

This is a post-print version of:

Tvedt, Morten Walløe  
'One Worldwide Patent System: What's in It for Developing Countries?'  
*Third World Quarterly*, Vol 31, No 2, 2010, pp. 277-293

The definitive version is available at [www.informaworld.com](http://www.informaworld.com)

# One Worldwide Patent System: What's in it for developing countries?

BY MORTEN WALLØE TVEDT

Fridtjof Nansen Institute (FNI), Oslo, Norway. Email: [mwt@fni.no](mailto:mwt@fni.no)

*ABSTRACT This article offers a discussion of the probable effects from a Worldwide Patent System for developing countries. It draws upon insight in the ongoing processes in World Intellectual Property Organization and elsewhere relevant for the global patent system and discusses these features from a develop country-perspective. For scientifically advanced developing countries, the effect in the most advanced and most global enterprises has potential to be positive as they will benefit equally as other multinational companies. In areas of research and development where these most advanced developing countries possess a high level of technological capacity, a Worldwide Patent System is unlikely to create any benefits for the developing country. For countries with the ability to copy and produce the inventions made by others, a Worldwide Patent System will have negative effect as inventors to a little extent will be able to utilise the system, whereas they will be bound by a larger number of exclusive rights narrowing down their space for innovation. For the least developed countries, an additional problem arises: It might become even more difficult to import essential goods to the country because patents will be in force in these countries even though there is no production of that product in the country.*

The overall aim of this article is to contribute to the understanding of how further harmonisation of patent law including the establishment of a supranational Worldwide Patent System (WPS) could affect developing countries. This is done by a legal study combined with participatory observations of the negotiations.

In June 2008 the most specialised international body in patent law, the Standing Committee on Law of the Patents (SCP) under the World Intellectual Property Organization (WIPO), reassumed their agenda of future work on harmonisation of patent law. Harmonisation of patent law means that patent rules are streamlined and made equal in all national and regional patent systems. In April 2006, when the negotiations in the SCP broke down, a draft Substantive Patent Law Treaty (SPLT) which would set equal standards for remaining issues of granting patent was on the table. Agreeing on these substantive patent law issues would open the possibility to establish on a supranational Worldwide Patent System (WPS).

A WPS could be set up in different manners, but one probable way could be that one applies for a patent to one global Patent Bureau which grants a Worldwide Patent.<sup>1</sup> When granted,

such a Worldwide Patent would become legally binding for everyone in all the countries subscribing to the system; and it would be enforceable upon every private person and public institution globally under the jurisdiction of each nation.<sup>2</sup> By supranational in this context it is meant giving competence at a political level above the nation-state to take decisions which would be legally binding under national jurisdiction among private parties without any individual act by that state.

At present there is not one coherent or supranational WPS, but a number of national systems tied together by international harmonisation and regional cooperation. International law is governed by the principle of sovereignty; which in patent law means that a patent establishes an exclusive right only under the jurisdiction of the granting country. There are currently no supranational legal systems at the global level that have the authority to alter the legal position between individuals.<sup>3</sup> A supranational patent system would be a conceptual novelty and an exemption from this fundamental principle of international law.<sup>4</sup>

Such a system is in the pipeline and several authors have dealt with topic:<sup>5</sup> Barton, for example, has maintained: 'There is no excuse for maintaining parallel national patent systems in a world of international trade.'<sup>6</sup> Dufield, on the other hand concludes that: 'The world is definitely not ready for harmonising substantive patent law.'<sup>7</sup> Even if these scholars do not seem to agree whether a WPS is needed, they seem to agree that there are trends pointing towards such a system.

International trade and conditions for business to operate globally have achieved international attention.<sup>8</sup> Patents are recognised as one major means for promoting research and thereby industrial growth. As trade becomes globalised and inventions are applicable as solutions to similar problems in a many countries, the need for exclusive global rights to protect investments increases. The existence of differing patent practices is perceived as costly and time-consuming for companies that must apply for patent protection for the same invention in a large number of countries.<sup>9</sup> In 2008 43.3% of all patents filed in the world were done by non-residents of the country for the application.<sup>10</sup> These facts points in the direction of a WPS being a logical next step in patent law. Such a supranational system would alter the conditions for research, development and creation of social welfare throughout the world: the question is what would be its effects for developing countries.

### **Legal and institutional matters needed**

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) obliges all members to the World Trade Organisation (WTO) to provide patent protection for all fields of technology (save some narrow exemptions), and sets important standards without fully harmonising patent practice. The WIPO administers several treaties aimed at creating a standard global system – including the Patent Cooperation Treaty (PCT)<sup>11</sup>, the Patent Law Treaty (PLT)<sup>12</sup> and the Budapest Treaty (BT).<sup>13</sup> Even though these treaties takes patent law in direction of international harmonisation, steps are needed before the first Worldwide Patent can be granted:

- Harmonisation of vital pre-grant issues such as prior art, novelty, inventiveness, industrial application and grace period.<sup>14</sup>
- Changing the authorisation of the WIPO Bureau from being a fact-finding bureau to one with the competence to grant patents (or agreeing on another institutional structure for

granting Worldwide Patents, e.g. dividing this work among key patent offices).<sup>15</sup>

- National decisions recognising a WPS.
- (Preferably) establish a system to enable reviewing and revoking a patent after it has been granted.<sup>16</sup>

TRIPS Article 28 harmonises the standards for patent protection required in the national patent systems to be conferring upon the patentee the exclusive right to ‘making, using, offering for sale, selling, or importing’ the patented object. Enforcement of the patent versus other private or public entities must anyway be done in the national legal systems, as international law does not have enforcement mechanisms between private parties. Thus, the crucial elements to be harmonised are the four pre-grant issues.<sup>17</sup>

### **The role of SCP in the making of a supranational WPS**

The four pre-grant issues have been singled out by the WIPO as those issues important to highlight similarities, by making a compilation of the patent acts of all WIPO members in Annex II to document SCP/12/3.<sup>18</sup> One main conflicting line in SCP has been between on the one side the Trilateral Offices (USA, Japan and the European Patent Office (EPO)), supported by some other countries,<sup>19</sup> and developing countries on the other.<sup>20</sup> Before the meeting in 2006, the industrialised countries had insisted that the four pre-grant issues would have to be negotiated and agreed first.<sup>21</sup> Developing countries rejected the narrow approach, and insisted that the SCP should embark on a more comprehensive working plan which would include e.g. development issues.<sup>22</sup> This was one important reason for the deadlock regarding SCP’s agenda.

In June 2008 a compromise working plan was reached; WIPO member countries agreed to deal with four issues identified as

- ‘dissemination of patent information’ (including the issue of a database on search and examination reports);
- ‘exemptions from patentable subject matter and limitations to rights’, including research exemption and compulsory licenses;
- ‘patents and standards’; and
- ‘client–attorney privilege’.

The Bureau was asked to prepare preliminary studies of these four issues.<sup>23</sup> They also agreed on a larger list of further future topics.<sup>24</sup> The list of four issues was extended in 2009 with more easiness than previously. Despite the four pre-grant issues not being the core at the agenda, the topic ‘Dissemination of patent information’ (including the issue of a database on search and examination reports) entails an attempt to establish a common ground for granting Worldwide Patents without a political agreement of establishing a supranational level.

Reaching consensus on the four pre-grant issues is not an easy task even between OECD countries: between 2006 and 2008 they continued negotiating outside WIPO to reach agreement on these issues (‘prior art, grace period, novelty and inventive step’). These negotiations were not open to the public, and it was not easy to get insight in this law-making process.

This new agenda of SCP leaves that as the most important forum for WPS. The two forums Development Agenda in WIPO and the Intergovernmental Committee on Genetic Resources,

Traditional Knowledge and Folklore (IGC) will not be in focus for this article even though they might be important for developing countries as they are not the arenas for WPS.

### **Differences among developing countries**

The classic justification for establishing monopoly rights by patents is that they promote innovation. During industrialisation, the leading Western European countries and the USA actively used their patent systems as a strategic tool for building up domestic industries.<sup>25</sup> International harmonisation closes the same options of national discretion to such use of the patent for today's developing countries. The term developing countries is an imprecise one that tends to disregard individual differences; a more nuanced grouping of countries based on their general technological capacity is useful:

1. Countries with innovative capacity and industry able to develop new technology, being likely to achieve inventions that may be patentable. For them the question is whether a WPS is likely to establish better conditions for research and development in the country;
2. Countries with the industrial capacity to reproduce what is invented elsewhere, but with a limited capacity to conduct new inventive research in the global forefront. For such countries, would a WPS provide better conditions for reproducing research and development? Would it enhance the possibility to establish domestic capacity to conduct pioneering research and development, thereby bringing it closer to the first category?
3. Countries without the capacity to reproduce the latest techniques and with only low industrial capacity in general. This group of countries consists basically of the Least Developed Countries (LDC). Would a WPS be able to provide better conditions for their development?

Since the main focus of this article is on the effects that a WPS might have for developing countries these differences must be regarded. A complication is that within each 'developing country' there are differences between sectors of industry: one country could be at the forefront in one field of technology but without research or even reproducing capacity in another field; even a country that generally belongs in the third category might have a niche technique or one technological area where its capacity belongs to the first category.

### **Users of global patent systems: Today and in the future**

Each year the WIPO publishes a patent statistics. This sections is only meant to give an overall idea of the statics. According to this report only China and the Republic of Korea are two countries of the grouping 'G-77 and China' that account for more than one percent of the total of patent applications handled by the Patent Cooperation Treaty (PCT) and using the patent system extensively.<sup>26</sup> For a country like Mexico as many as 96.2% of all patents was applied for by non-residents with countries like India at 81.6% and Brazil at 84.2%.<sup>27</sup> Only 18 countries accounted for 94.8% of all PCT filings in 2006. Not even large economies like those of India, Brazil or Argentina account for as much as one percent of the patents each. The WIPO characterises the situation like this: 'The numbers of patents filed in and issued by emerging countries are increasing. However non-resident applicants received the largest share of all patents issued by the patent offices of most emerging countries.'<sup>28</sup> This would indicate a rather pessimistic picture from a developing-country perspective.

Would introducing a WPS be likely to increase the number of developing-country patents globally? As it is difficult to predict the future, the best which can be done here is to outline some observations. Companies and inventors that do business in one country only would not have much use of a WPS. That leaves micro-businesses, small and medium-sized companies in developing countries outside being potential users. Except from few cases where a small business might manage to patent an invention with global interest, local and domestic businesses could hardly benefit from a WPS. The main users can be expected to be multinational companies or corporations (MNCs) with a market interest in several countries.

Probably also mainly entities with high innovative capacity will have the capacity to come up with globally novel and inventive solutions to a problem, and thereby be able to use such a system. This would indicate that mostly countries with industries belonging to group one will have a chance to take use of a WPS.

Users of a WPS must also have a business strategy and the ability to transfer their innovative capacity into a product or process recognised as an 'invention' according to the system. Not all kinds of innovation can be readily protected by a WPS; for example, the informal or daily inventions of a small-scale, local inventor working in a developing country cannot be expected to be framed or formulated in such a manner as to fit within the system.

Also entities must have legal and administrative capacity to formulate a formal, expensive and time-consuming written patent application for this system. Only companies with a certain level of access to legal experts are likely to be able to turn their technical work into something that enjoys legal protection. Also at the enforcement stage, the user of such a WPS needs to have capacity to license or overview the misuse of a Worldwide Patent.

In consequence, developing countries with only the capacity to copy the inventions of others and those without such reproductive capacity will have limited chances to take advantages of a WPS. Entities in these countries would however be bound by a higher number of global patents now being enacted by foreigners in their home-market. This could even make the production costs higher in most developing countries under such a system. Companies with global capacity and business plans for more than one or few countries will probably benefit the most from a WPS. The best chance of a small-scale inventor in a developing country would be to get a global patent and the sell or license it to a MNC.

### **Assessing the arguments for further harmonisation**

In the international debate, certain arguments are frequently put forward to support further harmonisation of substantive patent law. In particular, the document SCP/12/3 includes several arguments for why there is a need for harmonising the pre-grant issues. This section examines those lines of argument from a developing-country perspective.

#### *The efficiency argument*

The efficiency argument appears in various formats. A first approach to efficiency concerns efficiency at the patent office level. The fact that the various national patent offices today handle the same patent applications indicates a potential for greater efficiency here. A WPS would reduce duplication of work. Avoiding duplication may sound like a clear saving of resources, but hidden in this argument is also the removal of the country-specific

considerations that can be taken in domestic patent systems. True, there is a huge backlog problem, especially in the USA and Japan,<sup>29</sup> but this is not a problem for developing countries. Therefore, this argument would not seem to hold much interest from a developing-country perspective.

The second efficiency argument put forward as important by WIPO concerns the corporate level: For MNCs that routinely apply for patents in all the patent systems in the world, a WPS involving only one application would represent a tremendous saving in time and money. From a developing-country perspective, however, there would be little to be gained, since few MNCs are owned by developing countries or their population.

The third efficiency argument is that a global system would lift a burden from the developing countries: A WPS would take the workload of granting patents off the national patent system. This could be an advantage as long as the human capacity currently tied up in the patent system can be transferred to research and development for the benefit of the country. However, there is nothing to indicate that the officials now working in a patent office will be transformed into researchers and entrepreneurs. There is also the issue of revenues. In the USA, for example, the United States Patent and Trademark Office (USPTO) transfers funds to the national treasury each year; thus, patents provide revenue to the government. A global bureau would probably receive such payments, rather than the nation states, so the developing countries would lose a potential source of income. A WPS would also remove the possibility of the individual country to take a higher fee from the patentee for fiscal reasons. In other words, a WPS would reduce the costs for big companies, but would also reduce the potential income for countries.

These efficiency arguments do not indicate that the developing countries would stand to benefit from a WPS. Moreover, these arguments must be weighed against the loss of national flexibility and maintaining the sovereign right to adapt particular standards in each country.

#### *The patent quality argument*

Closely connected to the efficiency arguments is the argument of greater patent quality under a WPS. Clearly, avoiding duplication of work would save resources, but this does not necessarily result in better quality for the patents granted. Indeed, the quality of patents might be reduced, as a WPS would not have to take into account all information from smaller countries. For a developing country in the third group, where much innovation occurs in a rather informal manner, centralised handling of patent applications could make the quality less relevant to the domestic situation in that country.

#### *The technology transfer argument*

The document SCP/12/3 (paragraph 41 sig.) emphasises: ‘A third important function of the patent system is to encourage technology transfer, nationally and internationally, by creating tradable property rights.’ And in paragraphs 43 and 44 there are references to the growth in the annual increase in licensing income to the USA. This, however, shows only that payments for the use of patented techniques are increasing, as are the licence fees paid to the industrialised countries. It can be assumed that there are more users of technology who now spend considerable sums in licence fees on patented inventions. But these figures do not say anything about whether new techniques are made available to universities, small companies

or researchers in developing countries. What the increases in licensing fees show is that technology is transferred to entities that have the purchasing power to pay monopoly prices set one-sidedly by the patentee in the licensing agreement. These payments could also be payments from a daughter company to a mother company in another country. This kind of technology transfer will not necessarily promote development in the poorer countries of groups 2 and 3.

In conclusion: despite the theoretical potential for diverting the manpower and other resources currently found in national patent offices to innovative activities, there would be considerable disadvantages from a WPS for most developing countries. The cost-reductions to be gained from such a global system will benefit the MNCs, not the developing nations and their people.

### **Why should developing countries worry about further harmonisation**

#### *Decreased flexibility – increased number of patents*

A WPS would include removing or decreasing the flexibility of countries to take into account national priorities when receiving, examining and granting patent applications. This is not necessarily a problem, but it will close the possibility utilised by the now-industrialised countries when they developed their own industries by applying this legislation strategically to build national research and development.

In a situation where the costs do not rise with the number of countries for which patent protection is granted, MNCs will have an incentive to apply for an exclusive right also in those countries where they do not happen to be doing business. That is likely to increase the number of patents in developing countries with the least interesting markets. More exclusive rights will force innovators in those countries to devote more of their time to tracking the exclusive rights that they might infringe by their work, and that in turn will increase the cost of research for developing countries in groups 1 and 2. For group 3, it will close the possibility of copying the state of the art.

#### *Official languages for innovation*

One immediate effect for the people of the world is that the number of languages into which the patent claims will be translated will necessarily be limited. Probably it would suffice to provide the patent application and the claims in one language (or perhaps more than one language, but almost certainly limited to the six official UN languages, with perhaps Portuguese in addition). This could become a serious problem for developing countries with their vast array of languages – many of them spoken but not written. If the legally binding patent claims are published in between one and six/seven languages, persons unable to read these languages could face patent infringement cases even if they are unable to read what is covered by the exclusive right.

Another effect is that the languages chosen as the ‘patent languages’ will become those most desirable to use in research and development. That can be assumed to impose a challenge for local academic traditions as well as for applied research conducted in other languages. It is only the developing nations that could be affected – in all countries where the mother tongue is not among the ‘patent languages’, research and development would be forced towards using these languages. This would undoubtedly lead to greater pressure towards erosion of the

active use of these languages in research and development.

### *A limited set of patent criteria – closing the ‘disclosure’ debate*

TRIPS (Article 27, paragraph 1) provides the point of departure for harmonising patent criteria by referring to invention as the core term and by specifying as to the criteria for patent protection to be granted ‘provided that they are new, involve an inventive step and are capable of industrial application.’ TRIPS does not define invention, or the content/considerations to be taken into account by the patent office in checking whether the patent application fulfils the three criteria mentioned above.

The draft SPLT on the table of SCP before the deadlock, used strong wording limiting the additional patent criteria: ‘[n]o Contracting Party may require compliance with any requirement ... different from or additional to the requirements provided for in paragraph (1)’.<sup>30</sup> It was explicitly stated that compliance with other criteria was not to have any effect upon the grant of or the validity of the patent in these negotiations.<sup>31</sup> This would exclude any obligation to disclose information on the origin, provider or legal provenance to the biological material included in or necessary for the invention, as have been discussed in the TRIPS Council, in the IGC and in the Convention on Biological Diversity (CBD). The main reason why developing countries have argued for such a requirement is the hope that this could lead to benefit sharing as prescribed in CBD Article 15, paragraph 7, and safeguard the public domain and other rights to genetic resources. Despite these expectations, serious doubts have been raised as to whether such a requirement would lead to increased benefit sharing.<sup>32</sup>

### *The definition of invention*

The core concept of patent law is ‘invention’ (‘discovery’ in the USA). Even though this concept constitutes the essence of patent law, very few patent acts define what is meant by an invention. The system in patent law leaves it to the patent applicant to define what he claims to have invented. In fact, this makes the patent system an extremely dynamic legal system under which the various patent offices have considerable discretion.

In the attempt to harmonise patent law globally, in the SCP, there was no suggestion as to how invention should be defined positively. The draft SPLT approached the issue negatively, by stating that ‘mere discoveries’ shall not be considered eligible for patent protection<sup>33</sup>. Practice has showed that several patent offices in the industrialised countries have abandoned a natural linguistic interpretation of invention, and consider e.g. naturally occurring micro-organisms, and genes as inventions.<sup>34</sup> This view has been partly rejected by the developing countries. A global system for determining whether the patent claims describe an invention will shift this discretion from the national to the global level; and there are no indications that the industrialised nations will be willing to accept a high threshold for meeting the invention criterion.

### *Prior art in a Worldwide Patent System*

Prior art is a basic concept of the patent system defining the body of information regarded as previously known and thus not patentable. The prior art is the point of departure for the determining two patent criteria – novelty and inventive step. When a patent office is to



determine whether an invention should be awarded a patent, the examiner searches to see if there are items of prior art similar to the described invention. From an ideal perspective, prior art should cover everything which is already in use and/or known by anyone everywhere in the world.

The draft SPLT suggested that *prior art* be defined as follows:

The prior art with respect to a claimed invention shall consist of all information which has been made available to the public anywhere in the world in any form [as prescribed in the Regulations,] before the priority date of the claimed invention.<sup>35</sup>

A first look gives the impression that the definition is broad: It includes ‘all information’, ‘available to the public anywhere in the world’ and ‘in any form’, further specified as: ‘written form, in electronic form, by oral communication, by display or through use’.<sup>36</sup> However, to be included under prior art according to the draft SPLT, it must be conceived as information according to patent law; it must be available to the public in the manner accepted by patent law; and it must be presented in any form found by the patent system. These seemingly broad terms are narrowed down in the draft Regulation:

(2) [Accessibility to the Public] (a) Information shall be deemed to be made available to the public, if there is a *reasonable possibility* that it could be accessed by the public. The reasonable possibility that information could be accessed by the public shall be considered to exist if it is possible for the public to gain access to the content of the information and to acquire possession of that content.<sup>37</sup>

This paragraph includes more qualifying language. To form part of the prior art, there must have been a reasonable possibility that the public could have accessed the information. This means a shift in the criterion, from whether the information merely exists, to whether the information was easily accessible.

The patent claims as well as each item of prior art are mostly textual sources which must be interpreted. The principle for such interpretation was suggested to be ‘determined by what was explicitly or inherently disclosed’.<sup>38</sup> This links up to the debate on traditional knowledge which often is not described in a way which meets this criterion. The least developed countries which are most dependent upon the use of informal knowledge will face the greatest challenges. Areas with an oral and informal tradition, like agriculture and traditional herbal medicine, will be most vulnerable to not being regarded as prior art, or simply not being found in the search process. This in terms exposes these types of knowledge to be included under the patent of someone else.

One dilemma of prior art under a WPS will be that, while a patent should ideally not cover anything already known or made available to the public, a totally comprehensive search is extremely costly, time-consuming and scarcely feasible in practice. In a global system there will be greater chances of not finding or identifying all relevant prior art – particularly for items of prior art published in languages with few speakers.

One positive effect might be that a WPS could prevent countries from applying a relative novelty standard.<sup>39</sup> For example the patent act of the USA defines the relevant prior art for breaking novelty as information either that is made publicly available in the USA and information made available in English.<sup>40</sup> This entails that knowledge published in the official language in Mexico, Spanish, and sold on the border can be patented in the USA. A WPS would probably have to remove the discretion of countries to define prior art nationally. From a developing-country perspective, that could have a positive effect.

### **A supranational WPS: Power outside national control**

The combination of granting the patent globally and enforcing it locally would be the centrepiece of a WPS. Currently, there exist no legal mechanisms where a global and supranational bureau can alter the legal situation among private and public parties without doing so through individual acts of each nation-state. A Worldwide Patent Bureau would have executive power above the national governments in individual cases, including the power to change the legal position between private or governmental parties in a manner which today is available only to national public authorities.

This leads to another pertinent question: how could the substantive rules in such a system happen otherwise than by practice within the system itself? As a Worldwide Patent Bureau will have the competence to determine individual cases, there will be a continuing reinterpretation of the rules and thus a case-based change of the legal situation. If a system is established for reviewing or revoking patents in such a system, there will be a system for developing case-law. If authority to grant patents is conferred to a supranational body, it will probably have the chance to interpret and re-interpret the legal basis for its own competence. It will be very difficult for the less powerful developing countries to influence such a change in practices.

Clearly, the member states will have the possibility to alter the treaties that form the basis for the system. However, once a WPS is in place, treaty amendment will probably require unanimity, consensus or a large majority from the member countries. The struggle by developing countries to get more flexibility introduced into TRIPS has proven extremely difficult. The possibilities for making amendments to such a system will depend on the rules stipulated in the treaties themselves. But unless there are balanced law-making procedures in place, the development of a WPS might prove fairly autonomous without any authority from outside the system itself to change the reinterpretation by case-law. From a democratic perspective, establishing a global system without any input from popularly elected representatives is highly problematic. That would leave the power to define the limits of the system within the system itself, with only limited possibilities for amendments.

### **Distributive effects: What's in it for developing countries?**

A patent has distributive effects, in the sense that it allocates a right to the exclusive commercial use of an invention.<sup>41</sup> The establishment of a WPS will have distributive effects, establishing a stronger legal position for some and a weaker one for others. As noted above, the obvious beneficiaries will be companies with commercial activity in a large number of countries, the question then becomes: what benefits might a WPS bring to the three categories of developing countries?

One perspective can be sought in looking at views on whether the TRIPS Agreement has brought advantages to the developing world. De Carvalho, a former WTO official now with the WIPO, holds that '... it does not make sense to keep a discussion on the advantages and disadvantages that the TRIPS Agreement brings to developing countries.'<sup>42</sup> He argues that the TRIPS Agreement should be regarded and weighed against other possibilities for developing countries in the WTO system. If the view of one official in the WIPO is that TRIPS *per se* does not create opportunities for developing countries, the obvious question is: why then should

these countries agree to undertake a one-sided obligation of further harmonisation without any new trade possibilities? The rapid response would be that there is no convincing reason for developing nations to undertake such harmonisation unless such changes can be conducive to development or social welfare in these countries.<sup>43</sup>

The basic justification for the patent system is that it provides for an opportunity to re-capture economic benefits from investments made in research and development. Further, it is assumed that a patent system will bring to the market useful products that otherwise would not have been developed. A patent is meant to establish monopoly rights to the commercial use of the invention as a trade-off for the costs of research and development; so new products are made available at a higher price for a limited period of time. Investments will be attracted towards research and development of products for which there is a market with enough consumers with ability to pay monopoly prices. This discloses one important limitation in the patent system: it can only function accordingly for products where there are *consumers with economic power* to buy the products at a higher monopoly price. A WPS would probably be based on the logic that the world is one market with equal participants. This is however far from the current situation as the economic capacity or ability to pay is substantially unequally distributed. For many people in all the three categories of developing countries there are poor people without significant buying power. These people would also be without any power to influence which new products that shall be developed. A supranational WPS will probably have the effect that the needs of the poorer part of the populations will be even more left behind in fulfilling their needs.

### **Driving forces towards a Worldwide Patent System**

A supranational WPS will probably serve to reduce and perhaps close the possibilities for developing countries to use patents strategically to promote conditions for national research and industry. Instead, a WPS can be visualised as a continuum for reinforcing the strategic interests of those countries today referred to as industrialised. National patent systems with political discretion in developing countries are more likely to promote country-specific interests than what can be expected of a worldwide system. All the same, a WPS is probably on its way, so one interesting question is to identify its driving forces:

The first and very basic observation is that it was delegates from some of the member states to the WIPO who developed the draft SPLT. It could be assumed that a wide range of interests would be represented. However, a closer look at the representatives in WIPO negotiations shows that they come mostly from the national patent offices, ministries of foreign affairs or from the permanent representatives in Geneva. The fact that also developing countries have been represented in the SCP by officers from the national patent offices also narrow the bases of relevant perspectives and interests brought into these negotiations. If everyone participating in the negotiations believes that there is a linear connection between more patents leading directly to greater innovation and development, important perspectives might be left out of the negotiations.

As stipulated in Article 3 (i) and (ii) of the Convention Establishing the World Intellectual Property Organization, one of the objectives of the WIPO is to promote the protection of intellectual property throughout the world through cooperation among states and, where appropriate, in collaboration with other international organisations. To provide for a higher level of harmonisation of patent law among countries is among the tasks of WIPO. If

agreement could be reached and WIPO could be transformed into a Worldwide Patent Bureau the prestige of the organisation would certainly boost. It would also allow the organisation to expand further, in staff numbers and in revenues, as each patent applicant pays a fee for having his or her application examined. WIPO is unique as a UN organisation receiving funds from private companies as its clients to the international search for prior art. Even if not formally stated, it seems like the WIPO would have an interest in having a WPS be established as part of the organisation. That would probably also be in the interests of today's major patent offices, as they are most likely to become part of the institutional structure of such a new system. This indicates that those public institutions originally meant to have social responsibility also might have an interest in the system developing in one particular direction.

The lobby meeting at SCP meetings in WIPO represents first and foremost the biotechnological industry, pharmaceuticals and other business that are typically trans-national in scope and markets. As noted above, WIPO is the only UN organisation funded through private companies as clients. Indeed, MNCs are good clients of the WIPO, paying for a high number of PCT prior-art searches. This establishes an economic link between what was established as a public policy agency and MNCs.

Among the NGOs represented at the SCP negotiations are some representing patent attorneys and patent lawyers. A stronger patent system is likely to trigger more licensing, conflicts and court cases. This indicates that it is in the interest of lawyers to have such a system established. For impoverished developing countries, however, introducing law into every area of research is not necessarily the best strategy for development, as legal advices will create transaction costs.

These various actors share a common interest in establishing a further harmonised and comprehensive WPS. Their common interest might turn out to be negative from a developing country perspective.

### **Concluding remarks**

A supranational Worldwide Patent System is not formally on the agenda in the SCP. The democracy and legitimacy of this law-making procedure may be questioned, since understanding it requires such a level of specialised and detailed knowledge. This is even more crucial because of the common ground of interest of all the participants in the negotiations.

This article has indicated and discussed a range of negative effects likely to ensue for developing countries if a WPS is established. Little has been found indicating that it could promote development and increase the innovation rate in any of the three groups of developing countries. For the first group, the scientifically advanced developing countries, the effect in the most advanced and most global enterprises has potential to be positive as they will benefit equally as other multinational companies. In areas where these most advanced developing countries possess a high level of technological capacity a WPS is likely to create benefits for the developing country. In less advanced field, this positive effect is dubious. For the second group of countries, with the ability to copy and produce the inventions made by others, a WPS will have negative effect as inventors to a little extent will be able to utilise the system. They will however be bound by a larger number of exclusive rights narrowing down their space for innovation. This could create research costs which these countries cannot

carry. For the third group of developing countries, an additional problem arises: It might become even more difficult to import essential goods to the country because patents will be in force in these countries even though there is no production of that product in the country.

Establishing a WPS is a fundamental issue of our time. Is the world willing to leave the decisions of global priorities in research to those with the greatest purchasing power? The concept of a supranational WPS is a result of the 'globalising world', but it can also be seen as a driving force towards greater globalisation. This raises a basic moral question: is it right that an inventor in any country should be granted worldwide exclusive rights to prevent others from using a similar invention for commercial purposes anywhere else in the world? It also leaves us with a crucial question which developing countries must explore further: How can a WPS be drafted to also suit their interests?

### Notes on Contributor

**Morten Walløe Tvedt** is a Senior Research Fellow at the Fridtjof Nansen Institute, Norway. The author wants to thank Kristin Rosendal, Peter Johan Schei and the reviewers for very useful comments. Thanks also to Peter Hallsteinsen for editing. The author can be contacted at mwt@fni.no or P.O.Box 326, 1326 Lysaker, Norway.

### Notes

The author wishes to thank Regine Andersen for valuable comments and suggestions and the reviewers for equally useful comments. Thanks also to Peter Hallsteinsen for editing. The views presented in this article do not reflect those of the persons who have commented on the manuscript.

---

<sup>1</sup> In practical terms, there are several options for how to establish a system for granting Worldwide Patents. The Universal Bureau could be partly centralised and partly distributed among a number of nations. Currently, the Patent Cooperation Treaty establishes a global system for international prior art search where a number of national patent offices carry out work in searching the prior art; whereas the decision to grant the individual patent is left to national patent offices. The decentralised search model could be kept, whereas the grant of the patent could be done by a centralised Universal Bureau. The following fourteen patent offices are carrying out the international prior art search today: Austrian Patent Office; IP Australia; National Institute of Industrial Property (Brazil); Canadian Intellectual Property Office; State Intellectual Property Office of the People's Republic of China; European Patent Office; National Board of Patents and Registrations of Finland; Japan Patent Office; Korean Intellectual Property Office; Federal Service for Intellectual Property, Patents and Trademarks (Russian Federation); Spanish Patent and Trademark Office; Swedish Patent and Registration Office; United States Patent and Trademark Office; and Nordic Patent Institute.

<sup>2</sup> In Europe the European Patent Organisation has such a competence for its 36 member states.

<sup>3</sup> The European Union has certain features that indicate such supra-national competence, but these rules do not apply globally, only for the region encompassed by the EU.

<sup>4</sup> M Akehurst, *Akehurst's Modern Introduction to International Law*, 7<sup>th</sup> revised edition, New York: Routledge, 1997, pp 17-18; I Brownlie, *Principles of Public International Law*, 6<sup>th</sup> edition, New York: Oxford University Press, 2003, pp. 287-9, chapters 14 and 15; A Cassese, *International Law*, New York, Oxford University Press, 2001 pp 88-91; and M N Shaw, *International Law*, 5<sup>th</sup> edition, Cambridge: Cambridge University Press, 2003, chs 12 and 13.

<sup>5</sup> MW Tvedt, 'The path to one universal patent', *Environmental Policy and Law*, 37(4), 2007, pp 303-304; G Duffield, 'Is the world ready for substantive patent law harmonisation?', in P Drahos (ed), *Death of Patents*, London: Queen Mary Intellectual Property Institute, 2005, pp 228-249; and JH Barton, 'A world patent system', paper prepared for a conference at Duke University School of Law, 4-6 April 2003.

<sup>6</sup> Barton, 'A World Patent System'

- 
- <sup>7</sup> G Dutfield, 'Is the World Ready for Substantive Patent Law Harmonisation?', p. 249.
- <sup>8</sup> Document SCP/12/3 which was the main document from the WIPO Secretariat to the SCP at its twelfth meeting in 2008.
- <sup>9</sup> SCP/12/3, paragraph 268 sig. discusses 'threats to an effective and efficient patent system'.
- <sup>10</sup> WIPO, *World Intellectual Property Indicators*, Geneva, 2009, 110 pages, p. 14.
- <sup>11</sup> Patent Cooperation Treaty of 19 June 1970, last modified 3 October 2001, with the supplementing Regulations under the Patent Cooperation Treaty of 1 January 2004 (142 contracting parties), at <http://www.wipo.int/export/sites/www/treaties/en/documents/pdf/pct.pdf>, accessed 17 March 2010.
- <sup>12</sup> Patent Law Treaty adopted at Geneva on 1 June 2000 (18 contracting parties, [http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty\\_id=4](http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=4) (accessed 18 December 2008)), with the supplementing Regulations under the Patent Law Treaty, adopted the same date.
- <sup>13</sup> The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, 28 April 1977, amended 26 September 1980; and the Regulations Under the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, adopted 28 April 1977 and amended 20 January 1981 and 1 October 2002 (72 contracting parties), at <http://www.wipo.int/export/sites/www/treaties/en/documents/pdf/budapest.pdf>, accessed 17 March 2010.
- <sup>14</sup> FM Abbott, T Cottier & F Gurry, *International Intellectual Property in an Integrated World Economy*, New York: Aspen Publishers, 2007, at p. 221, mention the 'first to file' and the 'first to invent' controversy as a major issue to be solved in the SCP.
- <sup>15</sup> The International Bureau of WIPO provides, according to Patent Cooperation Treaty Article 1, the service of: 'filing, searching, and examination, of applications for the protection of inventions, and for rendering special technical services.' PCT Article 16 reads: 'The International Searching Authority (1) International search shall be carried out by an International Searching Authority, which may be either a national Office or an intergovernmental organisation, such as the International Patent Institute, whose tasks include the establishing of documentary search reports on prior art with respect to inventions which are the subject of applications.'
- <sup>16</sup> A system for review or revocation of granted patents does not necessarily have to be fully harmonised at the global level and may refer to national law.
- <sup>17</sup> Tvedt, 'The Path to One Universal Patent', pp. 298-301.
- <sup>18</sup> Beyond the pre-grant issues there is also a compilation of the exclusions from patentable subject matter (according to the discretion under Article 27.2 and 3 of the TRIPS Agreement) and the exceptions and limitations to the patent rights (according to the discretion under Article 30 of the TRIPS Agreement).
- <sup>19</sup> The list of supporting countries changes from meeting to meeting. Chile, China, India, Malaysia, Mexico, Morocco and the Russian Federation associated themselves with the Casablanca Declaration; see Annex to document SCP/11/3. Chile and India later opposed to this approach at the 11<sup>th</sup> meeting of the SCP.
- <sup>20</sup> See for example the statement from the group 'Friends of Development', which consists of Argentina, Brazil, Bolivia, Cuba, Dominican Republic, Ecuador, Egypt, Iran, Kenya, Peru, Sierra Leone, South Africa, Tanzania and Venezuela, in document SCP/11/4.
- <sup>21</sup> See for example the proposal in the Annex to SCP/11/3, 'These [six] issues should be addressed in parallel, accelerated processes, the first four issues (prior art, grace period, novelty and inventive step) in the SCP and the other two issues (sufficiency of disclosure and genetic resources) in the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC).'
- <sup>22</sup> Statement from the 'Friends of Development' referred in SCP/11/5: 'clauses on public interest flexibilities, transfer of technology, curbing of anticompetitive practices and biodiversity (disclosure of origin).'
- <sup>23</sup> SCP/12/5 Prov. Paragraph 124c of the decision.
- <sup>24</sup> SCP/12/5 Prov. Paragraph 124b of the decision: 'The Committee decided that the non-exhaustive list of issues identified during this session would remain open for further elaboration and discussion at the next session of the SCP.'
- <sup>25</sup> DS Chisum, CA Nard, HF Schwartz, U.S. Circuit Judge P Newman & FS Kieff, *Principles of Patent Law*, New York: Foundation Press, 1998.
- <sup>26</sup> SCP/12/3, paragraph 56, with further references and WIPO, *World Intellectual Property Indicators*, p. 8.
- <sup>27</sup> WIPO, *World Intellectual Property Indicators*, pp. 17, 20.
- <sup>28</sup> *Ibid*, p. 8.

- 
- <sup>29</sup> SCP/12/3, p. 13
- <sup>30</sup> Article 13 (3) Draft SPLT, SCP/10/4 p. 25. Unless otherwise indicated, quoted items from the draft SPLT or from the draft Regulation that are in square brackets indicate that the expression is not yet agreed to in the negotiations. Thus, these square brackets indicate the lack of international consensus in SCP not that quotations are made more extensive for the purpose of this article.
- <sup>31</sup> Article 13 (4) Draft SPLT, SCP/10/4 p. 25: '[*Compliance With Applicable Law on Other Matters*] A Contracting Party may also require compliance with the applicable law on public health, nutrition, ethics in scientific research, environment, access to genetic resources, protection of traditional knowledge and other areas of public interest in sectors of vital importance for their social, economic and technological development.' For a detailed analysis, see M W Tvedt, 'How Will a Substantive Patent Law Treaty Affect the Public Domain for Genetic Resources and Biological Material', in D J Gervais *et al* (eds), *The Journal of World Intellectual Property*, 8 (3), Oxford: Blackwell Publishing, 2005, pp 311–344. C Correa, *The WIPO Draft Substantive Patent Law Treaty: A Review of Selected Provisions*. Working Papers 17, Geneva: South Centre, 2004, [http://www.southcentre.org/index.php?option=com\\_content&task=view&id=77&Itemid=67](http://www.southcentre.org/index.php?option=com_content&task=view&id=77&Itemid=67) (accessed 30 June 2009).
- <sup>32</sup> M W Tvedt, 'Elements for Legislation in User Country to Meet the Fair and Equitable Benefit-Sharing Commitment' in D J Gervais *et al* (eds), *Journal of World Intellectual Property*, 9 (2), Oxford: Blackwell Publishing, 2006, pp 189-212 and M W Tvedt & T R Young, *Beyond Access – A Legal Analysis of the Fair and Equitable Benefit Sharing Commitment in the CBD*, Bonn: IUCN, 2007, pp 34–35.
- <sup>33</sup> Article 12 (1) (b) (i), SCP/10/4 p. 22
- <sup>34</sup> For a thorough analysis of the changes of the legal notion of invention and discoveries in Europe and the US, see L Westerlund, *Biotech Patents – Equivalency and Exclusions under European and U.S. Patent Law*, Stockholm: Stockholm University, Faculty of Law, 2001, pp 31–76.
- <sup>35</sup> Article 8 (1), SCP/10/4, p. 15
- <sup>36</sup> Rule 8 (1), SCP/10/5 p. 15
- <sup>37</sup> Rule 8 (2) (a) Draft SPLT Regulations, SCP/10/5 p. 15, emphasis added.
- <sup>38</sup> Rule 14 (2) Draft SPLT Regulations, SCP/10/5 p. 27
- <sup>39</sup> N P de Carvalho, *The TRIPS Regime of Patent Rights*, The Hague: Kluwer Law International, 2005, p 64.
- <sup>40</sup> 35 U.S.C. § 102(a)
- <sup>41</sup> J H Blakeney, 'A Critical Analysis of the TRIPS Agreement' in M P Pugatch (ed), *The Intellectual Property Debate: Perspectives from Law, Economics and Political Economy*, Cheltenham: Edward Elgar, 2006, p 22, notes that the increased income for the USA alone was US\$19 billion per annum; and that 'In 1999 the World Bank estimated a net outflow from developing countries of \$7.5 billion on royalties and licence fees.'
- <sup>42</sup> N P de Carvalho, *The TRIPS Regime of Patent Rights*, p 56.
- <sup>43</sup> D Lippoldt, 'Can Stronger Intellectual Property Rights Boost Trade, Foreign Direct Investment and Licensing in Developing Countries?', in Pugatch, *The Intellectual Property Debate*, pp 44-61 discusses developing countries and patent protection.