



INTELLECTUAL PROPERTY RIGHT IN CONTEXT OF TECHNOLOGY, INNOVATION AND INVENTION

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Abstract

The role of innovation and invention is same in Intellectual property is same as its kinds. Innovation includes newness, novelty and unique nature of any product, which is novel and invention comes after this. Technological development and commercialization plays an important role in developing the product and also overall development of any country.

Governmental approaches, legal policy, technology and economy are the base factor of any nation, and where there is innovation the product needs all of them together. This article also discusses about the protection of exclusive right of intellectual property under different laws in it. Which does not only provide legal benefit, but also minatory, fame, and holder got the right over that product's profits and use. That right can be contractual also, like employee and employer relation, where inventor gives all his work to the company and company run the business on that work's name. In return inventor get royalty and also get motivated and appreciation by company for innovating new more ideas like R&D in any enterprises. The complex and easy relationship between IPR, innovation and commercial business has been discussed here and the strategies followed by the enterprises also been mentioned.

Introduction

The transformation of any idea or thought into in any product or goods creates a monetary benefit and also makes commercial use of that product. For an innovation, those ideas must be reproduction at a cost-effective price and must assure the purpose. Innovation contains purposeful information in application, imagination and programming in deriving greater or different ideals from resources and all other means by which new thoughts can be created and developed in the form of product. In industrial purpose or we can say in business these ideas will be fruitful if they reaches to the level of satisfaction of society.

An innovative novel or improved product that assemble customer expectations offers an active or new business, new market territory without competition for so long as it keeps its innovative advantage. For helping a business to gain and retain its innovation-based advantage, the IP system plays a significant role in it.

Intellectual property has more and more introduced a vital role with the immediate use of scientific, technological and medical innovation that we are observes in today's scenario. Also, modification and development in the global economic atmosphere have put effect on the development of business processes where intellectual property is a crux of establishing significant and prospective growth. There are several new legislations in India for the protection of intellectual property rights (IPRs) has been passed to fulfil the international obligations under the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Technological innovation (henceforward, for the purpose of simplicity, simply called 'innovation') in a knowledge-driven, competitive business environment, is a principal determinant of successful firm performance. But different opinion lies amongst economists and policymakers about the correct role of intellectual property in relation to innovation. Intellectual property has therefore developed into the biggest and fastest-growing area of law thus require the demand for IP specialized have grown in this area to deal with (IPRs) across the national and international borders. Enhancing the protection and enforcement of IPRs to the level of solemn international commitment at the multilateral level, is the successful conclusion of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in the World Trade Organization. The new global IPR era comes with both profit and costs.



Here the main spotlight is on the competitive strategy of a private enterprise in a market-driven business environment, the term 'innovation' is used here to point out to the process of fetching valuable new products (goods and services) to market i.e., from the idea/concept making stage to the successful beginning of a new or improved product in the market place or the outcome of that process, so as to rally up with the explicit or implied needs of current or potential customers. Through innovation an enterprise look for to deliver unique new value to its customers.

Hence the need for a systematic and periodic study and check of the real use by businesses of the tools of the IP system with the intention that economists are able to provide experimental, evidence-based direction to policymakers to adapt the IP system so that it continues to provide the conflicting private and public interest in spurring extra innovation and its broad flow in the less time. Generally put, an 'innovation' is developing a new idea **and** putting it into practice.

Further in this article, technological innovations have been focussed. In this context, 'marketing' is the understanding of that unique new value and communicating it to the current and potential customers of a business so that the product sells itself.

Technological Innovation May Be Divided In Several Ways

1. Product vs. Process,
2. Radical (basic or fundamental) vs. Incremental (improvement), and.
3. Disruptive vs. Sustaining (sequential and/or complementary).

Other important types of (non-technological) innovations that are not outcome of scientific and/or technological R&D, but investment made in R&D creates profitable marketing the products and services:

1. Marketing innovation,
2. Institutional innovation, and
3. Complementary innovation.

Innovation and Ipr and Developing and Under Developed Countries

What is IP? Well if we talk about 'IP' term it refers to unique, value-adding creations of the human intellect that result from human creativity, inventiveness and cleverness. So the IP right is a legal right, which are lies on the relevant laws of nation surrounding that particular kind of intellectual property right. Such a legal right comes into continuation just when the needs of the relevant IP law are met and, if required; after following the prescribed procedure under that law it is granted or registered.

Assumption is that a typical developed country say US and a typical developing country say Nigeria have different technology requirements ,if US have an effective IPRs protection framework then Nigeria based firms does, US based firms would not develop technologies needed by Nigerian consumers. Secondly firms based in the US may resolve in the absence of strong IPRs system in Nigeria to make their technologies trickier to work on.

This will cause a turn down in the quality of innovation and research in the US. And yet if the functioning of strong IPRs system does not affect Nigeria directly it will come with increase in global welfare.

Innovative Activities that if once sanctioned to thrive, than it will really turn around the economic fortunes of the country One of the main objectives of a business is managing innovation better than its competitors that wishes to carry on and thrive in today's economy. By trusting on practical examples, in this article it is high highlighted that the important assistance made by the effective use of the different tools in the IP system to the process of taking innovative technologies to market, through introduction of superior products and/or services. For clearing up the role of the tools of the IP system, it refers beyond merely focussing at technological innovation as either radical or incremental technological breakthroughs.

Inventions comes from the creative work of human beings carry substantial commercial importance, considering the possibility of its usage by big sections of the society within the country and also in different countries of the



world. For scientific inventions Patent is a very common modes which carries potential for industrial application and which is protected. Very few scientific organizations and some industries take proper measures to protect their inventions in India.

As a substitute of it, it focuses upon technological innovation as an interactive process follows up by a number of distinct stages. It starts with the making of a novel idea/concept and, with a series of stages, ends in the successful marketing and launching of a new or improved product in the marketplace. In other words, it looks at realistic IP issues significant to different stages in the whole new process of product development in which technological innovations may be introduced at various stages of the value chain from the creator to the end user. In general, it focuses on the idea stage and the research and development stage. It should be taken care of that for patent it does not include all commercially viable ideas. Therefore, the essence of treating ideas as trade secret, in particularly at the inception stage is required.

According to Non-doctrinal evidence which indicates that generally small and medium-sized enterprises (SMEs) are more prone to take trade secrets instead of patenting as a form of protecting their inventions to stay competitive.

It should, however, be noticed out that anything the ultimate decision would, at first it must be protected as a trade secret so that, afterwards a part of it may be patented and the remaining may still stay as the related trade secret and know-how, or inferred knowledge have hold by individuals that are linked with the patent.

Technological innovations also includes technological drawings, are protected as trade secrets and/or by copyright. It is essential for the drawings to be dated so as to establish the date of making. Technical drawings could also form an important part of the relevant patent application, at a later stage.

The Information included in existing patent documents holds an important role in the formation, programming and development of an idea. This information can supply valuable insight into whether an idea is new or not also whether to keep moving on further in Technological essential or fundamental innovations create new markets and new industrial branches for a new product. Such an innovation is also expressed as a radical or disruptive innovation. An improved product over its ancestor in terms of quality, reliability, ease of use, environmental protection, raw material use, labour cost, and so on, only happens with the help of an improvement innovation (also called an incremental, sustaining, sequential or complementary innovation).

It may too contain the application of new and better production processes or techniques that allocate old or new products to be made more of better quality, reliably, or simply in larger quantities, or at a lower price. Trade secrets, utility models/petty patents and patents are relevant for protecting, administering, utilizing and leveraging both basic and improvement innovations.

One side the IP system is measured to be totally necessary “to encourage creative intellectual endeavour in the public interest,” and on the other side, some notices that in practice, the IP system disturbs competition to the level that it is repeatedly seen to give a dreadful role in innovation.

Basically all countries over the world, a national legal system of intellectual property rights have evolved; this has been created over different periods of time during the last 100 years or so. It has facilitate the grant of property-like rights on such novel knowledge and creative expression of human, which has completed it and made feasible to bind the commercial value of the outputs of human inventiveness and creativity. This is generally made by its exchange or sharing or systematic use in amongst various kinds of business partners in a compound network of strategic relationships that usually work pleasantly during the new product development process for creating and marketing novel and improved goods and services in markets (domestic and export).

The grant by the government of a property right, although generally held for a limited period of time, for useful intangible intellectual output provides the holder of such legal property rights the right to exclude all others from commercially profiting from it. In other words, the legal rights exclude all others from using the underlying IP



asset for commercial purposes without the previous consent of the IP right holder. The different kinds of IP rights include patents, utility models, trademarks, trade secrets, geographical indications, industrial designs, layout designs of integrated circuits new varieties of plants, and copyright and related right.

While innovations are anxious about the commercialization of new ideas; in distinction with an 'invention' may not be directly associated with commercialization.

As such, innovation may be perceived as a process of communication and feedback during the different stages of the new product development process. An invention is measured as the generation of a new idea or knowledge, which seeks to solve a specific technical problem. Inventions could relate to products or processes and are typically protected by trade secrets, patents or utility models/petty patents. Utility models/petty patents or patents are granted/ registered under the appropriate national/regional law by the appropriate national or regional patent offices.

As all inventions are not commercialized, so it's clear that not all inventions end in innovations. Many of new ideas are created but not commercialized, quoting Brandt (2002), "Most die a lonely death never seeing the light of commercial success."

As a result, the competitive boundary that an entrepreneurial business may grow with a basic or unsettling innovation is likely to be longer lasting than that obtained merely from an improvement innovation, presuming that the technological obstacles to competitors taking benefit of similar innovations are approximately corresponding, since a basic innovation creates a new class of product or service, access of competition requires that the opening provided by that class is acknowledged by a possible competitor before it attempts to open into the market. Patents are the most preferred IP rights in context to technological innovations. This seems to be because of the use of the terms 'innovation' and 'invention' as same. This may explain why studies on innovation have, in various cases, followed patent as proxy input for innovation. Further in this article, however, the focus is restricted to all IP related actions that should be taken in an enterprise at various stages of the new product development process or cycle for using the various tools in the IP system for success in market.

Innovation as a process, hence, needs effective contribution of individuals from different sections/divisions of an enterprise, such as technical experts in R&D, management, marketing, finance, legal, etc., other than outside consultants, business partners, lead users suppliers, and outsourced component manufacturers/service providers. Once an enterprise fixed to rely on a utility model or a patent to protect its result of research and development, it must begin with the essential process, e.g., filing a utility model/patent application. Such a turn would assist the setting for filing date for determining the primary date and for claim of exclusive rights on result even before a patent is granted (unless the patent office refuses on absolute or relative grounds to grant patent). Generally R&D results in both efficient and artistic improvements. For protection and influencing new or unique designs which are exclusively judged by the eye, one should move towards the industrial design registration process at the national/regional design office established under the relevant national /regional design law. Well in general term it is supposed in this article that all actions relating to innovation in relation to new product development occur within an enterprise.

An enterprise would be well positioned to gain benefit from innovation if it get into consideration from the initial stage of the new product development process the full range of IP issues. This is correct whether the decision to innovate is occupied as part and parcel of the overall business strategy, one-off development of a new idea, or as a response to developed market place.

Strategies of Intellectual Property Rights and Commercial

Several indicators have been used to measure the efforts of an enterprise in undertaking research on and developing innovative ideas. These include expenditure on research and development (R&D), information on innovation, total sales, firm size, innovation strategies, etc.



Therefore, trade secret pertains to be relevant, particularly if the enterprise is until now decided on whether to file a patent application. Continuing trade secrets to be relevant during the entire R&D stage, as one would not want to ever have access to vital information to the competitors. If it is used by such competitors it would result in the decline of a competitive advantage, came from the final.

Patent documents in respect of the state-of the art provide useful information, which would enable an enterprise to avoid needless wastage of resources, in sense of money and time, during the R&D process, thereby hopefully reducing the normally high R&D costs. Patent information provide useful information, which can direct to product development or to design-around inventions, which may help to “short-circuit” the long time frame repeatedly required to launch a new product to the market.

Unfortunately with the purpose of business requirements, SMEs do not use patent documents as a basis of competitive acumen. SMEs, especially in developing and less developed countries, should spread awareness of and be capable of to exercise business, legal, and technical information enclosed in patent documents, which is in the public domain to occur with innovative product, which have been modified to local environment. The US and other advanced countries rest unsatisfied with the countries to join the World Trade Organization (WTO) they must sign the TRIPS agreement thereby implying that developing countries should accept to constrict for their IPRs protection system. At present being a member of the WTO Nigeria still did sign the TRIPS agreement in 1995. Other than the above considerations Nigeria may wish for to improve its enforcement framework and IPRs protection for other reasons especially for economic reasons in domestic territory as weak IPRs system may be obstructing the progress of certain domestic innovative activities.

A well combination of patent, industrial design and trademark can support the technological innovation. For example, the invention and development of a laptop or other products provides a good example of considerable use of a combination of different types of IP protection, namely, patent, industrial designs and Trademark. Here we can see how the innovation is improved by the application of the three different kinds of IP protection.

Patents, Trade secrets, trademarks, industrial designs, and copyright may independently or jointly provide the acquirement of technology and its commercial purpose. Strategy base use of a combination of IP tools in the innovation process can symbolically contribute to facilitating the grant of higher profits, maintenance of a finest market position, so enabling technology-based, innovative SMEs to have a high return of investment.

In the case of Aspirin, it provides a good example. Grown by Felix Hoffman in 1897, working with Bayer Company in Germany as a research chemist, in 1899 the drug got patent by the Bayer Company. After having knowledge that patents have a limited time period, the Bayer Company embarked in the lead of promoting a trademark for its new product. The Aspirin Patent expired and then the company continued to profit from the sale of aspirin by its recognized trademark Aspirin.

Conclusion

There have been a lot claims that patents of tiny novelty or excessive breadth have been granted, allowing their holders to extract undue rents from other inventors and from customers.

This has been of picky concern in software, biotechnology and business methods, where patent offices and courts have had most problems in responding to fast change, building up institutional expertise, assessing prior art and getting correct standards for the breadth of granted patents. More basically, it has also been asked whether patentability might hamper the diffusion of knowledge, and hence innovation, notably in these new areas. Other apprehensions have been put up about access to basic technologies, and research models, which appears to have been stucked sometimes during exercising of the right to exclude by patent holders. As universities are flattering more likely to patent and commercialise their own inventions, exemptions for research use of existing inventions are under threat, with the danger of public research being faced with rising costs and difficulties of access.



Giving importance to only innovation in IP is not enough; the development should be in and out. Not only commercial even the society, legal policy and government and environment should also be the concern of IP and enhancing Innovation and invention.

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