Chapter

Prologue One: Drafting of Patent Specification

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1. Introduction

In nineteenth century, the foundation for Intellectual Property Protection (IPP) was created. In the 1883 Paris Convention, the Protection of Industrial Property was created. Intellectual property is the intangible product of the mind's work. Intellectual Property Right (IPR) is rights recognized by the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement and governed by the World Trade Organization (WTO), and they are given to persons for a certain period of time over the creations of their minds [1].

TRIPS agreement provides different norms and standards with respect to different categories of IPR. They are as follows:

- Patents
- Trademarks
- Copyrights and related rights
- Industrial designs
- Layout designs of integrated circuits
- Geographical indications
- Plant varieties
- Protection of undisclosed information (trade secrets) [1]

Patent is an exclusive right or a set of specific rights given to an inventor or a person or an organization, who claims to be the first inventor by the Patent and Trademark Office to exploit their invention for a limited period of time to make, use, or sell the invention.

In general patents are issued to protect new product, apparatus, and process provided that the invention is not in the public domain also not disclosed anyplace in the world; it must be nonobvious and should have a practical application [2].

Living organisms including animal species, plants, and biological empowered with biotechnological inventions are categories of patents on bio-patents or life-forms [2].

Patent system can motivate the technical process in different ways:

1. Inspires the research and invention
2. Motivates the inventor to disclose their invention

3. Reward for the expenses of their newly developed inventions

4. Provides an inducement to invest capital in new lines of production which might not appear profitable [1]

IPR has become a knowledge industry [3]; many corporate organizations to get a leadership in the market have designed their project management system with sustained growth and enriched profits. The different approaches in their project management systems are as follows:

- Managing the IPR strategy
- Managing research collaborations with internal expertise member
- Acquiring knowledge and invention inputs from external resources
- Making mutual beneficial licenses

2. Impact and benefits of stronger IPR in developing countries

Granting monopoly rights as patent for their invention, developing countries can have the benefits like the following:

- Motivation of innovative research by private agents
- Creation of new productive activity by utilizing knowledge or utilization of knowledge for creation of new productive activity
- Distribution of knowledge to others [4–6]

3. Reason for the patent search

Different sorts of people like lawyers, historians, educators, students, government agencies, and inventors conduct patent search. The reasons for the patent search are as follows:

- Research and development
- Educational
- Technology
- Patentability
- Financial
- Economic
- Historical
- Legal

- Genealogy
- Marketing (patent search) [7]

3.1 Types of patent system

Patent system is broadly categorized into the following:

1. Design patent—consumer product (ornamental aspects)-related inventions
2. Utility patent—functional attribute-related inventions
3. Plant patents (patent application) [8]

4. Patent application

To get an exclusive IPR rights for their innovation/invention as patent, patentee has to disclose their invention in the specific format into the public domain. Incorporation of invention details in the patent specification needs to be submitted along with the patent application. Consequently the specification should meet the basic requirements such as written description, best mode, and enablement. In order to accomplish this goal, the invention must be disseminated to the public in a manner that will allow its appreciation and exploitation.

Patent application is a complex one. Drafting the patent specification is indisputably difficult; however, it is a very essential part in the patent application. The description of invention should include both technical and nontechnical. Sufficient technical details need to be incorporated to enable the researchers to reproduce the invention, whereas nontechnical description details need to understand the reason for its advance over the art and economic value by jurors, judges, licensees, business people, etc. Also the patent application should have the provision for the incorporation and changes in near future perceptions and in critical circumstances. Hence patent specification in the patent application becomes the heart and soul. Drafting the patent specification and claim has a vital role in getting the invention to get patent. Patent application should be filed as quickly as possible to claim the priority of their invention [9, 10].

5. Drafting of patent specification

Types of patent specification

1. Provisional specification
2. Complete specification

5.1 Provisional specification

Provisional specification in the patent application is a placeholder application, because it is not examined and patent is not issued. This provisional patent application will last irreversibly after completion of 12 months from the date of filing.

Major advantages of provisional applications are as follows:

1. Required information for filling is minimal and inexpensive.

2. Provisional application is not examined but can claim the priority of their invention.

Major drawbacks of provisional applications are

1. Application will last irreversibly after completion of 1 year, hence to mark this dead line and ensure that it is not missed inadvertently.

2. The application is not examined during its pendency and will be examined later during checking the superseding application utility. Provisional application is not a draft; it should be framed cautiously taking claims in an enabling manner. The patent examiner may certify that the application is unpatentable one based on the prior art reference.

Important points for construction of specification

- Complete specification must be read underlining the importance of subsequent infringement.
- Legal expertise may be involved in drafting the claims.
- General statement always leads to misinterpretation of facts.
- The specification should be described as a technical constructive one rather than literal one.

5.2 Parts of the complete specification

Complete specification is constructed with the following:

- Title of the invention
- Opening description of the invention
- Prior art description
- Objectives of the invention
- Statement of invention (optional)
- Detailed description of the invention
- Claims

5.2.1 Title

The tile of the patent specification is a concise description related to their invention including its operation, use, and method by which it is to be performed. The primary concern in choosing a title for a complete specification is to specify the

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scope of the invention, and the second step is to say clearly what their invention is. Hence, care should be taken to incorporate the entire scenario related to the invention in the title itself.

5.2.2 Opening description of the invention

Opening description of the invention must provide more detail about the invention than the title. Patent draftsman should have a clear understanding about the invention, and then he/she can draft the specification and claims of the patent application. The specification also should describe how the invention is to be carried out.

5.2.3 Prior art references

Consequent to the opening description of the invention, prior art references are described in detail in the specification. In prior art references, brief information about the relevant invention are disclosed in the public domain or anywhere in the world.

5.2.4 Objectives of the invention

The objectives should briefly state the invention in detail. To start with, the invention information should describe the main objective, whereas invention-related information can describe the ancillary objectives of the invention separately.

5.2.5 Statement of invention

If the applicant wanted to include one or more omnibus claims, then the omnibus claim supporting details should be described in detail with the main claims.

5.2.6 Detailed description of the invention

In this section, the applicant or patent draftman should describe the invention in detail. Also the patent-drafting person should remember that the invention details need to be understood by a person having an average skill and average knowledge in the art to work the invention.

5.2.7 How to make

The specification must describe the invention in detail so that a person skilled in the art can be able to make the invention as it is claimed.

5.2.8 How to use

The claimed invention must have an industrial applicability (utility) and should not be obvious to the skilled reader.

5.2.9 Best mode

The applicant should describe and disclose their invention in a best possible method in the patent specification.

They can disclose the invention as follows:

1. Sufficiently and fairly describe the invention

2. Fully and particularly describe the invention

3. Sufficiently and clearly describe the invention

Each and every aspect of invention must have clarity and be specific to the invention.

5.2.10 Claims

Claim or claims are defined as the exclusive rights (monopoly or protection) for their invention.

General rules in the interpretation of claims:

1. The scope of the claim in the application must be clearly defined.

2. If the meaning of the words in the claim is not disputed, the undisputed claims will be interpreted as a matter of law.

5.2.11 Function of claims

Among the different claims in an invention, at least one claim should define the subject matter for which protection is sought. For that reason a patent drafter must draft the claim in such a way that the competitor should not get scope for infringing the invention by interpreting in such a way beneficial to him/her. The claims of a patent have to be supported by the description, and also the claims do not stand alone.

Description must be the precursor for claims which will be drafted on the basis of earlier study on prior art which will be cited during prosecution.

5.2.12 Claim categories

All claims fall into one of two broad categories. The claims are either product (something tangible such as a mechanical device, a machine, an electronic circuit, a chemical compound, or a formulation) or process (a method of making, using, or testing something).

5.2.13 Independent and dependent claims

Claims can either be independent or dependent. Independent claim may refer back to the earlier claim. A dependent claim, however, includes all the limitations of that claim and adds much more limitations.

5.2.14 Form of claims

Claims must be precise, definite, and explicit for the skilled reader. Words like "for example" or "preferably" should not be incorporated in the claims; also avoid the internal codes or trademarks or names.

5.2.15 Length of text

In general, the patent specification in the patent application should be kept as short as possible with sufficient disclosure of the invention in all aspects [11–23].

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6. Conclusion

IPR has an important role in the creation of technology and protection of ideas, innovation, and designs. In developing countries this IPR has a potential significance in protecting their investment; also it can help to achieve the desired technological advancement and economical level in the competitive world. IPR can assist the technology transfer of the invention through licensing and encouraging the further development of the invention with joint ventures. The specification in the patent application is a key element and has important role in the granting of patent for a particular invention. In the patent application, the patentee should fully disclose their invention in the section for what they expect for the exclusive rights. Claim or claims in the specification of the patent application are statements describing in a best possible method of the invention. Hence, drafting of patent specification has been considered as the heart and soul of any patent. It has an important role in protecting the invention from any infringement by the competitors. If any argument arises regarding the validity or infringement of patent, the scope of the invention will be verified based on the specification. While drafting the claims in the specification of the patent application, all possible equivalent variations are needed to be considered to safeguard the invention from infringement. Also the claims should be described legally in a defi¬nite, precise, and clear manner so that a competitor should not get scope to infringe upon the invention.

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