

4. Second-Tier Patent Protection in other Jurisdictions: Legislative Examples from outside South Asia

*'If I have seen far, it is by standing on the shoulders of giants'.
Sir Isaac Newton⁴⁸⁸*

As Sir Isaac Newton himself acknowledged, most innovators stand on the shoulders of giants, and never more so than in the current evolution of high technologies, where almost all technical progress builds on the foundation provided by earlier innovators.⁴⁸⁹ It goes without saying that there is no need to reinvent the wheel. The idea behind this statement is that 'the more knowledge that is available, the more can be developed by others'.⁴⁹⁰ The same can certainly be applied to countries that need to make innovations in their IP law systems. In that sense, Sri Lanka and other developing countries in the South Asian region, especially those who foresee an STP system in their domestic laws can benefit from reflection on the rich experiences of other jurisdictions. The question is whether such models can serve as blueprints in crafting new STP regimes. This Chapter presents experiences of STP systems in selected developed and developing countries. Each country experience is analysed along the lines of historical development, current legal framework, and economic impact on the basis of empirical data on the use of the system and policy implications. In this study, the German *Gebrauchsmuster* (UM) system and Australian innovation patent system from the developed countries and the experiences of China, Malaysia and Kenya from the developing world will be analysed from critical and comparative perspectives.

488 S Scotchmer, 'Standing on the Shoulders of Giants: Cumulative Research and the Patent Law' (1991) 5/1 *Journal of Economic Perspectives* 29, 29.

489 *Ibid.*

490 British Government, *Gowers Review of Intellectual Property* (HMSO Norwich 2006) 12.

4.1. Experience from Developed Countries

4.1.1. Germany

4.1.1.1. A Brief Historical Overview

‘The utility model, the ‘little brother’ of the patent, offers fast and low cost protection for technical inventions’
*DMPA Annual Report 2011*⁴⁹¹

From a historical perspective, even though the United Kingdom had a short-lived Utility Designs Act of 1843,⁴⁹² Germany was the first country in the world to introduce a specific form of secondary protection for sub-patentable innovations in the late 19th century. Specifically, Germany has used the UM regime in its IP landscape since 1891. According to commentators, the utility model system, initially a German invention was later enthusiastically followed by many other jurisdictions, including a number of Asian countries such as Japan, Korea, China, Taiwan, and Vietnam.⁴⁹³ In that sense, the German utility model has always been the source of inspiration for many countries that have virtually followed the provisions of the German utility model law in enacting their own laws to protect the small innovations as utility models.⁴⁹⁴ Historical evidence suggests that Germany developed a system of second-tier protection as a response to the perceived inadequacies and the protection gap which existed between the patent and the design regimes.

Prior to the enactment of the German Utility Model Act (*Gebrauchsmustergesetz*, GebrMG) of 1 June 1891, IP protection for innova-

491 German Patent and Trade Mark Office (DPMA), *Annual Report* (2011) Official website- DPMA 18, available at: <http://www.dpma.de/docs/service/veroeffentlichungen/jahresberichte_en/dpma-annualreport2011_barrierefrei.pdf> (accessed 2 May 2012).

492 See L Bently and B Sherman, ‘The United Kingdom’s Forgotten Utility Model: The Utility Designs Act 1843’ (1997) 1/3 *Intellectual Property Quarterly* 265.

493 See C Heath, ‘Utility Models in East and West’ in *Current Problems of Intellectual Property Law-Writings in honour of Nobuo Monya* (Tokyo, 1998) 47-72.

494 KS Kardam, ‘Utility Model –A Tool for Economic and Technological Development: A Case Study of Japan’ (2007) Final Report In Fulfillment of the Long-term Fellowship Sponsored by World Intellectual Property Office (WIPO) in Collaboration with the Japan Patent Office (from April 2, 2007 to September 28, 2007), 67, available at: <http://www.ipindia.nic.in/research_studies/FinalReport_April2007.pdf> (accessed 15 April 2012).

tive goods was generally available in accordance with the two traditional branches of exclusive rights: either under the Patent Act or under the Act on Copyright Protection for Designs (*Gesetz betreffend das Urheberrecht an Mustern und Modellen*) of 11 January 1876.⁴⁹⁵ Soon after the enactment of these laws the question arose whether the Act on Copyright Protection for Designs would extend protection also to technical and/or functional features of products of practical use or whether it merely covers aesthetical features of designs. In a far-reaching decision, the highest German Commercial Court of that time, the Reichsoberhandelsgericht (ROHG), denied protection under the Act on Copyright Protection for Designs.⁴⁹⁶ Moreover, due to the stringent patentability threshold under the German Patent Act which required a *technischer Fortschritt*, or ‘technical step forward in the art’, minor inventions and technical improvements could not receive legal protection under the patent regime.⁴⁹⁷ Hardest hit by this lack of protection were small and medium-sized enterprises, traditionally a forte of the German economy (‘Mittelstand’).⁴⁹⁸ Thus, the UM system was introduced with a lower standard of inventiveness, a non-examination system and a short period of protection.⁴⁹⁹ Scholars have described the main features of the first German Utility Model Act as follows:⁵⁰⁰

- Protection of models of working tools and objects of utilitarian use or parts of those, insofar as these were meant for working or utilitarian purposes by a new design, arrangement or contraction;
- Utility model applications were only checked for the formalities, without any substantial examination;
- The protection period was six years in total, divided into two periods of three years each;

495 HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 40-49 (copy on file with the author).

496 Ibid 41. See also Decision of 3 September 1878 – ROHG 24, 109.

497 See U Suthersanen, G Dutfield and KB Chow (eds), *Innovation Without Patents* (Edward Elgar 2007) 28.

498 C Heath, ‘Utility Models in East and West’ in *Current Problems of Intellectual Property Law-Writings in honour of Nobuo Monya* (Tokyo, 1998) 47- 48.

499 U Suthersanen, G Dutfield and KB Chow (eds), *Innovation Without Patents* (Edward Elgar 2007) 28-29.

500 C Heath, ‘Utility Models in East and West’ in *Current Problems of Intellectual Property Law-Writings in honour of Nobuo Monya* (Tokyo, 1998) 48.

- Fees were 15 German marks for the first period, and 60 marks for the extension;
- Novelty was limited to publications or domestic use.

Even though the German UM regime was initially limited to ‘working tools, implements, utensils and articles of everyday use’ which contained a three-dimensional form (*Raumform*), the protected subject matter has gradually been enlarged to a much broader scope of protection. After the revision of the UM law in 1986 and 1990, which abolished three-dimensional form requirement, the German UM system is no longer considered to be a classical three-dimensional model.

4.1.1.2. Main Features of the Current UM System

In spite of the repeated legislative changes since 1891, the legislative rationale of the German UM system has remained the same which is mirrored by the following wording of the law.⁵⁰¹ As stated in the policy document “*the utility model is mainly to quickly and inexpensively make available a manageable (easy to handle) industrial property right for sole inventors and small and medium sized enterprises for their everyday life inventions*”.⁵⁰² This approach was endorsed and supported by the Max Planck Institute in 1986 by arguing that “there will still be a need for a minor industrial property right for individual inventors, small and medium-sized industry, and for short-lived inventions which need immediate protection against imitation. This must be an entitlement which can be acquired simply and cheaply, for which a costly and lengthy preliminary examination of protectability would be prohibitive”.⁵⁰³ Today, the German UM regime is governed by the Utility Model Act (GebrMG), last amended

501 For further information see, W Prinz zu Waldeck und Pymont, ‘Secondary protection for innovations in Germany- What are the Advantages?’ (2013) January, Journal of Intellectual Property and Practice/Weblog, available at: <<http://jiplp.blogspot.com/2013/01/secondary-protection-for-innovation-in.html>> (accessed 13 February 2013).

502 K Königer, ‘Registration without Examination: The Utility Model-A Useful Model?’ in Wolrad Prinz zu Waldeck und Pymont and others (eds), *Patent and Technological Progress in a Globalized World* (Springer 2009) 23.

503 Ibid.

in 2011.⁵⁰⁴ According to Section 1 of the Act, utility model protection shall be afforded to inventions that are new, involve an inventive step and are susceptible of industrial application. Moreover, the eligible subject matter for UM protection is nearly identical to that of patent law. In other words, the German UM system protects a broad range of subject matter including electrical inventions, chemical substances, and pharmaceuticals in addition to basic mechanical inventions.⁵⁰⁵ Significantly, according to the recent case-law of the German Federal Supreme Court, UM protection is also available for second medical use inventions.⁵⁰⁶ Nevertheless, pursuant to Sections 1 and 2 of the Act, methods and processes, computer programs, and biological inventions discoveries, scientific theories, aesthetic creations, as well as plants and animal varieties are specifically excluded from the scope of UM protection.

In terms of conditions for protection, UM law demands a lower threshold compared to patent law. The first criterion of eligibility for protection is the novelty requirement. Pursuant to Section 3 of the UM Act, a utility model shall be considered to be new if it does not form part of the state of the art. The state of the art comprises any knowledge made available to the public by means of a *written description* (anywhere in the world) or by *use within the territory of the Republic of Germany*. It is obvious from this wording that neither oral disclosure, nor public use abroad can destroy novelty. Thus, this novelty requirement can be interpreted as ‘relative novelty’ standard. Unlike in the case of patents, the UM Act provides a six months grace period of novelty for prior publications by the applicant or his predecessor in title. Perhaps more significantly, an invention must meet a certain inventive threshold in order to gain protection under the German UM regime. The Act does not define what inventive step means. According to commentators, the 1986 reform codified for the first time the ‘inventive step’ (*erfinderischer Schritt*) requirement by Section 1 of the

504 The text of 1936 Act was fundamentally revised by Utility Model Law of August 28, 1986 and was most recently amended in November 24, 2011.

505 PA Cummings, ‘From Germany to Australia: Opportunity for a Second Tier Patent System in the United States’ (2010) 18/2 Michigan State Journal of International Law 297, 304.

506 A von Uexküll and N Hölder, ‘A Clever Move: Utility models for Second Medical Use Inventions in Germany’ (2006) June Patent World 22-23. Second Medical use claims relate to the use of a known compound for a new purpose, generally for treating a new specified disease.

Utility Model Act, but the requirement has always existed.⁵⁰⁷ In using the wording ‘inventive step’ the legislature sought to distinguish utility model law’s lower inventive level from ‘inventive activity’ (*erfinderische Tätigkeit*) requirement under the German patent Act.⁵⁰⁸ An analysis of the case-law before 2006 shows that a lower degree of inventiveness or slightly lower inventive step was sufficient for a grant of a UM right. Nevertheless, in a landmark ruling of the German Federal Supreme Court in *Demonstrationsschrank* case has changed the landscape of UM law in Germany.⁵⁰⁹

In this leading case, the German Supreme Court, in 2006, held that the inventive step required for utility models is the same as in the case of a patent. In other words, there is now no longer a distinction between the threshold for inventiveness in German patent and utility model law resulting in that there is no more a lower degree of inventiveness under the Utility Model Act.⁵¹⁰ The Court stated that it could not find a capable criterion for (utility model) protectability that lies between non-obviousness in the sense of patent law and novelty.⁵¹¹ In its reasoning, the German Supreme Court observed that the objective of making UM right easily available for small and medium-sized enterprises is already achieved by the lower requirements for novelty.⁵¹² Moreover, the German Supreme Court explicitly stated that UM must increase the requirements for inventiveness in order to prevent the utility model from transitioning into a ‘fall back option for non-patentable subject matter’.⁵¹³ This ruling is certainly not without its critics. From a policy perspective, the German Supreme Court ruling has changed the primary objectives the UM system. The crucial question

507 R Liesegang, ‘German Utility Models after the 1990 Reform Act’ (1992) 1 American Intellectual Property Law Association 5.

508 Ibid.

509 The decision of German Federal Supreme Court (Bundesgerichtshof BGH) June 20, 2006 GRUR 2006, 842- *Demonstrationsschrank*.

510 HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 43 (copy on file with the author).

511 K Königer, ‘Registration without Examination: The Utility Model-A Useful Model?’ in Wolrad Prinz zu Waldeck und Pyrmont and others (eds), *Patent and Technological Progress in a Globalized World* (Springer 2009) 24.

512 TT Moga, *China’s Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) Forward and Commentary provided by T Pattloch, 3.

513 Ibid.

that arises here is whether there is any need to protect ‘trivial’ or minor improvements to the state of art. Arguably, the fear of the UM system becoming a ‘dumping ground for sub-patentable inventions’ has probably created two systems of patent rights, namely one which is examined and the other (UM) unexamined one. Conversely, one can still argue that there is considerable difference between UM and patent threshold in view of the definition of novelty for which the prior art base is limited (oral description, prior use outside Germany would not be considered). The elimination of a lower inventive step threshold has not been unanimously approved by the legal community in Germany. The ruling of the Supreme Court has, however, left many IP scholars, as well as practitioners with more questions and uncertainties than answers. One commentator in his metaphor has even suggested that we would not have this ‘Schrank’ (cupboard) and let us forget it quickly.⁵¹⁴ There is no doubt that the abandonment of the lower threshold doctrine would have far-reaching repercussions on the use of the UM system in Germany.

Another key aspect of the German system is that UM applications are registered after formality examination (without substantive examination) and the granting process at the German Patent and Trademark Office (GP-TO) generally takes about two to three months. Similar to patents, a UM application needs to include claims, description and drawings.⁵¹⁵ Moreover, the filing fee (€40, or €30 if filed online) and maintenance costs are considerably less compared to patents. The maximum term of protection for a UM is ten years from the date of application. Upon registration, the holder of UM is granted exclusive rights similar to that of patents. According to Section 11 of the UM Act, such rights includes the right to exclude third parties from making, offering, putting on the market or using a product which is the subject matter of the utility model, or importing or stocking the product for these purposes. This by no means explains that the UM right is without exceptions and limitations. As stipulated in Section 12 of the UM Act, acts of private and non-commercial nature acts done for experimental purposes, prior user’s right etc. are not affected by a UM right. More importantly, according to Section 20, a registered UM may be subject to compulsory licenses in case of public interest. In terms of remedies

514 G Eisenführ, ‘Heraus aus dem Demonstrationsschrank’ (2009) 4 *Mitteilungen* 169.

515 See Section 4 (3) *GebrMG*.

against UM infringements, the Act provides for the same remedies (injunctive relief and damages) that are granted in patent infringement cases.

One of the other most important features of the German UM system is the option of branching off (*Abzweigung*) a utility model application from a pending patent application. According to Section 5 of the UM Act, every inventor, seeking patent protection, is entitled to file a UM application within two months after his patent application has been decided upon (by final grant, final rejection or withdrawal) and before the lapse of ten years from the date of patent application, if the patent and UM application cover the same invention.⁵¹⁶ A branched-off UM application has the advantage of claiming the priority date from the first filing. According to the latest statistics, in 2011 alone, 739 applications that were branched off, which is equal to 4.8 percent of the total UM applications filed.⁵¹⁷ The option of branching off is often used as a strategic tool to immediately enforce the applicant's rights in a case of an infringement. Last, but certainly not least, the German UM system has built-in safeguards in place against possible abuses of UM rights. Most importantly, pursuant to Section 15 of the Act, anyone can file invalidation proceedings to test the validity of an issued UM. As per the most recent data available, there have been 104 cancellation proceedings concluded in 2011, from which more than 75 percent resulted in a restriction or cancellation.⁵¹⁸ Moreover, validity of registered patents is also examined as an integral part of infringement proceedings. Besides, everyone has the right to apply for a search report for any registered utility model. Significantly, in 2011 there have been about 3,000 such applications (compared with 15,486 utility model applications) for such reports.⁵¹⁹

516 C Einem and J Bartmann, 'The Rise of the Utility Model in Germany' [1995] *Managing Intellectual Property* 44.

517 W Prinz zu Waldeck und Pyrmont, 'Secondary protection for innovations in Germany- What are the Advantages?' (2013) January, *Journal of Intellectual Property and Practice/Weblog*, available at: <<http://jiplp.blogspot.com/2013/01/secondary-protection-for-innovation-in.html>> (accessed 13 February 2013).

518 *Ibid.*

519 TT Moga, *China's Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) Forward and Commentary provided by T Pattloch, 3.

4.1.1.3. Empirical Analysis and Policy Implications

The empirical evidence paints a picture that the German UM system continues to be an attractive protection mechanism for industrial and commercial sectors. According to the *World IP Indicators 2012*, Germany has recorded the second-greatest number of utility model applications after China in 2011.⁵²⁰ The following statistical data of the users of both patents and UM regimes offers a revealing glimpse of the effectiveness of the system. As presented in Table 4.1, Germany remains an innovative economy in the global innovation arena with a growing number of patent applications every year. In fact, Germany is a leading producer and an exporter of high-tech goods in the world market which may also be evident from the patent statistics. Most notably, there is also an increase in the number of patent applications from abroad since recent years. It is obvious that the German economy has been an attractive market for foreign technologies and inventions. Another possible explanation for this increase is the rigorous enforcement of patent rights in Germany.

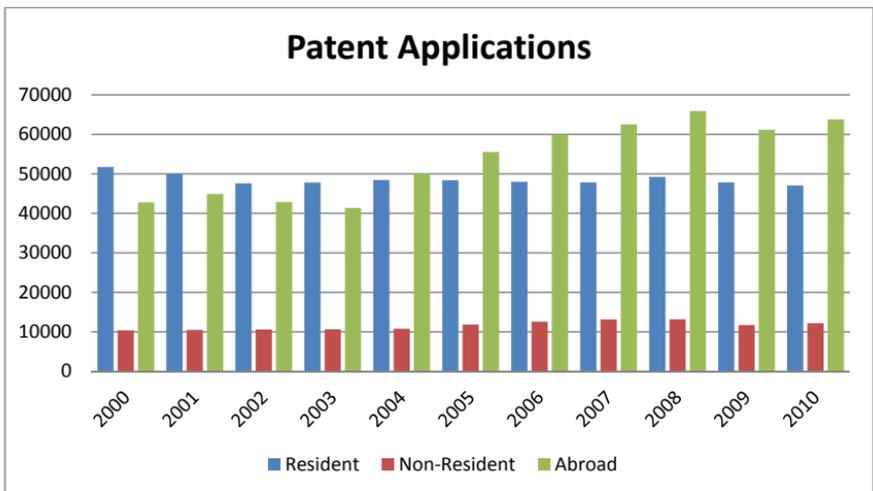
520 Germany has received around 16,000 utility model applications in 2011, See WIPO, *World IP Indicators* (2012 edn, WIPO 2012) 90, available at: <http://www.wipo.int/export/sites/www/freepublications/en/intproperty/941/wipo_pub_941_2012.pdf> (accessed 15 February 2013).

Table 4.1: Patent Applications, 2000-2010

Patent Applications				
Year	Resident	Non-Resident	Abroad	Total
2000	51736	10406	42795	104937
2001	49989	10486	44903	105378
2002	47598	10589	42866	101053
2003	47818	10663	41382	99863
2004	48448	10786	50201	109435
2005	48367	11855	55549	115771
2006	48012	12573	59987	120572
2007	47853	13139	62518	123510
2008	49240	13177	65904	128321
2009	47859	11724	61180	120763
2010	47047	12198	63800	123045

(Source: Based on data from WIPO statistics database)

Figure 4.1: Trends in Patent Applications, 2000-2010



(Source: Based on data from WIPO statistics database)

4. Second-Tier Patent Protection in other Jurisdictions

When compared with the annual number of patent filings, the UM system is predominantly utilized by German firms and individuals. As shown in Table 4.1 and Figure 4.1 even though the foreign patent applications accounted for more than 50 percent of foreign applicants, only about 20 percent of total UM applications in Germany come from abroad. In 2010, foreign applications have mainly originated from Taiwan (6.5 percent), Austria (2.4 percent), Switzerland (1.9 percent), and USA (1.3 percent). This indicates that domestic UM filings are still the vast majority; this supports the claim that utility models are (still) primarily a tool for domestic innovators.⁵²¹ From the data above, it can be concluded that a strong and vibrant use of the utility model system exists in the country. Presumably, German industrial sectors and individuals are more aware of the importance of UM rights and enforcement. Moreover, according to the latest figures an estimated 10 percent of all litigations related to innovations in Germany each year are related to utility models.⁵²²

521 HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 53 (copy on file with the author).

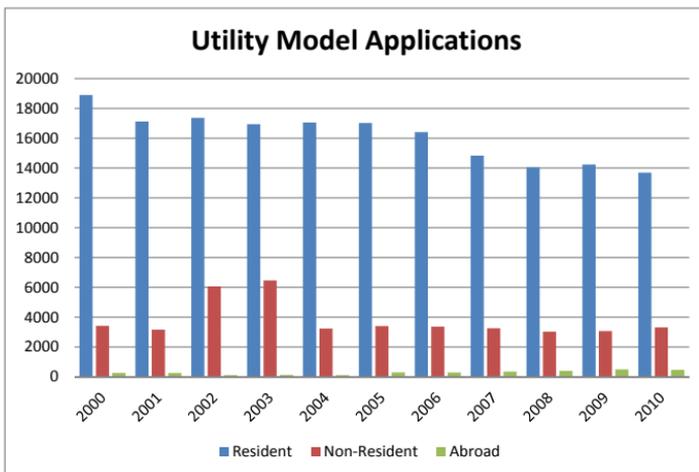
522 TT Moga, *China's Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) Forward and Commentary provided by T Pattloch, 3.

Table 4.2: Utility Model Applications, 2000-2010

Utility Model Applications				
Year	Resident	Non-Resident	Abroad	Total
2000	18899	3411	257	22567
2001	17126	3159	250	20535
2002	17363	6065	109	23537
2003	16945	6463	123	23531
2004	17053	3233	113	20399
2005	17021	3397	289	20707
2006	16406	3360	283	20049
2007	14834	3249	345	18428
2008	14047	3020	391	17458
2009	14242	3064	492	17798
2010	13694	3311	483	17488

(Source: Based on data from WIPO statistic database)

Figure 4.2: Trends in Utility Model Applications, 2000-2010



(Source: Based on data from WIPO statistics database)

It is obvious from the empirical evidence that the utility model system is an integral part of the German industrial geography, even though the numbers of applications in the recent years have slightly trended downward. Most notably, as shown in Table 4.2 and Figure 4.2, the overall number of utility model applications has seen a gradual decline in recent years resulting in a drop of the total number of UM in force in the last five years from 104,117 in 2006 to 96,096 in 2011. Perhaps more importantly, the main technology group represented in UM applications in 2011 are as follows:⁵²³

- Household goods (2052)
- Construction (1597)
- Vehicles, ships, planes (1345)
- Hoisting, lifting, upholstery (1114)
- Electrical engineering (1052)
- Illumination, heating (960)
- Medical supplies, hygiene (877)
- Machine construction (898)
- Grinding, pressing, tools (756)
- Agriculture (503).

In contrast, the top 5 technology groups for patents in 2011 are vehicles, ships and planes (7752), electronic engineering (7142), machine constructions (4899), medical supplies and hygiene (2485), illuminating and heating (2455).⁵²⁴ This comes as no surprise, given that the UM system aims at different groups of users and the level of novelty and inventiveness required for UM is rather low.

Viewed from legislative goals, the German UM system was designed to provide: (1) protection for technical inventions which involves only a small inventive step; (2) protection that is easily obtainable; (3) protection to be inexpensive; and (4) protection to be rapidly obtainable.⁵²⁵ Since there is a higher percentage of domestic users in Germany, one can rea-

523 See W Prinz zu Waldeck und Pyrmont, ‘Secondary protection for innovations in Germany- What are the Advantages?’ (2013) January, *Journal of Intellectual Property and Practice/Weblog*, available at: <<http://jiplp.blogspot.com/2013/01/secondary-protection-for-innovation-in.html>> (accessed 13 February 2013).

524 Ibid.

525 K Königer, ‘Secondary Protection of Innovations in Germany: Is there another Side of the Story?’ (2013) January, *Journal of Intellectual Property and Practice/Weblog*, available at: <<http://jiplp.blogspot.com/2013/01/secondary-protection-for-innovation-in.html>> (accessed 13 February 2013).

sonably argue that the German UM system has successfully advanced the interests of domestic industries sectors. Some critics have, however, argued:

‘The German utility model does not meet the expectations the German legislator apparently had. Apart from rare exceptions, the German utility model does not provide protection for technical inventions that do not meet the criteria of patentability. The German utility model application is as difficult to handle as a patent application and the utility models cause a lot of legal uncertainty for competitors, especially for SMEs’.⁵²⁶

Nevertheless, it is clear that the German courts are well aware of the fact that UM applications are not subject to substantive examinations. Thus, in practice, the lack of examination is taken into account; only about 10 percent of applications for a preliminary injunction are granted in the case of utility models.⁵²⁷ Judged from policy perspectives, the German UM system is a policy response to the need for a uncomplicated, fast and inexpensive system of protection. Arguably, today the German system may not be serving the primary purpose for which it was introduced as many firms use the UM system as a strategic tool to protect inventions until the time a patent has been granted. On balance, though it would no longer serve the historical function, one cannot underestimate the value of the time-tested German UM regime in incentivising innovations, especially those of SMEs.

4.1.1.4. Lessons from Germany

While the German experience since 1891 provides a great source of reference for many countries, Sri Lanka and other South Asian countries should pay careful consideration to the unintended consequences that have subsequently arisen in the system. As any other protection regime, an STP system might have negative effects although they are not initially thought of, and what may be important is to address such issues. In particular, the

526 See K Königer, ‘Registration without Examination: The Utility Model-A Useful Model?’ in Wolrad Prinz zu Waldeck and others (eds), *Patent and Technological Progress in a Globalized World* (Springer 2009) 29.

527 TT Moga, *China’s Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) Forward and Commentary provided by T Pattloch, 3.

strategic use of the regime by big players or large companies in the market would undermine the primary purpose of adopting such a regime. In that respect, the German mechanism against abuses of the system sheds some light on how to mitigate potential misuse of the system. As a caveat, the success of the system would also depend, at least in part, on the judicial and other administrative infrastructure of the country. Arguably, the abandonment of the lower threshold for inventive step would not be emulated by other countries. From a policy perspective, when the inventive step for UM is identical to that of patents, there would be little reasons to apply for an STP. Moreover, beyond Germany's borders, the successful experience of the German UM system has greatly influenced the European Commission to consider the adoption of a European wide harmonized UM regime since 1995.⁵²⁸ These proposals of the European Commission also would no doubt be worth considering in designing a model that is best suited to the needs of the country. Most encouragingly, many East Asian countries have learned and benefited from the German UM experience and it is fascinating to examine the German UM regime as the first point of reference.

4.1.2. Australia

'IP laws provide a protective barrier against free-riders without which innovation is like a crop in an unfenced field, free to be grazed by competitors who have made no contribution to its cultivation'.
*PMSEC Report, 1993*⁵²⁹

When compared with Germany and some other jurisdictions, Australia has a relatively young STP regime. Perhaps most encouragingly, Australia is one of the leading countries in the Common Law world to experiment with an alternative approach for incentivising sub-patentable innovations. Therefore, the Australian experience of the STP system provides useful insights for many Common Law countries such as Sri Lanka which foresee an STP system in their IP law landscape. At present, the Australian IP le-

528 See European Commission, 'Green Paper on the Protection of Utility Models in the Single Market Document' COM (95) 370 final. European Commission, 'Proposal for a European Directive approximating the legal arrangements for the protection of inventions by utility model Document' COM (97) 691 final. The European Commission amended this proposal on 28 June 1999.

529 Australian Prime Minister's Science and Engineering Council (PMSEC), 'Report – The Role of Intellectual Property in Innovation' (1993) 2 Perspectives 61.

gal framework provides two types of patents; one is the traditional ‘standard patent’ and the other is the ‘innovation patent’ which is unique to Australia. Before introducing the innovation patent regime, Australia had experienced a ‘petty patent’ system from 1979 to 2000. The innovation patent system, the successor of the petty patent system, was introduced in Australia by an Amendment to the *Patent Act 1990* (Cth) in 2000 which came into effect on 24 May 2001.⁵³⁰ The development of the Australian second-tier patent protection system has responded to perceived deficiencies in the existing patent and design regime.⁵³¹ Significantly, one of the main objectives of implementing an innovation patent system is to stimulate innovation in Australian small and medium-sized enterprises (SMEs) by providing IP protection for minor and incremental inventions.⁵³² From a historical perspective, the main reason for introducing an STP system in Australia was the findings of the Design Law Review Committee (‘the Franki Committee’) in its *Report Relating to Utility Models* in 1973.⁵³³ Based on the recommendations of the Franki Committee report, the petty patent system was introduced in 1979.

The objective of the petty patent system was to create a form of protection that was less expensive, more easily obtained and more quickly granted than standard patent protection, and that would accordingly be used for inventions with a relatively short lifespan.⁵³⁴ The other main features of

530 AL Monotti, ‘Innovation Patents: The Concept of a Manner of New Manufacture and Assessment of Inventive Step: *Dura-Post (Aust) Pty Ltd v Delnorth Pty Ltd*’ (2010) 32 *European Intellectual Property Review* 93, 94. See also, PA Cummings, ‘From Germany to Australia: Opportunity for a Second Tier Patent System in the United States’ (2010) 19 *Michigan State Journal of International Law* 297, 331.

531 A Christie and S Moritz, ‘Australia’ in U Suthersanen and others (eds), *Innovation Without Patents: Harnessing The Creative Spirit In A Diverse World* (Edward Elgar 2007) 119.

532 See Explanatory Memorandum for the Patents Amendment (Innovation Patents) Bill 2000.

533 The Parliament of the Commonwealth of Australia, ‘Design Law Review Committee (Franki Report), *The Law Relating to Utility Models*’ (1973) Parliamentary paper No. 121. The Franki Committee compiled a report analyzing whether Australia needed a form of intellectual property protection for lesser technological developments in addition to patent and design law.

534 SL Moritz and AF Christie, ‘Second-Tier Patent System: The Australian Experience’ [2006] *European Intellectual Property Review* 230, 231.

the petty patent system were:⁵³⁵ primarily intended for Australian industry; subject matter permitted was identical to standard patents; whilst not intended by the legislation, petty patents underwent examination prior to grant; maximum term of protection was six years; convertibility to a standard within certain time limits; only one claim was permitted; there was no opposition prior to grant; and the prior art base was limited to documents published in Australia. Nevertheless, the petty patent system was heavily criticized for not serving the people for whom it was intended and, moreover, the system was rarely used as evident from the filing of an average of 300 applications annually.⁵³⁶ One of the major problems with the petty patent system resulted from its requirement that only one claim could be made for each petty patent and the single claim made it difficult to enforce.⁵³⁷ Another problem was that the costs associated with petty patents were comparably same as standard patents. Moreover, the six year term was criticized for being too short to provide an incentive for a potential manufacturer to invest.⁵³⁸ In 1995, the Advisory Council on Intellectual Property (ACIP) undertook an extensive review of the petty patent system.⁵³⁹ In its report, the ACIP identified that the system was being under-used, with one of the key problems being the level of invention required to obtain a petty patent.⁵⁴⁰ The ACIP concluded that there was a gap between the protection afforded under the registered designs regime and that which was available under the patent system, so that what it called 'functional innovations' were unable to be protected.⁵⁴¹ The various reviews of the petty patent system led to the introduction of the new innovation patent system in July 2001.

535 L McCaffery, 'Key Features: Patents and Utility Models Protection' (WIPO Regional Seminar on the Legislative, Economic and Policy Aspects of Utility Models Protection System, Kuala Lumpur, Malaysia, September 3 to September 4, 2012).

536 SL Moritz and AF Christie, 'Second-Tier Patent System: The Australian Experience' [2006] *European Intellectual Property Review* 230, 232.

537 *Ibid.*

538 *Ibid.*

539 R Gay, 'Editorial: The Innovative Step Conundrum' (2009) April, *Managing IP* 98.

540 *Ibid.*

541 *Ibid.*

4.1.2.1. Main Features of Current Innovation Patents

The primary objective of the innovation patent regime is to fill the ‘gap’ that existed with regard to minor and incremental innovations and secondly, it offers a quick, less expensive and simple form of protection to encourage individuals and SMEs to realise their good ideas.⁵⁴² To be eligible for innovation patent protection, an invention must be new, involve an innovative step and be useful as stipulated in Section 18 (1A) of the Australian Patent Act. The same prior art criterion, as in the case of standard patent, is taken into consideration when assessing the novelty standard under the innovation patent regime. The Patent Amendment Act 2001 (Cth) for the first time imposed an absolute novelty standard for Australian patents.⁵⁴³ According to the current law, the prior art base for novelty is comprised of information made publicly available anywhere in the world before the priority date through either a document or an act.⁵⁴⁴ Thus, the test applied for novelty is the same in both standard and innovation patents. Most notably, the inventive threshold for patentability in the case of innovation patent is significantly different from that of the standard patent. Pursuant to Section 7(4), an innovation patent requires an ‘innovative step’ rather than an ‘inventive step’. As articulated in the Act, an invention involves an innovative step when compared with the prior art base ‘unless the invention would, to a person skilled in the relevant art, in the light of the common general knowledge as it existed in the patent area⁵⁴⁵ before the priority date of the relevant claim, only vary from the kinds of information set out in subsection (5) in ways that make no substantial con-

542 U Suthersanen and others (eds), *Innovation Without Patents* (Edward Elgar 2007) 125.

543 C Bodkin, *Patent Law in Australia* (Thomson Reuters 2008) 113. At its commencement, the *Patent Act 1990* imposed a ‘relative novelty’ standard by *excluding* information made publicly available by doing an act outside the patent area from the prior art base. The change to ‘absolute novelty’ was achieved by changing part (a)(ii) of the definition of ‘prior art base’ by replacing the words ‘in the patent area’, which had appeared previously, with the words ‘whether in or out of the patent area which now appear there’).

544 See the definition of ‘prior art base’ in the Schedule 1 of the Patent Act. See also Bill Bennet, *A Reference Guide to the Australian Patent System* (2008) 12.

545 Intellectual Property Laws Amendment (*Raising the Bar*) Act No. 35, 2012 has now changed the wording of this section. Under its Part 1-Main amendments, Section 7(4) replaces ‘whether in or out of the patent area’ instead of ‘in the patent area’. This Act came into force on 15 April 2013.

tribution to the working of the invention'. The legislative intention of providing protection to incremental technological advances with a lower level of inventive step has also been made clear by the Explanatory Memorandum to the Patents Amendment (Innovation Patents) Act. The test requires that the invention is not only new, but also differs from what was already known in a way that is not merely superficial or peripheral to the invention.⁵⁴⁶ The variation must be of practical significance to the way that the invention works.⁵⁴⁷ Unlike for patents, there is, however, no requirement that an innovation must be non-obvious. The key features of the innovation patents system summarized by commentators are as follows:⁵⁴⁸

- Patentable subject matter for the purpose of innovation patent is the same subject matter for which standard patent protection is available, with the exception of inventions concerning plants, animals and biological processes. Innovation patents can be obtained for products as well as processes;
- Maximum eight year term of protection;
- Applications for an innovation patent should be limited to a maximum of five claims;
- Same prior art base as for standard patents (absolute novelty)
- Prior art base applicable to an innovation patent is that of a standard patent;
- Lower standard of inventiveness (innovative step);
- Innovation patents do not undergo a substantive examination before the grant. Nevertheless, an innovation patent needs to be examined and certified before an infringement action can be brought against a third party. Otherwise, the substantive examination is optional and if certification of an innovation patent is requested, the patent office will conduct a substantive examination to determine whether the innovation patent meets threshold requirements such as novelty and inventive step;⁵⁴⁹

546 R Gay, 'Editorial: The Innovative Step Conundrum' (2009) April, *Managing IP* 98-99.

547 Ibid.

548 U Suthersanen and others (eds), *Innovation Without Patents* (Edward Elgar 2007) 126. See also Australian Government's Advisory Council on Intellectual Property, *Review of the Innovation Patent System: Issues Paper* (August 2011).

549 See W Hird and DC Cave, 'Protect Your Rights with Utility Model Patents' (2009) July/August *Managing Intellectual Property* 68.

- There is no opposition prior to grant;
- An application for a standard patent can be converted to an innovation patent application.⁵⁵⁰ This can be done simply by filing a divisional innovation patent from the parent patent application at any time before the patent is granted;⁵⁵¹
- In case of infringement, available remedies are identical to those of for standard patents (the injunctive relief, award of damage etc).

Unlike many other jurisdictions, the Australian innovation patent system offers protection for processes and methods. Thus, it is viewed as a unique feature of the STP regime.

Even though the innovation patent regime is relatively young, there exists a considerable body of case-law with regard to innovation patents in Australia. In fact, judgments of Australian courts have further illuminated the provisions relating to innovation patent under the current Patent Act, in particular, the court decisions dealing with the test of ‘innovative step’. According to scholars, the innovative step requirement remained less clear until recent years.⁵⁵² In 2008, the innovative step test was first judicially evaluated in the decision of *Delnorth Pty Ltd v Dura- Post (Australia) Pty Ltd*,⁵⁵³ by Justice Gyles. The invention claimed in *Delnorth* was a roadside marker post made of sheet spring steel as seen below.⁵⁵⁴

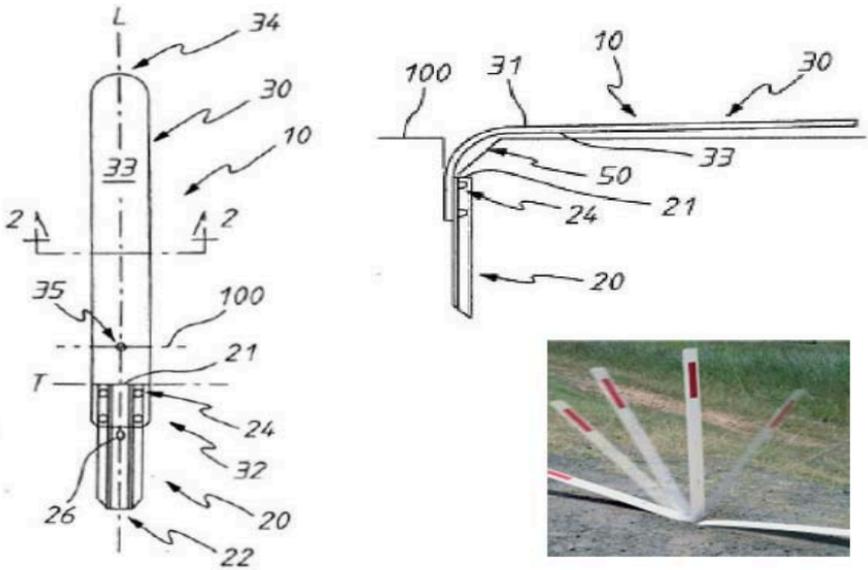
550 See Sections 79(B) and (C) of the Patent Act 1990.

551 See C Thompson and L Dumbrell, ‘A Really Useful Utility Model’ (2010) March/220 Patent World 31.

552 See R Gay, ‘Editorial: The Innovative Step Conundrum’ (2009) April, Managing IP 99.

553 (2008) 78 IPR 463. The case involved three separate innovation patents of Delnorth relating to ‘Roadside Post’, which were filed as divisional applications from a standard patent. Delnorth brought the case against Dura-Post for allegedly having infringed its innovation patents. Dura-Post challenged arguing that the innovation patents obviously lacked any innovative step.

554 DC Cave, ‘The Test for Innovative Step confirmed *Dura-Post (Australia) Pty Ltd v. Delnorth Pty Ltd* [2009] FCAFC 81 (30 June 2009)’ (2009) September DCC Intellectual Property, available at: <<http://www.davies.com.au/pub/detail/225/the-test-for-innovative-step-confirmed>> (accessed 10 May 2012). M Summerfield, ‘Re-examination Limits Rights to Flexible Roadside Post’ (2011) July, Patentology, available at: <[Patentologyhttp://blog.patentology.com.au/2011/07/re-examination-limits-rights-to.html](http://blog.patentology.com.au/2011/07/re-examination-limits-rights-to.html)> (accessed 10 May 2012).



Even though the post included features known from existing plastic roadside marker post, the court found that a number of obvious combinations claimed in the invention satisfied the innovative step as the new features contributed substantially to the working of the roadside post claimed.⁵⁵⁵ This decision of a single judge of the Federal Court of Australia was affirmed on appeal by the Full Court on 30 June 2009.⁵⁵⁶ In this judgment, the term ‘substantial’ in the Act was judicially evaluated and the court further interpreted that ‘make no substantial contribution to the working of the invention’, does not mean ‘great’ or ‘weighty’. Instead, it must be taken to mean ‘real’ or ‘of substance’ as contrasted with distinctions without real difference.⁵⁵⁷ Obviously, through a ‘purposive interpretation’, the

555 C Thompson and L Dumbrell, ‘A Really Useful Utility Model’ (2010) March/220 Patent World 28, 29.

556 See *Dura-Post (Aust) Pty v. Delnorth Pty Ltd Pty Ltd* (2009) 177 FCR 239. See also C Thompson and L Dumbrell, ‘A Really Useful Utility Model’ (2010) March/ 220 Patent World 28, 30.

557 See R Gay, ‘Editorial: The Innovative Step Conundrum’ (2009) April, *Managing IP* 100. The Court confirmed that, in accordance with subsections 7(4) and 7(5) of the Patent Act 1990 the following elements should be identified and considered: (a) the invention so far as claimed in any claim; (b) the ‘person skilled in the relevant art’; (c) the common general knowledge as it existed in Australia be-

Australian courts have in effect given life to the legislative intention as manifested in the Act. Viewed through the lens of the *Delnorth* decision, it is clear that an innovation that only differs from prior art and makes a substantial contribution to the working of the invention may well be protected under the current innovation patent regime in Australia. From a practical perspective, an invention can quite easily satisfy the innovative step requirement, even if the claimed invention is rather obvious in view of the totality of prior art. This is because, in the evaluation of innovative step, the patent office makes only a comparison of a claim against each single item of prior art and the law does not allow any ‘mosaicing’ or a combined prior art reference. More recently, the jurisprudence advanced by the *Delnorth* ruling has received further consideration from the Australian courts in the *Seafood Innovations Pty Ltd* case.⁵⁵⁸

Some commentators have, however, disapproved of the current treatment of the innovative step by the Australian courts. They argue that the innovative step enquiry is no more than a modified novelty test requiring nothing more than the presence of at least one meaningfully functional novel feature, when a claim is compared to each individual item of prior art separately. Whether or not the novel feature has any inventive merit is completely irrelevant to the test.⁵⁵⁹ Moreover, in the recent years, the frequent abuse and strategic use of the innovation patent system has worried Australian policymakers. As a result, the Australian Government (IP Australia) released a consultation paper proposing to raise the patentability threshold for Innovation Patents to the same level of inventiveness as required for standard patents.⁵⁶⁰ The Australian Government’s Intellectual Property Office (IP Australia) has observed that the current innovative step threshold is too low and there may be a case for policy reform. Concerns have also been raised in the Consultation Paper regarding the com-

fore the priority date; and, (d) whether the invention only varied from the prior art information in ways that make no substantial contribution to the working of the invention.

558 Spender J in *Seafood Innovations Pty Ltd v. Richard Bass Pty Ltd* [2010] FCA 723.

559 M Summerfield, ‘Innovation Patents Flop like Stunned Mullet’ (2010) July, Patentology, available at: <<http://blog.patentology.com.au/2010/07/innovation-patents-flop-like-stunned.html>> (accessed 10 May 2012).

560 See IP Australia, Innovation Patents-Raising the Step: Consultation Paper announced on 24th September 2012. The public consultation was closed on 25th October 2012.

parative ease of obtaining innovation patents may lead to the creation of patent thickets (patent trolls) and patent evergreening in the area of pharmaceutical patents. Most problematically, according to IP Australia, many firms are using the innovation patent system to obtain quick protection for most inventions that should be protected under the standard patents regime. Interestingly, even though Germany, Japan, and Korea have excluded computer-implemented inventions (computer software) from the STP regimes, the Australian innovation patent system currently grants protection for such inventions. In a number of most recent patent litigations in Australia (i.e. as a part of global battle between Apple and Samsung), innovations patents have been asserted and enforced. In fact, Apple has become the single largest user of the innovation patent system in Australia.⁵⁶¹ Nevertheless, the importance of the innovation patent regime as a useful alternative to standard patents cannot be downplayed by the increased number of abuses. The strategic use of the system to gain a rapidly enforceable right is a common phenomenon in many jurisdictions, if not all. Of course, future reforms would certainly need to address many of the above concerns, but raising the innovative step to the level of inventive step that is applied for standard patents would inevitably result in the innovation patent system becoming obsolete and ineffective, as was the case for the petty patent system.

561 See M Summerfield, 'Apple's 'Innovative' Australian Patent Strategy' (2012) August, IPWatchdog, available at: <<http://www.ipwatchdog.com/2012/08/15/apples-innovative-australian-patent-strategy/id=27378/>> (accessed 10 December 2012).

Table 4.3: A Snapshot View of Standard, Petty and Innovation Patents

	Standard Patent	Petty Patent	Innovation Patent
Objective	To encourage greater inventive activity through the grant of exclusive rights	To provide less expensive, quicker patent protection, encourage inventions of a short lifespan	To provide less expensive, simpler and quicker protection, to encourage minor and incremental innovations of SMEs
Initial legislation	Patents Act 1903 (Cth)	Patents Amendment Act 1979 (Cth)	Patents Amendment (Innovation Patent) Act 2000 (Cth)
Novelty	Originally domestic, currently absolute novelty	Domestic	Absolute novelty (Same prior art base as for the standard patents)
Inventiveness	Inventive step	Inventive step	Innovative step
Granting Procedure	Substantive examination	Substantive examination	Preliminary examination
Number of claims	Multiple	One claim only	Up to 5 claims
Divisional application	Yes	Yes	Yes
Opposition proceedings	Yes	No	Only post-grant
Subject matter	No express exclusions, except human beings, and the biological processes for their generation	As for standard patents	Identical to standard patents, additionally excluded plants, animals, and biological process
Average time for grant	2-4 years	90 percent granted within 3 months	2-3 months from filing
Term	20 years	6 years	8 years

(Source: Based on Australia's Second-Tier Patent System: A Preliminary Review (2004)

4.1.2.2. Empirical Analysis and Policy Implications

As noted above, one of the primary objectives of the Australian innovation patent regime is to provide protection for small and incremental innovations of Australian individuals and SMEs. The empirical data on the use of both standard and innovation patent systems would probably offer credible evidence on whether the innovation patent system works well in the Australian context. As presented in Table 4.4, Australian standard patent applications have significantly increased in the recent years. Nevertheless, the lion's share of Australian standard patent applications has been made

4. Second-Tier Patent Protection in other Jurisdictions

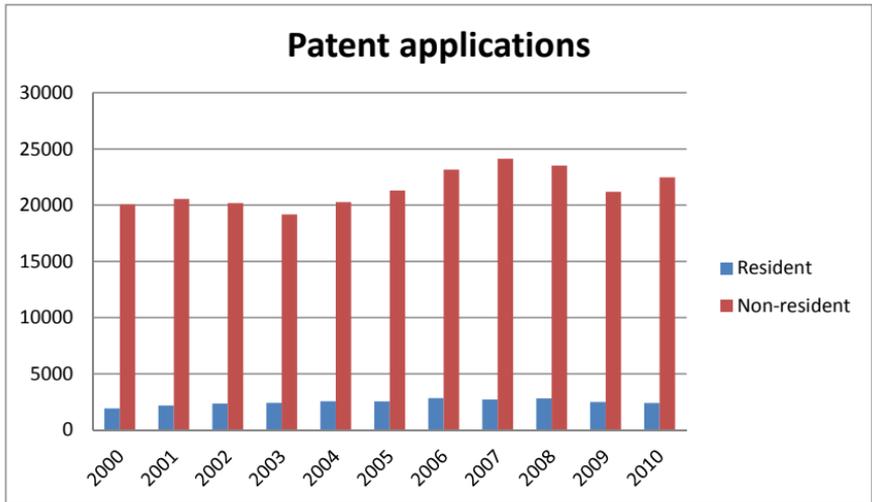
by foreign companies and individuals. On average, Australian applications consisted of about 10 percent of total standard patent applications filed in the last ten years. From these statistics, it can reasonably be concluded that the Australian standard patent system is predominantly used by foreign interests. From an analytical perspective, domestic patent filing is an indication of the technology strength of the nation. Obviously, the standard patent system is less used by Australian applicants.

Table 4.4: Patent Applications, 2000-2010

Patent applications				
Year	Resident	Non-resident	Abroad	Total
2000	1928	20073	3399	25400
2001	2187	20548	3868	26603
2002	2364	20181	4128	26673
2003	2418	19176	4714	26308
2004	2559	20274	6524	29357
2005	2555	21302	6988	30845
2006	2837	23166	7342	33345
2007	2718	24122	7914	34754
2008	2821	23525	7955	34301
2009	2494	21187	711	24392
2010	2409	22478	7408	32295

(Source: Based on data from WIPO statistic database)

Figure 4.3: Trends in Patent Applications, 2000-2010



(Source: Based on data from WIPO statistic database)

In stark contrast to applications for standard patents, the majority of innovation patent applications are made by Australians, though the share of innovation patent applications as against the total number of standard patent applications is small (around 6 percent). Perhaps more encouragingly, even though the petty patent system (1979-2001), the predecessor of innovation patents was not well-utilized by domestic applicants, with an average of 300 petty patent filings each year, the empirical data supports the view that Australian applicants have made relatively good use of the current innovation patent system. As evident from Table 4.5, the number of innovation patent applications has considerably increased in the last ten years, since its introduction in 2001.

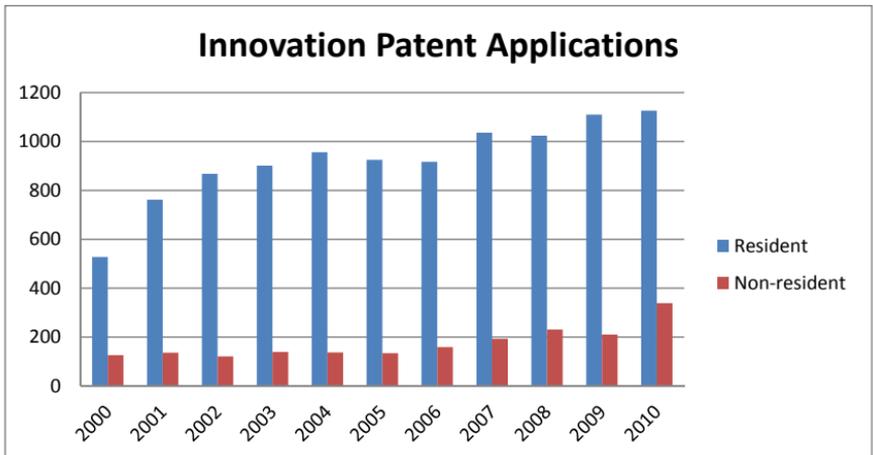
4. Second-Tier Patent Protection in other Jurisdictions

Table 4.5: Innovation Patent Applications, 2000-2010

Year	Resident	Non-resident	Total
2000	528	126	654
2001	762	136	898
2002	868	121	989
2003	901	139	1040
2004	956	137	1093
2005	925	134	1059
2006	917	159	1076
2007	1036	193	1229
2008	1024	231	1255
2009	1110	210	1320
2010	1126	339	1465

(Source: Based on data from WIPO statistic database)

Figure 4.4: Trends in Innovation Patent Applications, 2000-2010



(Source: Based on data from WIPO statistic database)

As noted above, the Australian innovation patent system was intended to appeal to domestic innovators and SMEs. As Figure 4.4 shows, both resident and non-resident innovation patent applications have trended upward. Arguably, the increase may reflect the reduced level of inventiveness required for innovation patents. One other possible reason is that there has been a significant rise in innovation patent applications within certain high-tech technologies in the recent years, in particular, electrical devices and engineering (with an increase of 350 percent), information technology (with an increase of 390 percent), and pharmaceuticals (with an increase of 560 percent).⁵⁶² According to IP Australia, this compares to a rise in applications of 150 percent averaged over all technologies.⁵⁶³ The annual number of Innovation Patent applications for these technologies has increased from 82 applications in 2001 to 401 in 2011, amounting to nearly a quarter of all Innovation Patent applications filed in 2011.⁵⁶⁴

An analysis of the latest statistics shows that, even though the majority of innovation patent applications are made by Australian individuals and companies, the proportion of domestic applications has significantly declined from 85 percent in 2001 to 65 percent in 2011.⁵⁶⁵ Probably, this may be attributed to the increase in innovation patent application from abroad, especially from high technology industries such as computer software. Nevertheless, the technology groups represented in standard patent applications are different from that of innovation patents. According to recent studies,⁵⁶⁶ the top five technology groups for standard patents are: (1) organic fine chemicals (9 percent); (2) pharmaceuticals, cosmetics (6 percent); (3) medical engineering (5 percent); (4) telecommunications (5 percent); (5) analysis, measurement, control (5 percent). When compared with standard patent applications, the applications for innovation patents are largely made in relation to: (1) consumer goods and equipment (22 percent); (2) civil engineering, building, mining (13 percent); (3) transport (9 percent); (4) information technology (9 percent); (5) handling and print-

562 IP Australia, 'Innovation Patents-Raising the Step: Consultation Paper- 24 September 2012' (2012) IP Australia/Australian Government, available at: <www.ipaustralia.gov.au> (accessed 10 December 2012).

563 Ibid.

564 Ibid.

565 Ibid.

566 SL Moritz and AF Christie, 'Second-Tier Patent System: The Australian Experience' (2006) 4 *European Intellectual Property Review* 230, 236.

4. Second-Tier Patent Protection in other Jurisdictions

ing (6 percent).⁵⁶⁷ Furthermore, the following Table provides a glimpse of innovation patents granted by IP Australia since 2001.

Table 4.6: Innovation Patents Granted by Calendar Year

Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Totals
Innovation patents granted	660	1026	1036	1104	1068	1085	1241	1272	1326	1469	11,287
Granted to foreign applicants	83	136	145	146	146	167	207	244	217	342	1,833
Percentage of foreign applicants	13%	13%	14%	13%	14%	15%	17%	19%	16%	23%	16%
Granted to Australian (Aus) applicants	577	890	891	958	922	918	1034	1028	1109	1127	9,454
Percentage of Aus applicants	87%	87%	86%	87%	86%	85%	83%	81%	84%	77%	84%
Granted to Aus individuals	428	644	674	667	626	566	682	686	676	697	6,346
Overall percentage of Aus individual applicants	65%	63%	65%	60%	59%	52%	55%	54%	51%	47%	56%
Granted to Aus companies/ firms	149	246	217	291	296	352	352	342	433	430	3,108
Overall percentage of Aus companies/ firms	23%	24%	21%	26%	28%	32%	28%	27%	33%	29%	28%

(Source: Australian Government’s Advisory Council on Intellectual Property, ‘Review of the Innovation Patent System: Issue Paper’, 2011)

As indicated by Table 4.6, the total number of innovation patents granted has doubled over the period 2001 to 2011. This can be interpreted as an indication of the fact that more Australian nationals than before are interested in using the incentive mechanism accorded by the innovation patent regime. Nevertheless, it might still be argued that this increase in granted innovation patent is an inevitable result of a large number of divisional in-

567 Ibid.

novation patent applications filed from pending standard patent applications for strategic purposes. In that sense, this does not reflect the real increase in incremental innovations in Australia. Moreover, as can be seen from the above Table, a vast majority of innovation patents are granted to Australian applicants, while on average, only about 1 in 6 innovation patents are granted to foreign applicants.⁵⁶⁸ Last but not the least, of all granted innovation patents, only about 20 percent of innovation patents are substantively examined and certified each year. As noted, the certification of an innovation patent is mandatory before initiating any legal action against a third party.

4.1.2.3. Lessons from Australia

Australia has lived with an STP system (petty patent and innovation patent regimes) since 1979 and the Australian experience could well serve as a model for Sri Lanka and other South Asian countries. Most importantly, various reviews and previous studies have confirmed that the Australian STP system has generally met and continues to meet the objectives for which it was introduced.⁵⁶⁹ Undeniably, the Australian system suggests an interesting way of advancing the interests of domestic innovators and SMEs by providing quick, less expensive and more easily obtainable protection for minor and incremental innovations. To that extent, the reflections on the Australian experience can provide an impetus to many countries to provide for an STP regime in their legal systems. One other important lesson that can be learned from Australia is to undertake periodical reviews on the working of the system once it has been introduced. The strength of the system such as its ability to protect almost every novel and useful product or process, lower threshold for inventiveness, quick and low-cost granting procedure and the need of certification before enforcing the rights are worth emulating by other countries. Nevertheless, the system

568 Australian Government's Advisory Council on Intellectual Property, 'Review of the Innovation Patent System: Issue Paper' (2011) Official Website of Australian Government/Advisory Council on Intellectual Property 8, available at: <<http://www.acip.gov.au/reviews/all-reviews/review-innovation-patent-system/>> (accessed 12 August 2012).

569 SL Moritz and AF Christie, 'Second-Tier Patent System: The Australian Experience' (2006) 4 *European Intellectual Property Review* 230, 238.

is certainly not without its critics. Even though the innovation system offers unique advantages for the domestic industrial sectors, it is often used as a strategic tool to gain rapidly enforceable right by filing an innovation patent divisional from a pending standard patent application by large domestic and foreign companies. This practice, along with patent evergreening and patent thickets, has raised serious concerns about the Australian innovation patent system today. To overcome such abuses, Sri Lanka would have to tailor the scope of the protected subject-matter narrowly; reduce the scope for strategic use, and exclude computer software from the design of a future STP regime. Moreover, relatively shorter term protection would also help to reduce the threat of pharmaceutical patent evergreening. Most significantly, even though the low innovative step threshold may be a concern for Australia as it is a more technologically advanced country, it should not be an issue for a developing country like Sri Lanka where most innovations by SMEs consist of minor adaptations and improvements for existing products. In conclusion, the Australian system provides valuable insights for countries where an STP regime is under consideration.

4.2. Experience from Emerging and Developing Economies

4.2.1. China

'Core technology cannot be bought. Only by strong capacity of science and technological innovation, and by obtaining our own IP rights, can we promote China's competitiveness and win respect in the international society'.
Former Chinese Premier Wen Jiabao⁵⁷⁰

While becoming an economic powerhouse in Asia, China has recorded awe-inspiring economic growth in the last three decades. From a negligible poor economy based on agriculture and manufacturing in the 1970s, China has moved towards an innovation-based economy, thanks to science and technology policies that have been implemented to encourage indigenous innovations. Thus, China has attracted much attention from South Asian policymakers as a successful growth model. With the 'Open Door Policies' in 1979, it has implemented an export-oriented economic strate-

570 Quoted by E Zhou and B Stembridge, *Patented in China-The Present and Future State of Innovation in China* (Thomson Reuters 2010) 16.

gy. Today, China has emerged as the world's second-largest economy with an annual GDP growth close to ten percent. Even more encouragingly, China has championed the world from another front, namely, innovations and patents. In 2011 alone, the Chinese State Intellectual Property Office (SIPO) has received 585,467 utility model (UM) applications, ranking number 1 and securing 87 percent of the world total UM patent filings.⁵⁷¹ Not surprisingly, China has recorded an exploding number of patent filings in the recent years. Moreover, in 2001, China became a member of the World Trade Organization (WTO), turning a new leaf in the country's history of IP law.⁵⁷² Admittedly, the most recent developments in IP have occurred as a result of China's legal obligations under the TRIPS Agreement. Even though Japan (as the first country in Asia), following the German experience, introduced a UM regime in 1905, China did not have such a regime until 1984. While enacting its first modern patent law in 1984, China brought the idea of an STP regime into its IP legal landscape. As a result, under the current Patent Act of China, there are three types of patents, namely, invention patents, utility models and design patents. Like many other countries, one of the main objectives of the Chinese UM system is to encourage domestic innovative activities by protecting small and incremental innovations.

4.2.1.1. Current System of Utility Model Protection

The utility model patent system constitutes an important part of the Chinese patent system and the purpose of the system is to protect small inventions and creations which play a unique role in China's patent protection system.⁵⁷³ According to commentators, "throughout the drafting of the Patent Act, there had been a strong debate regarding the adoption of a UM law (*shiyong xinxing*), with the legislators' fearing that the patent office

571 WIPO, World Intellectual Property Indicators (WIPO 2012) 90.

572 The World Trade Organization successfully concluded negotiations on China's terms of membership of the WTO, paving the way for the text of the agreement to be adopted formally at the WTO Ministerial Conference in Doha, Qatar, in November 2001.

573 State Intellectual Property Office of People's Republic of China (SIPO), 'Development of China's Utility Model System' (2013) Report released on 5 January 2013, SIPO-Official website, available at: <http://english.sipo.gov.cn/news/official/201301/t20130105_782325.html> (accessed 10 January 2013).

would be flooded by minor inventions from foreign corporations, especially those from Japan".⁵⁷⁴ The current UM system in China is governed by the Chinese Patent Act and its implementing regulations.⁵⁷⁵ Since its adoption in 1985, the Patent Act has been revised three times in 1992, 2000 and 2009. Most importantly, the third revision in 2009 introduced the requirement of 'absolute novelty' and 'evaluation report' into the UM regime. Under Chinese patent law, a utility model is defined as 'any new *technical solution* relating to the shape, structure, or the combination of a product, which is fit for practical use'.⁵⁷⁶ Thus, the subject-matter protectable as a utility model is limited to product-related technological solutions, excluding processes as well as methods, chemical compositions and computer software etc.⁵⁷⁷ Viewed through the lens of protectable subject-matter, the Chinese UM regime can be viewed as a three-dimensional model. Pursuant to Article 22(1) of the patent Act, to be patentable as a utility model, an invention must possess novelty, inventiveness and practical applicability. Like in many other jurisdictions, the Chinese law requires an invention to meet an 'absolute novelty' standard for UM protection.⁵⁷⁸

Nevertheless, the inventiveness standard required for utility models is significantly different from that of invention patent (*faming zhuanli*) in China. According to the wording of Article 22 of the Patent Act, a UM possesses inventiveness when it has '*substantive feature and must represent progress*' which is a lower threshold than for invention patents. Most notably, an invention patent requires a 'prominent (outstanding) substantive feature and represents a notable progress'. Due to frequent confusion as to what level of inventiveness represents, the Examination Guidelines propose that for an invention patent 'an invention is deemed to be non-obvious even to an expert who has conducted a comprehensive search in all

574 U Suthersanen, G Dutfield and Boey (eds), *Innovation Without Patents: Harnessing The Creative Spirit In A Diverse World* (Edward Elgar 2007) 153.

575 See The Patent Law of the People's Republic of China, adopted 12 March 1984, which came into effect on 1 April 1985, as last amended in 2009. See also, Implementing Regulations of the Patent Law, People's Republic of China, adopted 19 January 1985, adopted 1 July 2001 and 2010.

576 See Article 2 (3) of the Patent Act.

577 See also Chinese Patent Examination Guidelines (2010).

578 See Article 22, novelty means that, the invention or utility model does not belong to the prior art; The prior art in this Law referred to any technology known to the public in the country or abroad before the date of filing.

neighboring and related fields,' but for UM patents 'the search should be restricted to the fields to which the technical solution immediately pertains'.⁵⁷⁹ Moreover, in the case of a UM application, only two prior art documents may be combined unless the UM results from a simple combination of different pieces of prior art.⁵⁸⁰ Whereas for invention patents it is possible to combine more than two prior art documents and attack the inventiveness. As the last condition for protection, practical applicability means that the utility model can be made or used and can produce effective results.⁵⁸¹ Once filed, the application is only subject to *preliminary* examination and this examination includes a review as to formalities only, including a cursory review of the claims to verify appropriate subject-matter for a UM Patent.⁵⁸² Once registered, which typically takes seven to ten months after filing, the utility model patent is presumed valid, although the validity of the patent may be challenged by proceedings before the Patent Reexamination Board.⁵⁸³ This invalidation procedure serves as post-grant protection mechanism against possible abuses of the system because anyone who doubts the patentability of an issued UM patent can make a request for invalidation. Interestingly, there is an increasing concern regarding the validity of issued UM patents. According to the newest data from SIPO, the Patent Reexamination Board of SIPO received 10,044 requests for invalidation of utility model patents between 2010 and 2011. Moreover, from 2002 to 2011, SIPO has closed (decided on) 9,532 requests for invalidation of utility model patents, which has resulted in 35.6 percent invalidations and 11.80 percent partial invalidations respective-

579 PA Cummings, 'From Germany to Australia: Opportunity for a Second Tier Patent System in the United States' (2010) 19 Michigan State Journal of International Law 297, 310.

580 T Mak, 'Utility Model and Invalidation in China: Introduction and Practice Notes' (2011) April, Chartered Institute of Patent Agents 231, 233.

581 See Article 22 of the Patent Law of the People's Republic of China.

582 TT Moga, *China's Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) 12.

583 See Article 45 of the Patent Act 1985 as amended. TT Moga, *China's Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) 12.

ly.⁵⁸⁴ Generally, the invalidation rate remains as high as 50 to 60 percent.⁵⁸⁵

One other important aspect of the Chinese UM system is the dual filing arrangement as Chinese patent law does not permit conversion from one type of patent to another. Pursuant to Article 9 of the Act, an applicant can file applications for both an invention patent and a UM application for the same invention, but he is required to choose between the two in order to avoid double patenting. In other words, two patents (one invention and one utility patent) cannot exist claiming the same or identical invention.⁵⁸⁶ Moreover, in terms of the rights conferred by the Chinese UM regime, an owner of a UM patent is entitled to the same rights as in the case of invention patents. The longest statutory life of a UM patent is ten years from the date of filing. Even more significantly, enforcement of Chinese UM rights has attracted huge interest after the *Schneider v Chint* decision of the Chinese People's Court in 2007 where the highest recorded patent infringement compensation was awarded based on a UM patent.⁵⁸⁷ Last but not least, the Chinese UM law also provides enforcement related safeguards against possible abuses of the UM regime. Most importantly, in an infringement dispute involving a UM patent, the people's court or the patent administrative department may require the patentee or the interested parties to provide a patent evaluation report at the beginning of the lawsuit.⁵⁸⁸ Given below is an example of UM patent granted by SIPO: UM Patent

584 State Intellectual Property Office of People's Republic of China (SIPO), 'Development of China's Utility Model System' (2013) Report released on 5 January 2013, SIPO – Official website, available at: <http://english.sipo.gov.cn/news/official/201301/t20130105_782325.html> (accessed 10 January 2013).

585 E-mail from a Chinese patent lawyer to author (12 December 2012).

586 TT Moga, China's Utility Model Patent System: Innovation Driver or Deterrent (Research Paper, US Chamber of Commerce 2012) 13.

587 See T Mak, 'Utility Model and Invalidation in China: Introduction and Practice Notes' (2011) April Chartered Institute of Patent Agents 231. Decision WX9744 *Schneider v. Chint*. This case involved an invention for circuit breaker of Chint's UM ZL97248479.5.

588 See Article 61 of the Patent Act. Where any infringement dispute relates to a patent for a utility model... the people's court... ask the patentee or any interested party to furnish an evaluation report of the patent made by SIPO after having conducted search, analysis and evaluation of the relevant utility model, and use it as evidence for hearing or handling the patent infringement dispute. Arguably, such an evaluation report may be viewed as an important supplement to the preliminary examination system.

Number ZL 2006 2 0031103.5 (LCD Display Mercury Free Sphygmomanometer).⁵⁸⁹



4.2.1.2. Empirical Analysis and Policy Implications

The empirical data from SIPO and WIPO provides evidence on how successful the UM system has been in encouraging innovations in China. It also offers very useful insights for the use of the UM patent system by domestic and foreign applicants. Table 4.7 presents some illuminating facts on the latest trends regarding UM, invention and design patent applications and grants by State Intellectual Property Office (SIPO) from 2005 to 2011. Most strikingly, the total number of applications and grants of all three types of patents in China has remarkably increased over this period. According to the newest statistics of SIPO, a total of 1,633,347 patent applications have entered the Chinese patent system in 2011, representing a 33.6 percent increase over 2010. Of the total number, 526,412 (32.2 percent) were applications for inventions, 585,467 (35.8 percent) for utility

589 Department of Industrial Policy and Promotion of India, 'Utility Models' (2011) Discussion Paper-23 May 2011, 28. available at: <http://dipp.gov.in/English/Discuss_paper/Utility_Models_13May2011.pdf> (accessed 30 December 2011).

4. Second-Tier Patent Protection in other Jurisdictions

models, and 521,468 (31.9 percent) for designs.⁵⁹⁰ Obviously, more than one third of patent applications received by SIPO are for utility model patents. As shown in Table 4.7, most encouragingly, applications for utility model patents have sharply increased to an extraordinary level by exceeding 200,000 in 2008, 300,000 in 2009, and 400,000 in 2010 and in 2011, its applications reached 585,000, which was a 42.9 percent increase over the previous year.⁵⁹¹

Table 4.7: Applications and Grants for Three Kinds of Patents by Calendar Year

UMs	2005	2006	2007	2008	2009	2010	2011
Applications	139566	161366	181324	225586	310771	409836	585467
Grants	79349	107655	150036	176675	203802	344472	408110
Invention	2005	2006	2007	2008	2009	2010	2011
Applications	476263	573178	694153	828328	976686	391177	526412
Grants	214003	268002	351782	411982	581992	135110	172113
Design	2005	2006	2007	2008	2009	2010	2011
Applications	163371	201322	267688	312904	351342	421273	521468
Grants	81349	102561	133798	141601	249701	335243	380291

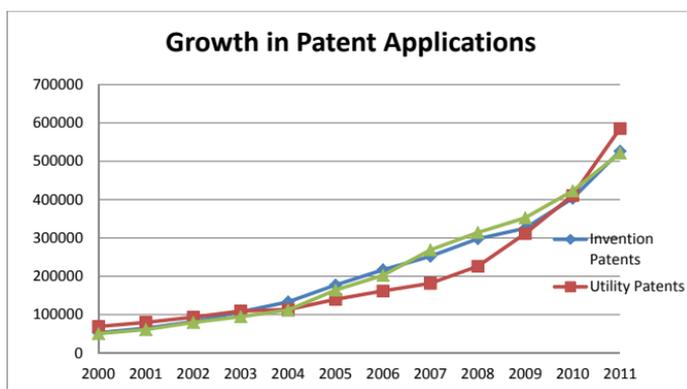
(Source: Based on data collected from SIPO)⁵⁹²

590 TT Moga, China's Utility Model Patent System: Innovation Driver or Deterrent (Research Paper, US Chamber of Commerce 2012) 13-14.

591 State Intellectual Property Office of People's Republic of China (SIPO), 'Development of China's Utility Model System' (2013) Report released on 5 January 2013, SIPO-Official website, available at: <http://english.sipo.gov.cn/news/official/201301/t20130105_782325.html> (accessed 10 January 2013).

592 HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 43, 60-61 (copy on file with the author).

Figure 4.5: Growth in Patent Applications, 2000-2011



(Source: Based on data from SIPO)

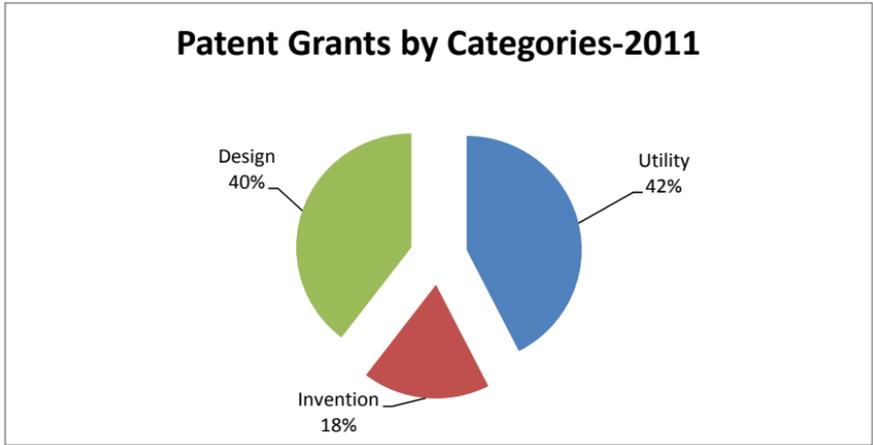
Table 4.8: Chinese Versus Foreign Utility and Invention Patent Applications

	Utility Models			Invention		
	Domestic	Foreign	Total	Domestic	Foreign	Total
2006	159997	1369	161366	122318	88172	210490
%	99.2%	0.8%	100%	58.1%	41.9%	100%
2007	179999	1325	181324	153060	92101	245160
%	99.3%	0.7%	100%	73.3%	37.6%	100%
2008	223945	1641	225586	194579	95259	289838
%	99.3%	0.7%	100%	67.1%	32.9%	100%
2009	308861	1910	310771	229096	85477	314573
%	99.4%	0.6%	100%	72.8%	27.2%	100%
2010	407238	2598	409836	293066	98111	391177
%	99.4%	0.6%	100%	74.9%	25.1%	100%

(Source: Based on data obtained from SIPO)⁵⁹³

593 Ibid 60-62.

Figure 4.6: Invention, Utility and Design Patent Grants, 2011



(Source: Based on data obtained from SIPO)

As presented in Table 4.8, domestic applicants make the lion's share of UM applications with more than 99 percent of total applications between 2006 and 2010 in China. Most strikingly, foreign UM applications accounted for less than 1 percent of the total applications filed during this period. In other words, domestic applications dominate the UM system in China. Nevertheless, according to the latest data from SIPO, foreign applications have increased from 2598 (0.6 percent) in 2010 to 4164 (0.71 percent) in 2011. The top five countries represented in foreign UM applications are Japan, the USA, Germany, Korea and Switzerland. On balance, the UM regime has not been attractive for foreign applicants. There may be differing reasons for this phenomenon. One possible explanation is that many Chinese trading partners do not have UM system in their respective countries. Another reason might be the exclusion of processes from UM protection in China. Moreover, many foreign firms are unaware of the benefits of the Chinese UM regime. When compared with UM applications, the share of foreign applications for invention patents is much higher and is accounted for nearly 30 percent in recent years.

According to commentators, the current indicators suggest that the UM system in China has become very popular among domestic users and it is effectively utilized by individuals and firms in securing necessary protection for their investments, in particular by small and medium-sized enter-

prises (SMEs).⁵⁹⁴ The empirical data further suggests that the Chinese UM system has attracted interests of many users from China's industrial landscape. Moreover, according to a recent study, a significant majority of SMEs in China, perhaps as high as 80 percent, believe that a patent is necessary to operate in a certain industry.⁵⁹⁵ In terms of the profile of users according to applicant type, our empirical evidence supports the view that individuals and SMEs are the main contributors to the UM applications. According to a recent internal report of SIPO, individuals (around 58 percent) and SMEs (around 26 percent) account for the biggest share of all the UM patents applications. The applications from research institutions, universities and colleges constitute around 16 percent of total UM applications.⁵⁹⁶ The main industrial fields for UM applications include inventions relating to human necessities (25 percent), engineering (21 percent), mechanics (13 percent), electronics (11 percent), communications (6 percent).⁵⁹⁷ Nevertheless, there is a difference in technology areas of domestic and foreign applications for UM patents. The domestic companies tend to emphasize on mechanical devices, and the foreign companies tend to focus on electrical devices.⁵⁹⁸

4.2.1.3. Critique and New Developments

According to SIPO, the Chinese utility model patent system has made remarkable achievements since its introduction in 1985. It not only promotes the implementation of the patent system, but also the economic, scientific

594 See D Wei, 'On the Simultaneous Filing of Patent Application for Invention and Patent Application for Utility Model' (1996) 2 *China Patent and Trademark* 28, 29.

595 TT Moga, *China's Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) 17.

596 Disclosed through personal communication with SIPO officials; e-mail from an officer at SIPO to author (20 August 2012).

597 *Ibid.*

598 See China Science Law Group, 'Characteristics and Best Practices of Utility Model System in China (2011) Website-Chinese Science Law Group 1, 9 available at: <<http://www.chinasciencelawgroup.com/documents/Characteristic%20and%20Best%20Practices%20of%20Chinese%20Utility%20Model%20System%20July%2010,%202011.pdf>> (accessed 10 May 2012).

and technological development of the country.⁵⁹⁹ Although the UM system has provided substantial benefits to local industries, it has also suffered from major criticism. Concerns have been voiced from top IP officials of the government against promoting quantitative metrics over quality of UM patents.⁶⁰⁰ Many have expressed doubts regarding the booming number of UM applications. To increase the number of domestic filings, China has introduced an array of incentives. They include cash bonuses, better housing for individual filers and tax breaks for companies that are prolific patent producers.⁶⁰¹ According to critics, China speaks of an innovation-by-the-numbers mentality, much like a student who equates knowledge with scores on standardized tests.⁶⁰² On the other hand, the pressure on Chinese entities to file patent applications is enormous, perhaps sometimes overwhelming.⁶⁰³ Thus, applicants seeking to increase the number of their utility model patents file just about anything, from old technology to unpatentable technology to, in some instances, photocopies of previously issued patents.⁶⁰⁴ In at least one province, businesses that do not file patent applications may face closure of their operations.⁶⁰⁵ Opponents criticize the UM system for producing a huge number of ‘junk patents’ that are worthless rights with a high rate of invalidation.⁶⁰⁶ Criticism has been leveled against the possibility of double patenting in China. One of the key concerns is that there can be utility model rights that are nothing more

599 State Intellectual Property Office of People’s Republic of China (SIPO), ‘Development of China’s Utility Model System’ (2013) Report released on 5 January 2013, SIPO – Official website, available at: <http://english.sipo.gov.cn/news/official/201301/t20130105_782325.html> (accessed 10 January 2013).

600 See the comment of M Weiye, The Director General of the State Intellectual Property Office’s (SIPO) patent department, who has addressed the issue by saying that ‘Our companies should pay much more attention to patent quality instead of only quantity’. M Weiye, ‘SIPO: Quality not Numbers, Key to Patent and Innovation’ *People’s Daily* (Beijing China, 5 January 2011).

601 S Lohr, ‘When Innovation, Too, Is Made in China’ *The New York Times* (January 1, 2011) available at: <<http://www.nytimes.com/2011/01/02/business/02unboxed.html?r=0>> (accessed 10 January 2013).

602 Ibid.

603 TT Moga, *China’s Utility Model Patent System: Innovation Driver or Deterrent* (Research Paper, US Chamber of Commerce 2012) 15.

604 Ibid.

605 Ibid.

606 Z Rongyan, ‘The Legislation for Utility Models and Their Examination and Approval: On Improving the System of Patent for Utility Model’ (1997) 2 *China Patents and Trademark* 73.

than an obvious variation of granted patents. There are also fears that the UM system can easily be used for strategic purposes although it is an unexamined right. The unfortunate reputation of utility models of ‘easy to get in, hard to get out’ is an invitation for free riders and other actors.⁶⁰⁷ According to commentators, ‘non-practicing entities’ (patent trolls) are becoming an increasing threat to the innovation landscape in China.⁶⁰⁸ Thus, it comes as no surprise that China’s ambitious strategy to move from being the factory floor to being a leader in innovation has attracted huge criticism from many commentators.⁶⁰⁹

4.2.1.4. Lessons from China

The Chinese experience of the STP regime for almost three decades may be a good case study for developing economies such as Sri Lanka. Leaving aside the difference in market size, China can teach the developing countries in South Asia many lessons on encouraging ‘indigenous innovation’ to improve home-grown creativity. Available empirical evidence supports the view that the Chinese UM system has been a very useful IP tool for SMEs and individual innovators. As explained by SIPO in a recent statement:

‘When the system was firstly established, China was comparatively weak in capacity for science and technology innovation. The inventions and creations made by many SMEs were technically low, and the majority of the innovative outputs were small inventions and creations. Though these small inventions and creations were not as creative as invention patents in the technological sense, they also contributed to scientific technology advancement, economic and society development of the country and should be given appropriate protection. China’s utility model patent system was set up to protect this kind of inventions and creations’.⁶¹⁰

607 TT Moga, China’s Utility Model Patent System: Innovation Driver or Deterrent (Research Paper, US Chamber of Commerce 2012) 15.

608 Ibid 21. A ‘Non-Practicing Entity’ (NPE) is a patent owner that does not produce anything and does not commercialize anything but, instead, uses a patent offensively to extract money through forced licensing or litigation.

609 TT Moga, China’s Utility Model Patent System: Innovation Driver or Deterrent (Research Paper, US Chamber of Commerce 2012) 24.

610 State Intellectual Property Office of People’s Republic of China (SIPO), ‘Development of China’s Utility Model System’ (2013) Report released on 5 January

There is no doubt that the above observations of SIPO certainly holds true for the Sri Lankan scenario today as the majority of innovations is concentrated on low technology produced by SMEs and individual innovators with less R&D investments. Thus, the Chinese experience could serve as a useful model for Sri Lanka in incentivising such innovation.

Moreover, the Chinese UM regime has been very instrumental in introducing and familiarizing the patent system to local industrial sectors, especially for many SMEs. As noted in Chapter 2, there is a general lack of awareness and a disappointingly low use of the patent system in Sri Lanka. To that extent, Sri Lanka can follow the Chinese example to inculcate the habit of using the IP system by industrial sectors and the general public. Furthermore, the concept of evaluation reports may be worth emulating because such a report would certainly help reduce potential abuses of the system. One other important aspect of the Chinese system that is worth following is the political will and support for promoting innovation in the country which might unfortunately be lacking in many developing countries. Perhaps most encouragingly, the Chinese government's innovation policies are designed to improve innovative capability in science and technology. Of course, through an indigenous innovation approach, the Chinese innovation policy is now directed to move from 'made in China' to 'innovate in China'. However, this by no means explains that the Chinese UM system is perfect. The quality of Chinese UM patents has suffered serious criticism in recent years. Thus, cases of abuse and other concerns regarding the quality need to be addressed in order to further improve the system.

2013, SIPO – Official website, available at: <http://english.sipo.gov.cn/news/official/201301/t20130105_782325.html> (accessed 10 January 2013).

4.2.2. Malaysia

'Ignored by many of the world's biggest and lucrative markets, utility model protection continues its long march to respectability and ultimate acceptability'.

*Professor Lim Heng Gee*⁶¹¹

Malaysia is one of the rapidly developing economies in the Southeast Asian region, with a population over 26.6 million. Like Sri Lanka, Malaysia is a Common Law country which has largely inherited its IP laws from the legal instruments and jurisprudence of the United Kingdom. Since its independence from British colonial rule in 1957, Malaysia has gradually developed its own IP law landscape. In recent decades, Malaysia has transformed its economy from an agricultural to a more industrial economy. Today, the country stands to benefit from its strong growth potential. Perhaps more importantly, Malaysia has a comprehensive UM system in place to protect and to incentivise minor and sub-patentable innovations in the country. The current system of utility innovations in Malaysia is governed by its Patent Act of 1983 (as amended). Given many similarities, among others, relatively small market size and the population, reflection on the Malaysian experience may benefit Sri Lanka in its endeavor to move up the technological ladder by encouraging domestic innovations, especially within the SMEs.

4.2.2.1. Main Features of the UM System

Under the Malaysian Patents Act of 1983, two types of protection are available; the first is through the grant of a patent, and the second is through the issue of a certificate for a utility innovation.⁶¹² The latter system of protection available under the Act aims to protect 'minor inventions', called 'utility innovations' (hereinafter 'UI') in the statute, whereby a lower level of patentability criteria needs to be satisfied.⁶¹³ By virtue of

611 LH Gee, 'The long March National Laws travel the tortuous route towards utility Model protection' (1993) May, *Managing Intellectual property* 37, 37.

612 U Suthersanen, 'Utility Models and Innovation in Developing Countries' (2006) ICTSD Issue Paper No.13, 21, available at: <http://unctad.org/en/docs/iteipc_2006_6_en.pdf> (accessed 15 March 2012).

613 Ibid 21.

Section 17, the Act defines a utility innovation as “any innovation which creates a new product or process, or any new improvement of a known product or process, which is capable of industrial application, and includes an invention”. According to scholars, the Malaysian utility innovation system may be more aptly described as a ‘patent model’, as opposed to the ‘classical German Model’ or the ‘intermediate model’, where the applicant would have to meet the same or similar substantive requirements as that of a standard patent application and protection is not limited to three-dimensional product or model.⁶¹⁴ The main objective of the introduction of the UI system in Malaysia was to protect inventions which may not be patentable because they do not satisfy the requirement of inventive step.⁶¹⁵ The thinking behind the UI regime has further been explained by the Intellectual Property Corporation of Malaysia (MyIPO) as follows:

‘Utility innovation in Malaysia is expected to attract the locals and also the small innovators like students, individual inventors and the SMEs. These innovators usually come up with simple but useful everyday life utilities. These innovations might not be able to surpass the threshold of inventive step if applied for patents. Thus, UI incentivizes innovations by giving an easier and better path of protection for this group of innovators’.⁶¹⁶

To be eligible for UI protection in Malaysia, an innovation must possess novelty and industrial applicability. Significantly, there is no requirement for an inventive step, which is specifically excluded by the Act.⁶¹⁷ Even though the original version of the patent Act carried the local novelty standard up until 1993, the current law, however, pursuant to Section 14, requires UI to satisfy absolute or universal novelty standard.⁶¹⁸ Moreover, other than for some minor modifications specified in the second Schedule, the procedure involved in an application for a certificate for a UI is the same as that is for regular patent.⁶¹⁹ Unlike a normal patent, for which

614 LH Gee, ‘Second Tier Protection for Minor Inventions in Asia: An Appraisal of the Similarities and Differences’ (3rd ASLI Conference Shanghai (China), 25-26 May 2006) 5-6.

615 IMAG Azmi, LH Gee and R Alavi, *Intellectual Property System and Industrial Development in Malaysia* (IIUM Press 2009) 70.

616 E-mail from MyIPO to author (23 December 2011).

617 See Sections 17 and 17(A) 2 of the Patent Act (as amended). U Suthersanen and others (eds), *Innovation without Patents* (Edward Elgar 2007) 171.

618 See Section 47 (a) (i) of the Patents (Amendment) Act 1993.

619 IMAG Azmi, LH Gee and R Alavi, *Intellectual Property System and Industrial Development in Malaysia* (IIUM Press 2009) 23.

more than one claim can be applied for, in the case of a UI only one claim is allowed.⁶²⁰ As in patent law, discoveries, scientific theories, plants and animal varieties other than manmade living micro organisms and their products, methods of doing business and methods of treatment for the human or animal body are excluded from the scope of UI protection.⁶²¹

Most notably, an application for UI is subjected to a substantive examination prior to grant. In that sense, the Malaysian system can be viewed as an examination system as opposed to a simple registration system. Furthermore, even though it is not possible for an applicant to be granted both a patent and a certificate for utility innovation for the same invention, the law allows to convert an application for a patent into an application for a utility innovation and vice versa.⁶²² The statutory life of a certificate of UI expires 10 years from the filing date of the application. Nevertheless, before the expiration of this 10 year period, an application for extension for two additional five year periods of protection can be made.⁶²³ This means that the total term of protection may be extended to 20 years like in the case of a normal patent. However, before such extensions can be granted, the owner has to show that the utility innovation is in commercial or industrial use in Malaysia.⁶²⁴ Moreover, pursuant to Section 36 of the Patent Act, the owner of a UI certificate, as in the case of a normal patent, enjoys exclusive rights to exploit the patented invention, to assign or transmit the patent as well as to conclude license agreements. According to the information of the MyIPO, the application fee for a UI is lower (RM 140(US\$ 45) than for a normal patent (RM 290 (US\$ 93), but the substantive examination fee applicable for both UI and patent remains the same (RM 140(US\$ 354). Commentators have summarized the main features of the Malaysian UI regime as follows:⁶²⁵

620 Ibid 23. See also Section 28 (1) (d), as modified by the Second Schedule.

621 See Section 13 of the Patent Act for non-patentable inventions.

622 U Suthersanen, *Utility Models and Innovation in Developing Countries* (2006) ICTSD Issue Paper No.13, 22, available at: <http://unctad.org/en/docs/iteipc2006_6_en.pdf> (accessed 15 March 2012).

623 Ibid.

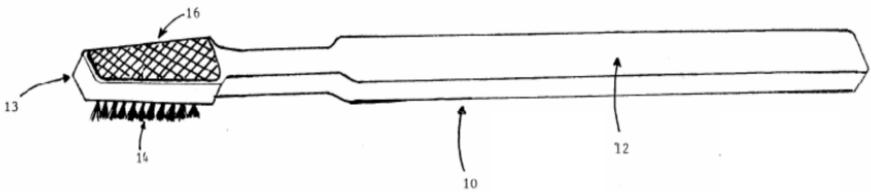
624 See IMAG Azmi, LH Gee and R Alavi, *Intellectual Property System and Industrial Development in Malaysia* (IIUM Press 2009) 23. See also Section 35, as modified by the Second Schedule.

625 See U Suthersanen and others (eds), *Innovation without Patents* (Edward Elgar 2007) 170. HG Ruse-Khan, *Utility Model Protection-A Feasible Option for In-*

4. Second-Tier Patent Protection in other Jurisdictions

- The protectable subject matter for utility innovations is the same as for patents which covers compounds and processes;
- No requirement for inventive step;
- The application can only contain one claim;
- Utility Innovation certificates are subjected to substantive examination before the grant. However, only the criterion of (absolute and universal) novelty is examined during this process;
- The duration of protection is for 20 years;
- Need to show that the invention is in commercial or industrial use in Malaysia for an extension of protection beyond 10 years;
- Not subject to compulsory license;
- Lower registration and maintenance costs.

Given below is an example of a granted UI certificate and its abstract as published by MyIPO. Application No. UI 20002263: Combined toothbrush and tongue cleaner⁶²⁶



Abstract: “The present invention relates to a tooth brush, particularly one with a tongue cleaner attached at the opposite surface of the bristles at the head section. A toothbrush comprising a handle portion and a head portion at one end thereof, the head portion having a plurality of bristles on one surface as means for brushing the teeth where the improvement lies in the coarse but soft material attached by conventional means to the opposite surface of the said bristles at the head portion for the purpose of cleaning the tongue”.⁶²⁷

centivising Incremental Innovation? 2012) Study conducted for the World Intellectual Property Organisation 65 (copy on file with the author).

626 Received from Industrial Property Division of Intellectual Property Corporation of Malaysia (MyIPO) through personal correspondence (12 July 2012).

627 Ibid.

4.2.2.2. Empirical Analysis of the UI System

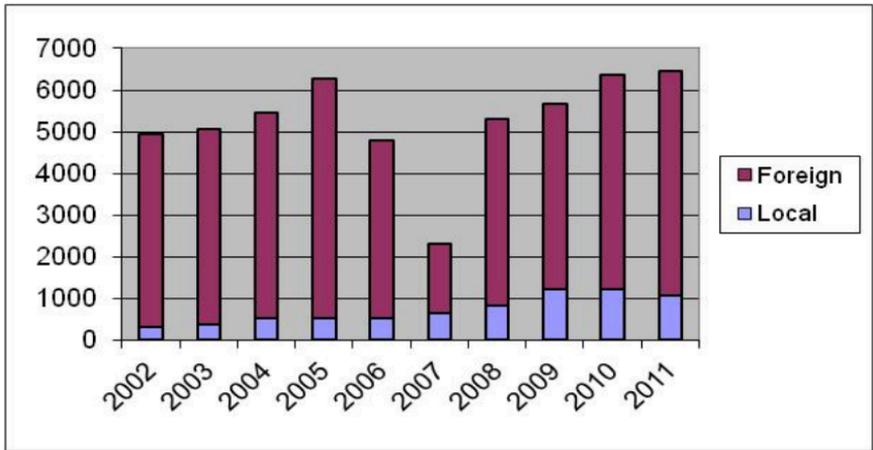
The empirical data offers a telling glimpse of how effectively the Malaysian UI system has been used by the industrial sectors in the country. From a broad perspective, the patent landscape of Malaysia is dominated by foreign applications and local applicants represent only around 20 percent of all applications. Interestingly, patent filings from both groups have gone up during the last 10 years and have exceeded 6000 applications in year 2010 and 2011. The statistical evidence from the MyIPO suggests that Malaysia has been and is an attractive market for foreign inventions and technologies though it may be a cause for concern in terms of domestic innovations.

Table 4.9: Patent Applications, 2002-2011

Year	Local	Foreign	Total	Local (%)
2002	325	4609	4934	7
2003	377	4677	5054	8
2004	513	4932	5445	10
2005	514	5769	6283	9
2006	526	4271	4797	12
2007	636	1658	2294	38
2008	832	4473	5305	18
2009	1205	4471	5676	27
2010	1214	5139	6380	24
2011	1075	5373	6448	17

(Source: Based on data collected from MyIPO)

Figure 4.7: Trends in Patent Applications, 2000-2011



(Source: Based on data obtained from MyIPO)

In contrast to normal patent applications, the number of UI applications has been low and has recorded a slow growth in the recent years. As presented in Table 4.10 below, the foreign applicants have also been dominating UI applications up until year 2010. Most strikingly, since 2010, Malaysian filings have outnumbered foreign applications. According to previous studies, in the initial 10 years after the introduction of the utility innovation system in 1986, there was an overall ten-fold increase in applications (from 15 in 1986 to 152 in 1995) which was quite encouraging.⁶²⁸ After the change from local to universal novelty in 1995 (The Patents Amendment Act of 1993, which came into force on 1 August 1995, has introduced the concept of absolute novelty for utility innovations),⁶²⁹ the number of applications have sharply declined to a low of 45 in 1998, from which they then recovered to a range between 70 and 90 applications per

628 See LH Gee, IM Azmi and R Alavi, 'Reform towards Intellectual Property-Based Development in Malaysia' (2009) 12/4 Journal of World Intellectual Property 317, 330. HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 66-67 (copy on file with the author).

629 See C Heath (ed), *Intellectual Property in Asia* (Kluwer 2003) 310. See also LH Gee, IM Azmi and R Alavi, 'Reforms Towards Intellectual Property based economic development in Malaysia' (2009) 12 Journal of World Intellectual Property 317, 330.

year.⁶³⁰ Significantly, the total number of UI applications is less than 2 percent in proportion to annual patent application, except in year 2007. Table 4.11 below indicates the most recent trends in UI applications in Malaysia.

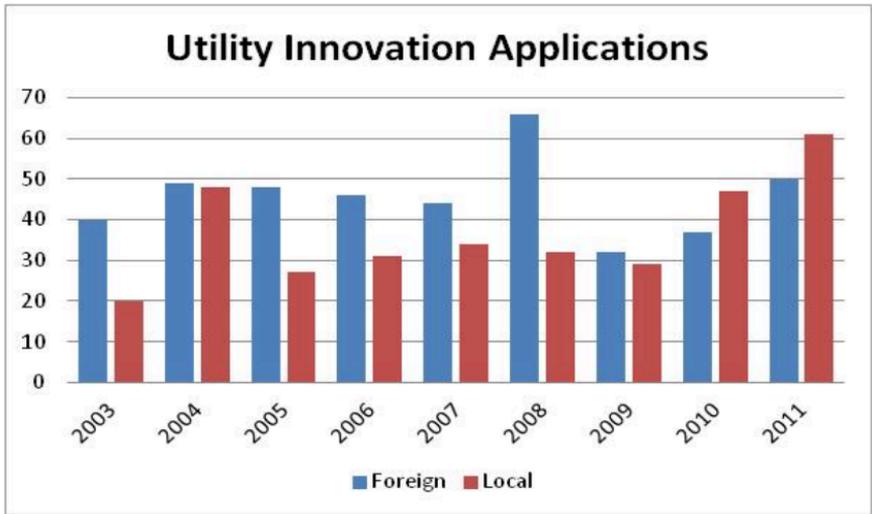
Table 4.10: Utility Innovation Applications, 2003-2011

Utility Innovation Applications				
Year	Foreign	Local	Total Application	Percentage from total Patent Applications (%)
2003	40	20	60	1.18
2004	49	48	97	1.78
2005	48	27	75	1.19
2006	46	31	77	1.60
2007	44	34	78	3.28
2008	66	32	98	1.81
2009	32	29	61	1.06
2010	37	47	84	1.30
2011	50	61	111	1.70
Grand Total	412	329	741	1.51

(Source: Based on data collected from MyIPO)

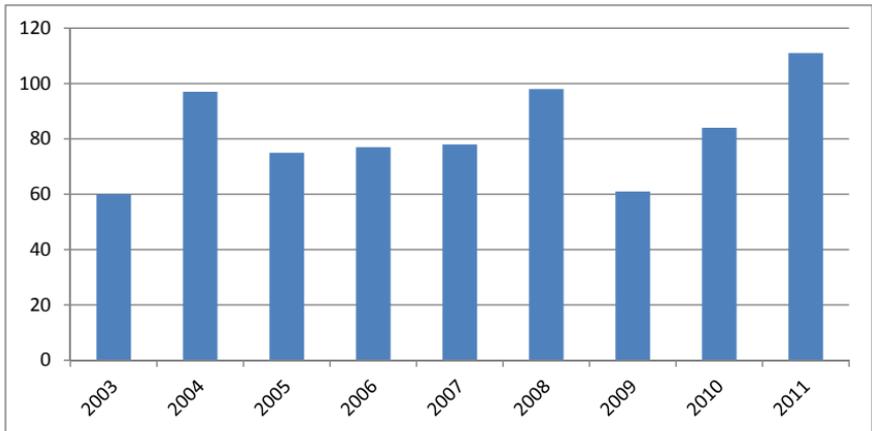
630 See IM Azmi and R Alavi, 'Reforms Towards Intellectual Property based economic development in Malaysia' (2009) 12 *Journal of World Intellectual Property* 317, 330. HG Ruse-Khan, *Utility Model Protection-A Feasible Option for Incentivising Incremental Innovation?* (2012) Study conducted for the World Intellectual Property Organisation 66 (copy on file with the author).

Figure 4.8: Trends in Utility Innovation Applications, 2000-2011



(Source: Based on data collected from MyIPO)

Figure 4.9: Growth in Utility Innovation Applications, 2003-2011



(Source: Based on data collected from MyIPO)

Survey evidence from Malaysian IP scholars also supports the view that low number of applications could be attributed to the change of novelty standard required for utility innovation from local novelty to universal

novelty in 1995.⁶³¹ One possible explanation for adopting the universal novelty standard is due to the concern of the possibility that an UI may infringe an existing patent. Arguably, a UI claim might well overlap with an existing patent. According to a recent study, the main users of the utility innovation system in the years 1986-2003 come from the region, with 47.3 percent of users from Taiwan Province of China, followed by 38.9 percent of the applications emanating from Malaysia, then from the United States (4.3 percent) and Japan (1.3 percent).⁶³² As further observed by the same authors, in terms of the proportion of UI applications coming from companies and individuals and comparing the numbers with patents from 1999-2003, 34.2 percent of the utility innovation applications came from companies and institutions, while 65.8 percent came from individuals. When compared with the patent statistics during the same period, the percentages are very different: companies and institutions are responsible for 96.2 percent of applications with only 3.8 percent coming from individuals.⁶³³ Viewed from the field of technology applied, the highest numbers of utility innovations encompasses innovations relating to human necessities such as footwear, furniture, agriculture, jewellery and travelling articles.⁶³⁴ The second highest category relates to performing operations and transporting, followed by innovations relating to mechanical operations involving physical or chemical processes, machines, apparatus and also transportation such as railways, aircraft and vehicles.⁶³⁵ According to commentators, these are areas in which individual innovators and SMEs could be involved in the creation of incremental improvements without the use of high technology.⁶³⁶ All in all, it can be well argued that the Malaysian UI system has not been enthusiastically used by industrial sectors. It may be described as a moderate use. The reasons why the UI system has not been more widely used is perhaps best explained by the MyIPO:

631 Telephone interviews with Professor LH Gee, Faculty of Law, Universiti Teknologi Mara, Malaysia, (17 November 2011) and the officials of MyIPO.

632 U Suthersanen, G Dutfield and KB Chow (eds), *Innovation without Patents* (Edward Elgar 2007) 176.

633 Ibid.

634 U Suthersanen, *Utility Models and Innovation in Developing Countries* (2006) ICTSD Issue Paper No.13, 22-23, available at: <http://unctad.org/en/docs/iteipc20066_en.pdf> (accessed 15 March 2012).

635 Ibid.

636 Ibid.

4. *Second-Tier Patent Protection in other Jurisdictions*

‘When these applications are subjected to substantive examination, though omitting the criteria of inventive step, the treatment received will be the same as of patent applications. The earlier applications will be examined first, thus utility innovation (UI) applications will have to wait for its turn to be examined. With UI applications’ pendency period being the same as of patent applications, applicants prefer to apply for patents. The scope of protection granted for UIs are often more specific and narrow than patents. Applicants will have to include all features of innovations into the only one claim allowed thus making it easier for others to modify or improvise for further exploitation. Applicants prefer to be granted with a total automatic protection period of 20 years (with yearly renewal fees) without the hassle of providing proof of utilization after the 10th year’.⁶³⁷

As interpreted through its objectives, it appears that the Malaysian UI system is not serving the very purpose for which it was introduced, due to the above mentioned reasons. Probably, the potential costs outweigh the perceived benefits of the current system. The policymakers may need to reform the system in order to make it more attractive to local innovators.

4.2.2.3. Lessons from Malaysia

As observed in the above analysis, the current Malaysian UI system is much closer to the normal patent system. Significantly, the requirements of substantive examination of UI application before grant and the emphasis on the absolute novelty standard might have been discouraging factors for domestic industries, even though there is no requirement of inventive step for UI. Viewed through the lens of the underlying rationale of the STP, the Malaysian UI system should be able to provide quick, less expensive and more easily obtainable IP right for domestic industrial sectors. Obviously, the UI system in place is not catering to the needs of the SMEs of the country. It is undeniable that, due to the time-consuming substantive examination procedure, the system cannot meet the demand from the industrial sector for a faster enforceable right for products that have a relatively short commercial life. Moreover, from a practical perspective, the limitation on the number of claims allowed (one claim only) would make the system less attractive. Nevertheless, on the positive side, unlike many other countries such as Germany and China, the Malaysian system offers a broad scope of subject-matter including processes. According to the infor-

637 E-mail from the MyIPO to the author (23 November 2011).

mation from the MyIPO, Malaysia is currently considering an Amendment to the existing UI regime. The proposed amendment aims at changing from the substantive examination before the grant to a non-substantive examination system, providing cheap and fast grant of right, making provisions for a request for substantive examination after grant, allowing more claims, introducing a lower level of inventiveness and a more practical period of protection.⁶³⁸ In sum, the Malaysian experience would undoubtedly offer motivations and rich insights in designing an appropriate STP regime for Sri Lanka. Nevertheless, emulating the Malaysian model without giving due consideration to the drawbacks of the system would lead to unintended repercussions.

4.2.3. Kenya

'The State shall support, promote and protect the intellectual property rights of the people of Kenya'.

Article 40 (5) of the 2010 Constitution of Kenya

Like Sri Lanka, Kenya has largely inherited its IP laws from the United Kingdom. Nevertheless, in recent years they were developed independently in view of international IP treaty obligations that Kenya has undertaken. Kenya was one of the first countries in the developing world to introduce a comprehensive system of IP rights and it is one of the leading countries in the African region which provides an effective utility model protection. A unique feature of the Kenyan utility models regime is that it has attempted to provide viable IP protection for traditional herbal medicine through a second-tier protection system. In that respect, the Kenyan system may offer rich insights for countries that consider extending IP protection for traditional knowledge inspired (TK-inspired) innovations. Therefore, the following discussion will mainly focus on that aspect of the Kenyan UM regime. In 2000, the United Nations Conference on Trade and Development has made specific reference to the Kenyan experience by suggesting that TK holders could take advantage of utility model (petty patent) systems that are less expensive to use and have lower inventive step require-

638 FR Dahalan, 'Utility Models protection in Malaysia-Utility Innovation' (2012) WIPO Regional Conference on the Legislative, Economic and Policy Aspects of utility Models Protection System, Kuala Lumpur, 3-4 September 2012.

ments.⁶³⁹ The Kenya's Industrial Property Act of 1989 allows utility model protection for traditional medicinal knowledge in the form of 'herbal as well as nutritional formulations which give new effects'. Today, the Industrial Property Act of 2001 governs the system of UM protection in Kenya.

4.2.3.1. Protection under the Current System

Under Kenyan IP Law, the certificates of UM are granted for a broad variety of inventions. According to Section 2 of the Industrial Property Act, a 'utility model' is defined as any form, configuration or disposition of element of some appliance, utensil, tool, electrical and electronic circuitry, instrument, handicraft mechanism or other object or any part of the same allowing a better or different functioning, use, or manufacture of the subject-matter or that gives some utility, advantage, environmental benefit, saving or technical effect not available in Kenya before and includes micro-organisms or other self-replicable material, products of genetic resources, herbal as well as nutritional formulations which give new effects. An invention qualifies for a utility model certificate if it is new and industrially applicable.⁶⁴⁰ According to the provisions of the Act, the novelty requirement for utility models in Kenya is similar to that required for patents. An invention is new if it is not anticipated by prior art which includes everything made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) or, by oral disclosure, use, exhibition or other non-written means shall be considered prior art.⁶⁴¹ It is obvious from this provision that a UM also needs to meet the absolute or universal novelty standard. Perhaps more importantly, unlike for patents, an inventive step is not required for UM protection. Nevertheless, one other striking feature of the Kenyan system is that UM applications are evaluated for novelty and industrial applicability prior to grant of the right. This process impliedly functions as a kind of a

639 United Nations, 'Systems and National Experiences for Protecting Traditional Knowledge, Innovations and Practices' (United Nations Conference on Trade and Development, Geneva, 22 August 2000, the Background Note by the UNCTAD secretariat, TD/B/COM.1/EM.13/2) para 36.

640 See Section 82 (1) of the Industrial Property Act of 2001.

641 See Sections 23(1) and (2) of the Industrial Property Act of 2001.

substantive examination. In response to the author's query an explanation in this regard was offered by the Kenya Industrial Property Institute (KIPI) as follows:

'According to current practice, utility models are evaluated for novelty and industrial applicability before registration. The Industrial Property Act 2001 Section 82 seems to prescribe requirements for registration of utility models requiring practice based interpretation since it is not clear how novelty for example may be evaluated without an international type search as stipulated in the Act. The current practice by examiners is to discover prior art by conducting a limited international search based only on what is freely available online or contained in physical records within the Institute, to facilitate the evaluation for novelty; which evaluation is conducted using procedures identical to those adopted to evaluate patents'.⁶⁴²

The statutory life of a utility model certificate shall expire at the end of the tenth year after the date of the grant of the utility model, and shall not be renewable. Like patents, UM protection is available for both products and processes in Kenya. Furthermore, pursuant to Section 83(1) of the Act, it is possible to convert an application for patent into a utility model certificate and vice versa.

4.2.3.2. Empirical Analysis

The following data from the KIPI offers a telling glimpse of how patent and utility model regimes have been used in the Kenyan context. Viewed through the lens of statistics, there is a gradual increase in patent applications over the years though the total number of applications remains significantly below 200 per year. As noted before, the number of domestic patent applications is an indication of innovative activities of the country. It is evident that the patent system has been poorly-utilized.

642 Personal communication with OJF Omiti, Senior Patent Examiner Kenya Industrial Property Institute facilitated by H Mutai, the Managing Director of KIPI (e-mail from KIPI to author on 17 September 2012).

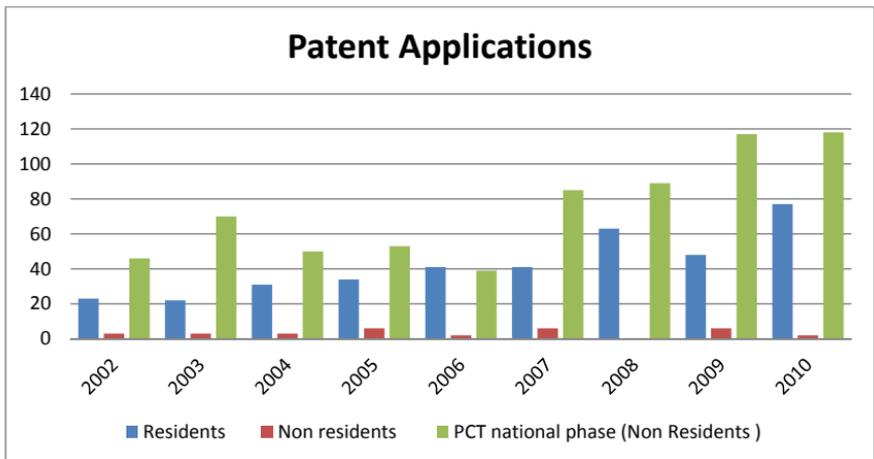
4. Second-Tier Patent Protection in other Jurisdictions

Table 4.11: Patent Applications, 2003-2010

Year	2003	2004	2005	2006	2007	2008	2009	2010
Residents	22	31	34	41	41	63	48	77
Non residents	3	3	6	2	6	0	6	2
PCT national phase(Non-Residents)	70	50	53	39	85	89	117	118
Total	95	84	93	82	132	97	171	197

(Source: Kenya Industrial Property Institute data)

Figure 4.10: Trends in Patent Applications, 2002-2010



(Source: Based on data collected from Kenya Industrial Property Institute)

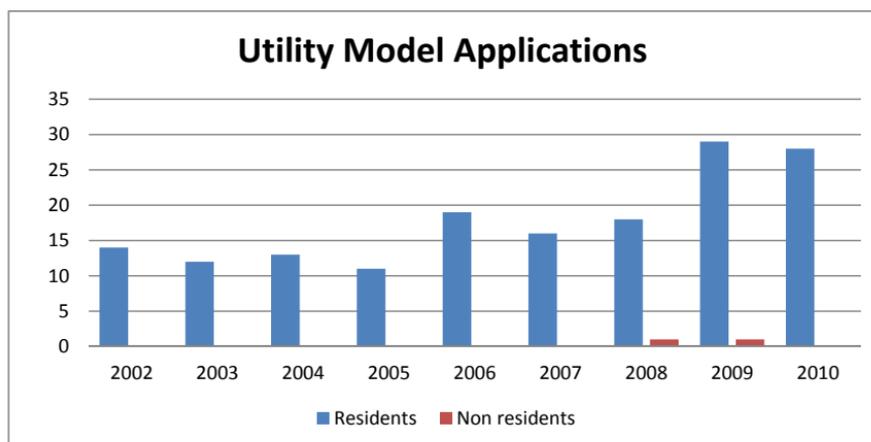
As indicated in Figure 4.11, in recent years both resident and non-resident applications have gone up in Kenya. What is clear from these statistics is that the majority of applications are made by non-residents. Most strikingly, the margin between domestic and foreign applications has gotten wider over the last few years and in particular in 2009 and 2010. In stark contrast to the patent applications, the utility model applications are predominantly represented by domestic applicants though the number of applications is small. Notably, as presented in Table 4.13, UM applications have recorded a slow growth since 2002.

Table 4.12: Utility Model Applications, 2002-2010

Utility Model Applications									
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Residents	14	12	13	11	19	16	18	29	28
Non residents	0	0	0	0	0	0	1	1	0
Total	14	12	13	11	19	16	19	30	28

(Source: Statistics of Kenya Industrial Property Institute)

Figure 4.11: Trends in Utility Model Applications, 2002-2010



(Source: Based on data collected from Kenya Industrial Property Institute)

From this data, one can reasonably conclude that neither the patent system nor the UM regime has been very attractive for industrial sectors in Kenya. An important question which arises here is whether the objectives of introducing a UM system have not been met in the Kenyan context. From a policy perspective, a UM system aims at promoting indigenous innovation by providing less expensive, quicker to obtain and less complex IP protection. A UM regime is expected to appeal to domestic innovators, and especially to SMEs. Given its unique feature of protecting the traditional herbal medicine, the system should have been attractive for traditional medicine practitioners. The survey evidence from IP practitioners, legal academics and officials at KIPi suggests that the use of the UM sys-

tem is disappointingly low. There may be several reasons for this situation. According to IP practitioners in Kenya, even though there is an adequate legal framework in place, the level of public awareness on IP remains low.⁶⁴³ The ignorance on the part of innovators and costs of drafting and other legal services operate as obstacles to the use of the system. It was also revealed during the telephone interviews with officials of KIPi that traditional medicine practitioners are, in most cases, unwilling to disclose their innovations as per the provisions of the Act, and it is not possible to grant UM rights without a full disclosure of the invention. Nevertheless, perhaps more encouragingly, in recent years, there have been at least a few UM applications for TK-inspired innovations. Seen below is one such example.⁶⁴⁴

An example of a granted utility model for herbal formulation⁶⁴⁵

Application type	National Utility Model
Application No	KE/U/2008/000114
Filing date	01/04/2008
Registration date	20/08/2010
Entitlement date	20/08/2010
Expiration date	20/08/2020
Inventor	Antony Mbugua Kamau, P.O. Box 65 Rongai [KE];
Owner(s)	Ambuka Wineries, P.O. Box 65 Rongai [KE];
Title	A Medicinal Alcoholic Drink and Method for its Production.
Abstract	The invention relates to a fermented alcoholic drink with medicinal properties. The alcoholic drink is made by fermenting various ingredients such as maize flour, millet, yeast, water, sugar and juice extracted from the plants stinging nettle, Aloe Vera and Ironweed is added to provide the desired medicinal property. The invention also relates to a method of producing such an alcoholic drink.

643 Disclosed to the author by a interviewed Kenyan IP practitioner.

644 E-mail from KIPi to author (12 November 2012). The above UM example was provided by KIPi at the author's request and more evidence on TK-based innovation (herbal cosmetics) is found in the KIPi Annual Report 2004-2007, 45.

645 E-mail from KIPi to author (12 November 2012). The above UM example was provided by KIPi at the author's request.

Moreover, according to KIPI officials, “herbalists in most cases process their medicine in a traditional non-industrial way. However, if there is any that meets the industrial application as provided in the Industrial Property Act 2001, then such can be protected by a utility model”.⁶⁴⁶ Much depends on how Section 2 of the Act is interpreted. There are utility models held by innovators in other areas. According to Section 25 of the Industrial Property Act 2001, an invention shall be considered industrially applicable if, according to its nature, it can be made or used (in the technological sense) in any kind of industry, including agriculture, fishery and services.⁶⁴⁷

As observed from the utility model statistics obtained from the KIPI, the utility model system seems to have been under-utilized. The reason for this, according to legal practitioners, is that the target group is not very keen on registering their knowledge as utility models and also the process is lengthy, if subjected to 18 month waiting period. One other possible reason maybe that the law fixes the same novelty standard as for patent for utility models, though there is no requirement for any inventive step. As commentators pointed out, due to the basic similarities in procedure and requirements, the same problems which occurs under patents are experienced when granting utility model rights for indigenous innovations; for example, the substantive examination-like procedure before grant acts as a disincentive for potential users of the system.⁶⁴⁸ According to one of the leading IP scholars in Kenya, ‘it is true that Kenya has an advanced system of management of utility model. However, it cannot be said surely that this system holds out as the utility model practice system. In Kenya, despite the conditions for grants of utility models being less, the procedure is largely similar to that for grant of patents. Some of the problems of this include, the process is lengthy and technical. Consequently, many applications fail to mature to grant’.⁶⁴⁹

646 E-mail from KIPI to author (12 November 2012).

647 Ibid.

648 See JM Mbeva, ‘Experiences and Lessons Learned regarding the Use of Existing Intellectual Property Rights Instruments for Protection of Traditional Knowledge’ (UNCTAD Expert Meeting on Systems and National Experiences for Protecting Traditional Knowledge, Innovations and Practices, Geneva, 2000) 8.

649 Explanation of Professor B Sihanya from the University of Nairobi Law School (e-mail communication received on January 21, 2013).

4.2.3.3. *Lessons from Kenya*

In view of the increasing demand for an appropriate protection mechanism for TK-inspired innovation in TK-rich countries such as Sri Lanka, it is certainly encouraging to observe that Kenya offers a system of UM protection for herbal, as well as nutritional formulations which give new effects. Kenya has extended UM protection system to non-traditional subject matters. As stated by commentators, most of the indigenous knowledge and innovation particularly in herbal medicine may be protected under the UM regime if they are given modern technological touches. Unfortunately, to many of the indigenous people this technology is relatively unavailable.⁶⁵⁰ This may also be the case in Sri Lanka. Moreover, it appears quite clear from the available evidence that the Kenyan UM system is under-utilized. There may be several explanations for this. Viewed through the lens of the Kenyan experience, one can well argue that, having an adequate legal framework alone is not enough to promote indigenous innovations, there needs to be a supporting mechanism to help TK-based innovators to turn their innovative ideas to IP rights. The lack of familiarity with the use of the UM system among SMEs may be a discouraging factor to them. Arguably, the low level of public awareness is a major obstacle for the effective use of the system. Most importantly, any STP system needs to be user-friendly and should appeal to the target group of users, especially the individual innovators and the SMEs. The Kenyan experience shows that the granting procedure is rather similar to that of patents and is time consuming. Moreover, the absolute novelty standard may also be a difficult hurdle for local innovators to overcome. As is evident, the disclosure requirement is a serious concern for TK-based industrial sectors. Nevertheless, TK-based innovators need to disclose their innovations if they opt to use the protection mechanism under the UM system. Certainly, secrecy may not be the right path to promote high quality products to meet global demand. Another important lesson from Kenya is that TK-inspired innovators may probably face difficulties in drafting their UM applications in scientific legal language. Like in Kenya, this may be a practical hurdle for potential users in Sri Lanka. In terms of the lessons to be learned from

650 See JM Mbeva, 'Experiences and Lessons Learned regarding the Use of Existing Intellectual Property Rights Instruments for Protection of Traditional Knowledge' (UNCTAD Expert Meeting on Systems and National Experiences for Protecting Traditional Knowledge, Innovations and Practices, Geneva, 2000) 8.

Kenya, while some aspects of the UM system may offer useful inspiration for Sri Lanka, other features that make the UM system less attractive for domestic innovators should be treated with caution.