

Innovation without patents: harnessing the creative spirit in a diverse world

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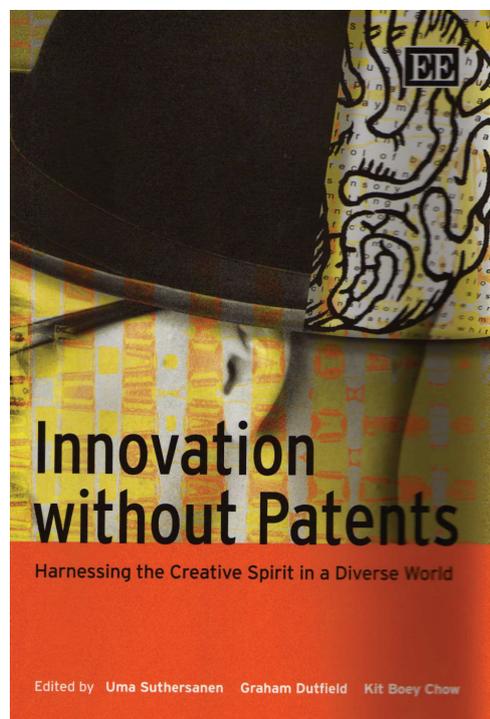
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The book *Innovation without patents* is fruit of an international comparative study about the different forms of protection available for minor innovations, shall say, innovations that do not qualify for full patent protection. In this context, the book discusses the utility model, its format in different countries and the advantages and disadvantages of utilizing this instrument.

To this purpose, in addition to the discussion about innovation, development and intellectual property rights, the book presents studies into the national realities of Singapore, Australia, Japan, South Korea, China, Taiwan, countries making part of the Association of Southeast Asian Nations (ASEAN) and some Latin American countries (Mexico and countries of the Andean community – Bolivia, Columbia, Ecuador, Peru and Venezuela).

The authors emphasize that innovation has to be understood from a wider perspective, not only taking as a basis the research-intensive industries whose products are directly derived from scientific discoveries (like biotechnology and pharmaceuticals) but also considering process or organizational innovations, the opening of new markets and the conquest of new sources of raw materials. Thus, the authors understand innovation as a complex process combining factors such as the knowledge basis, institutional arrangements, qualification of the labor force, economic opening and the capacity to absorb improvements achieved in other countries and sectors. In



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this sense, the government plays a fundamental role in the creation of an institutional and regulatory environment promoting innovation. Among other aspects, the government needs to establish appropriate regulatory structures providing rewards and incentives for innovation and investment. However, the analysis the authors make in the book does not include all these aspects.

For the authors, innovation uses to be more incremental than discreet or radical. For aggregating value by means of incremental innovation it is thus necessary to have access to knowledge. Being based on accessible knowledge, this kind of innovation is generally more difficult to protect. This way, many inventions important for the social well-being and cumulative by nature are not patentable for having a lower standard of novelty and inventiveness than patents. These inventions are also more vulnerable to the so-called unfair competition and imitation.

What the authors want to discuss is to which point protection by means of intellectual property rights is important for encouraging innovation and to which point innovations should remain in the public domain. In other words, they are discussing to which point learning for innovating requires the liberty to imitate and copy. There is a series of historical examples showing how important copies of inventions can be (like in the case of the appropriation of the integrated circuit, originally of Texas Instruments, by Japanese companies that today control great part of the North-American market). However, although such a conduct was allowed in the past – resulting in profits not only for the copying companies but also for the national economy – in our days local producers cannot act in this way anymore.

Then, what are the alternatives for the protection of incremental innovations? Should they or should they not be protected? If yes, should the standard patent system be amplified for embracing them or should alternative instruments be created? The authors are presenting the utility model, a kind of protection for inventions situated in between patent and industrial design protection. It is in general a kind of less expensive limited protection for a shorter period of time than a patent.

The utility model benefits mainly the industries based on incremental innovation. It is generally suitable for small and medium-sized companies, for being less expensive and less time-consuming than a patent and for being appropriate for the kind of innovation generated by these companies (“low grade” inventiveness and more exposed to imitation by competitors).

The utility model exists in a variety of forms over the world, in about 70 countries. Utility models are recognized by the Paris Convention for the Protection of Intellectual Property, but without defining their scope. Although the international agreements of intellectual property rights are increasingly harmonizing their legislations, there is no disposal in the TRIPS Agreement establishing minimum standards as occurs for patents, leaving the countries free to formulate or reject second tier protection regimes.

There is also no global consensus about the meaning of the term utility model, also called innovation patent (Australia), utility innovation (Malaya), utility certificate (France) and short-term patent (Belgium). The protected object also varies - from technical concepts, inventions or devices to more restricted definitions and tridimensional forms. In some cases, utility model is a form of patent protection without examination and for a shorter period of time. Anyway, there are at least three common characteristics: Exclusivity of rights for the patent holder, novelty and registration (although there is not always a substantial examination of the applications).

The authors emphasize the principal benefits and costs of the utility models. Among the benefits they point out that the utility model:

- encourages the production of more intellectual property and local innovation goods; this is particularly important in regions, where a great number of intellectual property goods are imported;
- provides protection for goods that cannot be protected by other instruments;
- prevents free-rider behavior of companies that do not invest in R&D.
- provides a source of information through the publication of specifications.

As refers to the costs, the authors advert that the utility model can:

- provoke litigations due to the absence of examinations prior to concession;
- create a rentist behavior, in which the investments are redirected to the efforts for obtaining protection;
- provoke the isolation of research areas using at the same time patent and utility model protection.

Important countries like the United States, the United Kingdom and Canada do not have utility model laws. The case of the United States is interesting because this country is the greatest producer of intellectual property worldwide. The authors speculate about some reasons why there is no utility model law in the United States: one of the possibilities is that the patent and industrial design laws are working well, as demonstrated by the great export of goods protected by intellectual property rights; The innovations and inventions are not produced in medium and small-sized companies but in transnational corporations; and finally, the North-American legislators are not so much concerned with the protection in the internal market but with the external markets. Another reason, according to the opinion of some experts¹, could be the reforms in the patent law that extended the scope of patentable objects (biotechnology, software and business methods) opening way for higher levels of patenting and leading to the creation of the Court of Appeals for the Federal Circuit, which increased the validity rate of the patents.

Thus, the pro-patent climate generated by the reforms in the patent law would turn a protection of second-tier innovations unnecessary because these would already be protected by the patent law itself (or its

misuse) and by a more relaxed antitrust law policy. The authors argue that a protection system type utility model would be useful for the USA in the sense of reducing the great quantity of applications the patent system receives and for discouraging defensive patenting. Obviously, in the case of the United States, the absence of a utility model is also due to the high level of investment in R&D generating first-line inventions as well as to the fact of its patent legislation being increasingly permissive, be it as refers to originality, be it with regard to inventiveness. In other words, they don't have it because they don't need it.

The policy-makers have at least four alternatives for dealing with the second-tier inventions:

- leave them unprotected;
- reduce the required level of inventiveness to turn them patentable;
- create new legal mechanisms for protecting them as a utility model; or
- introduce commercial and industrial regulation mechanisms such as the unfair competition law.

On the basis of these alternatives, the authors suggest that the developing countries, which do not protect minor innovations, consider three alternatives:

- 1 – *Status-quo* – accept the existent intellectual property rights regime without including any new right;
- 2 – Amplification of the current system – adjust the IP rights regime without introducing a new right but extending the existent rights to new objects;
- 3 – Competition – create new, hybrid rights such as the utility model.

As refers to Brazil, on occasion of the elaboration of the Industrial Property Right in 1996, the country adhered to the TRIPS agreement and adopted the so-called *status-quo*, which in some items surmounted the requirements of that agreement, as in the pipeline case.

The second part of the book deals with cases of specific countries, briefly presenting the cases of Australia Japan and Korea. The Australian case is interesting for showing the effects of the introduction of the utility model in 1979, corrected in 2001. The development of the petty patents system was a response to deficiencies in the patent and industrial design system. There was a need for a quicker, less expensive and easier system for protecting inventions with a shorter commercial life. The correction of the system in 2001, which created the innovation patent, occurred due to the need of protecting functional innovations of the industry. The greater part of petty innovation patent holders are individuals and not companies and mostly local not foreign inventors.

Like in Australia, in Japan the applicants of utility models are mainly individuals and small and medium-sized national companies. However, in that country the utility model system has not been very relevant seeing that since the 1980s the applications decreased drastically, from about 191 thousand to about 8 thousand. According to the authors, this drop is due to three factors; the increase in the scope of the standard patent in

the reform of 1987; the increase in the number of more substantial innovations in the industry; and the reform of the utility model law of 1993 eliminating the examination, a fact that turned the system less satisfactory because it increased the uncertainty as refers to the legal validity of the protection.

In South Korea, the UM Law of 1961 was also reviewed in 1999, and the examination was eliminated. But on the contrary to what happened in Japan, the number of applications and concessions increased, accompanied by a policy focused on high technology

The authors conclude that the intellectual property rights system should create equilibrium between private control and use and diffusion of technical information. The line between both is difficult to determine and will vary according to the country and even to the economic sector. In countries with low inventive activity, free access to technological information can be a greater stimulation for the construction of technological capacity than a strong protection system.

In the understanding of the authors, a second-tier protection system can potentially stimulate innovations in the following bases:

- less knowledge-based industries could seek protection for innovations that are not meeting the requirements of standard patents;
- knowledge-based industries, like the industry of semiconductors and TICs could protect their minor innovations with a less time-consuming and less expensive instrument.

This way, systems for protection of second-tier innovations would be useful in a variety of great situations – individuals, PMEs, more or less technology intensive industries. The authors conclude indicating some options for policies for the developing countries without an UM law. In the first place, they suggest that these countries should not follow blindly the experience of other countries. Before adopting the utility model, they should consider the following questions.

- Does the country need a quick and inexpensive form of protection for promoting the growth of the local industry?
- Is there an economical reason for protecting these inventions?
- Are the patent and industrial design regimes suitable for the industry in terms of protection criteria, cost and easy use?
- Is it necessary to reconsider the economical and legal protection policies of the patent law? If yes, to which point are the new policies served better with a regime of one or two levels?
- Is there a massive amount of imitations of minor innovations?
- Is it necessary to maintain a great public domain for supporting the unfolding of the innovations?
- The country would be in disadvantage in case other countries would adopt large-scale use of the utility model?

In the end, the authors indicate the characteristics of a law they consider ideal for minor innovations in terms of the objects to be protected, examination system, renewal, costs and required novelty level.

Now, we think this is the time for some comments on the title of the book and the subject under debate. It seems to us that there is a little contradiction between discussing innovations in an environment without patents and, at the same time, defending vehemently the Utility Model, an instrument in several countries considered a kind of patent. What is most intriguing is whether the authors are defending the intellectual property rights regime or a world without patents. In the end, it seems that the authors prefer a world with patents, but with different levels of protection. In their opinion, a patent system with different levels of protection would be more suitable than trying to accommodate the protection of very different things in a standard patent system like in the United States and in Japan. The rules of the game would be clearer and allow for patents of better quality. In this point the authors agree with Coriat and Orsi², who affirm that in fields of sequential innovation like software, a generous concession of patents can obstruct the innovation process.

Today, the world is witnessing a two-fronted process: on one hand we have the extraordinary surge of patent protection in different industries since the end-90s, with the consequent increase of the costs for the patentees; on the other hand, we witness the emergence of dif-

ferent movements against intellectual property rights (like open source, free software, open science, creative commons etc.). Thus, in the near future the world will probably undergo a more or less deep-reaching review of the national intellectual property rights legislations, contrary to the trend to homogenize proposed by the WCO in the TRIPS agreement. In this context, the utility model is situated halfway and represents doubtlessly an alternative for the less developed countries provided it goes hand in hand with learning mechanisms and technological capacity building.

Notes

1. Kortum, S & Lerner, J. Stronger protection or technological revolution: what is behind the recent surge in patenting? *National Bureau of Economic Research working paper 6204*, 1997. Jaffe, A.B. & Lerner, J. *Innovation and its Discontents: How our broken Patent System is endangering innovation and progress, and what to do about it*. Princeton, NJ: Princeton University Press, 2004. Mowery, D.C. & Rosenberg, N. The US national innovation system. In: Nelson, R.R. (ed). *National Innovation Systems: a comparative analysis*. Oxford: Oxford University Press, 1993.

2. CORIAT, B. & ORSI, F. Establishing a new intellectual property rights regime in the United States: Origins, content and problems, *Research Policy*, v.31, n.8-9, p.1.491-1.507, 2002. 