate claims which are dependent claims of principal claim. For example, in ‘a process for preparation of compound A’, the principal claim may comprises with many steps and one of the steps is the extraction of parts of medicinal plant species ‘X’ with polar solvents, then one subordinate claim would describe which parts have been used to get the extract and another subordinate claim would describe which polar solvents have been used to get that extract. Naturally, the construction of claims would depend upon field of the invention. Claim begins in a new page of the specification and begins with preamble ‘I/We Claim’, followed by numerical number 1, 2, 3, etc. 1 represents the first claim or principal claim and 2, 3, are the subordinate or dependent claims. Principal claim begins with the title of invention, such as, ‘A process for preparation of …..’ or ‘An improved process for preparation of……’ or ‘A device useful for…..’, etc. Subordinate claim should refer the principal claim, such as, ‘A process as claimed in claim 1 wherein polar solvents used are …...’. One omnibus claim which refers to the contents of specification itself is also allowed in India, such as, ‘A process for preparation of an antibacterial agent B as herein described’ or ‘A process for preparation of compound A substantially as herein described with reference to examples’. Such type of omnibus claim is not allowable in US. However, in US anything under the sun is patentable if the criteria of patentability are there in the invention. Many new uses of a known substance can be claimed in a US patent which is not allowable in an Indian patent. All the subordinate claims are dependent on principal claim only. Inventor may claim two or more independent claims in an Indian patent application if it is pertaining to product by process claim or pertaining to a group of inventions linked together so as to form a single inventive step as mentioned in the ‘statement of invention’. As mentioned earlier an inventor may adopt best format for the expression of the contents of specification from an US patent but should not adopt the way of construction of claims of a US patent to construct the claims for a patent application to be filed in India. Also, inventor should be acquainted with Section 3 of the Act to understand which claims are not allowable in India. The Act and rules thereof are available at www.ipindia.nic.in. It is worth mentioning here that a provisional patent specification does not require claim or claims in its contents. Provisional specification would not provide patent rights or would not be examined as per procedure until or unless a complete specification has been filed by the applicant within 12 months of filing the provisional specification. Provisional specification has to be filed only to get priority and protect novelty of the invention.

Abstract

Specification should be accompanied with an abstract which begins with a title. As per practice, the title of the invention as given as element (i) of Form 2, title which describes the field invention at the beginning of description (element iv of Form 2), and title of the abstract should be the same. Abstract is the technical information of the invention or summary of the specification or claims. The statute is very clear about abstract, therefore abstract should be as prescribed as in Rule 13 (7). Inventor may visit the Official Journal of Indian Patent Office for abstracts of all patent applications published as ‘publication after 18 months’.

Transformation of Novel Output of Scientific Research

It is evident from the above discussion that there have been several critical issues to transform the result of research output into written description of patent specification. The basic question as to whether description of research article is similar to the description of a patent specification, particularly if both are related to same or substantially the same invention could be answered with these critical issues.
In a research article, the closely related prior art and its distinguishing features as compared to instant invention is not very important whereas it is a decisive factor to establish novelty of invention and hence the closely related prior art should be described judicially and clearly in a patent specification. Another critical issue is the statement of invention based on which claim(s) have to be constructed in a patent specification. In an Indian patent specification, statement of invention is verbatim to claim(s). Therefore, statement of invention should comprise with all the salient features of invention for which legal protection has to be sought. Another critical distinctive feature of patent specification is to provide adequate examples to substantiate the statement of invention or claims. Hence, the detailed description of invention should be concise and clear as compared to a research article published in a scientific journal. However, an inventor could get idea from published patent specifications from the websites of patent offices, particularly from the European Patent Office website and would be able to transform his own research output into written description of patent specification.

Conclusion

Researchers and academicians engaged in scientific research are well-versed with technical write up of scientific research article. Earlier, the full text of patent specifications was not available to researchers or academicians; consequently they are not well-versed with contents of patent specification. With the advent of Internet, full text of patent specifications and Patent Act of many countries are easily available now. Therefore, it is rather easy now to disclose an invention in a patent specification. An inventor knows better the technical inputs and output of the invention. To transform the technical output of an invention into a written description, which is also known as ‘drafting of patent specification’, is possible now with easy access to Internet. In case any confusion arises, inventor may consult with any IPR professional who handles patent specification drafting, filing or amending the specification during examination of said patent application. Many legal disputes, which have been decided on the basis of contents of specifications, are beyond the scope of discussion of this article. Inventor may get recent cases from Internet. In view of such cases inventor should take enough care while transforming his own research output into written description of a patent specification.

References