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EMPOWERING SMES THROUGH UTILITY PATENTS: A CATALYST FOR HUMAN CAPITAL DEVELOPMENT

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ABSTRACT

In recent years, Utility patents, commonly referred to as "petty patents" or "utility models", have been a popular and highly acknowledged strategy in small and medium-sized enterprises (SMEs) for contributing to human capital development and serving as an alternative to the patent protection system. SMEs play a very significant role in the economic growth and development of our country and are considered to be one of the mainstays of our flourishing economy, but the sector still needs certain additional safeguards to realize its full potential. The paper exhaustively discusses the issues pertaining to the absence of "petty patents" in India, where SMEs are financially restricted but contain a vast reservoir of grassroots innovations that need to be preserved by a legal framework. The stringent patentability criteria of novelty, non-obviousness, and industrial applicability often preclude inventors of incremental innovations from reaping the rewards of their efforts. The paper makes an effort to explain the role of petty patents in fostering innovation and the acquisition of information and skills. The paper further discusses the significance of petty patents in nurturing human capital within SMEs by incentivizing investment in research and development, which stimulates economic expansion and job creation, further advancing human capital development. The paper further aims to provide insights into the global experiences related to utility patents in different countries where petty creations are provided with legal protection as utility patents. The paper exhaustively discusses the adherence to the TRIPS agreement, which has placed an obligation on developing countries to align their Intellectual Property laws with the international Intellectual Property regime. The paper seeks to outline India's approach in the implementation of the TRIPS Agreement which seeks to balance the need for knowledge dissemination and public access to innovations but delays adherence to other commitments so as to meet the domestic requirements. The paper also scrutinizes Section 3(d) of the Indian

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Patent Act which restricts the grant of patents for mere discoveries or trivial innovations. The stringent provision, designed to prevent the 'evergreening' of patents, could potentially be adapted to encompass utility patents which would not only clarify ambiguities but also promote technological innovations in small-scale industries, rather than restricting patent grants to mechanical devices. Lastly, the authors posit that the adoption of the utility patents model in India could stimulate competition in the global market and invigorate the Indian government's 'Make in India' initiative.

Keywords: Utility Patent, Small and Medium Sized Enterprises, Human Capital Development, Competition, Economy.

Introduction

In today's dynamic and integrated global economy, Small and Medium-sized Enterprises (SMEs) are recognized as the primary drivers of economic growth, innovation, and human capital development. These companies are usually engines of innovation, ingenuity, and flexibility, frequently offering new products, services, and solutions to the market. Their route, however, is not without hardships, as SMEs are frequently restricted by, financial constraints, and difficulties accessing markets and advanced technologies. In these conditions, where intellectual property and human capital are crucial assets, the strategic intersection of utility patents and human capital development appears as a significant avenue for increasing the competitiveness and long-term viability of SMEs.

The paper attempts to decipher the unintended and magnified negative effects of patents on innovators, with a focus on how patent rules and practices, which are apparently designed to assist Small and Medium-sized Enterprises (SMEs), can inadvertently create burdensome time and financial constraints. While patents might not harm Indian pharmaceuticals, they may hinder the progress of innovative engineering and technology sectors.

Following the judgment of Madras High Court in the case of *Novartis A.G. v. Union of India and Ors*.[3] which curtailed the issuance of patents for mere discoveries or trivial innovations, the world's economic landscape is undergoing a shift and SMEs are playing a pivotal role in driving this change. Their adaptability, agility, and inclination for invention make important contributions to local economies with respect to ‘vocal for local’ and ‘Make in India’ initiatives, creating employment opportunities and encouraging regional industrial growth. Small and medium-sized enterprises (SMEs), which frequently serve as catalysts for new ideas, have an incredible capacity to challenge established norms, paving the way for alternative

[3] Novartis A.G. vs. Union of India, (2013) 6 SCC 1.

methods of problem-solving and market involvement.

Utility patents are at the center of this transformational potential. The utility patent model offers exclusive rights to innovators, safeguarding their novel ideas for a specified period of time. Obtaining utility patents provide an array of advantages for SMEs that extend far beyond legal protection. These advantages include the capacity to gain a competitive advantage in the market, attract investors, and finally position themselves as pioneers in their respective industries in terms of innovation for the purpose of research and development. A number of developing countries have adopted this paradigm, with China providing as an instance of how utility patent implementation has played a crucial role in propelling the country to incredible technological advancements. Nonetheless, international accords like the TRIPS Agreement do not acknowledge the utility patent paradigm.

India can draw inspiration from countries such as China, which are fostering the growth of their SMEs and making technological advances. It is vital to exercise caution before adopting the utility patent model in India to avoid the acceptance of evergreening patent activities leading to 'overuse' of the system, making it hard for SMEs to compete.

Utility Patent Model and India:

In India, a utility patent, also known as "jugaad," is a type of intellectual property protection granted to unique and effective discoveries, processes, tools, manufactured commodities, or material compositions. Utility Models are awarded in numerous nations throughout the world in order to provide affordable and cost-effective access for SMEs into the intellectual system. SMEs employ approximately 59.7 million people in India, propagated among 26.1 million businesses. The SMEs sector is anticipated to be accountable for around 45% of manufacturing production and 40% of overall exports in terms of value.[4]

Despite its economic limits, the SME sector offers a rich pool of indigenous innovation, which must be safeguarded through the legal framework. The strict patentability standards of novelty, non-obviousness, and industrial utility could hinder innovation or minor inventions such as auto stoppers for LPG Gas stoves, Bullet Driven Santi, or Power Saving Technical Pumps. Also, the time required for attaining a patent is very lengthy and expensive in India which costs around Rs. 48, 00 to up to Rs. 1, 92,000.[5]

In India, we need to encourage our innovators and artisans to contribute to the economic growth of the nation and need to assure them that there is a cheaper as well as more viable option for protecting their invention. A simpler technical system than a patent is essential for the SME to

[4] S.S. Rana & Co. Advocates, Issues for Consideration on Utility Model Law, (2011), *available at:* https://ssrana.in/articles/issues-for-consideration-on-utility-models/ (last visited on August 11, 2023).

[5] Id.

benefit from Intellectual Property, and it is critical for it to get Intellectual Property Rights. The utility patent method is affordable, saves time, doesn't involve substantive examination, and remains valid for 6 to 10 years.[6]

The Indian Patent Act, 1970, Section 3(d), prevents patents from being granted for minor discoveries or innovations. In the case of *Novartis A.G. vs. Union of India*,[7] it was established that this stringent provision has been devised with a view to preventing the evergreening of patents as the term "efficacy" is not being defined in the Patent Act; thus, the decision lies at the discretion of the Controller however, the ambit of the provision can be designed in a way to cover utility patents, which also addresses the grey areas, and not restrict the grant of patents to mechanical devices but rather promote technological innovations in small-scale industries. Also, in the case of *Cipla Ltd. v. F. Hoffmann-La Roche Ltd. & Anr.*,[8] it was held that even if an asserted innovation is not a finished product, it would be patentable if it has some commercial feasibility. Thus, rather than the product, the focus is on the real physical material formed, which has the possibility for commercial realization.

Utility patenting appears to be an efficient instrument for protecting such innovations, which can fuel the already growing SME sector and act as a stimulating element for SMEs under the Government of India's 'Make in India'[9] initiative or 'Vocal for Local' as it would immediately assist local market entrepreneurs in entering the arena of innovation, where they might be able to stand up for their novel concept. This will result in international exports of low-creativity products, propelling the economy to a higher level. Overall, given the affordable registration fees and minimum inventiveness required, this would serve as an incentive for them.

Utility Patent Model and Human Capital Development:

In India's efforts to establish itself as a global innovation powerhouse, the utility patent system looks to be an important indicator of human capital growth. Inventors have to contend with the intricacy of patent applications, which necessitates an extensive understanding of their respective fields of specialization. This need fosters skilled human capital by requiring ongoing education, research, and collaboration. By actively participating in the patenting process, SMEs help to develop competence by fostering a culture of constant learning and specialization that extends beyond the boundaries of intellectual property.

In the context of the transfer of knowledge and joint initiatives, the utility patent model and

[6] Joseph Aristotle S., S. Shanthakumar, Utility Patent and Micro, Small & Medium Enterprises in India, *Vivekananda Journal of Research* 4-5, (2019).
[7] *Supra* Note 3.
[8] *Cipla Ltd. v. F. Hoffman-La Roche Ltd. & Anr*, RFA (OS) 92/2012.
[9] Intepat IP Services Pvt Ltd, India: Utility Patents & Position in India, *mondaq*, (2017).

SMEs complement each other. SMEs became significant players in technology-drivenindustries as they patent their innovations, thus enhancing their appeal to both domestic and foreign investors. The influx of money accelerates the trajectory of human capital development by helping SMEs to expand their teams and skills.

The utility is intrinsically tied to the growth of SMEs and the development of human capital in India. Patent protection empowers SMEs in such a manner, which stimulates innovation, rewards the development of skills, promotes collaborative ventures, and encourages global participation. The subsequent system not only boosts the economy but also acts as the foundation for a skilled and dynamic workforce that thrives on innovations and human capital development.

The Role of SMEs in India:

In India, SMEs are significant generators of both economic growth and technological advancement. They play an important role in the utility patent model and human capital development, affecting the landscape of innovations and nurturing a competent workforce.

SMEs are the primary source of innovation in the utility patent paradigm. This method gives SMEs a tactical advantage by preserving their intellectual property and establishing an innovation-friendly culture by granting them exclusive rights to their ideas. Because of their commitment to research and development, SMEs routinely introduce new products and solutions to the market. The utility patent paradigm encourages these companies to invest in innovation, allowing them to stay ahead of the competition and keep their position. This protection helps SMEs research, adapt, and provide cutting-edge goods and services, pushing India's technological frontiers.

Furthermore, the mutually beneficial interplay between SMEs, the utility patent model, and human capital development must be recognized. As they pursue patenting processes, SMEs engage in a complex process that generates human capital. To create detailed patent applications, SMEs must have an extensive knowledge of technology, which pushes them to build expertise and specialized abilities. This innate hunger for knowledge drives the development of a skilled workforce that not only excels in patenting processes but also promotes a more pervasive learning culture. Thus, SMEs contribute greatly to India's overall human capital development, supporting the country's ambitions to become a worldwide innovation hub.

Using their intellectual property, SMEs can collaborate and transfer technologies under the utility patent paradigm. Utility patents enable cooperation relationships to grow between SMEs, research centers, universities, and larger corporations. These collaborations promote

information interchange, cross-sector innovation, and the enhancement of the human capital ecosystem. Working on projects together exposes SMEs to a diversity of perspectives and fields of knowledge, which accelerates their rate of growth and increases the overall supply of skilled laborers.

The utility patent paradigm increases India's appeal to international investment in the global arena. Utility patent protection indicates a favorable environment for innovation and the enforcement of intellectual property rights. As a result, global investors seeking to profit from India's burgeoning SME market flock to the country. These businesses are funded by foreign investments, but these investments also foster cross-cultural knowledge exchange, thereby improving the country's human capital.

In India, SMEs play an important role in the relationship between the utility patent model and human capital creation. Their innovation, which is protected by patents, has an impact on the technological environment and energizes the country's efforts to develop its people resources. SMEs play a crucial role in India's advancement toward a dynamic, innovation-driven future by stimulating innovation, permitting the development of specialized skills, forging collaborations, and attracting foreign investment.

International Laws and Experiences across the Globe:

The importance of the utility patent model framework was first recognized in Article 1(2) of the Paris Convention in the year 1883, which categorizes utility models as one of the industrial properties. The member countries of the Convention cannot discriminate against a foreign right holder from the benefits of the generally applicable national treatment obligation for utility models and the reciprocal national treatment will also apply to select international principles including the right to priority.[10] However, the Convention does not mention the definition, nature, and scope of the right and protection to the utility patent holder. In addition to this, Article 2 of the TRIPS agreement administered by WTO enables the member countries to comply with the Paris Convention but the agreement does not provide for the establishment of a second-tier patent system or the utility patent model rather leaving it to the member countries to formulate laws related to utility patent model. However, Patent Cooperation Treaty allows international applications for a utility patent in countries that provides protection to the utility patent model.

[10] Sajid Sheikh, "Exploring the Possibility of Utility Model Protection in India", *Scholars International Journal of Law, Crime and Justice* 53-60 (2022).

Many developed and developing countries either have *sui generis* systems or incorporate flexibilities under their patent laws to provide protection to incremental innovations in the form of a utility patent model for a product or device.[11] However, there is no universal consensus on the term 'utility model', due to which it is called by different names in different countries example in Australian law it is termed as 'innovation patents'.

The utility patent model is also alternatively referred to as 'utility innovations' in Malaysia or 'utility certificate' in France.[12] The current rationale with regard to the utility patent model is that it has proven to be beneficial in advancing technological breakthroughs and in promoting research and development, especially in developing countries where major technological breakthroughs and minor innovations emanate from SMEs. SMEs play a very significant role in the economic development of the country and are considered to be one of the mainstays of the flourishing economy, especially in developing countries. The stringent patentability criteria often prevent inventors of incremental innovations from reaping the benefits of their hard work, which prevents the further growth of their business. Utility patent protection helps small-scale innovators to stay longer in business by protecting their incremental innovations which further promotes research and development thus enhancing the level of innovations.

The utility patent model has successfully been implemented in developed as well as in developing countries. Germany is considered to have one of the oldest and the mother utility patent model laws, the country has been successful in curing the deficiencies of the patent system and in providing cost-efficient utility patent protection within its utility model legal framework.[13] Since the introduction of the utility patent model, Germany has made tremendous growth in technological innovations with 85% of applications filed by domestic small-scale innovators,[14] thus encouraging the innovators to protect their utility-oriented inventions, especially SMEs.

Drawing inspiration from Germany, Japan adopted separate legislation on utility patent protection and has been successful in promoting domestic, industrial, and technical development. The system was introduced to "catch up" with the Western standard of technological development and in enhancing its research and development activities.[15] The utility model system in Japan has not only played a very important role in attaining high technological and economic upgradation but also in promoting further innovative activities and

[11] *Ibid.*

[12] Uma Suthersanen, "Utility Models: Do They Really Serve National Innovation Strategies?" *SSRN* (2018).

[13] Dr. K.S. Kardam, "Utility Model-A Tool for Economic and Technological Development: A Case Study of Japan", available at: https://www.ipindia.gov.in/writereaddata/images/pdf/FinalReport_April2007.pdf (last visited on August 11, 2023).

[14] Id.

[15] Id.

in wealth creation.

Today, Japan has become one of the major technology exporters to the USA[16] and has not only successfully exploited the utility patent model to enhance its indigenous minor innovations but also amended the utility patent laws to suit its higher innovative climate.[17] China is another prime example of a developing country that has been successfully exploiting the utility model for promoting technological upgradation like Japan. China has utility patent protection within its patent law and there is no separate legislation to protect incremental or minor innovations. The utility patent protection has helped the domestic industry of the country in protecting incremental innovations and in achieving technological advancements which further promotes research and development.

It has been observed that once industries of a particular country reach higher levels of innovative capacities the disadvantages of the utility patent model outweigh the advantages of the model as we can understand from the experiences of developed countries like Australia. There is a concern that dominant market players may use the utility patent system to avoid the strict patentability criteria and abuse the system in several ways to that make it hard for SMEs to compete.

Economic Partnership Agreements and International Investment Agreements:

Despite, the reluctance of international laws to address the utility patent model, there are provisions contained in FTAs and trade agreements on utility patent protection. In the year 2008, the European Union in its Economic Partnership Agreement (EPA) with Caribbean states called EU-CORIFORUM contains provisions on utility patent protection. Article 148 of the agreement lays out the requirements for utility patent protection, however, the introduction of a utility patent model remains optional to countries.[18] Further, Article 109, Article 110, and Article 121 of the Japan-Indonesia EPA address utility patent models.[19] However, the countries should be cautious in accepting the obligations contained in international agreements and should carefully analyze the impact of such provisions on the policy space. The rights of utility patent holders are also increasingly recognized in international investment agreements (IIA).

[16] Id.
[17] *Supra* note 13 at 11.
[18] Henning Grosse Ruse-Khan, "The International Legal Framework for the Protection of Utility Models", *SSRN* (2012).
[19] Id.

Curing Indian Patent Laws to Incorporate Utility Patent Model:

In India, there is a word for incremental innovations called 'Jugaad' which are innovations done by amateur inventors by using ordinary resources.[20] Most of the SMEs in India rely on the 'Jugaad' technique to get their work done effectively and in an efficient manner. However, there is no provision related to the utility patent model in India despite the fact that SMEs play a pivotal role in the economic growth and development of the country. SMEs in India often lack funds for paying hefty patent fees and are vulnerable to unfair competition and copying by foreign competitors.

The unavailability of utility patent protection robs SMEs of the vital time required to recoup research and development costs which are reflected in India's 42nd rank out of 55 countries in the International Intellectual Property Index. The solution is to adopt the utility model that helps developing nations advance their technological innovations by encouraging local innovations by SMEs. India can draw inspiration from countries like Japan and China to upgrade technological and economic innovations by adopting the utility patent system which would further strengthen the budding SMEs and stimulate competition in the global market at the same time invigorate its 'Make in India' initiative. Utility patent protection is undoubtedly an effective remedy in nurturing human capital within SMEs by incentivizing investment in research and development, which stimulates economic expansion and job creation, further advancing human capital development.

TRIPS agreement administered by WTO placed an obligation on developing countries to align their intellectual property laws in accordance with international intellectual property regimes. India amended its patent laws in order to fulfill its commitment to the TRIPS agreement, which seeks to balance the need for knowledge dissemination and public access to innovations but delays adherence to other commitments so as to meet domestic requirements. At present patent laws in India protects the inventions provided they meet the higher threshold of novelty, inventive step, and industrial applicability under the Indian Patent Act. Section 3(d) of the Indian Patent Act restricts the grant of patents for mere discoveries or trivial innovations.[21] The stringent provision was designed to prevent the 'evergreening' of patents, however, the patent laws can be harmonized and synchronized to encompass utility patents by either incorporating a separate chapter on the utility model or by incorporating flexibilities under the patent laws to provide protection to minor innovations in the form of a utility patent model for a product or device which would not only clarify ambiguities but also promote technological

[20] Joseph Aristotle. S. and Dr. S. Shanthakumar, "Significance of Utility Patents in the Economic Development of India", 1 *GLS Law Journals* 42-48 (2019).

[21] Indian Patent Act, 1970.

innovations in small-scale industries, rather than restricting only patent grants to mechanical devices.

Points to be considered while introducing the utility patent model in India:

- **Subject Matter of the utility model:** India can draw inspiration from countries like Germany, Japan, and China in restricting the subject matter of the utility patent model to devices, articles, structures, or combinations of the product and excluding the protection of processes under the model.
- **Novelty and inventiveness criteria:** As regards to the novelty criteria under the Indian Patent laws should be continued with prior public knowledge to be restricted within the territory of India and the stringent criteria of inventiveness or inventive step should be lowered to protect minor innovations so that SMEs are able to exploit the system for further technological advancements.[22]
- **Grace Period to file utility patent application:** The grace period provided under the patent laws should be continued for the utility patent model for domestic innovators.
- **Substantive non-examination:** The grant of the utility patent should be based on substantive non-examination of inventive steps and no pre-grant opposition for speedier and time-efficient registration thereby encouraging the domestic innovators to file utility applications.
- **Term of protection for utility patent:** The protection for utility patents should be around six years thus prohibiting the prolonged monopoly for such models.
- **Conversion of patent application and no dual protection:** The provisions should also be incorporated to allow the applicant to convert its patent application to a utility patent application if the patent application is rejected on grounds of inventiveness. However, dual protection of patent and utility patent should not be granted as it will diminish the importance of the utility model. While considering the transmutation of the patent to a utility patent in India several factors like pharmaceutical evergreening and welfare of the people should be taken into consideration.
- **Awarding compensation in cases of infringement:** The system can further be strengthened by providing monetary compensation in cases of infringement as the legal protection accorded to the utility model is not as strong as that of the patent at the same efforts should also be taken to create awareness of the utility patent regime.

[22] *Supra* note 14.

The Indian government has taken several initiatives to strengthen its Intellectual property protection with an aim to maximize the incentives for the protection of the intellectual property of different types of innovators. Apart from the intellectual property laws related to copyright, patent, and trademark several other legislations have been enacted such as the Plant Variety Protection and Farmers Rights Act, Geographical Indications of Goods (Registration and Protection) Act, and have made efforts in streamlining its intellectual property laws. Recently, a report was prepared by Economic Advisory Council to the Prime Minister (EAC-PM) titled *"Why India Needs to Urgently Invest in Its Patent Ecosystem"* recommended granting protection to incremental innovations through the utility model of patents.[23] The report also talks about the role of the utility patent model in pushing innovation done in Atal Tinkering Labs and Atal Incubation Centers under the Atal Innovation Mission as well as rewarding incremental innovations. The report states:

"India is already a hub of start-ups and small-scale enterprises, and the utility patent model will promote incremental innovation in this category. Thus, there is a case for bringing in a utility patent model in India- which should be much cheaper than patents, provided at a much faster pace, and has less stringent criteria for patentability."[24]

The report further states that the utility model of the patent is different from regular patents and does not dilute the rigor of the existing patent system. However, the report mentions that the utility model of the patent could only work after additional manpower is put in office so that the introduction of the model does not strain the existing system. However, there is still no law in place for the protection of the utility patent model. However, before introducing the model in India, there is a need to address the issues of lack of fixed timelines for various stages of the process. In addition to this consideration must be given to making improvements in filing and IT systems and outsourcing administrative manpower which can fasten the process.

Conclusion

The concept of the Utility patent model provides a cost-effective alternative to developing countries where the capacity to conduct innovative research is weak. In developing countries, patent protection tends to be useful only after an increase in indigenous-level innovative capacity which can be achieved through utility patent protection depending upon the local needs of that particular country. Utility patent protection may also encourage small businesses to operate in different markets and reduce the problem of duplication. However, there is a

[23] Sanjeev Sanyal and Aakansha Arora, "Why India Needs to Urgently Invest in its Patent Ecosystem", *EAC-PM/WP/1/2022*, available at: https://www.ies.gov.in/pdfs/why-India-needs-to-urgently-invest-in-its-IPR-ecosystem-16th-Aug-2022.pdf (last visited on August 11, 2023).

[24] Id.

concern that utility patent protection can stifle competition, especially in developed countries. As large market players in developed countries often use the utility model to get their products patented by circumventing the stringent criteria under the patent laws, thus leading to overuse of the system which can create a competition barrier, especially for SMEs, and lead to abusive behaviour by these market players. Developing countries like India should be cautious in broadening the concept of patent laws. The countries should tailor the utility patent regime according to the national innovative capacity and economic environment, once the threshold level of the innovative capacity has been reached that is to say the national economy and industries have reached a higher level of technological capacity it is not advantageous to continue with utility patent protection as it increases unnecessary noise and leads to patent thickets.

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