

# Exploring the Possibility of Utility Model Protection in India

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## Abstract

The basic rationalization behind Utility Models is that patents are not suited in circumstances where the innovation is mostly based on craftsmanship performed in response to a real but limited need. Over the past few years, the intellectual property regime in India has been able to reinforce and strengthen its roots in the structure of the legal system despite numerous challenges and limitations. But the main question is whether the Indian industry has been able to truly exploit the law of IPR for their growth or not? Going by the record it seems that only big national and Multi-National Corporations have succeeded in extracting the benefits of India's IPR reign because patent laws of India require a high threshold level of inventiveness which is accompanied with the cumbersome and highly technical application process, which is a quite a costly affair for small industries. In the present legal framework of India, the innovators of frugal or small inventions are unable to patent their inventions under the existing legal regime. The crisis has enlarged due to higher level of inventiveness. The utility model protection system developed to provide an alternate and auxiliary system to protect the inventions having a modulating level of inventiveness. Therefore, this paper intends to present the foundations of a legal framework which can strike a balance between the strong Patent system and a flexible utility model system which has a potential to boost innovation in India. The author in this paper looks into the possibility of legislating a separate law for the protection of utility models to promote economic and technological development.

**Keywords:** craftsmanship, patents, reinforce, industry.

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## I. INTRODUCTION

In his classic work 'Stages of Economic Growth' in 1960, Rostow presented five steps through which all countries must pass to become developed, viz., traditional society, preconditions to take-off, take-off, drive to maturity and age of high mass consumption [1]. In a globalized world, one factor that has fostered development is innovation. Since the trickling down of innovations post the Industrial revolution, IP systems in particular and patent systems, in general, have been an instrument for fostering technological innovation. In a globalizing world economy, protection of technological creation plays a key role in international competitiveness [2]. Through creation and innovation, today, the intellectual property regime reaches into everyone's daily lives. Considering its impact on human

society, literary awareness and a basic understanding of intellectual property laws and practice become indispensable for everyone. Even the National IPR Policy, 2016 obligates national program to raise awareness about the benefits and value of IPR to rights-holders and the public at large [3].

Theories of nature and character of the property say that a property can be both tangible as well as intangible [4]. Intellectual property is considered as an intangible asset or non-physical property and is a result of certain intellectual ability such as thoughts or ideas. In common parlance, rights cannot be claimed over non-physical entities, but intellectual property law protects inventors or artists by recognizing intellectual property rights so that they could claim control over

<sup>1</sup> P. T. Bauer and Charles Wilson, The Stages of Growth (29) 114 *ECONOMICA* 190-200.

<sup>2</sup> Matthias Zeeb, Intellectual Property Protection and the Globalization of the World Economy, 31(1) *INTERECONOMICS* (1996).

<sup>3</sup> Objective 1, National IPR Policy, 2016 (India).

<sup>4</sup> See Intangible Assets and Intellectual Property, American Association of University Professors, <https://www.aaup.org/sites/default/files/files/IntangibleAssets.pdf>.

their physical manifestations of ideas. This recognition of intellectual creation has garnered a lot of economic and political importance and also has opened up new challenges. Various intellectual properties like Patents, copyrights, trademarks, utility models, industrial designs, integrated circuits and geographical indications find its role in diverse sectors such as public health, food security, Internet, industrial policy, education, trade, biodiversity, traditional knowledge, media enterprises, science and technology, etc. In this knowledge driven society, integration of Intellectual Property in policy making has become indispensable. However, the nexus between IP and innovation needs to be properly documented [5].

The history of the concept of intellectual property and its legal protection can be traced from ancient Greece [6], even from the period before that. It is said that chefs in the Greek colony of Sybaris were granted year-long monopolies for creating particular culinary delights [7]. Similarly, in the Roman Empire, though Romans did not have any specific law protecting intellectual property, Roman jurists did discuss the different ownership interests associated with intellectual work [8]. However, according to World Intellectual Property Organization, “intellectual property rights (IPR) comprises those legal rights, by which the products of intellectual activity over a range of endeavours are defined” [9]. For the purposes of the TRIPS Agreement, IPR refers to “copyright and related rights, trademarks, geographical indications, industrial designs, patents, integrated circuit layout designs, protection of undisclosed information and anti-competitive practices in contractual licenses” [10].

Amongst the wide umbrella of different types of intellectual capital, patents have become the most revolutionary in terms of stimulating industrialization. The basis of Law of Patents is found in a 1474 statute of the Venetian Republic [11]. This statute appeared 150 years before England’s Statute of Monopolies [12]. The

two requirements laid down by the Venetian Republic “the usefulness” and “novelty of the invention” are still in force today in almost all states. As in a Faustian bargain [13], the inventor and the government undertake a long-term pact: “the inventor commits himself/ herself to disclose all information of his/her invention, while the government guarantees that it will provide legal protection to give exclusive rights on the economic returns of the invention.”

IPRs have evolved substantially over the centuries but the Faustian bargain has remained unchanged [14]. By providing intellectual property rights, the government assures the inventor the right to exclude others from using the outcome of his/her creative activities without his/her authorization. Thus, the government gives the inventor a legal monopoly to exploit his/her invention and capture the economic benefits for a limited period of time. It provides an incentive to individuals to invest their time and resources in creative activities. Once the inventor has invented a new device or a musician has written a new symphony or any artist has created some artistic piece of work, it becomes easy for others to exploit their outcomes at very low costs. Without legal protection, inventors, artists, manufacturers and authors are not in a position fully to exploit their works and claim the economic returns. As a result, in the absence of public regulation, there would be an under-investment in creative activities that would be below a socially desirable level [15]. Thus, it can be said that to protect the rights of artists and inventors, Intellectual Property laws were recognized and almost all states inculcated these rights in their respective legal systems.

Every state thus has its own IPR regime in the form of written and customary rules, which aims at providing protection to creative products produced out of creative activities. The reasons for which protection is afforded to such rights are twofold. One is to give expression to the moral sentiment that a creator, such as a craftsman, should enjoy the fruits of their creativity; the second is to encourage the investment of skills, time, finance, and other resources into innovation in a way that is beneficial to society [16]. This is usually achieved by granting creators limited monopoly rights to control the fruits of their creation [17].

<sup>5</sup> Keith E. Maskus, *Intellectual Property Rights and Economic Development*, 32 CASE W. RES. J. INT’L L. 471 (2000).

<sup>6</sup> Carla Hesse, *The Rise of Intellectual Property*, 700 B.C.-A.D. 2000: An Idea in the Balance, 131(2) DAEDALUS (2002).

<sup>7</sup> Adam Moore and Ken Himma, *Intellectual Property*, *The Stanford Encyclopedia of Philosophy* (Winter 2018 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2018/entries/intellectual-property/>.

<sup>8</sup> *Ibid.*

<sup>9</sup> About Intellectual Property,” WIPO Online Information and Introduction, <http://www.wipo.int/aboutip/en/>.

<sup>10</sup> TRIPS Agreement, 1995 art. 1(2)

<sup>11</sup> Joanna Kostylo, *From Gunpowder to Print: The Common Origins of Copyright and Patent*. In Ronan Deazley, Martin Kretschmer, Lionel Bently (eds.), *Property and Privilege* 21-50 (2010)

<sup>12</sup> Matt Kwong, *Six Significant Moments in Patent History*, Reuters, <https://www.reuters.com/article/us-moments-patent-idUSKBN0IN1Y120141104>.

<sup>13</sup> According to the legend, Doctor Faustus, an earnest alchemist, trades his soul to Mephistopheles to obtain 24 Years of unrestrained creativity.

<sup>14</sup> Daniele Archibugi, Andrea Filippetti, *The Globalisation of Intellectual Property Rights: Four Learned Lessons and Four Theses*, 1(2) Global Policy 137-149 (2010).

<sup>15</sup> Christopher May, Susan K. Sell, *Intellectual Property Rights: A Critical History* (2006).

<sup>16</sup> WIPO Intellectual Property Handbook: Policy, Law and Use, WIPO Publication No. 489,

<http://www.wipo.org/about-ip/en/iprm/pdf/ch1.pdf>.

<sup>17</sup> *Ibid.*

However, the tension between stimulating the creation and disseminating its benefits to society at large is delicate [18]. IPR as a concept has been discussed and debated throughout history and, with a global economy, this debate has become increasingly controversial and confrontational [19]. It is believed that IPRs play a great role in the economic development of a country. Economic theory shows that IPRs could play either a positive or negative role in accelerating overall economic growth and development of a country. The question of how IP rights affect economic development is complex and is based on multiple variables. Researches conducted with this regard reveal that the effectiveness of IPRs on the process of economic development and growth depends chiefly on particular circumstances in each country [20]. Available literature and researches conducted with this regard show that unlike developed countries, developing countries in their initial years of growth prefer weak IPR protection [21]. As the economy of a country grows and reaches a higher levels of technological capacity, demand shifts toward higher-quality products which as a result leads to favouring IP protected innovations. As seen from the limited evidence, relationship between IPRs and economic development is positive, however it depends on other factors that help promote benefits from intellectual property protection. That said, however, in the current technology-driven globalised world economy is becoming more dependent on intellectual knowledge and therefore effective (not necessarily strong and stringent) protection of IPR is emerging as a critical element of commercial success [22]. The changing dynamics of technology has also pressurized the conventional normative framework of IPRs. The most squeezed intellectual property is patents. In the present paper, the controversial aspect of utility model read with patents is discussed to gain clarity on invention and innovation in the current technology-driven globalised world economy.

## II. UNDERSTANDING THE CONCEPT OF UTILITY MODELS

A utility model system is a type of intellectual property that protects “minor inventions” through a system similar to the patent system [23]. The concept was carved out after the international recognition that minor improvements of existing products, even though they fail to fulfil the patentability requirements, have the potential to play an important role in a domestic innovation system [24]. The recognition of utility models is an effort to protect such inventions through granting an exclusive right, which allows the right holder to prevent others from commercially using the protected invention, without the right holder’s authorization, for a short period of time. Utility model systems require compliance with less stringent requirements and due to the liberalisation of the requirement of “inventiveness”, the utility model has simpler procedures with a shorter term of protection. The concept developed primarily to respond to the rising needs of domestic innovators like MSMEs [25].

The traits of a Utility model invention are such that the flexibilities proposed pave a way for improving the innovative climate in the country. These include: “...enabling artisans to secure protection for types of innovation that do not meet the stricter novelty and inventive step requirements of patent law; making it possible to increase the role of traditional innovators and artisans in economic development; acting as a catalyst to enhanced levels of innovation; the fact that they are cheaper to acquire than patents; and that they may become a source of data on innovative activity and experience in technological management” [26].

External and internal factors like a country’s technological absorptive capacity [27], its general institutional base to promote domestic research and development, and economic incentives influence the protection of utility systems of innovation. Like patents, utility models too, protect the functional aspect of a product [28]. It is also seen that in the countries like Germany and Japan, this system Utility Model has

<sup>18</sup> Cottier, Thomas and Mavroidis, Petros C., "Intellectual Property: Trade, Competition, and Sustainable Development: The World Trade Forum, Vol. 3" (2003). <https://scholarship.law.columbia.edu/books/148>.

<sup>19</sup> Brigitte Binkert, Why the Current Global Intellectual Property Framework under TRIPs is Not Working, *Intellectual Property Law Bulletin* 143 (2006).

<sup>20</sup> Keith E. Maskus, Intellectual Property Rights and Economic Development, 32 *Case W. Res. J. Int'l L.* 471 (2000) Available at: <https://scholarlycommons.law.case.edu/jil/vol32/iss3/4> L.471, (2000).

<sup>21</sup> Robert E. Evenson & Larry E. Westphal, Technological Change and Technology Strategy, *A Handbook of Development Economics* 2209, 2228–36, 2288 (Jere Behrman & T. N. Srinivisan eds., 1995)

<sup>22</sup> Gene M. Grossman and Elhanan Helpman, *Endogenous Innovation In The Theory of Growth*, The *Journal of Economic Perspectives* 25-7 (1994).

<sup>23</sup> Utility models, WIPO, [https://www.wipo.int/patents/en/topics/utility\\_models.html](https://www.wipo.int/patents/en/topics/utility_models.html).

<sup>24</sup> Uma Suthersanen, Utility Models and Innovation in Developing Countries, UNCTAD-ICTSD Project on IPRs and Sustainable Development (2006).

<sup>25</sup> H. Dernis, D. Guellec, and B. Van Pottelsberghe, Using Patent Counts for Cross-Country Comparisons of Technology Output, *STI Review*, 27, OECD 129-146 (2001).

<sup>26</sup> Uma Suthersanen, Utility Models and Innovation in Developing Countries, UNCTAD-ICTSD Project on IPRs and Sustainable Development (2006).

<sup>27</sup> Uma Suthersanen, The European Court of Justice in *Philips v Remington - Trade Marks and Market Freedom*, *Intellectual Property Quarterly* 3 (2003).

<sup>28</sup> Uma Suthersanen, Incremental Inventions in Europe: A Legal and Economic Appraisal of Second Tier Patents, *Journal of Business Law* 319-343 (2001).

contributed to the industrial development in those nations.

### A. Development of Utility Models

IPRs have traditionally been a sovereign right due to which there are fundamentally different features of the same IP in different national systems. A utility model is often referred to as a patent-like intellectual property right to protect inventions, however, the concept lacks a global definition and global acceptance. In common parlance, “utility models” can be defined as short-term registered rights granted for inventions that lack the level of inventive step that is required under the patent law. Different jurisdiction refers to utility models as “small patents” or “innovation patents” or “second-tier protection” [29].

The concept of the utility model can be found in statutes which existed before 150 years. The earliest example of utility model protection being the United Kingdom’s Utility Designs Act of 1843 [30]. In the early nineteenth century, the disorder in the regular British patent system and in the design protection laws resulted in the formation of two new acts: The Ornamental Designs Act of 1842 and the Utility Designs Act of 1843. While the Ornamental Designs Act protected ornamental designs that had been applied to articles of manufacture, the Utility Designs Act protected designs for the shape or configuration of useful articles of manufacture [31].

Later on, by the end of 19<sup>th</sup> century utility model framework was first established in Germany in 1891 [32]. This newly introduced utility framework facilitated domestic innovators who file about 85% of these applications [33]. While the law required utility models to meet the same requirements as patents in terms of novelty and utility, there is a lower threshold for an inventive step [34]. Processes and biotechnological inventions are excluded from the purview of utility models. Grants are to be made promptly without examination. Drawing inspiration from this, Japan adopted the utility model protection system in 1905 which was similar to the model of Germany, however it was amended several times [35].

<sup>29</sup> M. D. Janis, Second Tier Patent Protection, 40 HARV. INTL. L.J. 151,169 (1999).

<sup>30</sup> Lionel Bently & Brad Sherman, The United Kingdom’s Forgotten Utility Model: The Utility Designs Act of 1843, 3 INTELL. PROP. Q. 265 (1997).

<sup>31</sup> *Ibid.*

<sup>32</sup> F. Machlup and E. Penrose, The Patent Controversy in the 19th Century, JOURNAL OF ECONOMIC HISTORY 1 (1950)

<sup>33</sup> Rupinder Tewari & Mamta Bhardwaj, Mapping Patents and Research Publications of Higher Education Institutes and National R&D Laboratories of India 27-36 (2018).

<sup>34</sup> Section 1(1) of German Utility Model Law

<sup>35</sup> N. Kumar, Technology and Economic Development: Experiences of Asian Countries, Commission on Intellectual Property Rights (2002).

The present position of the Japanese UM law is that it protects devices only on the basis of shape or construction of articles or a combination of articles, which contributes in the industrial development [36]. In this regime, the applications are not examined substantively and protection is granted almost immediately through registration and publication.

In China, the patent law enacted in 1984 governs the grant of invention patents, utility models and industrial designs. Both the invention patent and utility model are referred to as patents [37]. The number of applications filed for utility models has always been more than those filed for invention patents and industrial designs. The system has also been utilized more by domestic innovators than foreigners. Understanding the significance of utility models, the European Commission in 1997, proposed legislative arrangements for creating Community Utility Models. These proposals were based upon wide-ranging discussions and consultations sparked by the issue of a Green Paper in 1995 [38]. However, these proposals on some grounds were withdrawn in 2005. While some countries in the EU do have a utility model system, others like the United Kingdom, Sweden and Luxemburg do not.

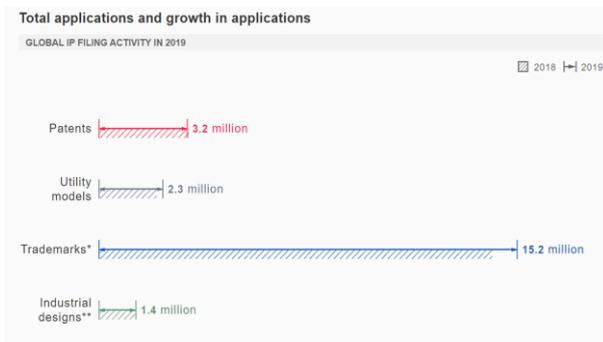
Similarly, South Korea introduced the utility model protection system in 1908 and Brazil in 1923. Apart from China and South Korea, some other developing countries from Asia such as Taiwan, China, Mongolia, Vietnam, Malaysia, Thailand, Indonesia and Philippines have also adopted the utility model system for promoting local innovators. As per WIPO, there are about 80 countries, which use utility protection models. These countries include: Albania, Angola, Argentina, ARIPO, Armenia, Aruba, Australia, Austria, Azerbaijan, Belarus, Belize, Brazil, Bolivia, Bulgaria, Chile, China (including Hong Kong and Macau), Colombia, Costa Rica, Czech Republic, Denmark, Ecuador, Estonia, Ethiopia, Finland, France, Georgia, Germany, Greece, Guatemala, Honduras, Hungary, Indonesia, Ireland, Italy, Japan, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Malaysia, Mexico, OAPI, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Russian Federation, Slovakia, Spain, Taiwan, Tajikistan, Trinidad & Tobago, Turkey, Ukraine, Uruguay and Uzbekistan [39].

<sup>36</sup> Section 1 of Japanese Utility Model law

<sup>37</sup> Patent Law of The People’s Republic of China. <http://www.wipo.int/edocs/lexdocs/laws/en/cn/cn006en.pdf>.

<sup>38</sup> Commission of the European Communities: Green Paper, *The Protection of Utility Models in the Single Market*, Brussels 1995, Accessed from [www.aei.pitt.edu/1216/](http://www.aei.pitt.edu/1216/).

<sup>39</sup> Protecting Innovations By Utility Models, *World Intellectual Property Organization*, See [http://www.wipo.int/sme/en/ip\\_business/utility\\_models/where.htm](http://www.wipo.int/sme/en/ip_business/utility_models/where.htm).



**Figure 1: Patent filings worldwide declined by 3% in 2019 – the first decline since 2009. Applications for utility models – a special form of patent right - grew by 9.1% to reach 2.3 million applications**

Source: WIPO Statistics Database, September 2020 [40]

### B. Scope of Protections of Utility Models compared with Patents

There is no common global acceptance and consensus of the term “utility model”. There is no international treaty which makes it obligatory upon the members to have a system for the protection of utility model in their national regime. TRIPS Agreement does not mention Utility Model. However, many countries have this protection which protects minor and incremental innovations by either having a sui generis system or by incorporating flexibilities under their patent regime. Utility model protection has different names in different national systems, like in Australia as “innovation patent”, in Malaysia as “utility innovation”, in France as “utility certificate”, and in Belgium as “short term patent”. Taking this tragedy of uncommon into consideration, “utility model” is a generic term equivalent to patent protection which refers to subject-matter that fails to fulfil the criteria for protectable under patent law but is granted protection without examination and for a shorter duration [41]. Due to which utility models are also termed as innovation patents or utility innovations in some countries like Australia and Malaysia [42]. On the other hand, some countries like Hong Kong, Ireland and Slovenia have a short-term patent that is equivalent (in term of rights) to patent [43]. Paris Convention mentions Utility Models as a category of Industrial Property due to which if the

designated country have such a protection the same can be sought by the inventor.

From a technical perspective, all inventions need to be protected and promoted, and the term ‘Utility Model’ simply refers, “a name coined to a title of protection for certain inventions, such as devices, articles or other engineering products” [44]. These inventions lack the complexity required for patents and have short commercial lifespan mainly categorized to meet the demands of local innovations [45]. They often exclude within its ambit certain inventions such as processes and biotechnological inventions including discoveries, scientific theories and aesthetic creations. According to German Utility Model Law, utility model protection shall be afforded to inventions that are new, involve an inventive step and are susceptible of industrial application.

This overlapping and cross-linkages between patents and utility models give rise to the dichotomy between the two. Under the patent jurisprudence, the following items can be granted a patent if it;

- a) Consists of patentable subject matter
- b) Is new (novelty requirement)
- c) Involves an inventive step (non-obviousness requirement)
- d) Is capable of Industrial application (utility requirement)
- e) Is disclosed in a clear and complete manner in the application (disclosure requirement) [46].

The third clause of “Non-obviousness” or “Inventive step” draws the sharp distinction between patents and utility models. Any invention is considered not inventive if it would be obvious to a person skilled in a particular field of technology. For example, a mere change of size, making a product portable, the reversal of parts, the change of materials, mere substitution by an equivalent part of the function. Utility models and patents are similar to each other in many ways [47]. In comparison to other IPRs that protect aesthetics and expressions of ideas, utility models and patents protect the function aspect of a technical invention. Although

<sup>40</sup> Facts and Figures, WIPO, <https://www.wipo.int/edocs/infodocs/en/ipfactsandfigures2019/>

<sup>41</sup> U. Suthersanen, *Utility Models and Innovation in Developing Countries*, International Center for Trade and Sustainable Development (ICTSD), Issue Paper No. 13 (2006), [http://www.unctad.org/en/docs/iteipc20066\\_en.pdf](http://www.unctad.org/en/docs/iteipc20066_en.pdf)

<sup>42</sup> World Intellectual Property Organization (WIPO) Collection of Laws for Electronic Access (CLEA) database, <http://www.wipo.int/clea/en/>

<sup>43</sup> A.F. Quecan, *Reforming the Patent Industry from the Small Business Perspective*, 11 *Journal of Engineering and Public Policy* (2007)

<sup>44</sup> See WIPO Patent Drafting Manual, [https://www.wipo.int/edocs/pubdocs/en/patents/867/wipo\\_pub\\_867.pdf](https://www.wipo.int/edocs/pubdocs/en/patents/867/wipo_pub_867.pdf)

<sup>45</sup> Patent Reform Impact on Small Venture-Backed Companies: Hearing Before the Subcomm. On Small Business of the H. Comm. on the Judiciary, 110th Cong. (2007) (statement of John Neis, CFA, Managing Director, Venture Investors), <http://www.nvca.org/pdf/House-SB-Patent-Testimony.pdf>

<sup>46</sup> See Conditions to be met to obtain patent protection, WIPO, [https://www.wipo.int/patents/en/faq\\_patents.html](https://www.wipo.int/patents/en/faq_patents.html). Also see, Sec. 2(1)(j) of Indian Patent Act, 1970. “invention” means a new product or process involving an inventive step and capable of industrial application.

<sup>47</sup> Utility models, WIPO, [https://www.wipo.int/patents/en/topics/utility\\_models.html](https://www.wipo.int/patents/en/topics/utility_models.html)

designs and trademarks can protect other aspects, due to statutory limitations, they cannot protect the technical details or functionality.

Practically speaking, protection for utility models is often sought for innovations of a rather incremental character which may not meet the patentability measures. The term of protection for utility models is shorter than for patents and varies from country to country (between 6 and 15 years). In most countries, applications for Utility Model are not examined prior to grant, unlike patents [48]. Process of the grant is usually swift and economical. Utility models are much comparably cheaper to obtain and to operate. Furthermore, in some countries, utility model protection can be sought for products only and that too for specific technologies, and not for processes.

### III. FRAMEWORK OF INTERNATIONAL TREATIES RELATING TO UTILITY MODELS: A COMPARATIVE STUDY

The utility model framework is well recognized in international treaties and conventions relating to intellectual property mentioned below.

#### A. Paris Convention (1883)

Utility models have been categorised under the Paris Convention as industrial property. However, the convention is quiet as to its definition and scope. The only aspects applicable are the international principles of national treatment and the right of priority (12 months) which is accorded to utility models. Thus, Article 1(2) states: "The protection of industrial property has as its object patents, utility models, industrial design, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition" [49].

#### B. The TRIPS Agreement (1994)

The TRIPS Agreement, on the other hand, requires all the countries to maintain minimum substantive standards for all the intellectual property regimes but fails explicitly to mention any second-tier patent system or the utility system, leaving it on the member countries to formulate it for themselves. Article 2(1) of TRIPS enables the member nations to adopt more extensive protection which is required in their law and comply with Article 1(2) of Paris Convention. Policymakers and legislators have often referred to this model as a second-tier patent system to develop their technological capacities.

#### C. Other Patent Treaties and Agreements

National utility model systems tend to adopt the International Patent Classification (IPC) as provided by the 1971 Strasbourg Agreement for the International

Patent classification, which facilitates the retrieval of patent documents in order to conduct effective novelty searches [50]. Similarly, Patent Cooperation Treaty (PCT), which enables patent applications in more than one country recognises utility protection model [51]. More than 77 developing countries use 'utility patent models' to foster local innovations which are not protected by standard patent laws. Historic evidence suggests that by doing so countries develop economically.

#### D. Utility Model Protection in the World

As per WIPO, there are about 77 countries and 2 Inter-Governmental Organizations, which use utility protection models [52].

### IV. ROLE OF UTILITY MODELS IN INNOVATION AND CREATION IN DEVELOPING COUNTRIES

India's informal economy or Indian unincorporated received huge attention from the international community because of its vast size and impact. The International Labour Organization data shows that around 80.9 per cent of the employment is in the informal sector [53]. They value about two-thirds of the country's GDP. Although largely unregulated, India UnInc. has shown immense improvements in terms of economic productivity and value-capital accumulation. Innovations in the informal sectors in developing countries find its inspiration not in quality R&D, but under constraint conditions. These innovations are a result of imitation, traditional knowledge, improvisation and adaptation of the existing inventions. However, these non-original innovations have huge economic power with the potential to solve socio-economic problems.

These frugal models are also referred to as 'bottom of pyramid innovations', 'below the radar innovations', and 'emergent' innovations [54] or 'jugaad' [55]. They are quick-fix solutions which do not

<sup>50</sup> See also European Patent Convention, art. 66, 140, Oct. 5, 1973, 1 B.D.I.E.L. 985 (13th ed. 2000)

<sup>51</sup> Patent Cooperation Treaty, art. 2(i), 3(1), June 19, 1970, 1 B.D.I.E.L. 833; see also WORLD INTERNATIONAL PATENT OFFICE STATISTICS AND INFORMATION, PCT APPLICANT'S GUIDE, INTRODUCTION TO THE INTERNATIONAL PHASE, CHAP. V, 43 (2009).

<sup>52</sup> Protecting Innovations By Utility Models, World Intellectual Property Organisation, See at [http://www.wipo.int/sme/en/ip\\_business/utility\\_models/where.htm](http://www.wipo.int/sme/en/ip_business/utility_models/where.htm). See also [https://dipp.gov.in/sites/default/files/Utility\\_Models\\_13May2011%20%202.pdf](https://dipp.gov.in/sites/default/files/Utility_Models_13May2011%20%202.pdf). The data has been revised by the author.

<sup>53</sup> R 204 - Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204), ILO, [https://www.ilo.org/employment/units/emp-invest/informal-economy/WCMS\\_443501/lang--en/index.htm](https://www.ilo.org/employment/units/emp-invest/informal-economy/WCMS_443501/lang--en/index.htm).

<sup>54</sup> A. Leliveld & P. Knorringa, Frugal Innovation and Development Research. Eur J Dev Res 30, 1–16 (2018).

<sup>55</sup> P.C. Bansal, Reviewed Work: FROM JUGAAD TO SYSTEMATIC INNOVATION: THE CHALLENGE FOR

<sup>48</sup> John Richards, Utility Model Protection throughout the World, [https://ipo.org/wp-content/uploads/2013/03/Utility\\_Model\\_protection.pdf](https://ipo.org/wp-content/uploads/2013/03/Utility_Model_protection.pdf).

<sup>49</sup> Articles 4(E) (1) and 4(E) (2), Paris Convention.

have any long-term scalability and are neither sustainable. Jugaad has been defined as an 'innovative fix' and 'impoverished solutions' which is followed by Indians in their everyday lifestyle [56]. These jugaad often have good quality, marketable scalability, affordable price and accessibility. For example:

1. An onion seed transplanter. Onion seedlings are usually transplanted manually. This task is time-consuming, labour intensive and not standardized. The transplanter is a tractor-drawn semi-automatic unit which simultaneously performs three functions viz. transplanting the onion, applying fertilizer and digging the irrigation channels [57]; or
2. Gas Stove switch: This device turns off the gas stove after a predetermined number of pressure cooker steam release whistles are sounded. The machine counts and displays the number of whistles a pressure cooker has sounded [58].

These innovations lack inventiveness; however, they fulfil the other conditions to get a patent. When a legal system, especially when a developing country leaves this whole sector unregulated, it often makes a large marketable sector impotent. These frugal innovations demand a specific legal framework which can accommodate these non-inventive innovations within its protective measures. The onus is on developing countries to legitimize these second-tier patents through at a reasonable price with no-examination protection regime for technical inventions which do not typically fulfil the stringent patentability standards.

## V. FRAMING A LAW FOR UTILITY MODEL PROTECTION: CHALLENGES AND LIMITATIONS

Nations that have focused on their technical and industrial capability to boost economic growth have laid emphasis on the protection of micro-innovations. States like Japan, South Korea and Germany have adopted the utility model regime. The idea behind the making of separate law to protect utility models is the inability of the patent system to recognize legal rights to innovations or discoveries that lack the threshold of inventiveness and novelty. One of the strongest arguments raised in favour of legitimizing utility models is that they are particularly advantageous for improving the legal environment for startups. Small and Medium Scale Enterprises play a pivotal role in the

Indian economy [59]. This sector contributes 8 per cent of the country's GDP, 45 per cent of the manufactured output and 40 per cent of its exports. Small and Medium Scale Enterprises provide employment to about 60 million persons through 26 million enterprises [60].

The Government of India in the past has had attempted to take into consideration the views of stakeholders, both for and against introducing Utility Model. In May 2011, Department for Promotion of Industries and Internal Trade (DPIIT), Ministry of Commerce and Industry had floated a Discussion Paper on Utility Model inviting suggestions from the stakeholders as to whether utility patents should be included in India's IPR regime and, if yes, in which form [61]. Since, the last few years, with active government campaigns in favour of localization, there has constant thinking that there is a need to recognize and support the wider spectrum of innovative activity in India, for example, by introducing utility models in Indian IPR regime.

In a decentralized market economy like India, there has been systematic research carried out in research and development in public and private laboratories and individual innovators for developing newer and cheaper products. However, filing of patent applications by domestic entities and patents granted to them are very low. Whereas in countries like China, South Korea, Japan, France, Germany etc., domestic filing and domestic grant of patents are profuse as compared to foreign entities [62]. This calls for a separate policy to encourage domestic innovators, and to file and own more patents so as to boost the economic value of IP and its commerciality in the country [63].

With the coming into force of TRIPS, India has strengthened IPRs framework despite numerous

INDIA by Rishikesh T. Krishnan, 46(3) Indian Journal of Industrial Relations (2011).

<sup>56</sup> *Ibid.*

<sup>57</sup> See Tractor Driven Onion Transplanter, National Innovation Foundation-India, [https://nif.org.in/innovation/Onion\\_Transplanter/1](https://nif.org.in/innovation/Onion_Transplanter/1).

<sup>58</sup> Auto Stopper for LPG gas stove, National Innovation Foundation-India, <https://nif.org.in/upload/innovation/5th/22-auto-stopper-for-lpg-gas-stove.pdf>.

<sup>59</sup> The sector accounts for about 45 per cent of the manufacturing output and 40 per cent of the total exports of the country.

<sup>60</sup> Report of the Task Force on MSME -2019, Ministry of Micro, Small & Medium Enterprises, <https://pib.gov.in/newsite/erecontent.aspx?relid=57553>.

<sup>61</sup> DPIIT - Discussion Paper, [https://dipp.gov.in/sites/default/files/Utility\\_Models\\_13May2011%20%202.pdf](https://dipp.gov.in/sites/default/files/Utility_Models_13May2011%20%202.pdf).

<sup>62</sup> Cf. Global patent applications from India drop to 1,423 in 2015: report, LiveMint (21 March, 2016), <https://www.livemint.com/Politics/9A31EOFzMCc9PqTcMOonZL/Global-patent-applications-from-India-drop-to-1423-in-2015.html>.

<sup>63</sup> R. Wilder, Presenting for the WIPO Milan Forum on Intellectual Property and Small and Medium-Sized Enterprises: Fostering the Innovation Potential of SMEs in the Globalization Era--The Role of Patents, (Feb. 9 10, 2001) available at [http://www.wipo.int/edocs/mdocs/sme/en/wipo\\_ip\\_mil\\_01/wipo\\_ip\\_mil\\_01\\_1\\_b.doc](http://www.wipo.int/edocs/mdocs/sme/en/wipo_ip_mil_01/wipo_ip_mil_01_1_b.doc)

challenges and limitations. The present structure of the IPR regime has favoured national and multi-national companies, because of the availability of resources and capacity to generate high-level research results. Utility Model system is undoubtedly an effective remedy to protect frugal intellectual capital having low inventive step threshold. Utility Model system fosters research activities, creativity and innovations among small inventors/SMEs with high technological value.

The Draft National IPR Policy had provisions on Utility Model [64], however, the National IPR Policy failed to accommodate Utility Model in its final report. Another argument raised against favouring separate legislation for Utility Model is the economic impact of having a new law. There is a fear amongst various quarters of the society that as Utility Model applies predominantly to the mechanical and technical sector, having a separate law just to cover these aspects would compromise the effective enforcement of the new law. One of the structural impediments is the question of interoperability between patents and utility models. For a stable system of IP law to protect the functionality of industrial applications, patent applications should be capable of being converted into utility models and vice versa. However, there would not be dual protection.

Similar to Patents, Utility rights shall be available territorially. Utility model applications must be filed individually. There is no equivalent of the PCT for utility models. Utility models protect technical inventions, but not normally for processes. Utility models ideally offer protection for a short period between six to ten years. This limitation, in combination with the quick registration process, makes utility models attractive for inventions. Utility models often do not involve a search report. In many nations, the legitimacy of a utility model pertaining to novelty and inventive step is only reviewed if it is challenged, i.e. via invalidation or infringement proceedings.

## VI. THE WAY FORWARD

The author suggests having a new Utility Model regime as it is there in many countries having possibility of interoperability between the national patent regime and meeting the standards of the International conventions. The way forward is to consider the following four essential features in the Utility Model Framework:

1. Clear demarcation of the scope of Utility Model protection – limiting it to mechanical devices
2. A non-examination system for the first term of protection, followed by a compulsory examination/report for the second stage of protection
3. Examination when invalidation/infringement proceedings are filed, prior to litigation
4. Government action to increase awareness of utility model protection

Many stakeholders advocate the suitability of utility model system to India, particularly to encourage MSMEs, startups and small innovators to strengthen IP creation. Concerns expressed against the introduction of Utility Model System in India are issues like lowering the standards of innovation may threaten the patent environment, lack of substantive examination means less legal security concerning the validity of the registered utility models, uncertainty about the nature of linkages between the law related to Utility Model and the existing Patents Act and present standard for safeguarding against evergreening of inventions may get diluted. There is an unsubstantiated fear that having utility models would affect public domain knowledge and the quality of patents would come down after if utility models come into force and IP dispute would increase over time. However, these are mere assumptions and presumptions. A policy is not an idea, but it is a collective implementation of the idea. Developing countries like India should not be a victim of over-analysis when it comes to policymaking.

<sup>64</sup> New IPR policy focuses on utility patents, LiveMint (7 Jan., 2015), <https://www.livemint.com/Politics/rEsAsIUbregHK6YGSxM8kJ/New-IPR-policy-focuses-on-utility-patents.html>.