

Role of IPR in Ergonomic Product Development and Design

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Editorial

In today's technology driven knowledge economy, Intellectual property (IP) has assumed a new strategic role in product development for the researchers and business entities. New product development process (NPDP) has become a critical discipline for many enterprises nowadays. Very few technological innovations are radically new products and most are the improvements, which in some way make a product superior to its previous version. The Intellectual Property (IP) system plays a significant role in helping a business enterprise to gain and retain the competitive advantage in the business. IP strategy may differ depending on the type of innovation/level of improvement, but either way the IP system remains a valuable tool to protect product for competitive edge in the market. Innovations with significant technical effects are important factors contributing to the success of the business. The business entities stand to reap greater benefits from such innovation if they consider the full range of intellectual property (IP) aspects in new product development. Effective use of Intellectual Property tools not only reduces risk and facilitates the process of taking innovative technology to the market place, but also enhances the competitiveness of technology-based enterprises.

In today's competitive era, product development is incomplete without thoughtful consideration of Intellectual Property (IP). For small and medium scale enterprises, who aim to use their innovative product/technology to differentiate themselves from the competition, Intellectual Property describes the exclusive rights they can obtain under law to protect something unique they have developed. For manufacturing enterprises, these may include devices, technologies, processes, products or product features. If one has developed something and is profiting from it, then the chances are somebody, somewhere may also want to commercially benefit from it too. Therefore, in this vast field of Intellectual Property, thoughtful selection of intellectual property tool and protection of distinguishing technology/feature becomes an important step.

Intellectual property (IP) is the intangible asset for which statutory right, monopoly rights, and territorial rights are granted for specific periods by the granting authority in lieu of disclosure by the creators. The philosophy behind intellectual property law is technological development and at the same time incentives to the creator/inventor in the form of exclusive rights. Till 20th century, IPR was a kind of a word used selectively, but today it has become a common word in every business/enterprise. Different types of intellectual property include Patents, Design Rights, Trade Mark, Copyright, Plant Varieties (Farmer's right), Geographical Indications, Trade Secrets, etc.

Patent is a form of IP rights granted to an inventor for his unique product, process or both enabling him to exclude others from making,

using, selling, offering to sell, and importing an invention for a limited period of time (20 years), in lieu of his invention disclosure. Design rights protects the aesthetic features of the product; covering shape, configuration, pattern visible to bare eyes or combination of thereof. Trademark is a distinctive mark that differentiates a particular product or service from the competition. It may comprise of alphabets, numerals, pictures, colours, or combination thereof. Copyright is the right granted to the authors/creators for literary, artistic, cinematographic work for the specific period from its first creation. The creation under copyright is called as "Work". Plant Varieties protection is sometimes called as Farmer's Right or Plant breeders' rights. These rights are granted for commercially exploiting new variety of a plant having distinguishing features. Geographical indication is a protection granted to the manufacturers from a specific geographical pocket for protecting the distinguishing feature of the product. For example, "Basamati" rice from specific area of Punjab which has a specific appetizing aroma. Trade Secrets are the secrets having high techno-commercial success potential to the business and maintained at the individual level with proper care. The best example of trade secret is Formula for Coca-Cola beverage.

Invention is the generation of a new idea aimed at solving a specific technical problem. Innovation can be seen as a process of interaction and feedback during the various stages of product development. For most technology-driven enterprises, a successful product / process development results in a more efficient way of doing things or in a new commercially viable product. The improved profitability of the enterprise is the outcome of added value that underpins a bigger stream of revenue or higher productivity.

In majority of the cases, innovative development and ergonomic design of technology and/or product requires resources and technical development that are not available in-house. Ownership of the IP rights on the technology ensures that these are not lost while taking advantage of external technical support and facilities owned by a third party. To avoid future conflict, IP ownership should be clearly established and issues related to resulting IP resolved before embarking on any joint development or outsourcing the design work. In addition, Confidentiality Agreements (Non-disclosure Agreements), can provide protection for concepts where businesses aim to keep ideas restricted.

Intellectual Property is often regarded as a bit of a specialist area, frequently misunderstood by engineers and designers. However a little knowledge can go a long way and provide engineers/designers/ entrepreneurs with a genuine competitive advantage. Patent applications (probably the most common form of IP for entrepreneurs) can be filed for national and strategic territorial protection on the world map depending on the potential of technology and strategy for its commercial exploitation. Therefore, the patent searches are essential

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to ensure your potential idea doesn't infringe patents already filed by somebody else. Engineer/designer should take a global patent search clarify that the new creation needs to be unique before it can be patented.

To summarize, the innovation is not the same as invention. Innovation is a process, which begins from the conception of an idea to commercially exploiting an innovative and ergonomic product/process by the designers, engineers and ergonomic professionals. Intellectual property rights can be used effectively to facilitate successful innovation. Innovative and ergonomic technologies and products stand a better chance of successfully reaching the end customers if IP is used strategically. A broader approach to the contribution of IP in the process of innovative and ergonomic design of products is therefore needed.