

# THE WIPO JOURNAL:

## ANALYSIS OF INTELLECTUAL PROPERTY ISSUES

GENERAL EDITOR: PROFESSOR PETER K. YU

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# The Juridification of Indigenous Knowledge Systems in Botswana

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☞ Botswana; Traditional knowledge

*The debate as to how to best protect IKS through juridification has gone on for decades. Since 2000 Botswana has embarked on a process of enacting IP legislation with provisions which protect IKS as part of mainstream IP. This article examines this juridification process as set out in the Industrial Property Act 2010. The article analyses the salient provisions of the Act relating to IKS of an industrial nature and concludes that Botswana has successfully addressed the challenges of juridification of IKS. As IKS protection moves from laudable principle and recognition of stakeholders to practical legislation, other nations may look to Botswana's legislation for a model as to how to best protect and harness IKS.*

## The background

The protection of traditional knowledge or indigenous knowledge systems (IKS) has attracted tremendous attention throughout the world. Many countries and individuals have embraced the goal of protecting IKS. Widespread IKS protection appears to be closer to realisation than ever before. As IKS protection moves from broad principle to international agreement, the hard work of drafting national laws looms large. Recent IKS legislation in Botswana may provide some lessons for this next, challenging step.

Great strides have been made recently in international recognition and protection of IKS. After nearly two decades of discussion pursuant to the Convention on Biological Diversity (CBD), the parties negotiated and adopted in October 2010 a supplementary agreement on access and benefit sharing with respect to genetic resources. The agreement, known as the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation, includes provisions regarding traditional knowledge related to using genetic resources.<sup>1</sup> Meanwhile, as of this writing, Member States of the World Intellectual Property Organization (WIPO)<sup>2</sup> are engaged in text-based negotiations of a treaty

\* I am greatly indebted to Professor Mark Schultz of the Faculty of Law, Southern Illinois University for his constructive suggestions and comments which tremendously assisted me in developing this article. The usual disclaimer applies.

<sup>1</sup> Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity, text available at <http://www.cbd.int/abs/text/> [Accessed March 25, 2011].

<sup>2</sup> The process, which is being carried on by a body in WIPO known as the WIPO Intergovernmental Committee began its work in 2001. After 10 years, the negotiations appear to have entered a new, more intense phase that is working toward a final product.

regarding the protection of traditional knowledge.<sup>3</sup> Work moves on in other forums as well, including the African Regional Intellectual Property Organization (ARIPO), which adopted the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore in August 2010.<sup>4</sup>

Although proponents of IKS protection are closer to their goal than ever before, the hardest work may be yet to come. If IKS protection is to have any effect in practice, governments must draft effective legislation. The Nagoya Protocol largely leaves protection of genetic resources and associated traditional knowledge to national legislation and implementation.<sup>5</sup> The same appears to be the case with the current text under discussion at WIPO.<sup>6</sup> The next step—transforming broad principles into a legal reality, the process of juridification<sup>7</sup>—has proven difficult thus far. Legislation recently enacted in Botswana may finally provide a model for the juridification of IKS.

Five major issues have arisen in the debate about juridification of IKS. First, can existing intellectual property laws accommodate IKS? Secondly, how does one determine ownership? Thirdly, what is the proper basis for entitlement—novelty, originality, or some other standard? Fourthly, what is the duration of the right? Fifthly, how may the rights be exploited and the owners remunerated?

Botswana's recently enacted laws resolve the major issues that have dominated the debate about IKS protection in Botswana. Botswana's Industrial Property Act 2010<sup>8</sup> is a landmark piece of legislation—the first of its kind in Botswana and in the entire common law world. By protecting IKS and geographical indications, it neatly completes the juridification of IKS in Botswana. Through the Copyright and Neighbouring Rights Act<sup>9</sup> and the Industrial Property Act 2010 Botswana has put an end to the long-running debate as to whether IKS should be legally protected as part of mainstream intellectual property law. In Botswana, IKS is no longer a residual or miscellaneous category of intellectual property. It is now part and parcel of all the other intellectual property rights. It is fully mainstream intellectual property law.

This article explains how Botswana has addressed the challenges to juridification of IKS, thereby offering a model that other countries might follow. The second section considers whether and how IKS can be addressed by currently existing intellectual property laws. Botswana concluded that current intellectual property laws were not suited to the task, but that in some cases they could be altered to accommodate IKS and that in other cases, IKS could and should be provided distinct protection as a new and additional part of the intellectual property system. Botswana has thus made IKS part of mainstream industrial and intellectual property law. The third section explains how folklore has been accommodated within copyright and neighbouring rights by what are, so far, relatively modest changes. The fourth section explains the novel and extensive system set up to protect other forms of IKS within industrial property law. The final section offers some conclusions.

<sup>3</sup> Catherine Saez, "Negotiators Work from New Text of Traditional Knowledge Treaty at WIPO", *Intellectual Property Watch* (February 25, 2011), at <http://www.ip-watch.org/weblog/2011/02/25/negotiators-work-from-new-text-of-traditional-knowledge-treaty-at-wipo/> [Accessed March 25, 2011].

<sup>4</sup> Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore, at [http://www.aripo.org/images/Swakopmund\\_Protocol.pdf](http://www.aripo.org/images/Swakopmund_Protocol.pdf) [Accessed March 25, 2011].

<sup>5</sup> Catherine Saez, "New Biodiversity Benefit-Sharing Protocol Relies on National Rules, Experts Say", *Intellectual Property Watch* (February 7, 2011), at <http://www.ip-watch.org/weblog/2011/02/07/new-biodiversity-benefit-sharing-protocol-relies-on-national-rules-experts-say/> [Accessed March 25, 2011].

<sup>6</sup> See Draft Articles Prepared by the Open-Ended Drafting Groups at IWG 2 (February 24, 2011), available at <http://www.ip-watch.org/weblog/wp-content/uploads/2011/02/IGC-Draft-Articles-24-Feb.pdf> [Accessed March 25, 2011].

<sup>7</sup> Juridification is the process by which policies, ideas, arguments, views, best practice, and codes of conduct (soft law) are turned into legislation (hard law) by a given country's legislature.

<sup>8</sup> Laws of Botswana, Act No.8 of 2010.

<sup>9</sup> Laws of Botswana, Cap.68:02.

## Indigenous knowledge systems and existing intellectual property laws

The recent momentum to juridify IKS in Botswana began with an international conference held in Gaborone, Botswana, on November 26–28, 2003.<sup>10</sup> The theme of the workshop was Intellectual Property Rights and Indigenous Knowledge Systems. The workshop helped policymakers in Botswana to determine that they could not simply rely on existing intellectual property laws to protect IKS. Instead, existing laws needed to be altered and substantially amended in order to ensure adequate and effective protection for IKS.

The workshop explored the interrelationship between contemporary (conventional) intellectual property law and the protection of IKS. The aim was to find answers to two pertinent questions:

1. Does conventional intellectual property law adequately protect IKS?
2. If it does not, what should be done to ensure adequate and effective protection of IKS in Botswana and in the rest of the developing world?

Participants in the workshop concluded that conventional intellectual property law does not adequately protect IKS because IKS does not fit into the basic principles/tenets of intellectual property.

Participants identified the following problems with trying to use traditional intellectual property laws to protect IKS.

### *Patents*

In the case of patents, protection requires:

- **Ownership:**  
in the form of a single inventor or any person to whom he has ceded his rights or someone to whom the rights legally belong to such an employer. IKS is owned by entire communities in some cases and by individuals in others;
- **Novelty:**  
in order to secure patent protection, the invention must be new. IKS does not satisfy this requirement because it has been around since time immemorial and is in the public domain;
- **Inventive step:**  
patent protection requires an inventive step. Again this is not applicable in the case of IKS;
- **Industrial application:**  
patent protection requires industrial application. This means it must be possible to manufacture the patented product on a large scale for use in industry and by the public. IKS does not meet this requirement because it is not meant for industrial application;
- **Term of protection:**  
in conventional IP, the term of patent protection is limited to 25 years in most cases. This does not really fit in with IKS, which has been around since time immemorial.

<sup>10</sup> The workshop was inspired and informed by earlier and ongoing regional and international efforts in the protection of IKS. At the regional level, the workshop noted the efforts of the ARIPO and at the international level, the workshop noted the efforts of WIPO which, through its Inter-Governmental Committee on the Protection of Traditional Cultural Expressions and Genetic Resources (IGC), is at the forefront in coming up with solutions for the protection of IKS.

## *Copyright*

The traditional principles of copyright are also not suited to protect IKS:

- **Ownership:**  
copyright law is intended to protect an individual author/creator of a work or someone to whom he has transferred his rights. As pointed out above, IKS has, in most cases, no individual owner. Rather, it is owned by the entire community.
- **Originality:**  
in order to be protected by copyright law, the work must be original. IKS is not original. It has been around since time immemorial and is in the public domain.
- **Reduction to permanent form (fixation):**  
traditional copyright law requires fixation: the work must be recorded in some permanent form. Some IKS does not meet this requirement because it has never been recorded or fixed in permanent form. It is simply known to all or some members of the community.

Based on this analysis, the workshop concluded that if IKS is to be protected, traditional intellectual property laws are not up to the task. The workshop noted, however, that the Botswana Copyright and Neighbouring Rights Act 2000<sup>11</sup> contained a number of less traditional elements that already protected most of the aspects of IKS which fall in the category of performing and visual arts. For example, although the Act still requires originality, it no longer requires fixation in permanent form. All that the Act requires is an “original intellectual creation”. It could be oral, written or even in the creator’s mind. The Act thus extended copyright to cover works that more typically fall into IKS without fundamentally changing the nature of copyright. The Act is further discussed further in the third section.

Not all elements of IKS can be accommodated simply by modifying traditional intellectual property laws. For example traditional medicine and handicrafts were not covered by existing laws in Botswana. Moreover, unlike copyright law, any changes to traditional industrial design law to accommodate IKS would change the fundamental nature of that law. Therefore the workshop concluded that there was need for Botswana to develop a national policy on the protection of IKS and to enact more legislation to protect such systems. This legislation could be stand alone legislation (the *sui generis* approach) or a Chapter or Part in the Industrial Property Act 1996 (the juridification approach). Botswana chose to take the juridification approach, creating distinct protection for IKS, while incorporating it into the industrial property laws. The resulting law is discussed further in the fourth section.

The workshop also discussed how best to ensure that IKS benefits local communities. In addition to IKS legislation, the workshop endorsed the view that contract law could be used to protect IKS: those who come to developing countries to exploit IKS would be required to enter into licensing agreements with the communities that own the IKS whereby the licences would be required to acknowledge the licensors as owners, and to pay them a royalty from the proceeds resulting from the exploitation of IKS in the developed world. It was further agreed that there is a need to inform the public about their rights in IKS. The people need to know their rights—the right to information. The resulting laws reflect and implement these views as discussed further later.

<sup>11</sup> Now the Copyright and Neighbouring Rights Act 2008, Cap 68:02.



One of the unresolved issues was whether IKS should be identified, collected, documented and recorded in digital form. There was a fear that once it is recorded in digital form, the creators of the databases might claim copyright, and disseminate the IKS even further and faster, resulting in the further exploitation of the communities which own it. On the other hand, however, it was recognised that documentation has two major advantages:

1. it preserves IKS forever so that even if the individuals who know it do die, the knowledge will never disappear forever; and
2. it acts as defensive protection in that once it is available to international patent offices, they can use it to stop anyone in the developed world from obtaining a patent or an industrial design from IKS on the database.

As discussed later, Botswana took a balanced approach to resolving this issue, providing for registration, but allowing registrants to keep certain elements confidential.

The workshop resulted in the formation of an IKS taskforce to produce Botswana's policy on the protection of IKS and the corresponding legislation. At the end of the process, the taskforce was expected:

- to identify the IKS concerns in Botswana;
- to produce a national policy on the protection of IKS in Botswana; and
- to produce draft legislation for the protection of IKS which will be either a chapter to be incorporated in the Industrial Property Act 1996 or sui generis legislation.

The results of the taskforce's efforts are discussed in the remaining sections.

## **IKS protection in the Copyright and Neighbouring Rights Act**

Botswana undertook the juridification of IKS in two stages. The first stage was to protect IKS of a literary and artistic nature.<sup>12</sup> This was achieved in 2000 when the Copyright and Neighbouring Rights Act was first enacted. It is to the discussion of the pertinent provisions of this Act that we now turn.

The Copyright and Neighbouring Rights Act<sup>13</sup> of 2000 was a major breakthrough in Botswana for the protection of copyright in general and the protection of IKS in particular. Its provisions are explained below, with the portions most relevant to IKS are emphasised:

### *Subject-matter and scope of protection*

"A literary<sup>14</sup> or artistic work<sup>15</sup> is not protected by copyright under the Act unless it is an *original intellectual creation* in the literary or artistic domain.<sup>16</sup> The types of literary and artistic works protected by the Act include:

- (a) books, pamphlets, articles, computer programmes and other writings;

<sup>12</sup> Like many countries, Botswana draws a clear distinction between literary or intellectual property and industrial property. Intellectual property deals with the protection of copyright and neighbouring rights. Its main scope is the protection of literary and artistic works. The object of copyright is to protect creative individuals such as authors and artists from having their work copied or reproduced without their authorisation. See A. Briscoe and J. Kiggundu, *A Guide to Intellectual Property Law in Botswana* (Gaborone: Morula Press, 2001), p.16. Industrial property on the other hand rewards the fruits of industry. It deals with the protection of patents, trade marks, industrial designs and utility models. In Botswana, intellectual property is governed by the Copyright and Neighbouring Rights Act, Laws of Botswana, Cap.68:02, while industrial property is governed by the Industrial Property Act 1996 as amended. Given this dichotomy between intellectual property and industrial property, juridification of IKS naturally progressed in two stages.

<sup>13</sup> Laws of Botswana, Cap 68:02.

<sup>14</sup> "Literary work" means any work, other than a dramatic or musical work, which is written, spoken or sung, and accordingly includes a table of compilation and a computer programme. See Copyright and Neighbouring Rights Act s.2.

<sup>15</sup> "Artistic work" means: (a) a graphic work, photograph, sculpture or collage, *irrespective of its artistic quality*; (b) a work of architecture being a building or a model of a building *irrespective of its artistic quality*; and (c) a work of artistic craftsmanship not falling within paragraph (a) or (b) *irrespective of its artistic quality*: see Copyright and Neighbouring Rights Act s.2.

<sup>16</sup> Copyright and Neighbouring Rights Act s.3(1).

- (b) speeches, lectures, addresses, sermons and other *oral* works;
- (c) dramatic, dramatic-musical works, pantomimes, choreographic works and other works created for stage productions;
- (d) stage productions of works referred to in paragraph (a) and of *expressions of folklore*;
- (e) musical works with or without accompanying words;
- (f) audiovisual works;
- (g) works of *architecture*;
- (h) works of *drawings, painting, sculpture, engraving, lithography, tapestry and other works of fine art*;
- (i) photographic works;
- (j) works of applied art; and
- (k) illustrations, maps, plans, sketches and three-dimensional works relative to geography, typography, architecture or science.”<sup>17</sup>

The Act brings much of what would be considered folklore under the protection of copyright and neighbouring rights. First, it is very inclusive in terms of categories covered, including oral works, expressions of folklore, works of architecture and various types of fine arts. Secondly, and just as important to protecting folklore, a work is protected under the Act by the sole fact of its creation and “irrespective of its mode or form of expression, as well as of its content, quality or purpose”.<sup>18</sup> This means that although the work must be an original intellectual creation, it does not have to be reduced to writing in permanent form—which is the traditional requirement for granting copyright protection. The law does not require high quality or permanent form. Oral works are therefore protected. Traditional song and dance is therefore clearly protected, provided that the particular expression of it is original.

However, the subject-matter covered by the Act is also limited because it protects only “original intellectual creations”. Section 6(2) of the Act further provides that copyright protection does not extend to any idea, procedure, system, method of operation, concept, principle, discovery or mere data, even if expressed, described, explained, illustrated or embodied in a work. This is a very important provision because it codifies the common law position.<sup>19</sup> This limitation makes Botswana’s protection of folklore much narrower than many other current proposals to protect folklore that do not require originality.<sup>20</sup>

### *Analysis of Botswana’s protection of folklore*

Botswana’s approach to protecting folklore, which is inclusive of many types of works but requires originality, results in a law that largely focuses on the needs of its musicians, artists, writers, dancers and other creators. The originality requirement preserves the freedom of artists to draw and build on their cultural traditions with few restrictions. However, because of concerns about past exploitation, creators are now more broadly protected than in the past.

Imposing an originality requirement contrasts with folklore protection provided or proposed in other countries, as well as with the approach taken in the Industrial Property Act towards traditional medicine. For example, the Republic of South Africa is, as of this writing, considering incorporating folklore into

<sup>17</sup> Copyright and Neighbouring Rights Act s.3(2). The Minister of Trade and Industry may by order add to or otherwise vary this list of works: s.3(3). Moreover, under s.4 of the same Act derivative works are also given copyright protection. These are: translations, adaptations, arrangements and other transformations or modifications of works; and collections of works, and collections of mere data (databases) whether in machine readable or other form, and collections of expression of folklore, provided that such collections are original by reason of the selection, co-ordination or arrangement of their contents.

<sup>18</sup> Copyright and Neighbouring Rights Act s.6(1).

<sup>19</sup> See *University of London Press v University Tutorial Press* [1916] 2 Ch. 601 Ch D; *Ladbroke (Football) v William Hill* [1964] 1 All E.R. 465 HL; *Cramp v Smythson* [1944] A.C. 329 HL; *Exxon Corp v Exxon Insurance Consultants* [1982] R.P.C. 69 CA (Civ Div); *Express Newspapers v Liverpool Daily Post* [1985] F.S.R. 306 Ch D; *Green v Broadcasting Corp of New Zealand* [1989] R.P.C. 700 PC (New Zealand).

<sup>20</sup> For example, as of spring 2010, the proposed South African Intellectual Property Law Amendments would bring folklore under copyright protection in the Republic of South Africa without requiring originality.

its existing copyright laws so that they would protect traditional music and other works without regard to originality. Under this approach, an indigenous community could control the use and adaptation of traditional stories, music or art forms into modern works, requiring payment or possibly prohibiting use entirely. By requiring originality, Botswana has left traditional stories, music and other works in the public domain, for modern creators to adapt free of cost or restriction.

The choice to leave traditional, non-original folklore in the public domain represents a choice in favour of modern creators and cultural evolution. Some of Africa's most successful popular art draws on ancient traditions. For example, in South Africa world-renowned artists such as Ladysmith Black Mambazo and the Soweto Gospel Choir have celebrated and preserved traditional Zulu, Sotho and Xhosa culture by altering it. In the recent debate over South Africa's traditional knowledge legislation, such artists have expressed concern that their artistry might be impeded by a law that gave indigenous property rights over non-original, widely used rhythms, melodies, songs, dances and other works.

On the other hand, the drafters of Botswana's Copyright and Neighbouring Rights Act perceived a need to better protect local artists by broadening protection—particularly to works not yet fixed. Many musicians and playwrights in Southern Africa have been ripped off for decades owing to a lack of copyright protection at home and abroad. Artists from abroad have come to Africa, listened to songs of local artists and then returned abroad and recorded modified versions of these songs passing them off as their own. Music producers have done the same. They come to Africa and take away with them recordings of songs by an African artist. When they return to the developed countries they reproduce the songs and make millions of dollars without paying royalties to the original composers of these songs in Africa. This is piracy. Such pirated works have raised much concern, particularly in the area of music recordings, as the authors or producers and other owners of the applicable copyright, together with their nations, have lost considerable amounts of revenue to copyright pirates.

The Copyright and Neighbouring Act solves these problems by expressly protecting oral, dramatic, dramatic-musical works with or without accompanying words. Given the fact that Botswana is a party to the international conventions referred to above, local copyright holders as well as foreign copyright holders from countries that are party to the conventions are able to enforce their copyright within Botswana, and local copyright holders are able to enforce their copyright in all other countries that are also party to the conventions.<sup>21</sup>

The oft-told story of Solomon Linda and "The Lion Sleeps" is a sad but real illustration of the problems faced by many African artists, which motivated the choices made in the Copyright and Neighbouring Rights Act. Linda wrote "Mbube", which was adapted into "Wimoweh" and "The Lion Sleeps Tonight", one of the most beloved and successful African songs ever. Linda's story exemplifies the story of many African artists—innovative adaptation of tradition, accomplished, popular artistry and uncompensated exploitation.

In the 1930s, Linda and his group, Solomon Linda's Original Evening Birds, drew on Zulu traditions, mixing them with Western styles and Linda's own innovations to create a distinctive and very popular and enduring new style of music. Their work drew on certain elements of "ancient Zulu performance"—solo introductions, extended choral sections, and other traditional melodies and conventions.<sup>22</sup> At the same time, he departed from tradition, for example by introducing a male soprano lead and urbane uniforms for his group. Linda thus both freely relied upon and adapted tradition as so many artists do.

<sup>21</sup> See further, J. Kiggundu, "Intellectual Property Law and the Protection of Indigenous Knowledge" in I. Mazonde and P. Thomas (eds), *Issues in Intellectual Property in the Twenty-First Century* (Dakar: Codesria, 2006), Ch.3.

<sup>22</sup> See Veit Erlmann, *Nightsong: Performance, Power and Practice in South Africa* (Univ. of Chicago Press, 1996), pp.63–66.

Linda's greatest hit was "Mbube", the first African recording to sell 100,000 copies.<sup>23</sup> "Mbube" is the Zulu word for lion, and it also came to be the name of the genre of music pioneered by Linda. Unfortunately, like so many African musicians, Linda enjoyed limited benefits from his work. Although he relied on his fame to get work as a performer, he ultimately died a pauper in 1962, leaving behind four children and a family too poor to afford a headstone for his grave.<sup>24</sup>

Although Linda enjoyed little benefit from "Mbube", others did. Its melody is the central theme in the hit songs "Wimoweh" and "The Lion Sleeps Tonight". Pete Seeger, of the US folk group The Weavers, obtained a recording of "Mbube" in the 1950s. He re-worked it into "Wimoweh", which was later adapted into "The Lion Sleeps Tonight". These adaptations have been big hits for many artists, played frequently for decades, translated into multiple languages and used in at least 15 movies and musicals, including Walt Disney's *The Lion King*. Until recently, none of these adaptations acknowledged Linda's authorship or paid him or his family a cent, despite "Mbube" generating millions in earnings. Finally, in the late 1990s, a *Rolling Stone* article told the story of the injustice done to Linda, and the publicity and a celebrated court case resulted in some compensation to Linda's descendants.<sup>25</sup>

Solomon Linda's story helps illustrate the needs of African musicians that Botswana's Copyright and Neighbouring Rights Act attempts to address. They need access to their cultural traditions to create vital works that appeal to local consumers by drawing on the familiar while innovating. But they also need their interests protected from uncompensated exploitation. The Act seeks to address this need by protecting a broad category of works, even if unfixed, while limiting protection to original works, thus allowing adaptation of traditional works.

## The protection of IKS under the Industrial Property Act 2010

Botswana has now embarked on the second stage of the juridification process by conferring protection on IKS of an industrial nature (food, medicine, agriculture, etc.) and geographical indications<sup>26</sup> in the Industrial Property Act 2010, which has been enacted by Parliament and will come into force shortly. The Act treats IKS as a separate subject-matter for intellectual property protection, with its own definitions, rights and limitations.

### Definition

The Industrial Property Act 2010 defines Traditional Knowledge as follows<sup>27</sup>:

"An idea, knowledge, practice use or invention, written or unwritten which may be associated to biological diversity, is a cultural, traditional or spiritual belief or value of a group of people."

This is a very wide definition that effectively covers all forms of IKS of an industrial nature that might need protection in Botswana. Most significantly it protects unwritten IKS.

<sup>23</sup> Simon Broughton, Mark Ellingham and Jon Lusk, *The Rough Guide to World Music: Africa and the Middle East*, Vol.1 (2006), p.358.

<sup>24</sup> See Owen Dean "The Return of the Lion" (2006) *WIPO Magazine* 8. See also <http://www.spoor.co.za>. See further, D. Wassel, "From Mbube to Wimoweh: African Folk Music in Dual Systems of Law" (2009) 20 *Fordham Intell. Prop. Media and Ent. L.J.* 289.

<sup>25</sup> See Wassel, "From Mbube to Wimoweh: African Folk Music in Dual Systems of Law" (2009) 20 *Fordham Intell. Prop. Media and Ent. L.J.* 289.

<sup>26</sup> See Industrial Property Act 2010 ss.91–99 (Pt X). Geographical indications are a very effective method of protecting IKS products from a particular country or region of a country. See further, Kiggundu, "Intellectual Property Law and the Protection of Indigenous Knowledge" in *Issues in Intellectual Property in the Twenty-First Century*, 2006, p.32.

<sup>27</sup> Industrial Property Act 2010 s.2.

### *Registration of traditional knowledge*

Traditional knowledge may be registered with a description of such knowledge if it has not been disclosed to the public through any means,<sup>28</sup> or, if it has been disclosed, such disclosure has not led to any commercial or industrial exploitation in Botswana.<sup>29</sup> The description must disclose the traditional knowledge in a manner which is sufficiently clear and complete to permit any third party to reproduce or utilise the described traditional knowledge to obtain results similar or identical to those obtained by the holder or holders of the traditional knowledge.<sup>30</sup> Any element of traditional knowledge may be registered separately or individually in conformity with its technical characteristics without prejudice to its holistic nature, or as a whole in its integrity combining, if necessary, all elements of traditional knowledge into a single registration.<sup>31</sup>

### *The right to register and ownership*

Any local traditional practitioner or a representative of any local community or any individual may apply to register traditional knowledge.<sup>32</sup> When making an application for registration of traditional knowledge, an applicant may opt to keep all or parts of the elements of traditional knowledge secret.<sup>33</sup> Where two or more local communities that occupy the same territory have created and are in possession of identical or similar elements of traditional knowledge, they may register those elements individually, on behalf of each community.<sup>34</sup>

Ownership and other rights to traditional knowledge belong to the owner of the traditional knowledge.<sup>35</sup> Where traditional knowledge is collectively owned, rights over it must be exercised and enjoyed collectively in accordance with cultural practices.<sup>36</sup> However, where local communities have individually registered similar or identical elements of traditional knowledge they must have the option to exercise and enjoy their rights over that traditional knowledge individually.<sup>37</sup> An applicant community which comprises individuals from different countries, including Botswana, has the right to register and acquire rights over traditional knowledge both in Botswana and, if permissible, in other countries.<sup>38</sup>

### *Duration of protection*

The duration of protection of traditional knowledge is indefinite. The protection of registered traditional knowledge expires only when it has lost its value as an element of cultural identification; as a result of wilful and expressed abandonment by its owner or owners; or as a result of non-use or use in a distorted manner by third parties of which the owner or owners are aware.<sup>39</sup>

### *Exclusive rights*

The protection of traditional knowledge under the Industrial Bill 2009 confers on the owner or owners of the following exclusive rights<sup>40</sup>:

<sup>28</sup> Industrial Property Act 2010 s.115(1)(a).

<sup>29</sup> Industrial Property Act 2010 s.115(1)(b).

<sup>30</sup> Industrial Property Act 2010 s.115(2).

<sup>31</sup> Industrial Property Act 2010 s.115(3).

<sup>32</sup> Industrial Property Act 2010 s.116(1).

<sup>33</sup> Industrial Property Act 2010 s.116(2).

<sup>34</sup> Industrial Property Act 2010 s.116(3).

<sup>35</sup> Industrial Property Act 2010 s.117(1).

<sup>36</sup> Industrial Property Act 2010 s.117(2).

<sup>37</sup> Industrial Property Act 2010 s.117(3).

<sup>38</sup> Industrial Property Act 2010 s.117(4).

<sup>39</sup> Industrial Property Act 2010 s.120.

<sup>40</sup> Industrial Property Act 2010 s.121.

1. Where the subject-matter of protection is a product, the right to prevent third parties without consent from making, using, stocking, offering for sale, selling, commercialising, importing or exporting the product or any element thereof.
2. Where the subject-matter of protection is a domesticated animal, cultivated plant or any micro-organism, the right to prevent third parties without consent from reproducing, multiplying or preparing for reproduction through an offer of sale, sale, importing, exporting or any form of commercialisation;
3. Where the subject-matter of protection is design, an object of a functional or aesthetic nature including any element of handicrafts, the right to prevent third parties without consent from making or reproducing any object with a similar configuration as regards shape, colour, material, technique and the overall style or visual impression of the handicrafts that are characteristic of it;
4. Where the subject-matter of protection is a name, a symbol, an emblem or any distinctive sign of a religious, spiritual, cultural or economic nature, the right to prevent third parties without consent from any kind of use, both in maternal language or any other language that consist of an identical or similar sign on a product or on a product associated with services, making of labels, packages or other material that reproduce or contain the signs for a commercial or any other purpose. This provision is very significant because it offers to IKS protection which is *mutatis mutandis* similar to the protection offered to the other Intellectual Property Rights such as patents, trade marks, designs and utility models.

5. **Non-distortion:**

registered traditional knowledge may not be distorted in any way, especially distortion of a spiritual or cultural identity of a community that owns traditional knowledge or any act that implies direct or indirect use of the knowledge for any purpose including scientific or academic research, without the owner's consent.<sup>41</sup> However, where the subject-matter of protection is a product which has been put in the market in Botswana by either the owner or by a third party with the consent of the owner, commercial acts in respect of that product do not distort the cultural identity of the community or in any way contribute to it.<sup>42</sup> This provision is a reflection of the doctrine of exhaustion of rights in intellectual property law.

6. **Confidential information:**

where, upon registration of traditional knowledge, an owner takes reasonable steps to keep part of the elements of that knowledge a secret, no person may disclose or acquire the undisclosed knowledge in any manner contrary to honest commercial practices.<sup>43</sup> This provision is in accord with s.116(2). It recognises that certain aspects of IKS may have several purposes. A plant (such as *hoadia* for example) may have medicinal as well as nutritional properties. The provision accordingly allows the owner of the IKS to disclose and register the medicinal properties while helping the nutritional properties secret.

### *The licensing of traditional knowledge*

The Industrial Property Act 2010 contemplates that owners will enjoy the benefits of IKS and be protected through licence agreements. The process of licensing IKS will be central to the success of the whole juridification process because it goes to the heart of two of the crucial issues in the protection of IKS: the

<sup>41</sup> Industrial Property Act 2010 s.121(2).

<sup>42</sup> Industrial Property Act 2010 s.121(3).

<sup>43</sup> Industrial Property Act 2010 s.121(4).

right to equitable remuneration and the right to benefit sharing. The Bill provides that local communities may grant licensing agreements to exploit traditional knowledge or any element thereof to third parties, subject to the following conditions:

- payment by a third party, at the discretion of the community, including payment of either a lump sum, royalty fee or participation in the benefits directly or indirectly derived from the exploitation of the knowledge;
- conferment by the third party of benefits such as educational grants, medical assistance and any other benefits;
- the exploitation does not lead to distortion of any kind; and
- registration of the licensing agreement with the Registrar.<sup>44</sup>

Where the exploitation of the licence leads to loss of the nature of the traditional knowledge as an element of cultural identification of that particular local community, the licensing agreement becomes invalid.<sup>45</sup>

### *Compulsory licences*

While the debate about IKS has long focused on protection of indigenous knowledge and the people who possess it, Botswana took a step beyond to consider how to balance the public need for access through compulsory licensing. Compulsory licences are a very important feature of intellectual property law. They reflect one aspect of what are known as “flexibilities” in the protection of IPRs. Compulsory licences are usually granted in relation to patents. The Act anticipates a situation which may arise where the owner of IKS is not willing to license such IKS as provided for in s.125 of the Act. The Minister of Trade and Industry may, after hearing any local community that owns traditional knowledge, *on grounds on public interest*, authorise the scientific, commercial or industrial exploitation of that knowledge or any element thereof by a third party where:

- the exploitation does not distort or offend the cultural identity of the local community;
- the local community is given an *equitable* share of any benefit derived from such scientific, commercial or industrial exploitation<sup>46</sup>;
- the exploitation must be limited by the scope and duration of the authorisation and must expire when it can no longer be justified on the basis of public interest.<sup>47</sup>

### *Restrictions of transfer, cession and assignment of rights*

The rights of local communities over registered traditional knowledge under the Bill may not be assigned, ceded or transferred in any manner. Accordingly, third parties may only exploit the rights in IKS through the licensing<sup>48</sup> and compulsory licensing<sup>49</sup> provisions discussed above. Section 123 is a very important provision because it ensures that individual owners and local communities can retain their ownership of traditional knowledge perpetually without losing it to biopirates, researchers and other entities. Such ownership subsists for present and future generations.

<sup>44</sup> Industrial Property Act 2010 s.125(1)(a)–(d).

<sup>45</sup> Industrial Property Act 2010 s.125(2).

<sup>46</sup> Industrial Property Act 2010 s.124(1)(a) and (b).

<sup>47</sup> Industrial Property Act 2010 s.124(2).

<sup>48</sup> Industrial Property Act 2010 s.125.

<sup>49</sup> Industrial Property Act 2010 s.124.

### *Invalidity of IKS-related IP titles*

Where a title of industrial property such as a patent, trade mark, industrial design or plant variety certificate is granted without the inclusion of the IKS component of that title, then the title is unenforceable against third parties until the written consent of the local community owning the traditional knowledge is obtained.<sup>50</sup> However, the local community may, where applicable and at their discretion, seek protection for the elements of their traditional knowledge in an alternative or complementary manner by means of other regimes of industrial property without prejudice to the rights and interests protected by the Act.<sup>51</sup>

This is a very important provision of the Act especially in relation to IKS-related patents. Biopirates, researchers and numerous other third parties visit developing countries. They obtain IKS from the local communities that they visit. They then take away the IKS with them to other parts of the world. They then use the IKS as a springboard for their patent application for a new drug or such other product without disclosing the IKS component of their application or even acknowledging the contribution of the IKS of the relevant community to the development of the new product. Section 127 therefore reinforces the principles of prior informed consent, enhanced disclosure, transparency, equity and benefit sharing currently being implemented or discussed by the CBD, the World Trade Organization (WTO) and the World Intellectual Property Organization (WIPO).<sup>52</sup> The provision will force third parties who surreptitiously obtain IKS from local communities to disclose the IKS component when applying for industrial property titles in Botswana or abroad.

### *Handicrafts*

Handicrafts form a special and interesting category of IKS. Various communities all over the world produce a variety of handicrafts. Botswana for example, is renowned for its beautiful baskets and pottery. The Swatis are famous for their wooden curvings, glassworks and kangas. The Basotho are famous for their cone-shaped hats and colourful blankets. The Ndebele of South Africa are famous for their striking beadwork. The handicrafts market is extremely lucrative globally. Unfortunately, the benefits of this market do not necessarily accrue to the local communities that make the handicrafts because of three factors. First, third parties that visit these communities as tourists or otherwise buy the handicrafts very cheaply and then export them and sell them at exorbitant prices abroad. Secondly, some of these third parties enter into contracts or other informal arrangements whereby the local communities are persuaded to produce these crafts on a large scale in return for a payment from the third party. This payment is usually very low and in local currency. The third party then exports the handicrafts in bulk to foreign markets where he sells them in hard currency at very high prices, thereby making an inequitable and disproportionate profit to the detriment of the community that produced the crafts in the first place. Thirdly, in the worst of the three scenarios, third parties visit local communities in various parts of the world and fraudulently expropriate the design of the indigenous handicraft. They then take it abroad and mass produce it with the benefit of modern technology, thereby destroying the market in the original indigenous version. This kind of piracy is clearly inequitable. A very good example here is the sad story of the Ghanaian Kente cloth. This cloth is a famous handicraft and is clearly part of Ghanaian IKS and cultural heritage. The textile design of this cloth was appropriated from Ghana. It is now mass produced in various factories in

<sup>50</sup> Industrial Property Act 2010 s.127(1).

<sup>51</sup> Industrial Property Act 2010 s.127(2).

<sup>52</sup> See Nagoya Protocol art.6. See further, WTO, *WIPO-WTO Colloquium for Teachers of Intellectual Property* (Compilation of WTO Documents Concerning Intellectual Property), Geneva, June 26-July 7, 2006, Part IV, IP/C/W/370/Rev.1, pp.1–19. See also the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) art.27.3(b); CBD.



Asia and America where it is sold cheaply. This has destroyed the foreign market in the original cloth. The domestic/regional market is also under threat because cheap copies of the cloth find their way into the Ghanaian and regional market.<sup>53</sup>

What has been highlighted above indicates very clearly why there is need to protect handicrafts. The industrial property in the handicrafts belongs in law and in equity to the local communities that produce them. Accordingly, the Industrial Property Act 2010 contains specific provisions on the protection of IKS in handicrafts. It is to the discussion of these provisions that we now turn.

## Registration of handicrafts

Designs or objects with an aesthetic or functional configuration, including clothing, pottery and any other handicrafts that constitute inseparable elements of culture, the spirituality of the tradition of any local community may be registered in the register of traditional knowledge even where there has been commercial exploitation, provided the object or design has not lost the essential link identifying the cultural or spiritual tradition of the local community.<sup>54</sup> The application must satisfy the provisions of cl.115 and must contain a description of the general characteristics of use, methods of making, the selection, preparation and use of raw materials of each type of product and a general description of the history and evolution of the handicraft.<sup>55</sup> The local community owning the handicraft may register individual parts of the handicraft which are created after registration and which may be added to the general registration.<sup>56</sup>

## Exclusive rights in registered handicrafts

Subject to the provisions of s.120, exclusive rights in registered handicrafts apply to the whole series or types of handicrafts as described in the register. The rights are to prevent the making, using, stocking, selling, offering for sale, importing or exporting by third parties without consent any products that may in any manner lead to confusion by consumers as to the origin, creation or making of the handicrafts.<sup>57</sup>

## Conclusions

Botswana's Industrial Property Act 2010 is a remarkable piece of legislation for several reasons. First it makes IKS of an industrial nature part of mainstream intellectual property, thereby facilitating its registration and protection. These provisions on the protection of IKS are the best in the common law world and should definitely serve as a model for other countries that have embarked or might embark on a similar exercise to emulate. Secondly, it facilitates equitable benefit sharing through a system of licensing and compulsory licensing. Thirdly, it puts a high premium on local communities who produce the IKS by endorsing their right to recognition and by facilitating their right to equitable remuneration. Fourthly, it resolves the issue of ownership by recognising that IKS may be owned by an individual or the entire community. Fifthly, it eliminates the rampant commoditisation/commercialisation of IKS by prohibiting the assignment, cession or transfer of the rights in IKS granted under the Act. This will ensure that the ownership of IKS remain in the relevant community in perpetuity. Sixthly, it surmounts the thorny issue of duration by granting IKS indefinite duration. Seventhly, by facilitating the registration of IKS, the Act thereby recognises that

<sup>53</sup> See further, J. Asmah, "Historical Threads: Intellectual Property Protection of Traditional Textile Designs: The Ghanaian Experience and African Perspectives" (2008) 15 *International Journal of Cultural Property* 271.

<sup>54</sup> Industrial Property Act 2010 s.126 (1).

<sup>55</sup> Industrial Property Act 2010 s.126 (2) read with s.115.

<sup>56</sup> Industrial Property Act 2010 s.126 (3) read with s.116(2) and 121(4).

<sup>57</sup> Industrial Property Act 2010 s.126(4).

the use of natural products and knowledge held by indigenous and local communities is important since it might assist in the development of traditional medicines that might contribute to the fight against HIV/AIDS.<sup>58</sup>

As other nations move to implement the international obligations arising out of the CBD, WIPO and other forums, they will need to address the same issues Botswana has addressed in its legislation: whether to accommodate IKS protection within existing law; ownership issues; the basis of entitlement; duration; exploitation and remuneration; and the recognition of and governance by indigenous peoples. Doubtless, there are numerous ways to answer these questions. However, formulating the answers requires governments to grapple with challenging practical issues. As IKS protection moves from laudable principle and recognition of stakeholders to practical legislation, other nations may look to Botswana's legislation for a model as to how to answer these and other questions.

<sup>58</sup> See Cabinet Memorandum, Industrial Property Bill (No.15 of 2009).

# The Economic Effects of Geographical Indications on Developing Country Producers: A Comparison of Darjeeling and Oolong Teas

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☞ Developing countries; Economics and law; Geographical indications; Tea

*The general perception about geographical indications (GIs) seems to be that benefits will flow to smallholders in local communities, but the correctness of that assumption has to date not been analysed empirically. This study provides both a method for calculating the recipients of benefits from GIs as well as applications to Darjeeling tea (India) and Oolong tea (China). Our analysis suggests that countries must select their GIs very carefully as the confluence of product familiarity in international markets and land ownership patterns needed for the generation and widespread distribution of benefits will be rare events.*

## Introduction

The Uruguay Round of the WTO was premised on a purported balance of enhanced market access, with developing countries expanding access for manufactured products while developed countries improved access for agricultural products. Many observers believe the execution was anything but balanced, with developing countries indeed reducing barriers to manufactured goods while developed countries largely reneged on a commitment to improve access for agricultural goods. Unsurprisingly, many developing country representatives have protested, with some of the strongest objections focused on the upward harmonisation of minimal international intellectual property rights (IPR) protection standards, as specified in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS requires, among other changes, that national laws provide IPR protection for pharmaceutical products and plants.

One of the several TRIPS-mandated forms of protection has the potential to enhance the value of largely agricultural exports from developing countries. This form, known as geographical indications (GIs), is little used by developing countries. The European Commission has identified about 900 GIs in Europe

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for foodstuffs and agricultural products (88 per cent of the total), while the rest of the world, and especially developing countries, has only a fraction of that amount.<sup>1</sup> Table 1 lists GIs by geographic region. GIs are a form of trade mark, some say the oldest form. A trade mark is any sign capable of identifying a product or service which, once registered, requires the permission of the owner for its use. Trade marks are justified as a mechanism for informing consumers about the characteristics of the product and in particular to protect producers and consumers from “false indications”.<sup>2</sup> GIs, however, differ from trade marks in several key dimensions:

- **Ownership:**  
trade marks are personal property, but GIs in some forms are owned by a group or public body, which may not be permitted to use it on their own behalf.
- **Location of production:**  
eligibility to use the GI is based in part on the location of production, and not the producer, as with trade marks.
- **Certification:**  
owing to the collective nature of GIs, an entity must exist which determines when the standards for inclusion in the GI have been met.

GIs of course can be and are used in conjunction with trade marks.

Table 1: Distribution of GIs by region (as of 2003)<sup>3</sup>

| Region                 | Frequency | Region                 | Frequency |
|------------------------|-----------|------------------------|-----------|
| Australasia            | 4         | South Africa           | 1         |
| East Africa            | 1         | South Asia             | 11        |
| Eastern Africa         | 24        | Southern Africa        | 7         |
| Eastern Asia           | 31        | Southern Asia          | 6         |
| Eastern Europe         | 6         | Southern Europe        | 366       |
| Eastern North America  | 12        | Southern North America | 16        |
| Eastern South America  | 2         | Southern South America | 7         |
| Great Lakes Region     | 1         | Western Africa         | 18        |
| Middle East Africa     | 5         | Western Europe         | 259       |
| Middle East Asia       | 4         | Western North America  | 29        |
| Northern Europe        | 1         | —                      | —         |
| Northern North America | 3         | Total                  | 814       |

<sup>1</sup> European Commission, *Impact Assessment Report on Geographical Indications—Accompanying Document to the Proposal for a Regulation of the European Parliament and of the Council on Agricultural Product Quality Schemes* (Brussels: 2010), at [http://ec.europa.eu/agriculture/quality/policy/quality-package-2010/ia-gi\\_en.pdf](http://ec.europa.eu/agriculture/quality/policy/quality-package-2010/ia-gi_en.pdf) [Accessed March 28, 2011]; C. Grant, “Geographical Indications: Implications for Africa”, *Tralac Trade Brief No. 6/2005* (2005), at [https://www.givengain.com/unique/tralac/pdf/20051108\\_TB6\\_2005\\_Geographical\\_Indications.pdf](https://www.givengain.com/unique/tralac/pdf/20051108_TB6_2005_Geographical_Indications.pdf) [Accessed March 28, 2011].

<sup>2</sup> See D. Rangnekar, “The Socio-Economics of Geographical Indications”, UNCTAD-ICTSD Project on IPRs and Sustainable Development, Issue Paper No. 8 (May 2004), at <http://ictsd.org/downloads/2008/07/a.pdf> [Accessed March 28, 2011]; T. Josling, “What’s in a Name? The Economics, Law and Politics of Geographical Indications for Foods and Beverages”, IIIS Discussion Paper No. 109 (2006), at <http://http://ssrn.com/abstract=922267> [Accessed March 28, 2011]; C.M. Correa, *Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement* (New York: Oxford University Press, 2007); M.A. Echols, *Geographical Indications for Food Products: International Legal and Regulatory Perspectives* (The Netherlands: Kluwer Law International, 2008).

<sup>3</sup> Source: GIANT database at [http://www.american.edu/ged/giant/global\\_analysis.doc](http://www.american.edu/ged/giant/global_analysis.doc) [Accessed March 28, 2011].

GIs as specified in TRIPS (s.3) have two distinct degrees of protection, a higher one for wines and spirits (also known as appellations of origin) and one for other eligible products, those for which “a given quality, reputation, or other characteristic of the good is essentially attributable to its geographic origin” (art.22(1)). A higher level of protection means GIs “should be protected even if there is no risk of misleading consumers or unfair competition”.<sup>4</sup> Applications are typically to food and other agricultural products, but not exclusively so. The additional protection presently accorded to wines and spirits includes preventing the use of GIs for products even when the true source of origin is indicated, used in translation or accompanied by expressions like “kind”, “type”, “style”, “imitation” or similar phrases, and a prohibition for the GI name becoming generic.<sup>5</sup>

During the now-suspended WTO Doha Round negotiations, the European Union (EU) representatives sought to have the level of protection for all eligible products enhanced in three ways:

- extension of the level of protection currently available for wines and spirits to other goods;
- rolling back of a limited set of GIs in use in countries where the GIs did not originate; and
- creation of a multilateral registration system for GIs.

The EU emphasis on GIs revived interest in their functioning and economic ramifications.<sup>6</sup> Interest is focused not only on the EU and the United States, but on developing countries as well because the EU takes the position that enhanced GI protection will benefit developing countries, which can potentially enhance export markets for products like Oolong tea (China), and Basmati rice and Darjeeling tea (India). GIs are seen as particularly applicable to developing country agriculture because ownership of the mark is by the group and not the individual, and because the established standards make it possible to standardise quality across a large number of small suppliers.

With the apparent suspension of the Doha Round the likelihood of enhancing GIs multilaterally is very much in doubt. However, the functionality, including the economic effects, of the current systems is poorly documented. The understanding of their impacts on developing countries is even more incompletely documented. Policy-makers in both developed and developing countries have identified GIs as a potential mechanism to assist primarily the agricultural sector in developing countries by reducing supply competition for traditional products while raising/standardising the quality of those products. The perception seems to be that GI benefits will flow primarily to smallholders in local communities as a form of rural development, but the correctness of that assumption, which is to say the projection of the distribution of benefits from the use of GIs, has to date not been analysed empirically. The objective of this study is to estimate the distribution of benefits from using GIs among factor owners and consumers. Our contribution is to document the resulting benefit distributions using two GIs operating with different levels of land supply. A secondary objective is demonstrating how our methodology can be applied to assess the benefit distribution for other GIs. We use a two-factor market displacement model of agricultural policy; while the model is perfectly general, the configuration we use is applicable only to agriculture.<sup>7</sup>

The use of an economic model configured for analysis of agricultural GIs has several ramifications for our objectives. The model functions with several quantifiable inputs, components of production, the broadest being land, labour and capital. Then it computes how benefits generated are distributed among those inputs. The analysis is useful for determining just who the major beneficiaries are and, with additional cost data, whether the benefits justify investments in, say, advertising or market channel development. Conversely, the results can indicate that, even if there is a net financial gain, the benefit recipients may

<sup>4</sup> “The Doha Declaration Explained”, at [http://www.wto.org/english/tratop\\_e/dda\\_e/dohaexplained\\_e.htm#top](http://www.wto.org/english/tratop_e/dda_e/dohaexplained_e.htm#top) [Accessed March 28, 2011].

<sup>5</sup> See Correa, *Trade Related Aspects of Intellectual Property Rights*, 2007.

<sup>6</sup> W.A. Kerr, “Enjoying a Good Port with a Clear Conscience: Geographic Indicators, Rent Seeking, and Development” (2006) 7(1) *Estey Centre Journal of International Law and Trade Policy* 1, at <http://ageconsearch.umn.edu/bitstream/23827/1/07010001.pdf> [Accessed March 28, 2011].

<sup>7</sup> Note for example that 80% of 82 current Indian GIs are for non-food products, mostly handicrafts. See [http://docs.google.com/View?docid=dc39jv73\\_6f75sk3s2](http://docs.google.com/View?docid=dc39jv73_6f75sk3s2) [Accessed March 28, 2011]. Since in our model we use supply shifters such as input (land) quota, the current configuration is more applicable to agriculture.

not be those intended by a government or non-profit group project, and hence not to be pursued. What the model is unable to measure is broader societal benefits from a GI such as pride or reconnection with traditional values, as those, as important as they may be, are non-quantifiable, at least by using the standard economist toolkit applied here. The model is equally ill equipped to evaluate diffuse inputs, community knowledge, in the form of, say, a traditional weaving design. This is because the input, traditional knowledge, is not priced in any market. Clearly such knowledge has value in a broader societal context, but not the kind which can be incorporated into the type of model used here. Thus we are presenting but one slice of valuing implications of GIs, a slice which is of considerable importance but has received only limited attention.

Here as an example applications we use Oolong and Darjeeling teas. Darjeeling tea was established as a GI in India in 2003 under the Geographical Indications of Goods (Registration and Protection) Act 1999. India produces only 10 million kg of genuine Darjeeling tea, but about 40 million kg of “Darjeeling tea” is available in the world market every year. Oolong tea is yet to receive protection in China. Our focus on international GI product markets reflects the international dimension of the WTO and the cost-reducing aspect of a harmonised system, as proposed by the EU.

## Literature review

Multiple streams of literature analyse component aspects of GI functions, such as supply and quality control, generic promotion and labelling.<sup>8</sup> There exist some studies that conduct qualitative analysis of GIs without any specific model or market assessments.<sup>9</sup> Conclusions based on such studies are very general at best. Giovannucci et al. for example in an extensive analysis make the general conclusions that GIs can enhance local production and pride, and may become the base for a tourism sector, as with Blue Mountain coffee in Jamaica, but successful GIs are “limited in number and not easy to achieve”.<sup>10</sup> The most applicable insights come from a series of case studies (see below). Hughes does examine in considerable detail the potential of GIs to assist coffee and cocoa farmers across a range of countries.<sup>11</sup> He notes that reaching a conclusion is complicated by the frequent overstatement of the benefits, and concludes by refuting a “conceptual error that strengthening GI law will, by itself, substantially help developing countries”. Moreover, he questions whether GIs are effective at protecting traditional knowledge and whether government agencies are well positioned to generate the market recognition needed for an international market. Overall, private companies are better suited to that function. In this section we focus on economic theoretical and empirical studies conducted on GIs or GI-like legal systems.

## Theoretical models

Using a game theoretic-optimal control approach, Winfree and McCluskey show that for goods which can be assessed by use/consumption (experience goods) without firm traceability, individual firms have the incentive to choose quality levels that are sub-optimal for the group.<sup>12</sup> Results from the study support

<sup>8</sup> See T. Dhar and J.D. Foltz, “Milk by Any Other Name ... Consumer Benefits from Labeled Milk” (2005) 87 *American Journal of Agricultural Economics* 214; European Techno-Economic Policy Support Network (ETEPS), “Economic Assessment of the Food Quality Assurance Schemes—Synthesis Report” (2006), at <http://eteps.gopa-cartermill.com/?p=189> [Accessed March 28, 2011].

<sup>9</sup> See S. Escudero, “International Protection of Geographical Indications and Developing Countries” (2001), at [http://www.southcentre.org/index2.php?option=com\\_content&do\\_pdf=1&id=88](http://www.southcentre.org/index2.php?option=com_content&do_pdf=1&id=88) [Accessed March 28, 2011]; C. Folkeson, “Geographical Indications and Rural Development in the EU”, university essay from Lunds University (2005), at <http://www.essays.se/essay/7906381ebc/> [Accessed March 28, 2011]; Kerr, “Enjoying a Good Port with a Clear Conscience” (2006) 7(1) *Esey Centre Journal of International Law and Trade Policy* 1, at <http://ageconsearch.umn.edu/bitstream/23827/1/07010001.pdf> [Accessed March 28, 2011]; Echols, *Geographical Indications for Food Products*, 2008.

<sup>10</sup> D. Giovannucci, T. Josling, W. Kerr, B. O'Connor and M. Yeung, “Guide to Geographical Indications: Linking Products and their Origins” (Geneva: International Trade Centre, 2009), pp.19, 34, at [http://www.intracen.org/publications/Free-publications/Geographical\\_Indications.pdf](http://www.intracen.org/publications/Free-publications/Geographical_Indications.pdf) [Accessed March 28, 2011].

<sup>11</sup> J. Hughes, “Coffee and Chocolate—Can We Help Developing Country Farmers through Geographical Indications?” (2010), at <http://ssrn.com/abstract1684370> [Accessed March 28, 2011].

<sup>12</sup> J.A. Winfree and J.J. McCluskey, “Collective Reputation and Quality” (2005) 87 *American Journal of Agricultural Economics* 206.

minimum quality standards for regional and specialty products such as Washington apples. Starting from the well-established position that producers have no incentive to invest in product quality/brand recognition when there is no entry control, Lence et al. examine the welfare implications of alternative legal approaches to joint supply control.<sup>13</sup> Considering a range of control approaches ranging from perfect competition through monopoly and including options to control only land area or production practices or both, they show, in line with general theory, that the incentive to establish a GI-type system increases with the strength of the property right system. That is, the stronger the property rights the more supply control is possible and the higher prices can be maintained. From this recognition have arisen the proposals for enhancing GI legislation multilaterally.

Merel investigates the economic rationale underlying control mechanisms in European protected designations of origin (PDO—this is a form of GI defined in the EU law and is very specific and restrictive in nature), with a focus on the French Comté cheese market.<sup>14</sup> The author shows that vertical integration between upstream producers and downstream processors is mutually beneficial as long as the integrated industry is able to exercise some degree of seller market power. This argument provides a potential rationale to government sanctioned production control scheme currently in place. Moschini et al. focus on the production of high quality products with GIs serving as a source of quality information for consumers<sup>15</sup>; Roquefort for example is a particularly select type in the broad class of blue cheeses. The authors show under these circumstances that a competitive equilibrium can exist but is not Pareto efficient—overall benefits can still be enhanced—when the costs of certification are borne by producers. As a consequence, high quality goods are under-supplied. With enhanced product information and a competitive equilibrium, most benefits are captured by consumers. Producers are benefited only to the extent they control inelastically provided input—those which cannot be enlarged with rising prices and profitability, such as land. These findings are in agreement with general economic theory that the least elastic element in the supply/demand equilibrium receives the greatest share of benefits.

### *Empirical models*

Carter et al. use a case study approach to highlight the conditions necessary for a successful geographical-origin branding strategy for farm produce in the United States.<sup>16</sup> The paper argues that the use of geographic identifiers to achieve product differentiation is viable, but is unlikely to benefit local producers. Giovannucci et al. measure the success of a GI as the proportion of stakeholders receiving economic benefits.<sup>17</sup> They note the significance of delineating the region, which may lead to conflicts among potential stakeholders or incorporate areas not suited to the quality associated with the product. At best, GI development is measured in decades, and benefits can be negative with little product differentiation and high costs. At best, small, and certainly lower quality, producers can be excluded from any benefits. With our economic model, we attempt to identify which group will benefit from a GI before it is established.

<sup>13</sup> S.H. Lence, S. Marette, D.J. Hayes and W. Foster, "Collective Marketing Arrangements for Geographically Differentiated Agricultural Products: Welfare Impacts and Policy Implications" (2007) 87 *American Journal of Agricultural Economics* 947.

<sup>14</sup> P. Merel, "Efficiency and Redistribution in the French Comté Cheese Market", paper presented at the I Mediterranean Conference of Agro-Food Social Scientist, Barcelona, Spain (April 23–25, 2007), at <http://ageconsearch.umn.edu/bitstream/9396/1/sp07me06.pdf> [Accessed March 28, 2011].

<sup>15</sup> G.C. Moschini, L. Menapace and D. Pick, "Geographical Indications and the Competitive Provision of Quality in Agricultural Markets" (2008) 90 *American Journal of Agricultural Economics* 794.

<sup>16</sup> C. Carter, B. Krissoff and A.P. Zwane, "Can Country-of-origin Labeling Succeed as a Marketing Tool for Produce? Lessons from Three Case Studies" (2006) 54 *Canadian Journal of Agricultural Economics* 513.

<sup>17</sup> D. Giovannucci et al., *Guide to Geographical Indications: Linking Products and Their Origins* (Geneva: International Trade Centre, 2009), at [http://www.intracen.org/publications/Free-publications/Geographical\\_Indications.pdf](http://www.intracen.org/publications/Free-publications/Geographical_Indications.pdf) [Accessed March 28, 2011].

Using consumption data for extra virgin olive oil from Italy, Van der Lans et al. tested the hypothesis that PDO labels and region of origin cues influence food product preference directly.<sup>18</sup> The study found that these labels influence regional product preference through perceived quality, although the effect is limited to specific consumer segments. Réquillart conducted a critical review of models that have been developed in the literature to evaluate the various welfare implication of GIs.<sup>19</sup> The review reports a limited number of works that estimate consumers' demand for GI products in Europe. Overall, these studies show that protected geographical indication (PGI—this is a form of GI defined in the EU law, which is more relaxed in its conditions than PDO) and PDO labels signal a certain level of quality and consumers are willing to pay for these perceived qualities. The European Commission recognises that benefits depend on consumers' confidence that the GI-labelled products meet the specifications and are produced where claimed.<sup>20</sup> Neither of these criteria is easy to establish across many small farmer producers in developing countries. Table 2 lists a number of studies that focus on consumer's willingness to pay (WTP) for GI products/consumer attitude towards such products.

Table 2: Consumers WTP for/attitude towards GIs<sup>21</sup>

| Study  | Commodity                  | Results  |
|--|----------------------------|--|
| Loureiro and McCluskey (2000) <sup>22</sup>    | Glacian Veal (Spain)       | PGI labels on high quality cuts of meat can obtain a premium, PGI has diminishing marginal returns with respect to quality |
| Bonnet and Simoni (2001) <sup>23</sup>         | Camembert (cheese, France) | A small portion of consumers (15%) have positive WTP for PDO   |
| Fotopoulos and Krystallis (2003) <sup>24</sup> | Apples (Greece)            | WTP for GI: 25–40% of product value WTP for PD): 6–25%   |
| Hassan and Monier-Dilhan (2006) <sup>25</sup>  | Ham (France)               | PGI is about 15% of the average price of the product   |
| Folkesson (2005) <sup>26</sup>                 | PDO/PGI products from EU   | Consumers have higher WTP for PDO/PGI products   |

<sup>18</sup> I.A. Van der Lans, I.A.K. Van Ittersum, A. De Ciccio, and M. Loseby, "The Role of the Region of Origin and EU Certificates of Origin in Consumer Evaluation of Food Products" (2001) 28 *European Review of Agricultural Economics* 451.

<sup>19</sup> V. Réquillart, "On the Economics of Geographical Indications in the EU", paper presented at workshop on Geographic Indications and Brands: Firms Strategies and Public Policies, Toulouse (June 14–15, 2007), at [http://www.idei.fr/doc/conf/inra/papers\\_2007/requillart.pdf](http://www.idei.fr/doc/conf/inra/papers_2007/requillart.pdf) [Accessed March 28, 2011].

<sup>20</sup> *Impact Assessment Report on Geographical Indications—Accompanying Document to the Proposal for a Regulation of the European Parliament and of the Council on Agricultural Product Quality Schemes* (Brussels: 2010), at [http://ec.europa.eu/agriculture/quality/policy/quality-package-2010/ia-gi\\_en.pdf](http://ec.europa.eu/agriculture/quality/policy/quality-package-2010/ia-gi_en.pdf) [Accessed March 28, 2011].

<sup>21</sup> Source: Authors' own compilation.

<sup>22</sup> M.L. Loureiro and J.J. McCluskey, "Assessing Consumer Response to Protected Geographical Identification Labeling" (2000) 16(3) *Agribusiness* 309.

<sup>23</sup> C. Bonnet and M. Simioni, "Assessing Consumer Response to Protected Designations of Origin Labeling: A Mixed Multinomial Logit Approach" (2001) 28 *European Review of Agricultural Economics* 433.

<sup>24</sup> C. Fotopoulos and A. Krystallis, "Quality Labels as a Marketing Advantage: The Case of PDO Zagora Apples in the Greek Market" (2003) 37(10) *European Journal of Marketing* 1350.

<sup>25</sup> D. Hassan and S. Monier-Dilham, "National Brands and Store Brands: Competition through Public Quality Labels" (2006) 22(1) *Agribusiness* 21.

<sup>26</sup> Folkesson, "Geographical Indications and Rural Development in the EU", 2005, at <http://www.essays.se/essay/7906381ebc/> [Accessed March 28, 2011].



Belletti et al. used a case-study approach to categorise and qualify costs and benefits of using PDOs and PGIs.<sup>27</sup> The study focused on cheese, olive oil and beef from Italy. The paper shows that the amount and distribution of the direct certification costs among the actors of the chain depend on product certification bodies and their relationships with the actors. The study also shows that direct certification costs is one of the important but not the main element in firms' decision whether to use PDO-PGI or not.

### *Literature assessment*

GIs generate benefits by enhancing demand through restricting competitive supplies using the same product name and/or raising the product quality and reputation. At the same time, establishing GI systems and providing for monitoring production, preventing unsanctioned uses of the name, ensuring quality, and market development all have costs, and it is the profit increases net of these costs which are relevant. But, as noted, the direct evidence regarding each of these components for existing GIs is limited. This overview substantiates that little of the economic effects of GIs from developing countries have been documented at any level of rigour. There is a special need to evaluate the impact of GIs on farmers' income as well as how potential benefits (if any) from GIs are distributed among the stakeholders, for developed and developing countries alike. There are suggestions of when and how GIs can benefit agriculture in developing countries—group action which reduces individual costs is an example. However, specific studies focusing on GIs from developing countries are missing. In this study we try to fill part of the gap by using Darjeeling and Oolong teas as examples.

### **Methodology**

Our objective is determining how the quantity and quality effects of an agricultural GI affect the distribution of benefits among consumers and factor owners. That can be evaluated by using a two factor (with variable factor proportions) production model involving land and other inputs as factors. The model, adapted from Alston and James,<sup>28</sup> has a homogeneous product,  $Q$ , and uses two factors of production,  $X_1$  and  $X_2$ , with a competitive market clearing condition. The Alston and James model was developed for evaluating the effects of agricultural policy and so focuses on subsidies and/or output/input quotas as the policy instruments (referred to as “shifters” in the model). This is a market displacement model to examine the policy incidence. We can model the market equilibrium of a competitive industry in terms of endogenous prices and quantities as:

1.  $Q = D(P, A)$
2.  $C = c(W_1, W_2)Q$  subject to  $c(W_1, W_2) = C/Q$ , & under perfect competition  $P = c(W_1, W_2)$
3.  $X_1 = c_1(W_1, W_2)Q$
4.  $X_2 = c_2(W_1, W_2)Q$
5.  $X_1 = g_1(W_1, B_1)$
6.  $X_2 = g_2(W_2, B_2)$

where

$A$  exogenous demand shifter (demand effects of a GI)

$B_1$  exogenous supply shifter (input effects of a GI)

$B_2$  exogenous supply shifter (input effects of a GI)

<sup>27</sup>G. Belletti, T. Burgassi, A. Marescotti and S. Scramuzzi, 2005. “The Effects of Certification Costs on the Success of a PDO/PGI”, paper presented at the 92nd EAAE seminar, Göttingen, Germany, (March 2–4, 2005).

<sup>28</sup>J.M. Alston and J.S James, “The Incidence of Agricultural Policy” in B.L. Gardner and G.C. Rausser (eds), *Handbook of Agricultural Policy* (New York: Elsevier, 2002), Vol.2, Part 2.

- $Q$  output
- $P$  output price
- $X_1$  input factor 1 (land)
- $X_2$  input factor 2 (all other inputs including fertiliser, seeds, and labour)
- $W_1$  price of  $X_1$  (land)
- $W_2$  price of  $X_2$  (other inputs)

Totally differentiating equations (1–6) and expressing the results as relative changes yields equations in terms of the relative changes and elasticities, the effect of a change in the price of one factor on the quantity demanded. The solution consists of linear equations expressing these relative changes in endogenous (internally determined) prices and quantities as functions of the parameters (such as demand and supply elasticities, elasticity of substitution, factor cost shares) and exogenous shifters. The shift variables, B1 and B2, take particular forms to represent the price and quantity effects of a subsidy on an output or an input; they take different values, combined with extreme elasticity assumptions, to represent a quota on an output or an input. Alston and James derived price and quantity effects of subsidies or quotas in terms of cost shares and elasticities, as reported in Table 3.

Table 3: Price and quantity effects of supply/demand shifters in a two-factor model<sup>29</sup>

|             | Output subsidy<br>( $\tau_Q$ )  | Input subsidy<br>( $\tau_I$ )   | Output Quota<br>( $\delta_Q$ )                               | Input quota<br>( $\delta_I$ )                                |
|-------------|---|---|--|--|
| $d \ln Q$   | $\frac{\eta[\varepsilon_1\varepsilon_2 + \sigma(k_1\varepsilon_1 + k_2\varepsilon_2)]}{D} \tau_Q$ | $\frac{k_1\varepsilon_1\eta(\sigma + \varepsilon_2)}{D} \tau_I$                   | $-\delta_Q$  | $-\frac{k_1\eta(\sigma + \varepsilon_2)}{D''} \delta_I$      |
| $d \ln P$   | $\frac{\eta[\sigma + k_2\varepsilon_1 + k_1\varepsilon_2]}{D} \tau_Q$                             | $-\frac{k_1\varepsilon_1(\sigma + \varepsilon_2)}{D} \tau_I$                      | $\delta_Q/\eta$  | $\frac{k_1(\sigma + \varepsilon_2)}{D''} \delta_I$           |
| $d \ln X_1$ | $\frac{\eta\varepsilon_1(\sigma + \varepsilon_2)}{D} \tau_Q$                                      | $\frac{[(k_2\sigma + k_1\eta)\varepsilon_2 + \eta\sigma]\varepsilon_1}{D} \tau_I$ | $-\frac{\varepsilon_1(\sigma + \varepsilon_2)}{D'} \delta_Q$ | $-\delta_I$  |
| $d \ln X_2$ | $\frac{\eta\varepsilon_2(\sigma + \varepsilon_1)}{D} \tau_Q$                                      | $-\frac{k_1(\sigma - \eta)\varepsilon_1\varepsilon_2}{D} \tau_I$                  | $-\frac{\varepsilon_2(\sigma + \varepsilon_1)}{D'} \delta_Q$ | $\frac{k_1(\sigma - \eta)\varepsilon_2}{D''} \delta_I$       |
| $d \ln W_1$ | $\frac{\eta(\sigma + \varepsilon_2)}{D} \tau_Q$   | $-\frac{(k_1\sigma + k_2\eta + \varepsilon_2)\varepsilon_1}{D} \tau_I$            | $-\frac{(\sigma + \varepsilon_2)}{D'} \delta_Q$              | $\frac{(k_1\sigma + k_2\eta + \varepsilon_2)}{D''} \delta_I$ |
| $d \ln W_2$ | $\frac{\eta(\sigma + \varepsilon_1)}{D} \tau_Q$   | $-\frac{k_1(\sigma - \eta)\varepsilon_1}{D} \tau_I$                               | $-\frac{(\sigma + \varepsilon_1)}{D'} \delta_Q$              | $\frac{k_1(\sigma - \eta)}{D''} \delta_I$                    |

$$D = \sigma(k_1\varepsilon_1 + k_2\varepsilon_2 + \eta) + \eta(k_2\varepsilon_1 + k_1\varepsilon_2) + \varepsilon_1\varepsilon_2 > 0, \quad D' = \sigma(k_1\varepsilon_1 + k_2\varepsilon_2) + \varepsilon_1\varepsilon_2 > 0, \quad \text{and}$$

$$D'' = \sigma\eta + \varepsilon_2(k_1\eta + k_2\sigma) > 0$$

- $k_1$  cost share  $X_1$
- $k_2$  cost share  $X_2$  such that  $k_1 + k_2 = 1$
- $\eta$  elasticity demand for  $Q$  (absolute value)
- $\varepsilon_1$  elasticity supply for  $X_1$
- $\varepsilon_2$  elasticity supply for  $X_2$
- $\sigma$  elasticity substitution between  $X_1$  and  $X_2$

<sup>29</sup> Source: Alston and James, “The incidence of agricultural policy” in *Handbook of Agricultural Policy* 2002.

*Applying model to GIs*

GIs, as is noted above, function by restricting production to a defined area and limiting sales to a quality standard set by the managing group or body. We define the output Q as farm product; hence the relevant inputs would be land and other farm inputs (labour, fertiliser, etc.). If our interest was to examine the effects on processors (i.e. middlemen), then inputs would include farm product and other marketing inputs. The model does not have any specific functional form (equations reflecting the production relationships) and is very simple in its structure, making it readily adaptable to apply to GI analysis in the following way:

- **Restrict area to the defined GI:**

this functions similarly to an input quota in the agriculture policy model by cutting off product produced outside that region. Within the Alston and James model, the effects of an input (here land) quota can be represented by making its effective supply perfectly inelastic (i.e. for land setting  $\varepsilon_1=0$ ) and defining the amount of displacement of production as  $-\delta_1$ . For some products where a GI has become a near-generic name for the product, the quantity displacement will be very substantial.

- **Quality enhancements:**

this can be represented as a shift in demand ( $\eta$ ) treated in the Alston and James context as an output subsidy. When producers of high quality product (e.g. Darjeeling tea) certify their product by a competent authority it signals quality to consumers, enabling the charging of a price premium. This quality enhancement results in a shift in demand ( $\eta$ ) similar in concept to an output subsidy.

GI certification which restricts the area of production (land) and/or enhances the quality of the output by defining minimum standards for the product affects the factor suppliers by inducing a shift in the demand for each factor. For example, whether suppliers of land (land owners) benefit from GI certification depends on whether the derived resulting demand for land is induced to rise or fall. This in turn depends on prices of all the other factors and cross elasticities or elasticity of substitution, the degree to which one input can replace another.

The benefits from GIs are distributed among consumers and factor owners (land, labour, capital and other purchased inputs), with the proportions depending on selected parameters. Here, as is explained above, we use demand and supply shifts over a moderate range to represent the effects of GIs. Under these conditions, benefits to consumers are approximately proportional to the percentage change in quantity consumed:

$$\Delta \text{Consumer Surplus} \approx (d \ln Q)(PQ/\eta)$$

and the benefits to suppliers of land ( $X_1$ ) and other inputs ( $X_2$ ) are approximately proportional to the percentage change in the use of the factor:

$$\Delta \text{Producer Surplus}_i \approx (d \ln X_i)(k_i PQ/\varepsilon_i)$$

A large component of analysing the distribution of benefits from GIs using our model is then quantifying the proper values of parameters such as  $\eta$ ,  $\varepsilon_1$ , and  $\varepsilon_2$ . An aspect of estimating these elasticities will be econometric analysis using production and consumption data, but some of the changes will be so large as to lie outside the range of historical data meaning some judgment is required as well.

### *Darjeeling tea*

Darjeeling tea is produced from 87 gardens/estates some situated over 5,000 foot elevation in the north-east state of West Bengal, India. The description of the location of the Darjeeling GI references specific estates in the Darjeeling district of West Bengal, India.<sup>30</sup> About 10 million kg of tea is produced from 17,500 hectares of land. The best quality, about 2,000 tons, comes from the spring and Easter harvests. Much of the supplementary production is of inferior quality, which diminishes the value of even the best quality product. Owing to the clearly demarcated area in Darjeeling, all of which is under cultivation, some going back to the origins in the 19th century, area expansion is not possible.<sup>31</sup> Production increases can come only through technological change or increased purchased input use intensity.

All tea growing regions in India are administered by the Tea Board, under the Tea Act 1953. Since its establishment, the Tea Board has had sole control over the cultivation and export of Darjeeling tea as well as ownership of the Darjeeling logo and name. Darjeeling tea was registered as a GI in India in 2003, the first one. Only pure, unblended Darjeeling tea is eligible for certification. All 87 existing tea estates have received licences to use the Darjeeling tea certification, as have processors, packers and exporters. A certification mark for Darjeeling tea was obtained from the United States in 1991. Protection has also been received in Canada, Egypt, Japan, Russia, the United Kingdom and other EU members. Worldwide protection is a costly process, not the least owing to the need to monitor use and enforce rights when needed.<sup>32</sup>

Tea is a labour-intensive crop, and Darjeeling tea employs about 52,000 people permanently, and more on a seasonal basis. Compensation has evolved to include many benefits such as health care and schooling. But whether that redistributive effect can be attributed to the existence of the GI is difficult to say for it was put into effect long before the GI was formally implemented, and in this 150-year old sector even prior to the 1953 Tea Act.<sup>33</sup>

### *Oolong tea*

The area under tea gardens across China is 1.18 million hectares. However, most of the total output (71 per cent) comes from five provinces: Fujian (principal), Zhejiang, Hunan, Anhui and Sichuan, as well as from Taiwan. On February 17, 2007 the General Administration of Quality, Supervision, Inspection and Quarantine approved application for a GI for Oolong tea in 35 out of 85 counties in Fujian Province. Presently, Oolong tea production in the specified 35 counties is about 98 per cent of total Oolong tea production in Fujian province, but utilises only one-third of the total Oolong tea planting area there.<sup>34</sup> Thus there is significant area available for future expansion, although whether the quality of all the unused two-thirds of the available land is appropriate for quality tea production is unknown at this time. The analysis assumes that a significant portion of it is at least legally permitted for Oolong production. Current Oolong tea gardens are typically 0.35 hectares per household in Fujian province.<sup>35</sup>

<sup>30</sup> Tea which has been cultivated, grown, produced, manufactured and processed in tea gardens (the current schedule whereof is attached hereto) in the hilly areas of Sardar Sub-division, the only hilly areas of Kalimpong Sub-division comprising Samabeong Tea Estate, Ambik Tea Estate, Mission Hill Tea Estate and Kumai Tea Estate and Kurseong Sub-division, excluding the areas in jurisdiction list 20, 21, 23, 24, 29, 31 and 33 comprising Subtíguri Sub-division of New Chumta Tea Estate, Simulbari and Marionbari Tea Estate of Kurseong Police Station in Kurseong Sub-division of the District of Darjeeling in the State of West Bengal, India; see <http://www.american.edu/tea/darjeeling.htm> [Accessed March 28, 2011].

<sup>31</sup> C.N. Rao, "Geographical Indications in Indian Context: A Case Study of Darjeeling Tea" (2005) 40(42) *Economic and Political Weekly*, at <http://www.epw.org.in> [Accessed March 28, 2011].

<sup>32</sup> Rao, "Geographical Indications in Indian Context" (2005) 40(42) *Economic and Political Weekly*, at <http://www.epw.org.in> [Accessed March 28, 2011].

<sup>33</sup> R. Kumar and V. Naik, "Darjeeling Tea—Challenges in the Protection and Enforcement of Intellectual Property Rights", WIPO Program Activities (n.d.), at [http://www.wipo.int/sme/en/case\\_studies/darjeeling\\_tea.htm](http://www.wipo.int/sme/en/case_studies/darjeeling_tea.htm) [Accessed March 28, 2011].

<sup>34</sup> Fujian Statistical Bureau, *Fujian Economic and Social Statistical Yearbook* (Fuzhou: Fujian People's Publishing House, 2005).

<sup>35</sup> Anxi Bureau of Agriculture, "The Basic Information of Anxi County's Oolong Tea Production" (2006), at <http://www.axny.gov.cn/lygk-tea.asp> [Accessed March 15, 2011].

## *Selection of parameters in the model*

### Price elasticity of demand

As noted above, the application of our model requires inputting estimated elasticities of land and other input supplies, as well as demand elasticities. We turn now to the approaches used in estimating those several elasticities. Previous studies estimating price elasticity of demand for tea are very limited, especially those for specialty teas such as Darjeeling and Oolong. In an attempt to estimate the market power of the tea processing sector, Weerachewa estimated price elasticity of demand at the wholesale level for tea in Canada, the United Kingdom and the United States as -0.47, -0.16 and -0.12 respectively.<sup>36</sup> In a study estimating unconditional demand elasticities for processed foods in the presence of fixed effects, Bergtold et al. report price elasticity of demand for tea as -1.07 for annual quarters one and four and -1.08 for quarters two and three.<sup>37</sup> According to the authors these estimates are larger than the previous estimates because of the use of disaggregated product groupings, scanner data, and the estimation of unconditional elasticities.

From this review it is clear that existing studies provide a very wide range of values for price elasticity of demand depending on the methodology used and the data source. Because of this wide range of values for the price elasticity of demand for tea, we estimated corresponding elasticities using unpublished scan data on specialty and non-specialty tea from the United States. The scan data (quarterly data from 2006 and 2007) on retail prices and sales of specialty and non-specialty tea for the analysis were collected from seven stores of Coborn's located in three US states: Minnesota, South Dakota and North Dakota. Simple regression was used to estimate the elasticities and the corresponding values for specialty and non-specialty tea are -1.9 and -1.05 respectively. Based on estimates from previous studies and our own estimates we select 1 (absolute value) as the benchmark.

### Supply elasticity of land

Direct estimates of elasticity of supply of land from developing or developed countries are not available. Because of the non-availability of reliable data on land price from India or China, we rely on elasticity values from the published literature and use our own judgment in selecting among them. The supply of all land is fixed in the extreme leading to  $\epsilon_s=0$ . However, the supply of agricultural land for particular crops may vary depending on farming decisions adopted by the farming community or other policy regulations.

In a study analysing the potential land use implications of a global bio-fuel industry, Gurgel et al. estimated the supply elasticity of land in many developed and developing countries.<sup>38</sup> Their estimation, based on the conversion of natural land to agricultural land, reports supply elasticities as 0.15 for China and 0.31 for India, or 0.12 for some regions that had virtually no conversion in the historical data. Sohngen and Mendelsohn report the representative range of values of supply elasticity of land in the literature as 0.13 to 0.38.<sup>39</sup>

In the case of Darjeeling tea, since virtually all the land in the Darjeeling GI area is long planted to tea,  $\epsilon_1$  will be close to zero. Based on all these information available we select 0.01 as  $\epsilon_1$  for Darjeeling tea. Compared with Darjeeling tea, the geographical boundaries of Oolong tea production are not well defined

<sup>36</sup> J. Weerachewa, J. 2003. "Estimating Market Power of Tea Processing Sector" (2003) 5(1) *Sri Lankan Journal of Agricultural Economics*, available at <http://www.slageconr.net/sjae/sjae51f/sjae05105.pdf> [Accessed March 28, 2011].

<sup>37</sup> J. Bergtold, E. Akobundu and E. B. Peterson, "The Fast Method: Estimating Unconditional Demand Elasticities for Processed Foods in the Presence of Fixed Effects" (2004) 29(2) *Journal of Agricultural and Resource Economics* 276.

<sup>38</sup> A. Gurgel, J.M. Reilly and S. Paltsev, "Potential Land Use Implications of a Global Biofuels Industry" (2007) 5(2) *Journal of Agricultural & Food Industrial Organization*, at <http://www.bepress.com/jafio/vol5/iss2/art9> [Accessed March 28, 2011].

<sup>39</sup> B. Sohngen and R. Mendelsohn, "A Sensitivity Analysis of Carbon Sequestration" in M. Schlesinger (ed.), *Human-induced Climate Change: An Interdisciplinary Assessment* (Cambridge, UK: Cambridge University Press, 2007).

so we can anticipate  $\varepsilon_1$  to be higher than that of Darjeeling tea. Combining the information available from published literature and secondary data sources we select 0.38 as  $\varepsilon_1$  for Oolong tea. Owing to the uncertainty of these estimates, the results include sensitivity analysis which indicates how the results change with changes in input values presented here.

### Supply elasticity of other inputs

The “other” non-land inputs include capital, purchased inputs such as fertiliser, hired farm labour and family labour and management. Many of these inputs would be expected to be highly elastically supplied in the medium to long term.

For example, given the small proportional use in all Chinese and Indian agriculture applied to tea, one would expect the supply of fertiliser and chemicals to be very price elastic. In the short term, some of these inputs such as managerial inputs, labour and capital may be less elastically supplied.

We are not aware of any studies estimating the supply elasticity of “other” inputs in agriculture. Hence in this analysis we select  $\varepsilon_2$  as 1, reflecting the elastic and inelastic nature of some of these inputs.

### Cost shares

Distribution of any potential economic benefits (costs) from GI protection among land owners and producers of “other” inputs depends on their respective cost shares:  $\kappa_1$  and  $\kappa_2$ . In order to calculate the cost share of land and “other” inputs in Oolong tea production, a field survey was conducted in Anxi County, Fujian province in the year 2007.<sup>40</sup> Based on data from our field survey, the cost share of land ( $\kappa_1$ ) in Oolong tea production is 0.16.

Comparable data for Darjeeling tea is not available from India, mainly because of the very competitive and secretive business strategy of each tea garden in the area. Owing to the non-availability of detailed data on cost of production of Darjeeling tea we arbitrarily select  $\kappa_1$  as 0.3.

This value reflects the strictly defined geographical boundaries of Darjeeling area in India which could result in increased land rent in the region.

### Elasticity of substitution

Estimates of the elasticity of substitution between land and other inputs vary, but these numbers typically do not refer to substitution between land and all non-land inputs as an aggregate, for which the elasticity of substitution should be smaller.<sup>41</sup> Following Hyman et al.<sup>42</sup> we calculated the elasticity of substitution ( $\sigma$ ) as:

$$(7) \quad \sigma = \frac{\varepsilon_1}{1 - \kappa_1}$$

<sup>40</sup>The survey employed a stratified random selection method to choose two villages in two towns. According to the per capita income, the enumerators divided all towns in Anxi County into two groups: rich towns and poor towns. One town from each group and one village from each town were randomly selected. From each village 10 tea farmers were randomly selected for participating in the survey. The questionnaire used in the survey included questions about tea production, costs and marketing. Even though the sample size is small, according to the local officials survey results reflect the general trend in the region.

<sup>41</sup>J.M. Alston, “Benefits and Beneficiaries from U.S. Farm Policy” (2007), at [http://www.aei.org/docLib/20070515\\_alstonSubsidiesfinal.pdf](http://www.aei.org/docLib/20070515_alstonSubsidiesfinal.pdf) [Accessed March 15, 2011].

<sup>42</sup>R.C. Hyman, J.M. Reilly, M.H. Babiker, A. De Masin and H.D. Jacoby, “Modeling Non-CO2 Greenhouse Gas Abatement” (2003) 8 *Environmental Modeling and Assessment* 175.

### Sensitivity analysis

As shown in Table 3, parameters such as elasticities are critical in determining the distribution of benefits among different stakeholders. To accommodate the deterministic nature of the parameters used in the model, we conducted a sensitivity analysis to check the robustness of the results. The values selected for the sensitivity analysis are reported in Table 4.

Table 4: Values of parameters used in the sensitivity analysis

| Category            | $\epsilon_1$ | $\eta$ |
|---------------------|--------------|--------|
| Darjeeling tea(low) | 0            | .5     |
| Base                | .01          | 1.0    |
| High                | .12          | 1.5    |
| Oolong tea (low)    | .18          | .5     |
| Base                | .38          | 1.0    |
| High                | .76          | 1.5    |

### Results

Table 5: Distribution of benefits among different stakeholders (Darjeeling tea)<sup>43</sup>

| Darjeeling tea |              |        |          |            |                |               |            |
|----------------|--------------|--------|----------|------------|----------------|---------------|------------|
| Category       | $\epsilon_1$ | $\eta$ | $\sigma$ | $\kappa_1$ | Landowners (%) | Consumers (%) | Others (%) |
| Baseline       | .01          | 1      | .01      | .3         | .91            | .05           | .04        |
| Sensitivity    | .01          | .5     | .01      | .3         | .86            | .10           | .04        |
|                | .01          | 1.5    | .01      | .3         | .93            | .03           | .04        |
|                | .01          | 1      | .02      | .5         | .94            | .04           | .02        |
|                | 0            | 1      | 0        | .3         | 1              | 0             | 0          |
|                | .12          | 1      | .17      | .3         | .44            | .31           | .25        |

Results from the welfare analysis are presented in Tables 5 and 6. In general the results in Tables 5 and 6 are fairly intuitive for both Darjeeling and Oolong teas. The benefits to consumers and factor owners are approximately proportional to the change in their respective quantities supplied and consumed. The share of benefits from a GI going to landowners/producers increases with a less elastic supply of land or with more elastic demand for output, or with increased elasticity of substitution between land and other inputs, all of which increase the derived demand for land. In the extreme case, when the supply of land is fixed ( $\epsilon_1=0$ , perfectly inelastic) and  $\sigma=0$ , all the benefits from a GI go to landowners. When this extreme condition is relaxed a bit by making  $\sigma \sim 0$  landowners share of the economic surplus generated decreases, but still receive a large share. Clearly, a greater share of the benefits goes to the factor which is more important (accounting for a larger share of costs) or less elastically supplied. The results from the sensitivity analysis (presented in Tables 5 and 6) suggest the effect of parameters used on the outcome of the model.

<sup>43</sup>  $\epsilon_2=1$  in the analysis.

Table 6: Distribution of benefits among different stakeholders (Oolong tea)<sup>44</sup>

| Oolong tea  |              |        |          |            |                |               |            |
|-------------|--------------|--------|----------|------------|----------------|---------------|------------|
| Category    | $\epsilon_1$ | $\eta$ | $\sigma$ | $\kappa_1$ | Landowners (%) | Consumers (%) | Others (%) |
| Baseline    | .38          | 1      | .45      | .16        | .14            | .46           | .40        |
| Sensitivity | .38          | .5     | .45      | .16        | .09            | .63           | .28        |
|             | .38          | 1.5    | .45      | .16        | .16            | .36           | .48        |
|             | .38          | 1      | .76      | .5         | .37            | .38           | .25        |
|             | .18          | 1      | .23      | .16        | .21            | .42           | .37        |
|             | .76          | 1      | .9       | .16        | .09            | .49           | .42        |

A comparison of benefits among different stakeholders (landowners, suppliers of other inputs, and consumers) of Darjeeling and Oolong teas shows how the different production, marketing and consumption and reputation aspects of the two commodities affect the proportionate share of each stakeholder. Given that “Darjeeling” is well defined geographically, and Darjeeling tea is known for its quality reputation both domestically and internationally, landowners of Darjeeling tea gain proportionately more compared to smallholders of Oolong tea. The limited land supply elasticity for Darjeeling tea means that landowners continue to receive the majority of benefits even if tea quality is enhanced (as modelled by reducing the demand elasticity). Conversely, reducing the demand elasticity for Oolong tea increases the benefits share to foreign consumers, the dead weight loss. These results suggest that product quality enhancement under a GI is not an effective use of public funds for rural development. However, in the case of Oolong tea, with a higher supply elasticity due to the more expansive and less well-defined geographical boundaries, the share of benefits going to land owners is less than that for consumers.

### *Deadweight loss from using GIs*

The cost of modifying existing intellectual property system /developing a new intellectual property system to accommodate GI registration should be considered while analysing the net impact of using GIs. The documentation of such costs is not available from all the cases. According to the Government of Hong Kong, the cost of registering an individual GI is US\$180.<sup>45</sup> The Tea Board of India, the responsible agency in charge of the Darjeeling GI, has spent approximately US\$200,000 over four years (2000–2004) on legal and registration expenses, costs of hiring an international watch agency and fighting infringements in overseas jurisdictions. This amount does not include administrative expenses including the relevant personnel working for the Tea Board, the cost of setting up monitoring mechanisms, software development costs, etc.<sup>46</sup>

Given that most developing countries are resource-constrained, especially financial resources, the cost of setting up GI system will be substantial. It is valuable then to calculate the deadweight losses from using a GI. In the case of export goods such as Darjeeling and Oolong teas, a major portion of the consumer benefits will accrue to foreign consumers and that foreign benefit will amount to deadweight loss from

<sup>44</sup>  $\epsilon_2=1$  in the analysis.

<sup>45</sup> Hong Kong Economic and Trade Office, “Multilateral System of Notification and Registration of Geographical Indications under Article 23.4 of the TRIPS Agreement”, Communication from Hong Kong, China, to Special Session of the Council for TRIPS, World Trade Organization, Geneva, Switzerland (April 23, 2003), at <http://www.info.gov.hk/ipd/eng/information/TN-IP-W-8.pdf> (last visited 3/15/11).

<sup>46</sup> Giovannucci et al., *Guide to Geographical Indications*, 2009.



the domestic perspective. This additional deadweight loss is approximately equal to the proportionate change in production times the value of production, multiplied by the fraction exported,  $k_e$ , and divided by the overall demand elasticity.

Following Alston,<sup>47</sup> the deadweight loss (DWL) from using a GI (by shifting demand at an ad valorem rate of  $\tau_Q$ ), in an open economy is:

$$(8) \quad DWL_s = \left[ \frac{1}{2} \tau_Q + \frac{K_e}{\eta} \right] PQ d \ln Q = \left[ \frac{1}{2} \tau_Q + \frac{K_e}{\eta} \right] PQ \tau_Q \left[ \frac{\varepsilon \eta}{\varepsilon + \eta} \right]$$

Where  $d \ln Q$  is the proportional change in quantity associated with the use of GI,  $\eta$  is the overall demand elasticity, and  $\varepsilon$  is the overall supply elasticity. Given that the total expenditure of using a GI approximately equals  $\tau_Q PQ$ , the deadweight loss as a share of the total expenditure is:

$$(9) \quad \frac{DWL_s}{\tau_Q PQ} = \left[ \frac{1}{2} + \frac{K_e}{\eta \tau_Q} \right] d \ln Q = \left[ \frac{1}{2} + \frac{k_e}{\tau_Q \eta} \right] \tau_Q \left[ \frac{\varepsilon \eta}{\varepsilon + \eta} \right]$$

This calculation ignores the costs of compliance and enforcement and the marginal social opportunity cost of government funds. Using the following values for parameters in equation (9) [ $\varepsilon=.01$  for Darjeeling tea,  $\varepsilon=.38$  for Oolong tea,  $\eta=1$ ,  $k_e=.7$  for Darjeeling tea,  $k_e=.29$  for Oolong tea, and  $\tau_Q=.1$ ] gives a value of 1 per cent for Darjeeling tea and 10 per cent for Oolong tea.<sup>48</sup>

## Conclusions, policy implications and extensions

We have shown by case examples and in line with the theory that GIs can indeed benefit consumers and/or producers of food products. The distribution of benefits is dependent on the relative elasticities with the majority of benefits accruing to the least elastic element. These results, and the model for applying them to other products, are important for policy planners concerned with whom benefits accrue to. The analysis should be repeated for each current and planned GI, but patterns are evident. For products with narrowly geographic scope, meaning limited opportunity for increased production (the Darjeeling tea case), benefits will accrue largely to landowners. Policy planners may have to consider how much public funds to invest in establishing a system benefiting already well-off groups with few benefits for other inputs, including labour. The results do raise questions about the EU inference that primarily smallholders from developing countries will benefit from using GI on agricultural products and foodstuff. In fact, the greatest benefits are likely when production is tightly controlled, but then it is the relatively wealthy landowners who benefit the most.

At the other extreme of a very large area GI production increases following any price rise would redistribute benefits to consumers, many international. That would effectively export any public investment in legislation, enforcement or promotion, but would lead to a higher level of domestic production, enhancing non-land input markets, including labour. That is, employment would be transferred away from competitor nations to the nations of the GI. Our model does not explicitly evaluate that outcome—it estimates shares, not aggregates—but a trade model with a reduction in international competition could be used. Then there are the examples of GIs for obscure products at least for international markets (for example, Kangra tea

<sup>47</sup> Alston, "Benefits and Beneficiaries from U.S. Farm Policy" (2007), at [http://www.aei.org/docLib/20070515\\_alstonSubsidiesfinal.pdf](http://www.aei.org/docLib/20070515_alstonSubsidiesfinal.pdf) [Accessed March 15, 2011].

<sup>48</sup>  $k_e$  for Oolong tea is the 12-year average of the percentage of Oolong tea exports: see *Chinese Custom Yearbook* (2007); *Chinese Agricultural Statistics Yearbook* (2007).  $k_e$  for Darjeeling tea is calculated based on 2007 data: see <http://in.reuters.com/article/businessNews/idINIndia-34037020080612?pageNumber=2&virtualBrandChannel=0> [Accessed March 28, 2011].

from Himachal Pradesh, India, Coorg green cardamom from Karnataka, India). A GI enhancing quality could alter the demand elasticity but with little change in the quantity demanded beyond traditional consumers, the amount of additional revenue to be distributed would be small. These extensions suggest that the opportunities for GIs with a substantial potential for rural development are limited but do exist.<sup>49</sup> All this says that countries must select their GIs very carefully as the confluence of product familiarity in international markets and land ownership patterns needed for the generation and widespread distribution of benefits will be rare events. Care in selecting the GIs with the greatest potential to meet specific policy goals will maximise public returns.

<sup>49</sup> See also Giovannucci et al., *Guide to Geographical Indications*, 2009; Rao, "Geographical Indications in Indian Context" (2005) 40(42) *Economic and Political Weekly*.

# Filing date requirements under the Patent Cooperation Treaty: Alignment with the Patent Law Treaty?

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☞ Applications; Filing date; Patents

*The Patent Law Treaty (PLT) aims at harmonising and streamlining formal procedures relating to national and regional patent applications and maintenance of patents. However, the PLT does not establish a uniform procedure for all parties to the PLT by leaving many requirements optional, allowing divergence in implementation between parties. Both the PLT and the Patent Cooperation Treaty (PCT) are international treaties on patent law. As the PCT cannot become a “Contracting Party” to the PLT, there is, ex lege, no reason for the PCT to comply with the requirements set by the PLT. In view of the close relationship between the PLT and the PCT, attempts have been undertaken to align the PCT with the PLT but this was hampered because amendment of the PCT Articles was regarded necessary. In this article the degree of alignment of the PCT with the PLT is investigated in relation to the filing date requirements under the PCT.*

## Introduction

In June 2000, the Diplomatic Conference for the Adoption of the Patent Law Treaty (PLT), convened by the World Intellectual Property Organization (WIPO) and encompassing 140 states, adopted the PLT; the PLT entered into force in April 2005.<sup>1</sup> The aim of the PLT is “to harmonize and streamline”, on a worldwide basis, formal procedures relating to national and regional patent applications and the maintenance of patents. In particular, the PLT provides maximum sets of requirements that the office of a contracting party could apply. This means that a contracting party is free to provide for requirements that are more generous from the viewpoint of applicants and owners. The provisions of the PLT apply to national and regional patent applications and patents as well as to international applications under the Patent Cooperation Treaty (PCT) once these applications have entered the “national phase”.

During the past few years the main features of the PLT have been implemented in a number of national patent laws and in regional patent treaties. During the EPC 2000 revision, the European Patent Convention (EPC) was adapted to the PLT.<sup>2</sup>

<sup>1</sup> Patent Law Treaty; at <http://www.wipo.int/treaties/en/ip/plt/> [Accessed March 29, 2011].

<sup>2</sup> “Revision of the European Patent Convention (EPC 2000): Synoptic Presentation EPC 1973/2000 — Part I: The Articles” [2007] EPO Official Journal, Special Edition No.4; comment in relation to article 120 EPC, at <http://www.epo.org/patents/law/legal-texts/journal/2007.html> [Accessed March 29, 2011]; “Revision of the European Patent Convention (EPC 2000). Synoptic presentation EPC 1973/2000 — Part II: The EPC Implementing Regulations” [2007] EPO Official Journal, Special Edition No.5; comment in relation to EPC r.59, at <http://www.epo.org/patents/law/legal-texts/journal/2007.html> [Accessed March 29, 2011]. Also see Cees Mulder and Derk Visser: “Filing Date Requirements under the EPC — An Option to Extend Subject-matter?” (2010) 2 *epi Information* 44, at <http://216.92.57.242/patentepi/en/Information/epi-information.php> [Accessed March 29, 2011]; Cees Mulder and Derk Visser: “Filing Date Requirements under the EPC — Filing by Reference to a Previously Filed Application” (2010) 4 *epi Information* 126.

## Main purpose of this article

Both the PLT and the PCT are international treaties on patent law. The PCT cannot become a “contracting party” to the PLT.<sup>3</sup> So there is, *ex lege*, no reason for the PCT to comply with the requirements set by the PLT, for example, with respect to the accordance of a date of filing.

A main feature of the PLT is that it provides standardised formality requirements for patent applications which are filed with a national or regional patent office. Instead of defining these requirements again or differently in the PLT, it was decided to *incorporate by reference* the provisions of the PCT and its Regulations, wherever appropriate, into the PLT. The main reason for this is that the PCT already regulates in detail the formality requirements with respect to patent applications.<sup>4</sup>

The question may arise as to why a (new) PLT was needed. The answer is that the PCT harmonises formalities only with respect to international applications. The requirements applied by offices to national and regional applications, as well as to international applications having entered the national phase, still vary considerably. The main concern of the drafters of the PLT was to avoid creating another internationally applicable standard different from the PCT, since more than 140 countries that are members of the PCT already apply the standards under the PCT to international applications.<sup>5</sup>

As the PLT is directly linked to the PCT, it seems “strange” that the PCT does not “comply” with the basic requirements of the PLT, for example, with respect to the accordance of the international filing date. As described in this article, the PCT was modified in view of the adoption of the PLT but mainly to satisfy the requirements of national law that are necessary for national processing. Apart from this, attempts have been undertaken to improve alignment between the PCT and the PLT, but this was largely impossible because amendment of the articles of the PCT was regarded necessary. Simply amending the PCT Regulations to provoke alignment, thereby “bending” the PCT articles, was often considered a bridge too far in the discussions of the Working Group on Reform of the PCT.

In this article the degree of alignment of the PCT with the PLT is investigated in relation to the filing date requirements under the PCT. In particular, the differences between the PLT and the PCT are identified. An analysis of the differences, problems derived from them and possible solutions will be given.

## Relationship between the PLT and the PCT

The PLT is connected to the PCT. Although the PLT is primarily focuses on national and regional patent applications, it incorporates by reference the standards prescribed by the PCT as to the form and contents of international applications (cf. PLT art.6(1)). These procedural and administrative requirements include the form and contents of national and regional patent applications, the type of translations of documents and the evidence which an applicant may be required to provide to an office in the course of processing the application. In view of the adoption of the PLT, the PCT Regulations were amended in the spirit of the PLT, enabling applicants, when filing an international application, to satisfy in a simplified manner a number of requirements of national law which have to be met when the international application, at a later date, enters the national phase before the national office of a PLT Contracting Party.<sup>6</sup> The PCT Assembly decided that these amendments to the PCT Regulations would enter into force on March 1, 2001.<sup>7</sup>

<sup>3</sup> cf. PLT art.20.

<sup>4</sup> “Basic Features to the Patent Law Treaty (PLT)” (November 2006), items 13–19, at <http://www.wipo.int/patent-law/en/plt.htm> [Accessed March 29, 2011].

<sup>5</sup> “Basic Features to the Patent Law Treaty (PLT)” (November 2006), item 14, at <http://www.wipo.int/patent-law/en/plt.htm> [Accessed March 29, 2011].

<sup>6</sup> PCT Union, “Proposed Amendments of the PCT Regulations and Modifications of the PCT Administrative Instructions, Relating to the Draft Patent Law Treaty”, Document PCT/A/28/2 (January 2000), item 2, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4001](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4001) [Accessed March 29, 2011].

<sup>7</sup> PCT Union, “Proposed Amendments of the PCT Regulations”, Document PCT/A/28/2, 2000, item 46.

PLT art.3(1) specifies the applications and patents to which the PLT applies: “national and regional applications for patents for invention and for patents of addition”. The terms “national and regional applications for patents for invention” and “applications for patents of addition” are to be construed in the same sense as these terms in PCT art.2(i).<sup>8</sup> Under PLT art.3(1)(a)(i), the PLT also applies to those types of applications for patents for invention and for patents of addition, which can be filed as international applications under the PCT.<sup>9</sup>

PLT art.3(1)(b) applies to contracting parties which are also party to the PCT. The phrase “Subject to the provisions of the Patent Cooperation Treaty” is included in PLT art.3(1)(b) to ensure that the provisions of the PCT continue to apply to international applications in the “national phase”. For example, a filing date accorded to an international application under PCT art. 11(2)(b)<sup>10</sup> cannot be challenged by the applicant, once that application has entered the national phase, on the grounds that the application would be entitled to an earlier filing date under PLT art.5(1)(a).<sup>11</sup>

The purpose of PLT art.6(1) is to apply, to the extent possible, the requirements relating to the form or contents of international applications under the PCT to national and regional applications.<sup>12</sup> It is implicit that the expression “form or contents of an application” in PLT art.6(1) is to be construed in the same manner as the expression in PCT art.27(1) stating that no national law may require compliance with requirements relating to the “form or contents of the international application” different from or additional to those which are provided for in the PCT and its Regulations.<sup>13</sup>

PLT art.6(1)(i) prohibits a contracting party from imposing requirements in respect of the form or contents of a national or regional application that are stricter than those applicable to international applications under the PCT.<sup>14</sup> In addition, PLT art.6(1)(i) permits a contracting party to require that a national or regional application complies with any requirements relating to the “form or contents” that any PCT contracting state is allowed to apply after entry of the international application in the “national phase”.<sup>15</sup>

In preparation for the Diplomatic Conference for the Adoption of the PLT, the International Bureau investigated how future changes to the PCT could be incorporated by reference in the PLT. This principle, which was not explicitly incorporated into the provisions of the Basic Proposal of the PLT,<sup>16</sup> is implicitly assumed in order to make the interface between the PLT and the PCT viable over time. The International Bureau could not identify any identical or analogous provisions in other international treaties.<sup>17</sup>

<sup>8</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty Adopted by the Diplomatic Conference on June 1, 2000” (prepared by the International Bureau), Diplomatic Conference for the Adoption of the PLT, Document PT/DC/48 Prov. (November 2000), Note 16.01, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4057](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4057) [Accessed March 29, 2011].

<sup>9</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 3.04.

<sup>10</sup> PCT art.11(2)(b) refers to the situation where the receiving office did accord a later international filing date due to the applicant’s compliance with an invitation from the receiving office stating that he did not fulfil the requirements of PCT art.11(1), e.g. because of the late filing of at least one claim.

<sup>11</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 3.07.

<sup>12</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 6.01.

<sup>13</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 6.02.

<sup>14</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 6.06.

<sup>15</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 6.07.

<sup>16</sup> “Basic Proposal for the Patent Law Treaty” (submitted by the Director General of WIPO), Diplomatic Conference for the Adoption of the PLT, Document PT/DC/3 (November 1999), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4057](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4057) [Accessed March 29, 2011].

<sup>17</sup> “Results of the 28th (16th Extraordinary) Session of the PCT Assembly, March 13–17, 2000; Issues for Possible Discussion at the Diplomatic Conference” (prepared by the International Bureau), Diplomatic Conference for the Adoption of the PLT, Document PT/DC/6 (April 2000), Item 14, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4057](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4057) [Accessed March 29, 2011].

An example of such “incorporation by reference” in the field of intellectual property is found in PCT art.62(3), which states that the “provisions of Article 24 of the Stockholm Act of the Paris Convention” apply to the PCT. This appears to cause no problem because membership to the PCT is, in principle, limited to countries party to the Paris Convention (cf. PCT art.62(1) and Paris Convention art.1(1)). Another example is that art.2.1 of the TRIPS Agreement incorporates by reference arts 1 through 12 and 19 of the Paris Convention (1967) (Stockholm Act). However, the TRIPS Agreement does not incorporate future changes to the Paris Convention. Additional examples can be found in: “Results of the 28th (16th Extraordinary) Session of the PCT Assembly, March 13–17, 2000; Issues for Possible Discussion at the Diplomatic Conference”, Document PT/DC/6 (April 2000), Item 14.

The International Bureau indicated that discussion would be needed at the Diplomatic Conference on the international law implications of the automatic incorporation of future modifications of the PCT and the PCT Regulations into the PLT, in particular in respect of parties to the PLT which are not also PCT contracting states.<sup>18</sup> As these non-PCT contracting states are not represented in the PCT Assembly, they would therefore have no voice in future changes to the PCT Regulations. A further difficulty is posed by the fact that future changes to the PCT Administrative Instructions should also be automatically incorporated into the PLT, even though these changes are promulgated by the WIPO Director General after consultation with offices and authorities which have a direct interest in the proposed modifications, but without express approval by the PCT Assembly.<sup>19</sup>

Various options to deal with this problem were discussed in a document prepared by the International Bureau<sup>20</sup> and discussed at the Diplomatic Conference for the Adoption of the PLT, which, eventually, resulted in the adoption of PLT arts 16 and 17(2)(v).<sup>21</sup> In addition, an “Agreed Statement” was formulated during the PLT Diplomatic Conference consolidating the relationship between the PLT and the PCT.<sup>22</sup>

The effect of PLT art.16(1) is that any revisions, amendments and modifications of the PCT (made after June 2, 2000) will only apply for the purpose of the PLT if two conditions are satisfied. First, the revision, amendment or modification of the PCT must be consistent with the articles of the PLT. Secondly, that revision, amendment or modification of the PCT must be adopted by the PLT Assembly, for the purposes of the PLT, by a majority of three-fourths of the votes cast. Accordingly, future changes to the PCT will not apply for the purposes of the PLT unless and until they are formally adopted by the PLT Assembly.<sup>23</sup> In addition, PLT art.16(2) relates to provisions of the PCT (“transitional provisions”), and by virtue of which a revised, amended or modified provision of the PCT does not apply to a state party to the PCT, or to an office acting for such a state, for as long as that revised, amended or modified provision is incompatible with the law applied by that state or office.<sup>24</sup>

## Alignment of the Patent Cooperation Treaty with the Patent Law Treaty

In view of the adoption of the PLT and the relationship between the PLT and the PCT, the Working Group on Reform of the PCT discussed proposals designed to align the PCT with the requirements of the PLT. There was wide agreement as to a number of general observations made by various delegations<sup>25</sup>:

- the principles of the PLT should so far as possible be taken up in the PCT in order to achieve the same benefits for applicants and offices in the filing and processing of international applications as would be available for national applications;
- certain features of the PCT system differed from national and regional patent systems; some aspects of the PLT were less relevant than others in the context of the PCT system;

<sup>18</sup> Currently (March 1, 2011) all PLT members are also contracting states to the PCT. “Results of the 28th (16th Extraordinary) Session of the PCT Assembly, March 13–17, 2000; Issues for Possible Discussion at the Diplomatic Conference”, Document PT/DC/6, Item 16.

<sup>19</sup> “Results of the 28th (16th Extraordinary) Session of the PCT Assembly, March 13–17, 2000; Issues for Possible Discussion at the Diplomatic Conference”, Document PT/DC/6, Item 15.

<sup>20</sup> “Results of the 28th (16th Extraordinary) Session of the PCT Assembly, March 13–17, 2000; Issues for Possible Discussion at the Diplomatic Conference”, Document PT/DC/6, Items 17–23.

<sup>21</sup> PLT art.16 as currently in the PLT was not present in the “Basic Proposal for the Patent Law Treaty”; see Document PT/DC/3.

<sup>22</sup> “Patent Law Treaty, Regulations under the Patent Law Treaty and Agreed Statements by the Diplomatic Conference” (adopted by the Diplomatic Conference on June 1, 2000), Diplomatic Conference for the Adoption of the PLT, Document PT/DC/47 (June 2000), Agreed Statements, Item 2, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4057](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4057) [Accessed March 29, 2011].

<sup>23</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 16.01.

<sup>24</sup> “Explanatory Notes on the Patent Law Treaty and Regulations under the Patent Law Treaty”, Document PT/DC/48 Prov., 2000, Note 16.03.

<sup>25</sup> “Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9 (November 2002), Item 21, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4446](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4446) [Accessed March 29, 2011].

- while some provisions of the PLT could be implemented readily by changing the PCT Regulations, others would require changing the PCT articles; some proposed amendments to the PCT Regulations raised difficulties of possible inconsistency, to varying degrees, with the PCT articles, for example, in providing for the accordane of an international filing date where no claims were present in an international application;
- priority should be given by the Working Group on Reform of the PCT to those matters which would result in the greatest and most immediate practical benefits for users, having regard also to the degree of complexity involved and to workload implications for offices and authorities; for example, priority might be given to the following:
  - provisions for restoration of the priority right;
  - relief when time-limits were missed, especially the time-limit for entering the national phase.

With respect to issues in relation of the filing of an international application, the following amendments in the Regulations under the PCT were, eventually, adopted or amended<sup>26</sup>:

1. Filing missing parts of the description or missing drawings (PLT art.5(6); PCT art.11 and EPC r.20.5)<sup>27</sup>;
2. restoration of the right to priority (PLT art.13(2); PCT r.26bis.3).

The item:

3. addition or correction of a priority claim (PLT art.13(1); PCT r.26bis.1)

was already present in the PCT. In fact, PLT art.13(1) was modelled after PCT r.26bis.1, permitting the applicant to add or correct a priority claim, on or after the filing date, to an application which could have claimed the priority of an earlier application but did not do so.<sup>28</sup>

The following items in the PCT have not or only partly been aligned with the PLT:

4. requirements for according an international filing date to an international application (PLT art.5(1); PCT art.11(1) and r.20);
5. filing a description and/or drawings by a reference to another application (PLT art.5(7); no direct equivalent in the PCT).

In this article the requirements in relation to the accordane of an international filing date (items 4, 5 and 1, respectively) are investigated, elucidating the “misalignment” between provisions of the PLT and provisions of the PCT.

## **Inconsistencies in provisions dealing with filing date requirements**

### *Filing date requirements—PLT article 5*

PLT art.5 governs the requirements for the accordane of a date of filing. In particular, PLT art.5(1) prescribes the elements of an application to be filed for the purpose of according a date of filing. First, the office receiving the application documents needs to be satisfied that the elements that it has received are intended as an application for a patent (PLT art.5(1)(a)(i)). Secondly, the office must be provided with indications which identify the applicant and/or allow the applicant to be contacted. Instead of such

<sup>26</sup> On April 1, 2007, the Regulations under the PCT were amended to better align the PCT with requirements of the PLT.

<sup>27</sup> Provisions concerning the furnishing of missing parts of the description of missing drawings already existed before the reform of the PCT in view of the PLT (April 2007). In the context of aligning the PCT with the PLT, the existing provisions were amended.

<sup>28</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 13.01.

indications, the office may accept evidence allowing the identity of the applicant to be established or allowing the applicant to be contacted by the office (PLT art.5(1)(a)(ii) and (1)(c)). Thirdly, the office must have received a disclosure of the invention, either in the form of what appears to be a description or, where permitted, a drawing in place of that description (PLT art.5(1)(a)(iii) and (1)(b)). In addition, PLT art.5(7) obliges a contracting party to accept, at the time of filing, the replacement of the description and any drawings in an application by a reference to a previously filed application, subject to certain formal requirements.<sup>29</sup>

A PLT contracting party is obliged to accord a date of filing to an application which complies with the requirements of PLT art.5. Since the list of elements under PLT art.5(1) is exhaustive, a PLT contracting party is not permitted to require any additional elements for a filing date to be accorded.<sup>30</sup> In particular, it is not permitted to require that the application contains one or more claims, compliance with formal requirements (for example, that handwritten applications are not accepted), use of a prescribed language or payment of a filing fee.<sup>31</sup>

### *Filing date requirements—PCT article 11*

PCT art.11(1) prescribes the requirements for the accordance of an international filing date<sup>32</sup>:

“The receiving Office shall accord as the international filing date the date of receipt of the international application, provided that that Office has found that, at the time of receipt:

- (i) the applicant does not obviously lack, for reasons of residence or nationality, the right to file an international application with the receiving Office,
- (ii) the international application is in the prescribed language,
- (iii) the international application contains at least the following elements:
  - (a) an indication that it is intended as an international application,
  - (b) the designation of at least one Contracting State,
  - (c) the name of the applicant, as prescribed,
  - (d) a part which on the face of it appears to be a description,
  - (e) a part which on the face of it appears to be a claim or claims.”

### *Filing date requirements—differences/matters of concern*

#### Right to file an international application

The requirements under PCT art.11(1)(i) (“right to file”) are different from those under the PLT, because the accordance of a filing date in PLT art.5(1) is not dependent on the nationality or residence of the applicant. As, for example, Argentina is not a PCT contracting state, an international filing date will not be accorded when an Argentinean national living in Argentina files an international application. Pursuant to PCT art.9(2), the PCT Assembly may decide to allow residents and nationals of any country party to the Paris Convention which is not a party to the PCT to file international applications. No such decision has been taken.<sup>33</sup>

<sup>29</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.23.

<sup>30</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.02.

<sup>31</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.02.

<sup>32</sup> Patent Cooperation Treaty (last amended on October 3, 2001) and the Regulations under the PCT (as in force from 1 July 1, 2011), at <http://www.wipo.int/pct/en/texts/index.html> [Accessed March 29, 2011]. cf. Cees Mulder, “The Cross-Referenced Patent Cooperation Treaty” (published yearly), at <http://www.helze.com/> [Accessed March 29, 2011].

<sup>33</sup> *PCT Applicant’s Guide, International Phase*, (January 2011), Item 6.036: if the indications of the applicant’s residence and nationality as stated in the request do not support the applicant’s right to file an international application—that is, if the applicant appears not to be (or, where there are two or more applicants, none of the applicants appears to be) a resident or national of a contracting state—there is prima facie a defect under PCT art.11(1)(i) and the receiving office issues an invitation accordingly to correct that defect. In such a case, it may be that the applicant is able to show that he had,



If an applicant files the international application at a non-competent receiving office, there is a fail-safe arrangement in PCT r.19.4(a)(i) providing that the application will be forwarded to the International Bureau and is considered to have been received by that receiving office on behalf of the International Bureau as receiving office under PCT r.19.1(a)(iii). In this situation, PCT art.11(1)(i) is in alignment with the requirements of the PLT.

### Language of filing an international application

The requirement under PCT art.11(1)(ii) (“prescribed language”) is, in principle, different from that under PLT art.5(1). However, the fail-safe arrangement of PCT r.19.4(a)(i) provides that, when an international application is filed in a language not accepted by the receiving office, that application will be forwarded to the International Bureau and is considered to have been received by that receiving office on behalf of the International Bureau as receiving office under PCT r.19.1(a)(iii).<sup>34</sup> The International Bureau of the WIPO accepts international applications filed in “any language”.<sup>35</sup>

### Intended as an international application

The requirement under PCT art.11(1)(iii)(a) (“indication international application”) is in alignment with that under PLT art.5(1)(i).

### Designation of at least one contracting state

The requirement under PCT art.11(1)(iii)(b) (“designation of States”) is, in principle, different from that under PLT art.5(1). However, the adoption of PCT r.4.9 implies an automatic and all-inclusive designation of all PCT contracting states upon filing an international application.<sup>36</sup>

### Identification of applicant

The requirement under PCT art.11(1)(iii)(c) (“applicant”) is different from that under PLT art.5(1)(ii). PCT r.20.1(b) gives a definition of this requirement:

“For the purposes of Article 11(1)(iii)(c), it shall be sufficient to indicate the name of the applicant in a way which allows the identity of the applicant to be established even if the name is misspelled, the given names are not fully indicated, or, in the case of legal entities, the indication of the name is abbreviated or incomplete.”

This definition only deals with the situation that the name of the applicant is more or less known but contains some formalities error (“misspelled” or incomplete address) which may be corrected upon invitation by the receiving office (such correction will not result in a re-dating of the international

on the date on which the international application was actually received by the receiving office, the right to file an international application with that receiving office. In those circumstances, the applicant should submit evidence to the receiving office accordingly, together with a proposed correction of the indications concerning his residence and/or nationality. If the receiving office is satisfied, on the basis of that evidence, of the applicant’s right to file the international application, the invitation to correct the defect under PCT art.11(1)(i) will be considered to be an invitation to correct a defect under PCT art.14(1)(a)(ii) and r.4.5 in the prescribed indications concerning the applicant’s residence and/or nationality, and the indications may be corrected accordingly. If such a correction is made, no defect will be considered to exist under PCT art.11(1)(i), and the defect will thus not prevent the accordance of the actual date of receipt of the international application as the international filing date. Note, however, that the United States Patent and Trademark Office as receiving office has stated that it will not apply the procedure outlined above. See <http://www.wipo.int/pct/en/appguide/index.jsp> [Accessed March 29, 2011].

<sup>34</sup>“Summary of the Session — Changes Related to the PLT: Language of the International Application and Translations” (prepared by the chair), Working Group on Reform of the PCT, Document PCT/R/WG/2/12 (May 2002), Item 27, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>35</sup>PCT Applicant’s Guide, 2011), International Phase — Annex C — International Bureau of the WIPO, at [http://www.wipo.int/pct/en/appguide/index.jsp#](http://www.wipo.int/pct/en/appguide/index.jsp#/) [Accessed March 29, 2011].

<sup>36</sup>“Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9 (November 2002), Items 12–13.

application). However, the definition in PCT r.20.1(b) does not address the situation “allowing the applicant to be contacted” as prescribed in PLT art.5(1)(ii). This relates to situations where, for example, only the name and address of the patent attorney of the applicant and/or only the address or fax number of the attorney are known. The receiving office contacting the attorney and through him the applicant is not encompassed in the definition of PCT r.20.1(b). PCT r.20.1(b) could easily be adapted so as to bring it into alignment with PLT art.5(1)(ii).<sup>37</sup>

## Description

The requirement under PCT art.11(1)(iii)(d) (“description”) is in alignment with that under PLT art.5(1)(iii).

## Claims

The requirement under PCT art.11(1)(iii)(e) (“claim or claims”) is different from that under PLT art.5(1). For the accordance of a date of filing under the PLT, it is not permitted to require that the application contains one or more claims.<sup>38</sup>

As mentioned earlier, the PCT cannot become a “contracting party” to the PLT, so there is no obligation to comply with the requirements of the PLT. However, attempts were undertaken in the Working Group on the Reform of the PCT to align the PCT with the PLT with respect to the compulsory presence of claims as prescribed in PCT art.11(1)(iii)(e). In particular, the Working Group on Reform of the PCT indicated that it would be prepared to consider other ways of dealing with international applications having no claims pending revision of the PCT articles.<sup>39</sup>

A way to circumvent the requirement of PCT art.11(1)(iii)(e) is to regard claims as a “legal fiction”.<sup>40</sup> A proposal to this effect, prepared in great detail by the International Bureau, included the introduction of a suitably-worded pre-printed statement to be included in the request form (PCT/RO/101) as well as the presence of “claim-like” wording in the description. To this end a new item would be added to PCT r.20.4,<sup>41</sup> worded as follows:

“For the purposes of Article 11(1)(iii)(e), it shall be sufficient that there is wording in any part of the international application which makes it clear what is the matter for which protection is sought.”

This “claim-like” wording would be sufficient to constitute “a part which on the face of it appears to be a claim or claims” and, hence, support the accordance of an international filing date. It should be noted that PCT art.11(1)(iii)(e) does not prescribe where the part that appears to be a claim is to be included in the international application and, in addition, does not require that the claims be expressly identified as such. Where compliance with PCT art.11(1)(iii)(e) relies solely on either of these two possibilities, the international application would be considered to contain a formal defect under PCT art.14, which can be remedied by the furnishing of “formal” claims as a correction under PCT r.26.<sup>42</sup> The later furnishing of claims would be consistent with PLT art.6(1)(i).

<sup>37</sup> “Changes Related to the Patent Law Treaty (PLT): Other PLT-Related Changes” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/2/6 (2002), Item 21, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>38</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.02.

<sup>39</sup> “Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9, 2002, Item 26.

<sup>40</sup> “Changes Related to the Patent Law Treaty (PLT): Absence of ‘Formal’ Claims” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/2/8 (March 2002), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>41</sup> After the reform of the PCT in view of the PLT (April 2007), such an item would have been included in PCT r.20.1.

<sup>42</sup> “Changes Related to the Patent Law Treaty (PLT): Absence of ‘Formal’ Claims” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/2/8, 2002, Items 3–4.

However, it was noted in the Working Group on Reform of the PCT that some of the proposed amendments raised difficulties of possible inconsistency, to varying degrees, with the PCT articles—in particular, in providing for the according of a filing date where no claims were present in an international application.<sup>43</sup>

### *Filing date requirement—PCT v PLT*

The differences between the filing date requirements under the PCT as compared to the PLT cause friction. If a state becomes a contracting party to the PLT, this state is obliged to accord a filing date to an application which complies with the requirements applicable under PLT art.5.<sup>44</sup> No re-dating of the application will be effected if the applicant supplies a set of claims within some time after the filing date, either of his own volition or upon invitation by the office where the application was filed (cf. PLT r.2). Where an application as filed does not contain one or more claims, which may be required under PLT art.6(1)(i) (with reference to PCT art.3(2)), a PLT contracting party may require that at least one claim be subsequently filed under PLT art.6(7), within the time-limit prescribed in PLT r.6(1). However, failure to file such claim(s) within the prescribed time-limit would not result in the retroactive loss of the filing date, even if the application were refused under PLT art.6(8)(a).<sup>45</sup>

Suppose an applicant files an international application with the intention of, at a later date, entering the national phase before the national office of that state. If his application, on filing, does not contain at least one claim, no international filing date will be accorded by the receiving office acting under the PCT (PCT art.11(1)(iii)(e)). The receiving office (which may be the national office of the PLT contracting party) will invite the applicant to file at least one claim (PCT art.11(2)(a) and r.20.3(a)). If the applicant complies with the invitation, the receiving office accords as the international filing date, the date of receipt of the required correction (PCT art.11(2)(b) and r.20.3(b)). The question arises: will the national office of the PLT contracting party, after entry of the international application into its national phase, accept the initial filing date (when claims were not included) or the international filing date (when claims were received by the receiving office)? The answer is that only the international filing date can be accepted as the filing date under the national law of the state.

If, under the provisions of the PCT, the applicant upon invitation by the receiving office or of his own volition does not file at least one claim, his international application will not be refused. Instead, the receiving office will promptly notify the applicant that the application is not and will not be treated as an international application (PCT r.20.4(i)).<sup>46</sup> As no international filing date will be accorded to the application, this also implies that the international application will not have the effect of a regular national application (PCT art.11(3)) and that no priority can be claimed from it (PCT art.11(4)).

### *Filing by reference to a previously filed application—PLT article 5(7)*

As described above, PLT art.5(7) obliges a contracting party to accept, at the time of filing, the replacement of the description and any drawings in an application by a reference to a previously filed application,<sup>47</sup> subject to certain formal requirements.

<sup>43</sup>“Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9, 2002, Item 21(iii); “Summary of the Session — Other Matters” (prepared by the chair), Document PCT/R/WG/2/12, Item 59, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>44</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.01.

<sup>45</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.01.

<sup>46</sup>However, not all is lost in such a case. Pursuant to PCT art.26 the applicant would stand a good chance of proceeding with this application as a “national” application with the original filing date if the national Office does not require a claim as a filing date requirement under its national law.

<sup>47</sup>Note that a “previously filed application” need not be an application from which priority is claimed. Hence the previously filed application may have been filed more than 12 months prior to the filing date of the international application.

PLT r.2(5) provides two different types of requirements<sup>48</sup>: obligatory requirements (indicated by “shall”), and optional requirements (indicated by “may require”). Each PLT contracting party can decide which optional requirements it incorporates into its law as compulsory requirements for the accordance of a filing date. PLT art.5(7)(b) permits a contracting party to regard an application as not having been filed if the applicant fails to comply with the obligatory and any optional requirements under PLT r.2(5) implemented as compulsory by a PLT contracting party.<sup>49</sup>

PLT r.2(5)(a) prescribes that the indication that the description and any drawings are replaced by the reference to the previously filed application, as well as the number of that application and the office with which that application was filed, must be included in the application. According to PLT r.2(5)(a), a PLT contracting party may require that the reference also indicates the filing date of the previously filed application. PLT r.2(5)(a) does not require that the reference identifies any claims of the previously filed application that are incorporated by reference, since claims are not required for the purposes of the filing date.<sup>50</sup> In addition, a PLT contracting party may decide which of the optional requirements mentioned in PLT r.2(5)(b) are made compulsory for the accordance of a filing date:

- filing a copy of the previously filed application and, where the previously filed application is not in a language accepted by the office, a translation of that previously filed application, be filed with the office within a time-limit which shall be not less than two months from the date of receipt of the application;
- filing a certified copy of the previously filed application with the office within a time-limit which shall be not less than four months from the date of the receipt of the application.

Where the applicant indicated in the application containing the reference is not the same as the applicant identified in the previously filed application, the office pursuant to PLT r.2(5)(c) may require a declaration or other evidence that the previously filed application had been filed by that applicant’s predecessor or successor in title.<sup>51</sup> The latter requirement is not often implemented in the patent law of PLT contracting parties.<sup>52</sup>

### *Filing by reference to a previously filed application—PCT*

With respect to “filing by reference” the PCT was not aligned to the PLT. There was an initial proposal to incorporate a new r.20.4(e) into the PCT, which would provide for a reference to another document to replace the description, drawings and claims.<sup>53</sup> The formulation included<sup>54</sup>:

“For the purposes of Article 11(1)(iii)(d), a reference, made upon filing of the international application, in a language accepted by the receiving Office under Rule 12.1(a), to a previously filed application shall ... replace the description and any drawings and, if applicable, the claim or claims.”

<sup>48</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 2.05.

<sup>49</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 2.05; authors’ interpretation of Note 5.24.

<sup>50</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 2.05.

<sup>51</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 2.05.

<sup>52</sup>The EPO has not implemented this requirement in r.56 EPC 2000. In the UK, the Patent Act 1997 (as amended) includes a provision in art.15(1)(c)(ii) stating that a reference to an earlier relevant application must be “made by the applicant or a predecessor in title of his”.

<sup>53</sup>“Changes Related to the Patent Law Treaty (PLT): Contents of the International Application; Language of the International Application and Translations; Right of Priority and Priority Claims; Time Limits” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/2/8, Item 5.

<sup>54</sup>“Changes Related to the Patent Law Treaty (PLT)” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/2/8, Annex I.

Later on, the matter of “filing by reference” in the sense of the PLT was not pursued owing to time constraints and low priority.<sup>55</sup> As a consequence, in the request form (PCT/RO/101) no provision has been included to file an international application while referring to a previously filed application. This means that an applicant upon filing an international application always must file documents comprising the description, any drawings and, also, at least one claim.

Filing by reference is advantageous when transmitting the application by fax, since the application documents need not be sent anymore. However, when using electronic filing, the effort to include a copy of the application is relatively small. Hence the advance in technology away from fax transmission appears to have taken away the main advantage of filing by reference. Moreover, filing the complete application does not have the disadvantages of the risk of uncorrectable errors and the obligation to provide a (certified) copy of the previously filed application.

Filing an application by reference to a previously filed application is, in particular, convenient for applicants in that upon filing the application only the earlier application need be correctly identified in the request form. As more and more patent applications become available in electronic manner, the applicant need no longer file the corresponding application documents. “Filing by reference” is most convenient when filing a divisional application: it suffices to refer to the description and drawings of the parent application while, preferably at the same time, filing a new set of claims. At present, the PCT does not provide for the filing of divisional applications during the international phase.<sup>56</sup>

It will be shown in the section “Filing an international application by reference to a previously filed application” below that “filing by reference” under the PCT is possible; however, in a restrictive manner. In the section “Missing entire description of missing entire set of claims—PCT Rule 20.6” a different use of “filing by reference” will be described allowing under the PCT to file so-called missing elements, i.e. where the entire description or all of the claims are missing.

## **Further inconsistencies in provisions dealing with defects which may affect the filing date**

### *Filing missing parts of the description or missing drawings—PLT article 5(6)*

PLT art.5(6) obliges a PLT contracting party to allow the inclusion, in the application, of a missing part of the description or a missing drawing filed within a prescribed time-limit.<sup>57</sup> The provision applies whether or not the applicant has been notified of an item being missing. Normally, the late filing of a missing part of the description or a missing drawing causes the filing date to become the date of receipt of the missing item, provided that all of the other requirements for the accordance of a filing date have been complied with on that date (cf. PLT r.2(3)).

In particular, PLT art.5(6)(b) obliges a contracting party to allow, upon the request of the applicant, the inclusion of a missing part of the description or a missing drawing in the application without loss of the initial filing date, where that missing part or missing drawing is “completely contained” in an earlier application, from which priority is claimed, provided the additional formality requirements are complied

<sup>55</sup>“Changes Related to the Patent Law Treaty (PLT) — Conform PCT ‘Missing Part’ Requirements to Those of the PLT” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/4/2 (March 2003), Item 5, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>56</sup> See, e.g., “Divisional Applications under the PCT” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/4/9 (April 2003), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011]; “Divisional Applications under the PCT” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/4/9, 2003, Items 5–6: while, at present, the PCT does not provide for the filing, during the international phase, of divisional applications, it is to be noted that the 1968 draft of the PCT contained provisions in both the draft Treaty and the draft Regulations under the Treaty which would have allowed the applicant, in the case of lack of unity of invention, at his option, to either (1) restrict the claims, or (2) pay additional fees, or divide the application, or both. However, in the 1969 draft of the PCT those provisions were deleted, and the final text of the PCT as signed at the Washington Diplomatic Conference in June 1970 does not contain any provisions concerning the division of an international application during the international phase.

<sup>57</sup>“Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 5.21.

with (cf. PLT r.2(3) and (4)).<sup>58</sup> The PLT leaves the question whether, in a particular case, a missing part of the description or a missing drawing is “completely contained” in the earlier application to be treated as a clerical check by the office, based on the indications provided by the applicant.<sup>59</sup>

The wording of PLT art.5(6)(b) is very specific with respect to the nature of the earlier application and by when that application must be mentioned (emphasis added):

“Where the missing part of the description or the missing drawing is filed under subparagraph (a) to rectify its omission from an application which, *at the date on which one or more elements referred to in paragraph (1)(a) were first received by the Office, claims the priority of an earlier application,* the filing date shall ... be the date on which all the requirements applied by the Contracting Party under paragraphs (1) and (2) are complied with.”

The italicised part of the above citation makes it clear that when the applicant desires to make use of the provision of PLT art.5(6)(b) to incorporate a missing part of the description or a missing drawing into an already filed application without loss of the filing date initially accorded by the office, the earlier application must not only be a priority application but also that the priority of this earlier application must have been claimed on “the date on which one or more elements” referred to in PLT art.5(1)(a) “were first received by the Office”, i.e. on the initial filing date.

### *Filing missing parts of the description or missing drawings—PCT rule 20.5*

The requirements as set out in PLT art.5(6) for filing missing parts of the description or missing drawings have been taken over in PCT r.20. In particular, “missing parts” are defined in PCT r.20.5 (emphasis added):

“Where, in determining whether the papers purporting to be an international application fulfill the requirements of Article 11(1), the receiving Office finds that a *part* of the description, claims or drawings is or appears to be missing, including the case where *all* of the drawings are or appear to be missing but *not* including the case where an *entire element* referred to in Article 11(1)(iii)(d) or (e) is or appears to be missing”.

According to the above definition a “missing part” includes any *part* of the description, any *part* of the claims and/or any *part* or *all* of the drawings of the international application as long as it is not the “entire” description (PCT art.11(1)(iii)(d)) or the “entire” set of claims (PCT art.11(1)(iii)(e)). As can be seen, the definition also refers to a missing part of the claims (see section “Missing part of the claims—PCT rule 20.5” below).

Most patent laws already had a provision allowing the applicant to late file missing drawings. In the PCT this is dealt with in PCT art.14(2):

“If the international application refers to drawings which, in fact, are not included in that application, the receiving Office shall notify the applicant accordingly and he may furnish them within the prescribed time limit and, if he does, the international filing date shall be the date on which the drawings are received by the receiving Office. Otherwise, any reference to the said drawings shall be considered nonexistent.”

<sup>58</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note 5.21.

<sup>59</sup> “Explanatory Notes on the Patent Law Treaty and Regulations”, Document PT/DC/48 Prov., 2000, Note R 2.04.

Before the Reform of the PCT in view of the PLT (April 2007), PCT art.14(2) found its implementation in PCT r.26.6. Although PCT art.14(2) and r.26 belong to the “formalities examination” by the receiving office, the consequence of the late furnishing of drawings was (always) that the international filing date, already accorded pursuant PCT art.11(1), was re-dated to the date on which the missing drawings were received by the receiving office.

As a result of aligning the PCT with the PLT, the requirement of the late filing of drawings was incorporated into PCT r.20 implementing PCT art.11 (“international filing date”) while abolishing PCT r.26.6.<sup>60</sup> At the same time, the scope of PCT r.20 was broadened, allowing the applicant to file not only missing drawings but also missing parts of the description and/or missing parts of the claims (see section “Missing part of the claims—PCT rule 20.5” below), as well as providing for the case when all of the description and/or all of the claims are missing (see section “Missing entire description of missing entire set of claims—PCT rule 20.6” below).

Missing parts of the description or missing drawings can be filed by the applicant upon invitation when the receiving office finds that parts of the description and/or drawings are, or appear to be, missing. PCT r.20.5(a) deals with the case that the receiving office finds that a “missing part” is missing or appears to be missing. The time-limit for furnishing such missing parts is two months from the date of the invitation (PCT r.20.7(a)(i)).

The filing of “missing parts” can also be done by the applicant of his own volition. This own volition is hidden in the wording “or otherwise” in PCT r.20.5(b), in the sentence: “Where, following an invitation under paragraph (a) *or otherwise*, the applicant furnishes to the receiving Office ...” (emphasis added).

If the applicant notices and wishes to correct the defect on his own initiative, this is permitted within a time-limit of two months from the date on which papers were first received by the receiving office (PCT r.20.7(a)(ii)). The time-limits in PCT r.20.7(a)(i) and (ii) were fixed at two months in alignment with the minimum duration of such time-limits under the PLT.<sup>61</sup>

### Filing missing parts—re-dating the international application

The filing of missing parts of the description or missing drawings normally results in a re-dating of the international filing date. If the applicant furnishes to the receiving office the required correction under PCT art.11(2) on a date after the date of receipt of the purported international application (but falling within the applicable time-limit under PCT r.20.7), the receiving office will accord that later date as the international filing date (cf. PCT r.20.3(b)(i) and r.20.5(c)).

Where the international filing date has been corrected in the above sense, the applicant may realise that his re-dated international application no longer lies within the period for claiming priority from an earlier (national) application and he might want to undo the filing of the missing parts retroactively. In that case, the applicant may request the receiving office to disregard the missing part in order to establish that the initial filing date<sup>62</sup> becomes the international filing date and, hence, to retain the priority claim (PCT r.20.5(e)). This notice of withdrawal has to be sent to the receiving office within one month from the date of mailing of the later submitted parts (PCT r.20.5(e)).

<sup>60</sup> The abolition of PCT r.26.6 has diminished the effectiveness of PCT art.14(2) because all issues relating to late-filed drawings are now covered in PCT r.20 implementing PCT art.11(2).

<sup>61</sup> “Report — Missing Elements and Parts of the International Application” (adopted by the Working Group), Document PCT/R/WG/7/13, 2005, Item 24, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=7129](http://www.wipo.int/meetings/en/details.jsp?meeting_id=7129) [Accessed March 29, 2011].

<sup>62</sup> In this article the wording the “initial filing date” is used to indicate the date on which one or more elements referred to in PCT art.11(1)(iii) were first received by the receiving office.

Generally, the “priority period” is 12 months from the filing date of the earlier application from which priority is claimed.<sup>63</sup> If the corrected international filing date falls outside this 12-month period but within a period of two months after the expiration of the priority period of the claim concerned, the applicant may file a request for restoration of right of priority at the receiving office under the applicable condition (PCT r.26bis.3).<sup>64</sup>

### *Filing missing parts without re-dating—incorporation by reference*

Under certain circumstances, missing parts of the description or missing drawings can be added to an international application without affecting the international filing date. In line with PLT art.5(6) and r.2(4), this is possible when the missing parts of the description or the missing drawings are “completely contained” in an earlier application from which priority is claimed on the initial filing date.

As a first step the applicant must declare, upon filing the international application containing at least some of the elements referred to in PCT art.11(1)(iii) and while claiming priority from an earlier application, that he reserves the right to later on rely on parts or elements which are completely contained in the priority application. To this end Box No.VI “Priority Claim” of the request form (PCT/RO/101) includes a pre-printed statement, stating:

*“Incorporation by reference:* where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6”<sup>65</sup>.

The formulation of this statement is based on PCT r.4.18 and is formulated in line with PLT art.5(6)(b) and r.2(4)(5). The priority claim must have been included in the request on the initial filing date and cannot be added later on, for example, by applying PCT r.26bis.1(a).<sup>66</sup> The latter requirement is in line with PLT art.5(6).

If the applicant files a missing part of the description or a missing drawing based on the content of the application from which priority is claimed on the initial filing date, the following requirements must be met (cf. PCT r.20.6(a)):

- The applicant must confirm the incorporation by reference by way of a written notice to the receiving office.
- Such notice should be accompanied by:
  - a sheet or sheets embodying the missing part as contained in the application from which priority is claimed;
  - where the applicant has not already complied with the requirements of PCT r.17.1(a), (b) or (b-bis),<sup>67</sup> a copy of the priority application as filed;

<sup>63</sup> cf. PCT art.8(2) referring to art.4 of the Paris Convention. Article 4A(1) and 4C(1) of the Paris Convention regulate a right of priority of 12 months for patents and utility models.

<sup>64</sup> A number of receiving offices have declared that PCT r.26bis.3 is not compatible with the national law applied by the receiving office (PCT r.26bis.3(j)). For these offices, restoration of the right of priority is not possible. In addition, a number of designated/elected offices has declared that restoration of the right of priority is not compatible with the national law as applied by the designated/elected office (PCT r.49ter.1(g)).

<sup>65</sup> If such a statement was not contained in the request at the time of filing, it can only be added to the request if it was otherwise contained in, or submitted with, the international application on the date of filing (cf. PCT r.4.18, last sentence).

<sup>66</sup> See the *PCT Applicant's Guide — International Phase*, 2011, Item 6.028, at <http://www.wipo.int/pct/guide/en/gdvoll/pdf/gdvoll.pdf> [Accessed March 29, 2011].

<sup>67</sup> PCT r.17.1(a) relates to the case where a certified copy of the earlier application has been submitted by the applicant to the International Bureau or the receiving office (unless it has already been filed with the receiving office together with the international application).



- where the priority application is not in a language in which the international application is filed (PCT r.20.6(a)(iii)), a translation or translations of the priority application; and
- an indication as to where the missing part is contained in the priority application and, where applicable, in any translation of the earlier application.

It seems superfluous that upon filing missing parts of the description or missing drawings, the applicant should confirm the incorporation by reference statement under PCT r.4.18. The relevance of the formal confirmation of the “incorporation by reference” was extensively discussed in the Working Group on Reform of the PCT.<sup>68</sup>

The start of the two-month time-limit for confirming the incorporation by reference of missing parts of the description or missing drawings differs depending on the situation. Where no invitation by the receiving office has been sent to submit missing parts, the time-limit to confirm is two months from the date on which papers were first received by the receiving office (PCT r.20.7(a)(ii)). Where such an invitation has been issued, the time-limit to confirm is two months from the date of mailing of this invitation (PCT r.20.7(a)(i)).<sup>69</sup>

Where the receiving office finds that the requirements of PCT r.4.18 and PCT r.20.6(a) have been complied with and that the missing part of the description or the missing drawing is completely contained in the priority application, that part is considered to have been contained in the purported international application on the initial filing date.

The procedure of incorporation by reference does not apply if the receiving office has notified the International Bureau under PCT r.20.8(a) that any of r.20.3(a)(i) and 20.3(b)(ii), 20.5(a)(ii) and 20.5(a)(d), and 20.6 are not compatible with its national law.<sup>70</sup>

In most contracting states, the parts will be treated as if they were actually contained in the international application as originally filed.<sup>71</sup> However, those designated/elected offices which have submitted notifications of incompatibility under PCT r.20.8(b), may treat the international application as if the international filing date had been accorded on the basis of the date on which the sheets containing the missing parts were submitted (PCT r.20.8(c)).<sup>72</sup>

### *Missing part of the claims—PLT article 5(6)*

PLT art.5(6) does not address the issue of allowing the inclusion, in the application, of a missing part of the claims filed within a prescribed time-limit. The reason for this is that claims are not a filing date requirement according to the PLT.

PCT r.17.1(b) relates to the case where the priority document is issued by the receiving office and the applicant has requested the receiving office to transmit the priority document to the International Bureau. PCT r.17.1(b-bis) relates to the case where the priority document is available to either the International Bureau or to the receiving office from a digital library and the applicant has requested to obtain the priority document from such a digital library.

<sup>68</sup>“Summary of the Session—‘Missing Part’ Requirements” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/5/13 (2003), Item 88, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

The outcome of the discussion in the Working Group on Reform of the PCT was that “incorporation by reference” is not to be regarded as a standard feature applicable to all international applications but that *express confirmation* by the applicant would be required if the applicant wanted to rely on this instrument to correct a mistake made when filing the application. In other words, the content of prior applications is not automatically incorporated by reference into the international application; rather an express confirmation is required by the applicant in each and every case.

<sup>69</sup> If this time-limit expires after the expiration of 12 months from the filing date of the earliest application, the priority of which is claimed, the receiving office will draw this circumstance to the attention of the applicant. *PCT Applicant’s Guide — International Phase*, 2011, Item 6.029, at <http://www.wipo.int/pct/en/appguide/index.jsp> [Accessed March 29, 2011].

<sup>70</sup> Such a receiving office will neither invite nor accept a confirmation of the incorporation by reference.

<sup>71</sup> Designated and elected offices may, to a limited extent, review decisions by receiving offices which have allowed incorporation by reference (PCT r.82ter.1(b)).

<sup>72</sup> Missing parts may be omitted only after having given the applicant the opportunity to make observations on this outcome and/or to request that, at least, the missing parts which had been furnished be disregarded (PCT r.20.8(c)).

*Missing part of the claims—PCT rule 20.5*

As discussed, PCT art.11(1)(iii)(e) requires the presence of “a part which on the face of it appears to be a claim or claims”. Hence the case may arise that a part of the claims is missing. It is for this reason that the PCT allows the filing of a missing part of the claims. The definition in PCT r.20.5 (“missing parts”) includes the situation where a part of the claims are missing (emphasis added):

“Where, in determining whether the papers purporting to be an international application fulfill the requirements of Article 11(1), the receiving Office finds that a *part* of the description, *claims* or drawings is or appears to be missing, including the case where all of the drawings are or appear to be missing but not including the case where an entire element referred to in Article 11(1)(iii)(d) or (e) is or appears to be missing ... .”

According to the above definition a “missing part” includes any *part* of the description, any *part* of the claims and/or any *part* or *all* of the drawings of the international application as long as it is not the “entire” description or the “entire” set of claims (see section “Missing Entire Description of Missing Entire Set of Claims — PCT Rule 20.6” below).

Analogous to what is described in section “Filing Missing Parts of the Description or Missing Drawings—PCT Rule 20.5” above, a missing part of the claims can be filed by the applicant of his own volition or upon invitation, when the receiving office finds that a part of the claims is, or appears to be, missing. The filing of a missing part of the claims normally results in a re-dating of the international filing date (cf. PCT r.20.5(c)).

Analogous to what is described in the section “Filing Missing Parts Without Re-dating—Incorporation by Reference”, a missing part of the claims can be added to an international application without affecting the international filing date. This is possible when the missing part of the claims is “completely contained” in an earlier application from which priority is claimed on the initial filing date.

*Missing entire description of missing entire set of claims—PLT article 5(6)*

PLT art.5(6) deals with the inclusion, in the application, of missing *parts* of the description and missing drawings. However, PLT art.5(6) does not address the issue of allowing the inclusion of the *entire* description and/or the *entire* set of claims.

*Missing entire description of missing entire set of claims—PCT rule 20.6*

For the purpose of according an international filing date, PCT art.11(1)(iii)(d) and (e), as discussed, require the presence of “a part which on the face of it appears to be a description” and “a part which on the face of it appears to be a claim or claims”, respectively. In addition, the PCT did not implement the provision of “filing by reference” (see section “Filing by Reference to a Previously Filed Application—PCT” above).

The Working Group on Reform of the PCT considered a different approach with respect to the issue of “filing by reference” by considering that under the PLT, an applicant can, for the purposes of the filing date of the application, replace the description and any drawings by a reference to a previously filed application (see PLT art.5(7) and r.2(5)). In particular, the Working Group explored the possibilities as to whether the proposed incorporation by reference discussed in the context of “missing parts” could be extended to cover the contents of such earlier application for the purposes of overcoming PCT art.11(1)(iii)(d) and (e) defects; such defects are addressed as “missing elements” and refer, for example, to the case where the entire description or all the claims is missing.<sup>73</sup>

<sup>73</sup>“‘Missing Part’ Requirements” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/6/4, 2004, Item 11, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

The result was that the PCT Regulations were amended by adopting a new r.20.6 allowing the applicant, by way of reference to an earlier application, not only to rectify the omission, at the time of filing, of certain *parts* of the international application (the so-called “incorporation by reference” of “missing parts”, similar to the provision under PLT art.5(6)(b) and r.2(4)) without the loss of the international filing date, but also to allow replacement of the “part which on the face of it appears to be a description” (PCT art.11(1)(iii)(d)) and/or the “part which on the face of it appears to be a claim or claims” (PCT art.11(1)(iii)(e)) for the purposes of the international filing date (the so-called incorporation by reference of “missing elements”, similar to the provision under PLT art.5(7) in respect of the description and any drawings).<sup>74</sup>

From the definition in PCT r.20.5 (“missing parts”) it follows that a “missing part” only includes any part of the description, any part of the claims and/or any part or all of the drawings of the international application. The wording “missing elements” is used when the “entire” description or the “entire” set of claims is or appears to be missing. Such an “element” is mentioned in PCT r.20.3(a)(ii) and in 20.3(b)(ii) where it is identified as: “an element referred to in Article 11(1)(iii)(d) or (e)”. This should not be confused with the wording: “one or more elements referred to in Article 11(1)(iii)” which is used in PCT r.20.3(b)(ii), 20.5(d), 20.6(b) and 20.7(a)(ii), because the latter definition includes all five items of PCT art.11(1)(iii) including the description (item d) and the claims (item e). To further confuse things, in PCT r.20.5(a) and 20.6(a)(i) reference is made to (emphasis added): “an *entire* element referred to in Article 11(1)(iii)(d) or (e)”, which wording probably means the same as “element” at the other occurrences.<sup>75</sup> Apparently, the word “entire” has been added to emphasise the difference between a “part” of the description or claims and the “entire” description or claims. For legal consistency, it would, however, be better to delete “entire” from the wording “entire element” in PCT r.20.5(a) and 20.6(a)(i).

“Missing elements” can be filed by the applicant of his own volition or upon invitation when the receiving office finds that the entire description and/or the entire set of claims are, or appear to be, missing. Such a finding is addressed as a “defect under PCT Article 11(1)” and dealt with in PCT r.20.3 in relation to any of the requirements of PCT art.11(1)(iii)(a)-(e) and, in particular, with respect to “an element referred to in Article 11(1)(iii)(d) or (e)”, i.e. when the entire description and/or the entire set of claims are missing.

If the applicant files a “missing element” based on the content of the application from which priority is claimed on the initial filing date, the following requirements must be met (cf. PCT r.20.6(a)):

- The applicant must confirm the incorporation by reference by way of a written notice to the receiving office.
- Such notice should be accompanied by:
  - a sheet or sheets embodying the missing element as contained in the application from which priority is claimed;
  - where the applicant has not already complied with the requirements of PCT r.17.1(a), (b) or (b-*bis*), a copy of the priority application as filed;
  - where the priority application is not in a language in which the international application is filed (PCT r.20.6(a)(iii)), a translation or translations of the priority application.

Similar to the situation of “missing parts”, the start of the two-month time-limit for confirming the incorporation by reference of missing elements differs depending on whether the receiving office has sent an invitation to submit missing element or whether the applicant files missing elements of his own volition.

<sup>74</sup>“Missing Part” Requirements” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/6/4, 2004, Item 12.

<sup>75</sup>Note that the wording “entire elements” is also used in PCT r.91.1(g)(i) in relation to PCT art.3(2).

Where the receiving office finds that the requirements of PCT r.4.18 and PCT r.20.6(a) have been complied with and that the missing element is completely contained in the priority application, that element is considered to have been contained in the purported international application on the initial filing date.

In most contracting states, the elements will be treated as if they were actually contained in the international application as originally filed.<sup>76</sup> However, those designated/elected offices which have submitted notifications of incompatibility under PCT r.20.8(b) may treat the international application as if the international filing date had been accorded on the basis of the date on which the sheets containing the missing elements were submitted (PCT r.20.8(c)).

## **Filing an international application by reference to a previously filed application**

In the section “Filing by Reference to a Previously Filed Application—PCT” above, it was discussed that the PCT was not aligned to the PLT with respect to the issue of “filing by reference”. Although not explicitly provided for in the PCT, there is, however, a possibility to file an international application by reference to an earlier application, if that earlier application is an application from which priority is claimed on the initial filing date. Suppose that on that day the applicant only files a filled-in request form (PCT/RO/101) containing at least the priority claim to be relied on for the incorporation of reference. By filing the request form to the receiving office, the receiving office has at least received “an indication that” the application “is intended as an international application”, thereby meeting the requirement of PCT art.11(1)(iii)(a). In addition, the receiving office will notice that the application as filed does not fulfil all requirements of PCT art.11(1)(iii) for the accordance of an international filing date and will promptly invite the applicant to file the required corrections (PCT art.11(2) and r.20.3(a)). The applicant can then confirm that the missing elements (the entire description and the entire set of claims) and the missing part (all of the drawings) are incorporated by reference based on the priority application (PCT rr.20.6 and 4.18). Of course, upon incorporating by reference the missing elements and the missing parts, the applicant must submit to the receiving office all the sheets embodying the missing elements and the missing parts (PCT r.20.6(a)(i)). If not already available to the receiving office, the applicant must also file a copy (and possibly a translation) of the priority application (PCT r.20.6(a)(ii) and (iii)).

## **Discussion**

### *Amendment of the PCT articles and the Regulations*

The PCT articles can be revised by a Revision Conference of the PCT Contracting States (PCT art.60(1)). With currently more than 140 PCT contracting states, it will be difficult to achieve consensus about the required revision of the PCT articles.

The Regulations under the PCT may be amended by the Assembly (PCT art.58(3)) and require unanimous consent. In order to make certain amendments acceptable, transitional reservations are frequently incorporated in the amended Regulations. A PCT contracting state declaring that such an amendment is not compatible with the national law of the state need not apply the amended provision until such time as the position might be solved under its national law.<sup>77</sup>

<sup>76</sup> Designated and elected offices may, to a limited extent, review decisions by receiving offices which have allowed incorporation by reference (PCT r.82ter.1(b)).

<sup>77</sup> For examples of reservations and incompatibilities (situation as of July 2010) see PCT r.4.9(b), r.4.10(d), r.20.1(d), r.20.8(a) and (b), r.26.3ter(b) and (d), r.26bis.3(j), r.49.5(l), r.49.6(f), r.49ter.1(g), r.49ter.2(h), r.51bis.1(f), r.51bis.2(c), r.51bis.3(c) and r.66.1bis(b).

### *“Bending” of PCT articles in the Regulations*

Flexibility in the system has over the years been added to the PCT by amending the Regulations under the PCT. In this manner, the rigidity of certain PCT articles has been mitigated in the PCT Regulations. At a number of occasions this has led to inconsistencies between the PCT articles and the PCT Regulations. Some examples of such inconsistencies are given in the following paragraphs.

#### Designation fees

A first example of an inconsistency between a PCT article and the PCT Regulations is that it was desired at a certain moment in time to abolish the designation fees and incorporate these into a new so-called “international filing fee”.<sup>78</sup>

PCT art.4(2) states (emphasis added):

“Every designation shall be subject to the payment of the *prescribed* fee within the *prescribed* time limit.”

The word “prescribed” indicates that the “fee” and the “time limit” are to be found somewhere in the PCT Regulations. Before the abolition of the designation fee, it was “prescribed” in PCT r.15.2 that the “international fee” consists of two parts: the “basic fee” and the “designation fee”. The time-limit for payment of the designation fee was prescribed in PCT r.15.4. After the accordance of the international filing date, the receiving office checks, among other things, whether the fees have been paid (PCT art.14). In PCT art.14(3)(a) the receiving office checks whether within the prescribed time-limit “no fee prescribed under Article 4(2) has been paid in respect of any of the designated States”. In PCT art.14(3)(b) the receiving office checks whether “the fee prescribed under Article 4(2) has been paid in respect of one or more (but less than all) designated States within the prescribed time limit”. The various consequences of non-compliance are indicated in the respective paragraphs of the articles.

What happened to the payment of designation fees was abolished?<sup>79</sup> Well, there is no longer any “prescribed” fee and there is no longer any “prescribed” time-limit for the designation fee(s) in the PCT Regulations.<sup>80</sup> The two instances of the word “prescribed” in PCT art.4(2) are preserved without reference in the Regulations. No sentence was added somewhere in amended PCT r.15 about the international filing fee, such as:

“By paying the international filing fee within the time limit of Rule 15.4, the applicant is deemed to have paid the fee prescribed in Article 4(2) within the time limit prescribed in Article 4(2).”<sup>81</sup>

It can be concluded that PCT art.4(2) has become a “lame duck”.

What happened with the references in PCT art.14(3) with respect to the “fee prescribed under Article 4(2)”? As the designation fee was linked to the international filing fee, the wording “fee prescribed under Article 4(2)” was given the following interpretation in PCT r.27.1(b):

“For the purposes of Article 14(3)(a) and (b), ‘the fee prescribed under Article 4(2)’ means the international filing fee (Rule 15.1) and, where required, the late payment fee (Rule 16bis.2).”

<sup>78</sup>“The Concept and Operation of the Designation System” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/1/1 (September 2001), Item 59, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>79</sup>The Regulations under the PCT as amended, effective January 1, 2004.

<sup>80</sup>There is no reference in the *PCT Applicant’s Guide — International Phase*, 2011, to PCT art.4(2). In addition, there is no mention of the “designation fee”.

<sup>81</sup>The original proposal of the International Bureau for the reformulation of PCT r.15.1, as contained in the Annex of PCT/R/WG/1/1, in relation to the “international filing fee” contained a sentence: “That fee includes the fee referred to in Article 4(2).” However, this sentence was abolished in later versions of PCT r.15.1.

Another consequence of the abolishment of the designation fees was the introduction of PCT r.4.9 specifying an automatic and all-inclusive designation of all PCT contracting states, for all types of protection and also in respect of regional patent treaties. The introduction of this rule has more or less inactivated PCT arts 43, 44 and 45, at least insofar as the international phase is concerned.

### *WTO priority claims*

A second example of an inconsistency between the PCT articles and rules is that it was desired, in view of the TRIPS Agreement, to acknowledge apart from priority claims from Paris Convention states as well as parties to the WTO. However, PCT art.8(1) is “rigid” about this:

“The international application may contain a declaration, as prescribed in the PCT Regulations, claiming the priority of one or more earlier applications filed in or for any country party to the Paris Convention for the Protection of Industrial Property.”

In addition PCT art.8(2)(a) specifically refers to the “Stockholm Act of the Paris Convention”. Flexibility was added to the Regulations, by the following addition in PCT r.4.10(a) (emphasis added):

“Any declaration referred to in Article 8(1) (‘priority claim’) may claim the priority of one or more earlier applications filed either in or for any country party to the Paris Convention for the Protection of Industrial Property or *in or for any Member of the World Trade Organization that is not party to that Convention.*”

### *Misalignments in the Regulations*

There are also minor “misalignments” between various rules in the Regulations under the PCT. For example, PCT r.4.5 clearly states, without any prejudice, that the indications of the applicants in the request with respect to name, address, nationality and residence must be indicated for “each of them”. Similarly, PCT r.4.15 clearly states, without any prejudice, that all applicants must sign the request. When looking at these rules, one is made to believe that “all” applicants have to comply with the prescriptions in these rules. Nevertheless, PCT r.26.2bis(b) and (a) say that (for the purpose of the formalities check by the receiving office under art.14(1)(a)) it is sufficient if one of the applicants meets the requirement of PCT r.4.5(a)(ii) and (iii), and r.4.15, respectively.<sup>82</sup> Such inconsistencies render the PCT user-unfriendly.

### Discussions in the Working Group on Reform of the PCT

At the first session of the Working Group on Reform of the PCT held in 2001, proposals were discussed to amend the Regulations under the PCT so as to align the requirements of the PCT with regard to claims as a filing date requirement to those of the PLT.<sup>83</sup> PCT art.11(1)(iii)(e) requires that for an international filing date to be accorded, an international application shall, inter alia, contain a part which on the face of it appears to be a claim or claims whereas, under the PLT, claims are not required for a filing date to be accorded (PLT art.5(1)). The comments and concerns expressed by the various delegations included the following<sup>84</sup>:

<sup>82</sup>Note, however, that any designated office may in accordance with the applicable national law require the applicant to furnish the confirmation of the international application by the signature of any applicant for the designated state who has not signed the request and/or any missing indication required under PCT r.4.5(a)(ii) and (iii) in respect of any applicant for the designated state (cf. PCT r.51bis.1(a)(vi) and (vii), respectively).

<sup>83</sup>“Summary of the Session — Contents of the International Application; Language of the International Application and Translations; Right of Priority and Priority Claims; Time Limits” (prepared by the International Bureau), Document PCT/R/WG/1/5 (October 2001), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4446](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4446) [Accessed March 29, 2011].

<sup>84</sup>“Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9 2002, Item 25.

- the idea of according a filing date under the PCT to an international application without claims was widely supported, but the wording of PCT art.11(1)(iii)(e) and art.58 did not support the draft rules proposed—it would be necessary to develop a proposal to revise the PCT itself;
- to adopt amended PCT Regulations that were so clearly inconsistent with the PCT articles itself would jeopardise the rights of applicants;
- the PCT provided no basis for adding claims before the international search took place.

As a response to these concerns, the Working Group in Reform of the PCT indicated that it would be prepared to consider other ways of dealing with international applications having no claims pending revision of the PCT itself. The International Bureau indicated that it would attempt to elaborate proposals bearing in mind, in particular, the following possibilities<sup>85</sup>:

- the PCT distinguishes between the “international application” on the one hand and the “record copy” on the other; different treatment may be able to be accorded to papers according to those different notions;
- advantage might be able to be taken in cases where there is “claim-like” wording appearing in the description; it was noted that the procedure under the EPC provided for the description to repeat, in effect, the wording of the claims;
- the request form could include pre-printed wording sufficient to constitute “a part which on the face of it appears to be a claim or claims” for the purposes of PCT art.11(1)(iii)(e);
- the international search might be able to be undertaken without the presence of formal claims, or on the basis of a “search statement” furnished by the applicant;
- new possibilities being developed for combined search and examination under the PCT might allow for claims furnished under PCT art.34 to be taken into account for both international search and international preliminary examination.

In addition, proposals in relation to “filing by reference to a previously filed application” were discussed at the first session of the Working Group on Reform of the PCT. The comments and concerns expressed by the various delegations included the following<sup>86</sup>:

- some delegations supported and others opposed the proposal;
- the cases requiring this kind of remedy were rare, and certain delegations felt that this issue should not have a high priority;
- any proposals in this direction should be co-ordinated with the proposal for the expanded international search system, where the International Searching Authority, in addition to the International Search Report, establishes a written opinion;
- user representatives expressed their support for a proposal which would permit such reference filings under the PCT.

The Working Group agreed that the question of reference filings should be reconsidered in substance and in terms of its priority among the other proposals before the Working Group.<sup>87</sup>

<sup>85</sup> “Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9, 2002, Item 26.

<sup>86</sup> “Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9, 2002, Item 27.

<sup>87</sup> “Summary of the Session — Changes Related to the PLT” (prepared by the chair), Document PCT/R/WG/1/9, 2002, Item 28.

In later sessions of the Working Group on Reform of the PCT priority was given to those matters “which would result in the greatest and most immediate practical benefits for users, having regard also to the degree of complexity involved and to workload implications for Offices and Authorities”. In particular, the Working Group focused on proposals concerning restoration of the right of priority and relief when time-limits were missed, especially the time-limit for entering the national phase.<sup>88</sup>

### Reform of the PCT—issues not pursued

During its meeting in October 2005, the Assembly of the “PCT Union” decided to reform the PCT in view of the PLT.<sup>89</sup> Consequently, a number of amendments of the Regulations under the PCT entered into force on April 1, 2007, relating to the following issues<sup>90</sup>:

- missing elements and parts of the international application;
- restoration of the right of priority;
- rectification of obvious mistakes.

The proposed amendments help applicants to avoid loss of rights in certain circumstances, consistently with the PLT, while maintaining an appropriate balance between the interests of applicants and third parties.<sup>91</sup>

As discussed above, there was no mitigation of the compulsory presence of claims when filing an international application as prescribed in PCT art.11(1)(iii)(e) as compared with the exhaustive list of requirements for according a filing date under PLT art.5(1). Despite the proposal of the International Bureau to “bend” the PCT articles by regarding claims as a “legal fiction”, such amendment was, eventually, not adopted by the Working Group on the Reform of the PCT and therefore not put before the Assembly of the PCT Union. These differences between the filing date requirements under the PCT as compared to the PLT cause friction. A PLT contracting party is obliged to accord a filing date to an application filed in the absence of claims. In addition, no re-dating of the application will take place if the applicant later on supplies a set of claims. However, if an applicant files an international application at the same office, the presence of at least one claim is compulsory and an international filing date will only be accorded when the applicant files at least one claim.

In view of the filing date requirements under the PLT, the PCT allows the filing of a missing part of the description or a missing drawing (cf. PCT r.20.5). In addition, the filing of missing parts may be based on a priority application. Owing to the presence of claims being obligatory when filing an international application, it was decided to allow an applicant also to file a missing part of a claim. Moreover, it became possible under the PCT to file a complete set of claims and/or the entire description as a so-called “missing element” (cf. PCT r.20.3 and 20.6). All this resulted in PCT r.20 being complicatedly formulated because it encompasses the possibilities of filing missing parts as well as missing elements.

In addition, it was also discussed in relation to filing date requirements, that PCT r.20.1(b) could easily have been adapted to incorporate the requirement “allowing the applicant to be contacted” as prescribed in PLT art.5(1)(ii).

<sup>88</sup> “Changes Related to the Patent Law Treaty (PLT) — Conform PCT ‘Missing Part’ Requirements to Those of the PLT” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/4/2, 2003, Item 2.

<sup>89</sup> PCT Union, “Report”, Document PCT/A/34/6 (October 2005), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=9006](http://www.wipo.int/meetings/en/details.jsp?meeting_id=9006) [Accessed March 29, 2011].

<sup>90</sup> PCT Union, “Proposed Amendments of the PCT Regulations”, Document PCT/A/34/2 Rev. (September 2005), Item 1, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=9006](http://www.wipo.int/meetings/en/details.jsp?meeting_id=9006) [Accessed March 29, 2011].

<sup>91</sup> PCT Union, “Proposed Amendments of the PCT Regulations”, Document PCT/A/34/2 Rev., 2005, Items 2 and 10(i).



Not introducing the PLT requirement “filing by reference to a previously filed application” (PLT art.5(7)) into the PCT seems reasonable because this requirement appears already to have become outdated by advances in transmission technology and would no longer be regarded as a preferred option when filing an international application.

## Conclusion

The incorporation by reference into the PLT of so many standards prescribed by the PCT as to the form and contents of international applications has not also resulted in the PCT itself being aligned with the basic requirements of the PLT. Owing to this incomplete alignment, the relationship between these two international patent law treaties has become a complex one.

In view of earlier amendments to the Regulations under the PCT which already “squeezed” some of the articles of the PCT, it would have been possible to realise a better alignment between the PCT and the PLT. In particular, mitigation of the compulsory presence of claims when filing an international application in view of the requirements in the PLT is desirable and would have been possible. Users of the PCT system would welcome a better alignment of at least some filing date related requirements and provisions dealing with defects which may affect the filing date.

More than once the view has been expressed that the PCT articles would, at some stage, need to be revised, because there is a limit to the kind of changes which could be achieved by amending the Regulations under the PCT within the boundaries of the provisions of the PCT articles, and that the manner in which particular changes needed to be implemented would depend on their nature.<sup>92</sup> In addition, the Working Group on Reform of the PCT extensively discussed the possibilities and consequences of drafting a completely new treaty encompassing the PCT, the PLT and, possibly also, the Substantive Patent Law Treaty.<sup>93</sup> At present, all these seem far from realisation.

<sup>92</sup> See, e.g., “Summary of the Session — Approach to Further Reform: Options for Revising the Treaty” (by the chair), Working Group on Reform of the PCT, Document PCT/R/WG/3/5, 2002, Items 6–12, at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

<sup>93</sup> See “Options for a Possible Revision of the Patent Cooperation Treaty (PCT)” (prepared by the International Bureau), Working Group on Reform of the PCT, Document PCT/R/WG/3/3 (October 2002), at [http://www.wipo.int/meetings/en/details.jsp?meeting\\_id=4554](http://www.wipo.int/meetings/en/details.jsp?meeting_id=4554) [Accessed March 29, 2011].

# IP in Global Governance: A Venture in Critical Reflection

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☞ Developing countries; Globalisation; Intellectual property; International trade

*Courtesy of the TRIPS Agreement and the monumental transformations in innovative technologies, especially in the bio and digital arenas, the global IP order has been fundamentally altered since a decade and a half ago. Not only has global awareness of IP increased, the latter's significance as a flashpoint of tension in regard to its practical impact on every sector of the global socio-economic and cultural constitutive process is felt now more than ever before. Consequently, IP is a subject matter for the global governance discourse. This article reflects on the failure, successes, accomplishments, challenges as well as the unsustainable nature of current global IP order. It argues that the current order has run its course. It is now time for change. Spotlighting the changing political and economic landscapes currently being re-drawn by emerging regional and global economic powers of the South, the article speculates on the future direction of global IP law and policy. These new economic and power blocs bear the seed or agency of the present urgency for a new approach to global governance of IP. At the core of that urgency is the imperative for mainstreaming equity, development imperatives and, overall, public regarding considerations in the current calibration phase toward a new global IP order.*

## Introduction

A decade ago, the world was engulfed in taking precautionary measures in response to the apocalyptic prophecies on the advent of the 21st century via the magic “Year 2000”.<sup>1</sup> Especially prominent in the hyper-uncertainty associated with the Year 2000 was the focus on how the computing systems would crash, resulting in massive loss of data and unprecedented chaos in all sectors of the social and economic fabric of a world that barely begun to embrace the digital revolution.<sup>2</sup> The Year 2000 came and went like any other. There was no Armageddon. The doomsayers were wrong after all.

It is now 10 years after, and a new decade has begun. Despite the false hype and prophecies of doom that heralded the 21st century, there is no question that the turn of a century is a monumental milestone in every civilisation. No less so is the significance of a decade for mortals, institutions and governments. Ten years is a benchmark to assess the state of affairs in the past and to reflect on the nature of things to come. In this article, I take the platform provided by the new *WIPO Journal* to reflect, randomly, on the state of intellectual property (IP) law in the global governance context, especially in the last decade and a half since the commencement of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) of the World Trade Organisation (WTO) as the catalyst of the current global IP order. I identify some progress and accomplishments, some failures as well as some challenges, and speculate

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<sup>1</sup> Also known as “Y2K”.

<sup>2</sup> See Jerome Marilyn Murray, *The Year 2000 Computing Crisis* (New York: McGraw-Hill, 1996).

on the future direction of global IP law and policy-making. I conduct this task against the backdrop of a changing global political and economic landscape currently being redrawn by the emerging regional and global economic powers. I argue that the status quo in the global governance of IP has run its full course and that the time is ripe for a new direction, or so it seems. Not much is certain regarding how this change would evolve. If anything is certain, it is the urgency for mainstreaming of the development imperative in the global governance of IP.

## IP in global governance

IP in global governance implicates virtually all aspects of economic globalisation and its intricate relationship with global normative and political governance.<sup>3</sup> In the context of global governance, IP regulation implicates an unfolding, complex regime interaction, given the indeterminate nature of technological evolution. Inherent in the pattern of this interaction is the dynamism of resistance and counter-hegemonic reactions. Buoyed by the complex and indeterminable issue linkages to IP, more and more actors continue to crowd the IP policy space as agents of desirable control mechanisms relevant to the specific issue areas within their primary jurisdictions or interests. Thus, in the context of global governance, the prominence of IP, a hitherto obscure and arcane discipline,<sup>4</sup> is a major reality of the new knowledge economy.

The narrative of IP in global governance affirms analysts' interpretive impression of global governance as both a descriptive enterprise and the study of a process in continual transition.<sup>5</sup> As part of that process, IP becomes a dynamic: in regard to which socio-political and economic arrangements are asserted and negotiated; on account of which interests are rotated on fluctuating values; in the context of which the balance among competing control forces are susceptible to ebb and flow; and in the governance of which schemes will continue to be re-invented.<sup>6</sup>

Rosenau was right to associate global governance with "powerful tensions, profound contradictions and perplexing paradoxes", where the controlling authorities are obscure, where critical boundaries are in a state of flux defying simplistic binaries, and where the systems of rules are subject to continuing negotiation.<sup>7</sup> Perhaps only few aspects of the global process more directly validate these claims than the characteristics of IP in global governance.

Arising from the interaction of powerful tensions and embedded paradoxes, the global IP system has been driven to a crossroads.<sup>8</sup> Its currently unfolding future will be shaped by new forces, by a proactive engagement of old and new controlling authorities (be they obscure or self-evident) and by the unpredictable direction of new technologies and other endeavours. It is a future that is set not to accept every normative

<sup>3</sup> The association of IP with global governance is not an isolated conceptual construct but is one that has yet to be fully explored. Recognising the variation in emphasis, narratives of IP from diverse international lawmaking and policy perspectives are, clearly, components of the global governance discourse. In her work in intellectual property in global governance in the context of public health, Sell argues that "Global governance means devising, implementing, and enforcing policies in a way that accommodates a broad range of stakeholders and publics". See Susan K. Sell, "The Quest for Global Governance of Intellectual Property and Public Health: Structural, Discourse, and Institutional" (2004) 77 *Temple Law Review* 363, 363–364; see also Thomas E. Novotny, "Global Governance and Public Health in the 21st Century" (2007) 38 *California Western International Law Review* 19. See generally Kal Raustiala, "Density and Conflict in International Intellectual Property Law" (2007) 40 *UC Davis Law Review* 1021. According to Weiss and Thakur, "global governance is the sum of laws, norms, policies and institutions that define, constitute and mediate relations [on specific and interlinked subject-matters] among citizens, society, markets, and the state in the international arena — the wielders and objects of international public power". See Thomas G. Weiss and Ramesh Thakur, *Global Governance and the UN: An Unfinished Journey* (Bloomington, IN: Indiana University Press/CIGI/UNIHP, 2010); see also United Nations Economic and Social Council, *Committee of Experts on Public Administration: Definition of Basic Concepts and Terminologies in Governance and Public Administration*, UN Doc E/c.16/2006/4 (January 5, 2006), at <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan022332.pdf> [Accessed March 29, 2011].

<sup>4</sup> See Peter K. Yu, "International Enclosure, the Regime Complex, and International Property Schizophrenia" [2007] *Michigan State Law Review* 1, 33.

<sup>5</sup> See James N. Rosenau, "Governance in the Twenty-first Century" (1995) 1 *Global Governance* 13; see also Lawrence S. Finkelstein, "What is *Global Governance*?" (1995) 1 *Global Governance* 367; David Kennedy, "The Mystery of Global Governance" (2008) 34 *Ohio Northern University Law Review* 827.

<sup>6</sup> Kennedy, "The Mystery of Global Governance" (2008) 34 *Ohio Northern University Law Review* 827, 832.

<sup>7</sup> Rosenau, "Governance in the Twenty-first Century" (1995) 1 *Global Governance* 13, 13–14.

<sup>8</sup> See Peter K. Yu, "The Global Intellectual Property and Its Undetermined Future" (2009) 1 *WIPO Journal* 1, 1.

claim of the old order and would strive to eschew its mistakes and boomerang effects; it is set to confront the task of re-calibrating IP to respond to the contingencies of the ever-expanding circle of diverse stakes and stakeholders. It is a future that could hardly afford to further delay mainstreaming equity and the development imperative into the core of what analysts call the calibration phase of IP in global governance.<sup>9</sup> Without question, these objectives are attainable with the right will and resolve. But the answer to whether they actually will be attained, and how soon, is at best speculative and depends on the very unpredictable nature of the international process and the ancillary interests and priorities of the socio-political and economic actors engaged in the reform process.

## A global IP order at a crossroads

The present global IP order is at a crossroads,<sup>10</sup> rocked on several fronts by crises of equity, imbalances of stakeholder interests and reckless insensitivity to social welfare, including public and development-regarding considerations. In its gradual but phased evolution from the national through the bilateral to the international and finally to the current global stage,<sup>11</sup> IP law- and policy-making, for the most part, has been dominated by developed countries and their industrial and information establishments, or the various right owning stakeholders within them.<sup>12</sup> The narrative of IP in global governance reveals deep-seated tensions between producers or owners and users of IP—an overly broad, though convenient, categorisation that hardly aligns neatly with the complex dynamics, interests and actors involved. Nonetheless, in essence, IP in global governance can be easily reduced to an interlocked series of conflicted binary relationships between, inter alia, developed and less-developed countries; private and public good; private and public domain; monopoly and competition; development and the under-development agenda.

Some rightly disclaim the inflammatory, sometimes unquestioned, and even unhelpful use of these binary terms.<sup>13</sup> But only a few analytical approaches to the issue capture and underscore the extent of the imbalance, which the current global IP order continues to sustain. Concomitantly, only a few approaches also underscore the urgent need for a critical re-configuration of the global governance scheme in regard to IP. For more than two centuries, developed countries have sustained a:

“maximalists’ stranglehold on IP lawmaking exercises, which aims mainly to preserve a ‘knowledge cartel’s’ comparative advantage in existing technological outputs at the expense of future innovation requiring more subtle forms of nurture.”<sup>14</sup>

The outcome of the maximalist approach, which reached an unprecedented height with the coming into force of the TRIPS Agreement<sup>15</sup> and its practical consequences, is an increased awareness on the part of the global public of the significance of IP rights. The adjunct to this development has been an escalation in diverse issue densities or issue linkages with IP and associated regime complexity at the intersection of such issue linkages.<sup>16</sup>

<sup>9</sup> On the calibration thesis, see Daniel Gervais, “TRIPS and Development” in Daniel Gervais (ed.), *Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPS-Plus Era* (Oxford: Oxford University Press, 2007), p. iv; see also Jeremy de Beer (ed.), *Implementing the WIPO Development Agenda* (Ottawa: CIGI/Winfred Laurier University Press, 2009), p. 15.

<sup>10</sup> See Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPO Journal* 1, 1.

<sup>11</sup> See Peter Drahos, “The Universality of Intellectual Property: Origins and Development” (Geneva: WIPO), at <http://www.wipo.int/tk/en/hr/paneldiscussion/papers/pdf/drahos.pdf> [Accessed March 29, 2011] (for an analysis of the evolution of global intellectual property order in three phases).

<sup>12</sup> John Braithwaite and Peter Drahos, *Information Feudalism: Who Owns the Knowledge Economy?* (New York: The New Press, 2002).

<sup>13</sup> See Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPO Journal* 1, 7.

<sup>14</sup> See Jerome H. Reichman, “Intellectual Property in the Twenty-first Century: Will Developing Countries Lead or Follow?” (2009) 36 *Houston Law Review* 1115, 1165.

<sup>15</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights (Annex 1C of the Marrakesh Agreement establishing the World Trade Organization) 1869 U.N.T.S. 299; 33 I.L.M. 1197 (1994).

<sup>16</sup> See Laurence R. Helfer, “Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking” (2004) 29 *Yale Law Journal* 1; Laurence R. Helfer, “Regime Shifting in the International Intellectual Property System” (2009) 7 *Perspectives on Politics* 39; Yu, “International Enclosure, the Regime Complex, and International Property Schizophrenia” [2007] *Michigan State Law Review* 1; Raustiala, “Density

The maximalist approach to global IP protection has been advanced through a harmonisation strategy pursued mostly under the outlook of the one-size-fits-all TRIPS regime. Undoubtedly, there are some cosmetic attempts to create flexibilities or so-called “wobble room” in the TRIPS Agreement and various trade regimes to modify the stricture of this regime.<sup>17</sup> However, these flexible accommodations are quite nuanced. In particular, TRIPS has a phased implementation time line directed at “developing” or “least developed” countries that was designed to accommodate the extraordinary challenges required in those jurisdictions to make their IP systems TRIPS-compliant. Although the Doha Declaration elaborated TRIPS’ “development” content, only a few would quarrel with the impression that TRIPS was an overkill and that, in operation, its so-called flexibilities are hardly far-reaching.<sup>18</sup> Similarly, not many would dispute the suggestion that as the gold standard of the new global IP order, TRIPS has left in its wake a sobering list of negative outcomes for many in less-developed countries.<sup>19</sup>

It is in terms of those negative outcomes that TRIPS interacts with other relevant peripheral regimes that now constitute part of the global governance landscape for IP. That interaction implicates diverse issue linkages and issue aggregation in regard to IP. The categories of IP issue linkages are open-ended. Prominent ones include human rights, public health and access to pharmaceuticals, political economics of agriculture, food security, the digital divide, and traditional knowledge including genetic resources, expressive culture and cultural heritage.<sup>20</sup> When examined in the context of new technological revolutions of bio- and digital technologies and their complex interactions with globalisation and global governance and the undergirding regimes at the intersection of these issue linkages, the negative outcomes become palpable.<sup>21</sup>

In a way, IP has the potential to advance public-regarding considerations in all areas of issue linkages. But the reality is that given the maximalist approach to IP championed by the technology-exporting countries, the impact of IP rights in those areas, at least in regard to less-developed countries is, for the most part, negative. From access to medicine to food security to information and biotechnology innovations to broader human rights considerations, including those arising in the context of traditional knowledge, the interactions of IP with the forces of globalisation and global governance do not reflect equitable distributional outcomes.<sup>22</sup>

and Conflict in International Intellectual Property Law” (2007) 40 *UC Davis Law Review* 1021; Ruth L. Okediji, “The International Relations of Intellectual Property: Narratives of Developing Country Participation in the Global Intellectual Property System (2003) 7 *Singapore Journal of International and Comparative Law* 315; Chidi Oguamanam, “Regime Tension in the Intellectual Property Arena: Farmers’ Rights and the Post-TRIPS Counter Regime Trends” (2006) 29 *Dalhousie Law Journal* 413.

<sup>17</sup> See Jerome H. Reichman, “Securing Compliance with the TRIPS Agreement After the US v. India” (1998) 1 *Journal of International Economic Law* 585.

<sup>18</sup> Joseph E. Stiglitz, “The Economic Foundations of Intellectual Property Rights” (2008) 57 *Duke Law Journal* 1693, 1717 (describing TRIPS so-called flexibilities as actually inflexible).

<sup>19</sup> See Jerome H. Reichman, “The TRIPS Agreement Comes of Age: Conflict or Cooperation with Developing Countries?” (2000) 32 *Case Western Reserve Journal of International Law* 441.

<sup>20</sup> For a more detailed exploration of these heads of issues in the context of intellectual property in global governance, See Chidi Oguamanam, *Intellectual Property in Global Governance: A Development Question* (London/New York: Routledge, forthcoming in 2011).

<sup>21</sup> Oguamanam, *Intellectual Property in Global Governance*, 2011 forthcoming.

<sup>22</sup> See generally Sell, “The Quest for Global Governance of Intellectual Property and Public Health” (2004) 77 *Temple Law Review* 363; see also Amir H. Khoury, “The ‘Public Health’ of the Conventional International Patent Regime & the Ethics of ‘Ethicals’: Access to Patented Medicines” (2008) 26 *Cardozo Arts & Entertainment Law Journal* 25; Peter K. Yu, “Access to Medicines, BRICS Alliances, and Collective Action” (2008) 34 *American Journal of Law and Medicine* 345. In regard to food security and the political economics of agriculture, see Brian Tokar (ed.), *Gene Traders: Biotechnology World Trade and Globalization of Hunger* (Burlington, VT: Toward Freedom, 2004); Carmen C. Gonzalez, “Institutionalizing Inequity: The WTO Agreement on Agriculture” (2002) 27 *Columbia Journal of Environmental Law* 433; Carmen C. Gonzalez, “Trade Liberalization, Food Security, and the Environment: The Neoliberal Trade to Sustainable Rural Development” (2004) 14 *Transnational Law and Contemporary Problems* 419; Chidi Oguamanam, “Agro-Biotechnology and Food Security: Biotechnology and Traditional Agricultural Practices at the Periphery of International Intellectual Property Regime Complex” [2006] *Michigan State Law Review* 215.

## Modest progress

The search for fair distributional outcomes regarding the benefits of innovation is at the core of the complex regime dynamics that now characterise IP in global governance. To be certain, the continuing upward ratcheting of international IP norms has not gone unchallenged. Many countries from the less-developed world—especially those in the high and middle income group and their sympathisers (multivalent stakeholders including indigenous and local communities) and supporters (diverse NGOs, IGOs, civil society groups and categories of sub-state actors) have continued to push for a more balanced global IP order in different and opportune forums. Their efforts in these regards take the appearance of nuanced forms of a counter-regime or counter-harmonisation movement. The most recent manifestation of these initiatives is symbolised in the new development agenda adopted by WIPO in 2007.

In various other forums, the pressure for a balanced global IP order is sometimes couched in the overlapping language of development, empowerment, access to knowledge (A2K), distributional equity, social welfare or adjustment of social costs, public good, public-regarding consideration and other similar characterisations. Significant strides have already been recorded in the burgeoning elaboration of IP rights from a human rights perspective,<sup>23</sup> including the IP rights of indigenous peoples and local communities in the context of various forms of traditional knowledge and as regards expressive culture and cultural heritage. Specifically in this issue area, developed countries' hegemony over IP norms and their relentless inclination to ratchet them up are increasingly confronted by counterbalancing arguments from less-developed states.<sup>24</sup>

In regard to global health, the public good argument has garnered traction by virtue of the activities of the World Health Organisation (WHO) and emergent public-private actors in the sector.<sup>25</sup> In agriculture and food security, despite its current weakness across regimes, the case for farmers' rights remains a counterbalancing challenge to the anti-competitive stranglehold of transnational agricultural and allied chemical corporate monopolies that have capitalised on the privatisation of genetic resources in public gene banks.<sup>26</sup> Moreover, as with health, the public good argument has now been advanced and translated in the activities of Food and Agriculture Organisation (FAO) and allied institutions, especially through forms of public-private partnership in CGIAR's federating International Agricultural Research Centres (IARCs).<sup>27</sup>

So is it in regard to traditional bio-cultural knowledge where, through a form of silent revolution at the Convention on Biological Diversity (CBD), a new Nagoya Protocol on Access and Benefit Sharing (ABS) over genetic resources and associated traditional knowledge, however imperfect, has recently been

<sup>23</sup> See generally Laurence R. Helfer and Graeme W. Austin, *Human Rights and Intellectual Property: Mapping the Global Interface* (Cambridge: Cambridge University Press, 2011); Laurence R. Helfer, "Human Rights and Intellectual Property: Conflict or Co-existence" (2003) 5 *Minnesota Intellectual Property Review* 47; Laurence R. Helfer, "Towards a Human Rights Framework for Intellectual Property" (2007) 40 *UC Davis Law Review* 971; Laurence R. Helfer, "The New Innovation Frontier? Intellectual Property and European Court of Human Right" (2008) 49 *Harvard International Law Journal* 1; Philippe Cullet, "Human Rights and Intellectual Property Protection in the TRIPS Era" (2007) 29 *Human Rights Quarterly* 403; Audrey R. Chapman, "The Human Rights Implication of Intellectual Property Protection" (2002) 5 *Journal of International Economic Law* 861; Peter K. Yu, "Reconceptualizing Intellectual Property Rights in a Human Rights Framework" (2007) 40 *U.C. Davis Law Review* 1039; Peter K. Yu, "Ten Common Question About Intellectual Property and Human Rights" (2007) 23 *Georgia State University Law Review* 709 (distinguishing between human rights and non-human rights aspects of IP and exploring the conceptual morass implicated in the human right-intellectual property intersection).

<sup>24</sup> See above fn.16 and accompanying text.

<sup>25</sup> See Keith E. Maskus and Jerome H. Reichman, "The Globalization of Private Knowledge Goods and the Privatization of Global Public Good" (2004) 7 *Journal of International Economic Law* 279; see also Susan K. Sell, "TRIPS-Plus Free Trade Agreements and Access to Medicines" (2007) 28 *Liverpool Law Review* 41 (discussing WHO's commitment and solidarity of purpose by segments of developing countries in the pursuit of public health outcomes through the exploitation of "TRIPS flexibilities").

<sup>26</sup> See Keith Aoki and Kennedy Luvai, "Reclaiming "Common Heritage" Treatment in International Plant Genetic Resources Regime Complex" [2007] *Michigan State Law Review* 35.

<sup>27</sup> For example, through the HarvestPlus Challenge Program, the FAO's International Consultative Group on International Agricultural Research (CGIAR) is involved with its federating IARCs in using insights from biotechnology and public science to improve the nutritive quantity of major stable food crops of developing countries as a public good. For an overview of the programme, see CGIAR, "HarvestPlus Challenge Program: Medium Term Program 2010–2012", at <http://www.harvestplus.org/content/who-we-are> [Accessed March 29, 2011].

negotiated.<sup>28</sup> Similarly, the WIPO IGC, from its modest and unsuspecting origins, mapped the complex jurisprudential landscape in regard to the protection of traditional knowledge, genetic resources and folklore. Presently, the IGC is on the verge of concluding negotiations of a treaty on its mandate subject(s).<sup>29</sup> Finally, recent policy and international lawmaking developments under the auspices of the UNESCO demonstrate bold initiatives to advance protection and safeguarding of intangible cultural heritage, and to promote cultural diversity and cultural exchange for sustainable development.<sup>30</sup> In addition to these international developments, domestic legal regimes, especially at the national and regional levels among many countries of the south, continue to adjust, reflecting the height of progress so far made in the various areas.<sup>31</sup>

## Steps forward and steps back

The foregoing developments continue to evolve; in fact, they hardly constitute a dent or a counterforce to the unprecedented degree to which IP expansionism has been entrenched. What appears to have been accomplished remains inchoate, especially in light of the continuing strategic implementation of bilateral and, sometimes, multilateral or regional free trade agreements with TRIPS-plus components, particularly by the United States through its “divide-and-conquer” politics. Indeed, despite the significant or, more appropriately, symbolic, strides that have been made in the areas of traditional knowledge, such as via the CBD, the United States has yet to become a party to that convention. In addition, the loose language in its text, and that of the recent Nagoya Protocol on ABS, cast doubts on how seriously states may take their obligations under these international instruments.<sup>32</sup>

The CBD, WIPO, WTO, UNESCO, FAO (through the International Treaty on Plant Genetic Resources for Food and Agriculture), WHO and several other regimes, institutions, forums and instruments constitute part of the IP regime complex, subsuming IP in global governance to the dynamics of regime politics. The importance of regime proliferation as a counterbalancing force to the hard-edged approach to IP under TRIPS cannot be discounted. At the same time, analysts remind us that when regimes proliferate, for many reasons, stronger states benefit the most.<sup>33</sup> In part, this trend in regime proliferation is a consequence of the diversity of issues linked to IP. It is also an incidence of IP’s ubiquitous presence and impact in virtually

<sup>28</sup> The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity, at <http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf> [Accessed March 29, 2011]. The Protocol was opened for signature on February 1, 2011.

<sup>29</sup> On the activities and mandate of the WIPO Intergovernmental Committee on Intellectual Property, Genetic Resources Traditional Knowledge, and Folklore, see <http://www.wipo.int/ik/en/igc/> [Accessed March 29, 2011]. The IGC is currently undertaking text-based negotiations with a view to raising international treaty documents on its mandate areas.

<sup>30</sup> A number of these initiatives include the 2003 Convention for the Safeguarding of Intangible Cultural Heritage, October 17, 2003; 2368 U.N.T.S. 3; the Convention on the Protection and Promotion of the Diversity of Cultural Expression (October, 20, 2005), UN Doc CLT-2005; 2440 U.N.T.S. and UNESCO’s Universal Declaration on Cultural Diversity, adopted by the 31st session of the UNESCO General Conference in Paris (November 2, 2001).

<sup>31</sup> According to GRAIN’s database on biodiversity rights and related traditional knowledge laws, and CBD’s database on ABS measures, there are about 96 recent country legislative and six regional initiatives relevant to ABS. See Genetic Action Resources International, “Biodiversity Rights Legislation” at <http://www.grain.org/brl> [Accessed March 29, 2011]; see also CBD Database on ABS measures, at <http://www.cbd.int/abs/measures.shtml> [Accessed March 29, 2011]. Regional initiatives on ABS include those in regard to the African Union, the Andean Pact, Central America, the Nordic Region, and the Himalayan Region through some legislative/regulatory schemes including the African Union Model Law on Rights of Local Communities, Farmers and Breeders and Access (2000), The ASEAN Framework Agreement on Access to Biological and Genetic Resources (2000). For the Himalayan project, see <http://www.icimod.org/abs/resource.php?id=349> [Accessed March 29, 2011].

<sup>32</sup> For a critical perspective on the Nagoya Protocol, see ICTSD, “CBD Clinches ABS Protocol in Nagoya” (2010) 10 *Bridges Trade Biores* 20, at <http://ictsd.org/i/news/biores/94075/> [Accessed March 29, 2011]; see also Daniel Robinson and Brendan Tobin, “Dealing with Traditional Knowledge under the ABS Protocol” (2010) 4 *ICTSD Environmental and Natural Resources Programme* 3, at <http://ictsd.org/i/environment/87124/> [Accessed March 29, 2011].

<sup>33</sup> See Stephen D. Krasner, *Power, the State and Sovereignty: Essays in International Relations* (London/New York: Routledge, 2009), p.8; Helfer, “Regime Shifting” (2004) 29 *Yale Law Journal* 1, 7; Yu, “International Enclosure, the Regime Complex, and International Property Schizophrenia” [2007] *Michigan State Law Review* 1, 16. See generally Stephen D. Krasner (ed.), *International Regimes* (Ithaca, New York: Cornell University Press, 1983).

all sectors of the new knowledge-based economic order. But regime proliferation is not an efficient way to find workable solutions to the distributional inequity and increasing development gaps engendered by the current dynamic of IP in global governance.

What is urgently needed for IP in the 21st century is a more efficient regime and forum management approach to reconfigure the current global governance scheme in IP. Such an approach should be sensitive to the diversity and open-ended nature of issue linkages, and to the imperative for an effective way of mainstreaming development considerations into IP policy- and lawmaking. How this may come about takes us into the realm of complex permutation on a number of scenarios or possibilities. Of specific interest in that regard is the role of new and emergent economies, especially the high and middle income strands among less-developed countries and other actors. Related to that is whether and how these countries are able to leverage the influence of multinational corporations (MNCs) in their respective jurisdictions in the direction of a more development oriented approach to IP. The role of MNCs as agents of influence in the IP arena is itself a complex discourse outside the present project.

In addition to the negative effects of regime proliferation on the ability of less-developed countries to stem the tide of the maximalist approach to IP, pressures exerted by less-developed countries to induce a rethinking of the normative approach to IP have failed to yield desired results. Self-serving changes that have only helped to accentuate continuity in current global IP protection arrangements are readily secured by developed countries that wield coercive political clout. Development-oriented changes that touch on the aspirations of less-developed countries are often considered too burdensome on established IP norms. This view is often asserted with little or no regard to the historical malleability of IP norms and their susceptibility to political influences.

For example, opposition by developed countries led by the United States and Japan, sometimes with mixed signals from the EU, has ensured that progress remains elusive under the WIPO Patent Agenda, the TRIPS Council and even the Nagoya Protocol on ABS (which was established based on the desire of less-developed countries to incorporate disclosure of source or origin of genetic resources and, where applicable, associated traditional knowledge in relevant patent applications as an aspect of a new patent jurisprudence).<sup>34</sup> This contrasts sharply with the rapidity with which the United States and its allies secured a pair of the post-TRIPS WIPO internet treaties in 1996 to attune copyright jurisprudence to the vagaries of the internet. Similar are the consistent lowering of the patent threshold regarding biotechnology-related inventions, especially around genes, and the pattern of extension of IP to platform science and innovations, including digital data sets. Yet traditional knowledge forms, including those in the bio-cultural context and in expressive culture remain problematic in their relation to IP because of the “gap question”. The gap question, in the words of Professor Daniel Gervais, refers to “areas where current intellectual property norms leave traditional knowledge holders in the dark”.<sup>35</sup> Overall, it includes a combination of the conceptual, philosophical and practical limitations around IP norms and their relation to traditional knowledge or lack thereof. Consequently, traditional knowledge forms remain perennial outliers to IP norms and jurisprudence. Rightly or wrongly, they are conveniently treated under the rubric of the category of legally inchoate secondary rights which are often depicted as *sui generis*.

<sup>34</sup> The principal argument against the incorporation of mandatory disclosure of origin and/or source of genetic resources into the patent process supported by the US and its allies is that such a requirement would unduly burden the patent jurisprudence and would be difficult to implement. See Emanuela Arezzo, “Struggling Around the ‘Natural’ Divide: The Protection of Tangible and Intangible Indigenous Property” (2007) 25 *Cardozo Arts and Entertainment Law Journal* 367; Chidi Oguamanam, “Genetic Resources & Access and Benefit-Sharing: Politics, Prospects and Opportunities for Canada After Nagoya” *Journal of Environmental Law and Policy*, 2011 forthcoming.

<sup>35</sup> See Daniel Gervais, “Traditional Knowledge: Are We Closer to the Answer(s): The Potential Role of Geographical Indications” (2009) 15 *ILSA Journal of International & Comparative Law* 551, 556; see also IGC-commissioned “Draft Gap Analysis” (on the protection of traditional cultural expressions/expressions of folklore (TCEs/EoF) and on the protection of traditional knowledge (TK)), at <http://www.wipo.int/tk/en/igc/gap-analyses.html> [Accessed March 29, 2011].



## IP overreach: The dangers of a boomerang effect

The consistent addiction of developed countries and their strong industry lobby to an unbalanced optimisation of IP rights has left the global IP order in a jurisprudential mess. Without question, less-developed countries' economies and their vulnerable populations are at the receiving end of the distributional disequilibrium regarding access to knowledge and public goods in this unbalanced global IP system. However, that is only part of the story. Continued calibration of IP rights to their maximum, in a bid to sustain the knowledge hegemony of a few countries in the new knowledge economy, has the potential to implode or flip over and to scuttle the pace of innovation even in those countries. As Reichman<sup>36</sup> remarks:

“Efforts [e.g. through the TRIPS Agreement] to rig a regime for short-term advantages may turn out, in the medium and long-term, to boomerang against those who pressed hardest for its adoption ... by reaching for high levels of international [IP] protection (that could not change in response to less-favourable domestic circumstances), technology-exporting countries risked fostering conditions that could erode their technological superiority and resulting terms of trade over time.”

This self-destructive potential or counter-productive scenario could upset the current balance in technology and innovation which stands in favour of a few technology-exporting countries, the so-called “knowledge cartel”. The scenario could throw up new actors from high and middle income developing countries, especially those currently characterised to be at the “crossover point”.<sup>37</sup> At this juncture, a radically abbreviated but critical perspective on the real and potential impact of maximum IP protection and expansion, which technology-exporting developed countries have foisted on the rest of the world via TRIPS and other measures, is in order. This would assist to underscore the real dangers of the ongoing IP overreach and what it forebodes for the future of IP in global governance.

In light of recent advances in bio- and digital technologies and the TRIPS Agreement, the indiscriminate extension of IP protection to all manners of innovation shows that the global IP system is designed to mirror the domestic regimes of developed countries. As in the United States, to some extent in the EU, and in most OECD countries, IP now extends to everything under the sun that is made by man.<sup>38</sup> The consequence of this overly permissive approach, especially in the bio- and digital technology arenas, is the escalation of patents based on a much lower non-obviousness standard and the undermining of the idea-expression dichotomy in copyright jurisprudence. In the biotech and software fields, this trend encourages a lousy and inefficient innovation culture in which big transnational corporations with strong capital and global factor endowments invest their resources in fencing off competition through the creation of patent thickets and copyright cartels.<sup>39</sup> The resulting situation is that the controllers of innovation are those who have learned how to “game”, dribble or push the envelope of the domestic and global IP system with a view to perpetuating their monopoly, as opposed to those who make truly meaningful innovation.

These questionable captains of innovation thrive in creating “mounting thickets of rights that impede both technological progress and research”.<sup>40</sup> They also escalate IP litigation costs and, most importantly, they corrupt and subvert the IP system by turning it into an anti-competition instrument. In this subverted

<sup>36</sup> See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1119 (footnotes omitted); see also Jerome H. Reichman “Intellectual Property and International Trade: Opportunities and Risks of a GATT Connection” (1989) 22 *Vanderbilt Journal of Transnational Law* 747, 891.

<sup>37</sup> Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPOJ* 1, 10–11.

<sup>38</sup> This is pursuant to the US Supreme Court’s 1982 landmark decision of *Diamond v Charabarty* 447 U.S. 330 (1980) which upheld a patent for a non-naturally occurring genetically modified bacterium designed to break down crude oil as an environment containment device. In that case, the Supreme Court (Chief Justice Warren Earl Burger) sanctioned a liberal interpretative approach as one that best justifies Congress’ intention in regard to a patentable subject-matter pursuant to s.101 of the US Patent Code.

<sup>39</sup> See generally Drahos and Braithwaite, *Information Feudalism*, 2002.

<sup>40</sup> Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1132.

IP order, genetic materials, software and digital data sets, among others, have become theatres of intense innovation intrigue or overlapping patents and copyrights patronised by rent-seeking entities interested in erecting barriers to entry and in scuttling healthy competition.

These forms of IP fence-making do not only obstruct the rise of cumulative and sequential innovations. They also ignore the all-important distinction between platform or basic science, research, information and technology and their applied or practical translations, not to mention cultural and ethical questions.<sup>41</sup> Unlike platform or basic science, the practical or functional technological applications constitute a composite all-important site of truly non-obvious innovation deserving of sound IP protection. In order to ensure qualitative innovation, access to basic or platform science and innovation is critical. But when IP is, unfortunately, nested in the platform arena, it distorts and disrupts technological and scientific progress and excludes medium level and even institutional interests, especially those that are publicly funded as well as others that have less factor endowment, from operating in this increasingly perverted global IP process.

The real and potential social costs of global IP at a crossroads reverberate in diverse sectors, including public health, access to essential medicines, food security and agricultural innovation, human rights and indigenous self-determination.<sup>42</sup> As part of the litany of social cost partly induced by the current regime of IP governance, a new scientific research culture is emerging. Presently, this research culture is transitioning from the customary knowledge sharing ethos to one driven by a code of secrecy and suspicion within the scientific community.<sup>43</sup> This emergent culture is fundamentally not suited to tackle or optimise the exponential possibilities and the promise of networked collaboration in research and development in the wake of advances made in bio- and digital technologies.<sup>44</sup> It is evident that developed countries have shunned those promises. They prefer to deploy IP in tolling platform information and critical data vital to a cost-effective, fair, efficient and integrated optimisation of bio- and digital technologies through cumulative and sequential innovation.

Having maxed or stretched IP to its limits, they have turned to technology to erect “thickets of rights” via technological protection measures, including terminator and similar technologies and forms of digital rights management, to undermine public-regarding aspects of IP rights.<sup>45</sup> Capturing these sentiments, Reichman<sup>46</sup> notes:

“Successful special interest lobbying at both the national and international levels has overprotected existing knowledge goods at the expense of the public domain, while compromising digitally empowered scientific research opportunities with little regard for the social costs and burdens imposed on future creation and innovation.”

<sup>41</sup> See Ikechi Mgbеoji and Byron Allen, “Patent First, Litigate Later! The Scramble for Speculative and Overly Broad Patents: Implications for Access to Health Care and Biomedical Research” (2003) 2 *Canadian Journal of Law and Technology* 83; Margo Bagley, “Patent First, Ask Questions Later: Morality and Biotechnology in Patent Law” (2003) 45 *William and Mary Law Review* 469; Daniel J. Kevles and Ari Berkowitz, “The Gene Patent Controversy: A Convergence of Law, Economic Interests and Ethics” (2001) 67 *Brooklyn Law Review* 233.

<sup>42</sup> See Oguamanam, *Intellectual Property in Global Governance*, 2011 forthcoming.

<sup>43</sup> See Chidi Oguamanam, “Patents and Pharmaceutical R&D: Consolidating Private-Public Partnership Approach to Global Public Health Crises” (2010) 13 *Journal of World Intellectual Property* 556; see also Chidi Oguamanam “Beyond Theories: The Intellectual Property Dynamic in the Global Knowledge Economy” (2009) 9 *Wake Forest Intellectual Property Law Journal* 104, 144. See generally Jocelyn Downie and Matthew Herder, “Reflections on Commercialization of Research Conducted in Public Institutions in Canada” (2007) 1 *McGill Health Law Publication* 23.

<sup>44</sup> See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1151; see also Oguamanam, “Beyond Theories” (2009) 9 *Wake Forest Intellectual Property Law Journal* 104, 144–146.

<sup>45</sup> On the real economic harm of intellectual property overprotection, see Dan L. Burk, “Anticircumvention Misuse” (2002–03) 50 *UCLA Review* 1095; see also Siva Vaidhyannathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity* (New York: New York University Press, 2003); Jerome Reichman and Paul F. Uhlir, “Database Protection at the Crossroads: Recent Developments and Their Impact on Science and Technology” (1999) 14 *Berkeley Technology Law Journal* 793; Debora Kemp “Copyright on Steroids: In Search of an End to Overprotection” (2010) 41 *McGeorge Law Review* 795; Kenneth D. Crews, “Copyright Duration and the Progressive Degeneration of a Constitutional Doctrine” (2005–06) 55 *Syracuse Law Journal* 189.

<sup>46</sup> Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1152.

As part of the social cost or the “boomerang effect” of a lop-sided global IP regime, access to knowledge in diverse public-regarding contexts is now fiercely contested. For example, there is now a radical enclosure of public science space, a tolling of access to publicly funded research, a pull-back on IP exemptions in regard to scientific research, educational applications, and technological surveillance, and constriction of public libraries as centres for knowledge dissemination. Another aspect of the festering social cost of an IP system out of joint with the public interest is the external pressures that have resulted in the weakening of small and medium scale entities, such as genetic drug manufacturers, especially in less developed countries (as evident in the Indian experience after TRIPS).

In most industrial sectors, these entities are naturally positioned to make cumulative and sequential innovation from publicly accessible platform science, information and technologies. They are pivotal catalysts in the downstream translation of innovation and in the advancement of distributional justice in regard to innovation. However, in the bio- and digital technology arenas, such critical arteries in the innovation physiology have increasingly become victims of the choking or blocking effects of the proliferation of low standard patents designed to shut them out from the present anti-competitive and slothful innovation environment.

Given the identified flaws in the too smart-by-half politics through which major technology-exporting countries drive the global governance of IP, the ability to sustain their leadership in innovation should not be taken for granted. Consistently, these so-called knowledge cartels have increased the premium on IP by a combination of upward calibration of rights and unmitigated expansion of the scope and sphere of IP application. In their attempt to co-opt the rest of the world into a harmonised global IP order, they initiated a one-size-fits-all approach and erected a global IP floor without a ceiling. Since the coming into effect of the TRIPS Agreement, there has been virtually no let-up in the strengthening and upward protection of IP to a degree often insensitive to the development gap between industrialised and less-developed countries. Frustration over this state of affairs is symbolically reflected in the extreme or radical call for a “ceiling approach” to IP, as unconventional as that may seem.<sup>47</sup> The present stage of IP overreach has incrementally shown that its structurally defective floor-without-ceiling edifice is no longer safe. Nor is it able to sustain the present leadership in innovation of the present crop of technology-exporting countries.

## IP overreach: Alarms in critical constituencies

Like the poorly configured national IP systems in some of the leading developed countries that championed the current global IP order, such as the United States, Japan and members of the European Union, the current global system has important implications. In less-developed countries, it has generated consistent tensions. In the developed countries themselves, it elicits concerns in critical constituencies.<sup>48</sup> For instance, research communities are worried about the privatisation of publicly funded research, especially by

<sup>47</sup> See Annette Kur “International Norm-Making in the Field of Intellectual Property: A Shift Toward Maximum Rules? (2009) 1 *WIPO Journal* 27, 30. Between a maximalist (overprotection) and minimalist (underprotection) approach to IP, Reichman and Uhler proposes a middle course, a more moderate approach to IP protection, one that allows room for genuine progress in regard to sequential and cumulative innovation while accommodating the upward calibration of rights in accordance with the state of progress in a given sector. See Reichman and Uhler, “Database Protection at the Crossroads” (1999) 14 *Berkeley Technology Law Journal* 793.

<sup>48</sup> The following literature reflects the diversity of contexts and subject-matters in which concerns regarding the unsustainable direction of the current global intellectual property order are expressed: European Patent Office, “Scenarios for the Future”, at <http://www.epo.org/topics/patent-system/scenarios-for-the-future.html> [Accessed March 29, 2011] (a study commissioned by the EPO which identifies four future scenarios and directions in the potential evolution of IP law and patenting in the next 15 years); see also Lawrence Lessig, “The Creative Commons” (2003) 55 *Florida Law Review* 763; Lawrence Lessig, *Free Culture: The Nature and Future of Creativity* (New York: Penguin Books, 2004); James Boyle “The Second Enclosure Movement and the Construction of the Public Domain” (2003) 66 *Law and Contemporary Problems* 33; Michael Heller, *The Gridlock Economy: How Too Much Ownership Wrecks Market, Stops Innovation and Costs Lives* (New York: Basic Books, 2008); Adam B. Jaffer and Josh Lerner, *Innovation and Its Discontent: How Our Broken Patent System is Endangering Innovation and Progress, and What to Do About It* (New Jersey: Princeton University Press, 2005); Peter Drahos (ed.), *The Death of Patents* (Oxford: Lawtext and Queen Mary IP Research Institute, 2005); Anthony D. So, Bhaven N. Sampat, Arti K. Rai, Robert Cook-Deegan, Jerome H. Reichman, Robert Weissman and Amy Kapczynski, “Is Bayh-Dole Good for Developing Countries? Lessons from the US Experience” (2008) 6(10) *PLoS Biology*, at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2573936/> [Accessed March 29, 2011]; Joshua Gay (ed.), *Free Software, Free Society: Selected Essays of Richard M. Stallman* (Boston, MA: GNU Press, 2002).

universities, and the erosion of the sharing norms or ethics of public science. The protection of scientific databases and the role of overlapping foundational patents in clustering a wide ambit of interlinked sites of innovation around frontier science<sup>49</sup> is also a major source of worry among policy-makers.

The European Commission is presently concerned about how to enhance dissemination of knowledge and innovation, especially research outcomes, scientific information and educational resources as a strategy to contain the threat to public science posed by the extant IP culture in the European Union.<sup>50</sup> In addition, concerns about the widening digital divide and access to knowledge and information between technologically endowed and less-developed countries continue to engage stakeholders involved in the promotion of the information society.<sup>51</sup> In the United States, the current IP overreach continues to elicit strong public debates and notable objections to its unmitigated social costs.<sup>52</sup> Recent signals from the United States show a willingness by both the judiciary and Congress to attenuate the present addiction to the proliferation of patents on the basis of a lower non-obviousness standard.<sup>53</sup>

In the current era of bio- and digital revolution, perhaps only a few things signify the disquiet over a failing global IP order in the leading industrialised countries than does the popularity of open access ideology, A2K movements and the concept of scientific commons. Open access movements, including the Creative Commons movement, have not only successfully evolved in theory and application; they are generally presented as viable alternatives to address the deficient distributional outcomes of the global IP system in a manner that strikes at the core issue of access to information and knowledge. Not only do these open access or creative commons initiatives underscore the role of IP in negotiating or structuring social relations,<sup>54</sup> they also serve as catalysts for networked innovation to advance individual and collective creativity of all sorts. The legendary success of Wikipedia, various open source operating systems<sup>55</sup> and the liberalisation of collaborative information generation and sharing, especially through the activities of second generation social network sites and other creative commons platforms within and across geopolitical borders, have continued to foster the open access culture. They have also induced an increased attraction to apply the model of networked innovations, which attempt to bypass IP bottlenecks or, where possible, minimise their social cost for optimal distributional outcomes.<sup>56</sup>

## From followers to leaders: Emerging and regional powers

Despite the concerns of critical constituencies within and outside the leading technology-exporting countries over the negative effects of perpetuating maximum norms of IP, it would be naive to expect that the desired change will come voluntarily, let alone quickly, from the same quarters that have rigged and led the global IP regime to its present crisis point. Regimes take time to form, and when they do, they assume a life of

<sup>49</sup> Sapna Kumar and Arti Rai, "Synthetic Biology and Intellectual Property Puzzle" (2007) 85 *Texas Law Review* 1745 (alluding to the potential negative effects of foundational patents in biotechnology and software on the development of innovation in synthetic biology and the option of "open source"-type model).

<sup>50</sup> See European Commission, "Green Paper on Copyright in the Knowledge Economy" COM(2008) 466/3, at [http://ec.europa.eu/internal\\_market/copyright/docs/copyright-info/greenpaper\\_en.pdf](http://ec.europa.eu/internal_market/copyright/docs/copyright-info/greenpaper_en.pdf) [Accessed March 29, 2011]; see also Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1152–1153.

<sup>51</sup> See Peter K. Yu, *Building Intellectual Property Coalition for Development*, Center for International Governance Innovation (CIGI) Working Paper Series No.37 (2008), p.2 (IPC4D) (citing concerns over global digital divide which preoccupied deliberations on the 2003 and 2005 World Summit on Information Society held in Geneva and Tunis); see also Peter K. Yu "The Trust and Distrust of Intellectual Property Rights" (2005) 18 *Revue Québécoise de Droit International* 107.

<sup>52</sup> See Kemp, "Copyright on Steroids" (2010) 41 *McGeorge Law Review* 795; see also Crews, "Copyright Duration and the Progressive Degeneration of a Constitutional Doctrine" (2005–06) 55 *Syracuse Law Journal* 189; Emily Meyers, "Art on Ice: The Chilling Effect of Copyright on Artistic Expression" (2006–07) 30 *Columbia Journal of Law and Arts* 219.

<sup>53</sup> Heller, *The Gridlock Economy*, 2008, pp.65–66; see also Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1128.

<sup>54</sup> Madhavi Sunder, "IP3" (2006) 59 *Stanford Law Review* 257, 288.

<sup>55</sup> See Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1148.

<sup>56</sup> See Lea Shaver (ed.), *Access to Knowledge in Brazil: New Research on Intellectual Property, Innovation and Development* (New Haven, CT: Yale University Law School, 2008); Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven, CT: Yale University Press, 2006); Gay (ed.), *Free Software, Free Society*, 2002.

their own. But things do not look as hopeless as they seem. One of the lessons of IP in global governance is the presence of resistance, by way of counter-regimes or “cross-currents” as permanent features of both globalisation and global governance. For example, typical of trends in globalisation and global governance, the birth of TRIPS and its induction of a harmonised global IP order was, perhaps, the single most pivotal development responsible for eliciting different forms of resistance to the new IP order. In this regard, different institutions, instruments, NGOs, IGOs, sub-state actors and multifarious stakeholders—hitherto outliers in the normative discourses on IP—easily became sites or agents for critical exploration of IP issue linkages and for the elaboration of the development discourse.

So far, modest strides have been made, at least, to open up and intensify conversation—for example, on traditional knowledge-related rights, including farmers’ rights, traditional cultural expressions, ABS, the intersection of IP with public health and human rights, and the safeguarding and protection of intangible cultural heritage and cultural diversity. These advances do not only reflect increased global awareness of the critical importance and ubiquity of IP. They also demonstrate the realisation that IP is fundamentally an interdisciplinary subject-matter and the target of multiple control mechanisms outside the ambit of a single or few governance institutions as previously thought.

The new way of understanding IP and the stakes involved in its governance is empowering rather than intimidating, especially for those at the receiving end of the presently subverted and poorly configured global IP order. It is on this backdrop that less-developed countries and their global sympathisers (which transcend geo-political and economic borderlines) under the leadership of Brazil and Argentina, successfully pushed for the adoption of a new Development Agenda at WIPO in 2007. Though the Development Agenda is presently taking baby steps on its implementation journey and though its future remains uncertain,<sup>57</sup> for the purpose of this article, its symbolism is what matters.

In terms of significance, first, the Development Agenda reflects an acknowledgement that the ongoing harmonisation of global IP rules weighs abysmally poor on the development scale and, as such, it is in need of salvaging. Secondly, though it has a very weak legal grounding, that fact should not be over advertised. The process that resulted in the Development Agenda is legitimately robust, perhaps even more so than the one that yielded the TRIPS Agreement. Further, via its six clusters, the Development Agenda adopts a comprehensive outlook on global governance of IP. Thus it is both an approach and a framework, the pursuit of which would recognise and accommodate the non-hierarchical or non-conventional nature of actors, instruments and processes that forge control mechanisms in global governance.

Thirdly, and, perhaps most importantly, the Development Agenda symbolises the real and potential ability of less-developed countries, led by those increasingly described as emerging or regional powers, to influence a new vision for a global IP order through rethinking the present governance scheme or its reconfiguration. Lastly, the Development Agenda demonstrates, in accordance with David Kennedy’s thesis, a reification of global governance in action; it objectifies “a dynamic process in which political and economic arrangements unleash interests, [attempt to] change the balance of forces, and lead to further re-invention of the governance scheme itself”.<sup>58</sup>

The ability of less-developed countries to actually change the balance of forces and to reconfigure the direction and governance scheme of the global IP process is an idea that holds great hope for many respectable analysts<sup>59</sup> as a way out of a global IP system at a crossroads. In a 2008 study commissioned by the Centre for International Governance Innovation (CIGI) titled *Building Intellectual Property Coalition for Development* (IPC4D), Peter Yu writes:

<sup>57</sup> See generally de Beer (ed.), *Implementing the WIPO Development Agenda*, 2009.

<sup>58</sup> See Kennedy, “The Mystery of Global Governance” (2008) 34 *Ohio Northern University Law Review* 827, 832.

<sup>59</sup> For example, see sentiments expressed in Yu, *Building Intellectual Property Coalition for Development*, 2008; Yu, “Access to Medicines, BRICS Alliances, and Collective Action” (2008) 34 *American Journal of Law and Medicine* 345; Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115.

“The adoption of a Development Agenda ... has provided less developed countries with a rare and unprecedented opportunity to reshape the international IP system in a way that would better advance their interests. However, if these countries are to succeed, they need to take advantage of the current momentum, coordinate better and with other countries and nongovernmental organizations, and more actively share with others their experience and best practices.”<sup>60</sup>

The potential of less-developed countries to shape the future of the global IP is not necessarily limited to addressing the development question for their own interest only. Indeed, as Yu observes, learning from the mistakes of the major technology-exporting countries or knowledge cartels is also critical. That approach provides a window of opportunity for less-developed countries to change the direction of the present global IP order, which will also benefit the developed countries in the long run. However, a pro-development approach, broadly understood, takes aim at most of the wrong elements of that order. Under its broad construct, development becomes a touchstone for rallying various open-ended IP issue linkages. To this extent, development provides a malleable framework for a holistic and critical outlook on the global IP order.

For instance, depending on one’s conceptual approach, all of the 45 recommended proposals adopted in the Development Agenda,<sup>61</sup> even if overlapping, are comprehensive enough to accommodate most of the problematic or challenging issues highlighted by the present crisis besetting the global IP. The six different issue clusters into which they can be reduced—technical assistance and capacity building; norm setting, flexibilities, public policy and public domain; technology transfer, information and communication technologies and access to knowledge; assessment, evaluation, and impact studies; institutional matters, including mandate and governance; and, lastly, the omnibus “other issues”<sup>62</sup>—combine to give a clear sense of the issue compass compressed under the Development Agenda.

### **Pushing the Development Agenda: The benefits of a coalition imperative**

According to Yu, the different but non-exclusive forms or platforms which the IP Coalition for Development (IPC4D) could take include the formation of blocs, alliances, regional integration and miscellaneous co-operative arrangements by less-developed countries. He proposes four different co-ordination strategies for the development and implementation of IPC4D. They are: the building of South-South alliances, engagement in North-South co-operation, a joint or collaborative strategy for effective participation in the WTO dispute settlement process, and the development and patronage of regional development forums for capacity building and co-operative optimisation of factor endowment and various comparative advantages among less-developed countries.

The advantages of a dedicated collaborative approach to IP by less-developed countries are simply innumerable and require a few highlights. Under this strategy, leading countries in the pack, such as the Brazil, Russia, India and China (the BRIC alliance),<sup>63</sup> and potential contenders thereto, are able to share their knowledge and experiences and to disseminate their best practices in navigating the TRIPS Agreement, the WTO dispute settlement and other trade and development-sensitive processes. A collaborative approach ensures context-sensitive training, education and capacity building, as well as the optimisation of negotiation

<sup>60</sup> See Yu, *Building Intellectual Property Coalition for Development*, 2008, p.3.

<sup>61</sup> See WIPO 45 Adopted Recommendations under the WIPO Development Agenda, at <http://www.wipo.int/ip-development/en/agenda/recommendations.html> [Accessed March 29, 2011] (as listed under six clusters: A–F).

<sup>62</sup> See WIPO 45 Adopted Recommendations under the WIPO Development Agenda, cluster F, at <http://www.wipo.int/ip-development/en/agenda/recommendations.html> [Accessed March 29, 2011].

<sup>63</sup> Since the BRIC concept was floated about nine years ago by the Goldman Sachs asset management chairman, Jim O’Neil, some countries, including the following, are touted or even self-promote as potential contenders for membership in the coveted club: Indonesia, Mexico, Nigeria, South Africa and Turkey. On December 28, 2010, China (as the current rotating chair of BRIC) announced that the bloc had issued an invitation to South Africa to join the club, following South Africa’s application, thus making South Africa an official member of the economic bloc. See Mu Xuequan, “South Africa Joins BRIC as Full Member”, at [http://news.xinhuanet.com/english2010/china/2010-24/c\\_1366213.htm](http://news.xinhuanet.com/english2010/china/2010-24/c_1366213.htm) [Accessed December 27, 2010].

or bargaining leverage. It also provides what Peter Yu calls “a combine-and-conquer strategy”,<sup>64</sup> which helps counterbalance the divide-and-rule mentality of the United States and its European allies. This approach further minimises the prospects of retaliation, isolation and other negative forms of diplomatic backlash that arise when small states “pick fights” with powerful ones.

In addition, a focused collaborative approach would, be cost efficient overall in regard to optimising access to the wiggle room, or for exploiting the flexibilities of the current global IP order and other relevant multilateral trade negotiation arrangements. Many analysts rightly contend that less-developed countries have consistently under-explored the wiggle room or flexibilities offered by TRIPS and other multilateral trade agreements.<sup>65</sup> Stretching or pressuring those wiggle room and flexibilities is now more important than before. This is not only because the post-TRIPS global IP order and the WTO process have crystallised, but also because pending any future reforms in the global IP policy- and lawmaking regime, less-developed countries will continue to play by the current rules. Perhaps, it is only when the capacity of those flexibilities is optimally explored would appropriate and informed lessons be learned in regard to their strengths and weaknesses. Such an outcome is important for fashioning future policies.

### **Emerging powers and their dramatic transitions in context**

Increasing optimism in the ability of less-developed countries to spearhead change in the global IP policy and lawmaking is not an isolated speculation. It is integral to the confidence in their ability to realign the balance of forces in the broader global political and economic equation in the 21st century.<sup>66</sup> The basis of this optimism is not far-fetched. First, from the late 20th century, most regions and countries of the global South have witnessed significant political and economic transitions. Without renouncing its communist political structures, China embraced the market economy with unprecedented and unstoppable energy, marked by remarkable progress. India, the world’s largest democracy, has maintained strong economic growth along with a strong profile in the bio- and digital technology sectors. America’s emergence as the sole super-power after the Cold War left South American military dictatorships without America’s strategic support that they had enjoyed in the Cold War era. The continent consequently shed its unviable association with brutal military dictatorships in exchange for democracy, with Brazil as the beacon of that change. In the African region, South Africa, like a phoenix, rose from the ashes of apartheid and strategically re-positioned itself for leadership in the region. Much of the rest of the continent, including Nigeria, despite regular political hiccups, social conflicts and military interventions in government, have transitioned via infant steps into some forms of fledgling democratic cultures. Yet the economic and political ramifications of the ongoing 2011 revolutions in the Arab Middle East and North Africa have yet to ripe for informed assessment.

One effect of the positive political transitions in these countries and regions is the opening up of economic and political opportunities through which their voices are heard in international regulatory processes, including those dealing with IP and trade, the environment and sustainable development. The freeing up of democratic spaces in these nations also enhances regional, bilateral and multilateral forms of co-operation. For instance, most of the countries of the south are involved at one level or the other in every conceivable form of coalition building, including regional, continental, sub-continental, and special interest-driven trans-regional groupings.

<sup>64</sup> Yu, *Building Intellectual Property Coalition for Development*, 2008, p.7.

<sup>65</sup> See Sonia E. Rolland, “Developing Country Coalition at the WTO: In Search of Legal Support” (2007) 48 *Harvard Law Journal* 483; Yu, *Building Intellectual Property Coalition for Development*, 2008, p.8. See generally Sisule F. Musungu, Susan Villanueva and Roxana Blasetti, *Utilizing TRIPS Flexibilities for Public Health Protection Through South-South Regional Frameworks* (Geneva: The South Centre, 2004) (also cited IPC4D: Yu, *Building Intellectual Property Coalition for Development*, 2008).

<sup>66</sup> See Jeffrey E. Garten, *The Big Ten: The Big Emerging Market and How They Will Change Our Lives* (New York: Basic Books, 1997); Gerald Schmitz, “Emerging Powers in the Global System: The Challenges for Canada”, PRB-05-70E Parliamentary Library (2006), at <http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm> [Accessed March 29, 2011].

The role and influence of leading developing countries such as Brazil, India and China in the post-TRIPS IP world has become quite significant. This is so, especially in regard to the Doha Declaration and generally in regard to the development rounds of multilateral trade negotiations. It is also the case in relation to the specific heads of IP issue linkages and the overall dynamics of various institutional forums relevant to IP in global governance. Economic analysts have grouped Russia with Brazil, India and China as the BRIC bloc of countries and have gradually nudged them into appreciating their enormous political and economic potential as a bloc.<sup>67</sup> Gradually, these four big countries have become engaged as an unofficial economic and political pressure bloc of great significance.<sup>68</sup> In 2010, the bloc announced the formal admission of South Africa into the BRIC league.

With more than 25 per cent of world's land mass and 40 per cent of its total population, the BRIC (excluding South Africa) have a collective GDP of US\$15.5 billion. Recently, the original "Big Four BRIC" have begun to leverage their economic and political clout to counter, reverse or otherwise influence the United States' hegemonic role in critical subjects, including IP and trade. The emergence of the BRIC is another important layer on the growing South-South alignment, which builds on pre-existing historical and contemporary formations such as the non-aligned movement (NAM), G77+China, and even the North-South strategic engagement forums such as Outreach 5 of the G8 and the G20.<sup>69</sup>

Except South Africa, all the BRIC countries rank among the five most populous countries in the world. Save for the United States and Japan, which occupy the third and tenth positions, less-developed countries make up 80 per cent of the world's most populated territories. With continuing economic prosperity in the BRIC bloc and in other strategic middle income countries like South Africa, Argentina, Mexico, Thailand, Indonesia, Malaysia and South Korea, the political and economic clout of less-developed countries and its implication for re-engaging the crisis of equity in the global IP arena has never looked more promising.

Leading countries of the global South are now commonly referred to by analysts as regional or emerging powers. These countries have continued to cultivate and consolidate their regional clout as an important platform for engaging in cross-regional bridge-building which is very relevant for advancing IPC4D and other trade and development oriented objectives. An example in this regard is South Africa, which, since its integration into international comity at the end of apartheid, adopted Africa as the centre of its foreign policy and has shown strong leadership within the Southern African Development Community (SADC) and the African Union (AU). India's engagement in the subcontinent is also evident in its historical commitment to the South Asian Association for Regional Cooperation (SAAARC) and other regional groupings. Similarly, as South America's most populous country and its largest economy, Brazil's influence in the region has been quite natural, as evident in its leadership role in such forums as the Mercosur (Southern Common Market) and the Union of South American Nations. Indonesia and its regional partners in the ASEAN region also have remained engaged in the nurturing and transformation of the South East Asian countries into a competitive regional economic and trading bloc.

Building upon their regional influences, two of the original BRIC countries, India and Brazil, have formed a trilateral union with South Africa called IBSA (India-Brazil-South Africa). This association, which came into life in 2003, transcends:

<sup>67</sup> For a more critical insight into the evolution and the future of BRICS, see Goldman Sachs, "BRICS", at <http://www2.goldmansachs.com/ideas/brics/index.html> [Accessed March 29, 2011].

<sup>68</sup> See Dominic Wilson and Roopa Purushothaman, "Dreaming the BRICs: The Path to 2020", Global Economics Paper No.99, Goldman Sachs, New York (October 1, 2003), at <http://www2.goldmansachs.com/ideas/brics/book/99-dreaming.pdf> [Accessed March 29, 2011]; see also Michael Schuman, "The BRICS: Plotting A New World Order?", *Time: Curious Capitalist* (April 16, 2010), at <http://curiouscapitalist.blogs.time.com/2010/04/16/the-brics-plotting-a-new-world-order/> [Accessed March 29, 2011].

<sup>69</sup> See Woodrow Wilson International Center for Scholars, Special Report: "Emerging Powers: India, Brazil and South (IBSA) and the Future of South-South Cooperation" (August 2009) (IBSA Report), p.13, at <http://www.wilsoncenter.org/events/docs/brazil.IBSAemergingpowers.pdf> [Accessed March 29, 2011].



“geographical, historical and regional differences in order to promote their individual and collective interests at a time when the current economic hardship and declining US hegemony mean greater opportunities for emerging countries in the global South.”<sup>70</sup>

As a trans-regional grouping, IBSA provides a platform “for sharing of best practices between member countries and strengthens the voice of the developing world as a whole”<sup>71</sup> in critical areas such as trade and IP negotiations. Within the short period of its existence, a report on IBSA by the Woodrow Wilson International Center for Scholars shows increased trilateral trade and co-operation among IBSA members in the G8, and an increase in “similarity among their votes in other international forums”.<sup>72</sup> According to the report, the combined population of IBSA countries is estimated at 1.3 billion with a nominal GDP of US\$3 trillion, or in the alternative, US\$5.7 trillion based on purchasing power parity. All the IBSA countries “encompass an area three times bigger than the European Union”.<sup>73</sup>

With the prospect of Mexico joining IBSA,<sup>74</sup> only a few alliances better suit Yu’s vision of a model of South-South co-ordination strategy for developing IPC4D. As three strategic regional leaders who also double as emerging powers, countries of the IBSA coalition are aware of the current opportunity for “re-engineering the [global] economic architecture of the Bretton Woods Institutions”<sup>75</sup> for a more representative and development oriented outcome. Divergences in the historical and political profiles and experiences of these countries should not (as has always been the reason for pessimism over South-South solidarity) be an impediment to their co-operation. In fact, bridging the development gap is a shared permanent interest of most, if not all less-developed countries, including the regional and emerging powers among them. This realisation is critical for forging IPC4D and for reconfiguring the global governance scheme for IP. The recent formal admission of South Africa into the BRIC bloc (more appropriately BRICS,) however, raises concerns not only about the future of IBSA but also about the potential danger of loss of direction likely to plague the indiscriminate duplication of these alliances.

### **Development: A common denominator**

Unlike their developed counterparts, the shared common interests of less-developed countries, including the regional and emerging powers among them, in a new development-oriented world IP order, stems from diverse reasons, few of which I identify here. First, the asymmetrical gap between the rich and poor in those countries—for example, in China, Brazil, India, South Africa and Mexico—is simply phenomenal. Even with the present unprecedented pace of economic prosperity, the rich-poor gap in those countries cannot be adequately bridged over a generation. Thus, addressing the development question, for instance, in regard to access to knowledge, essential medicines and human rights, and in regard to the distribution of miscellaneous benefits from innovation, remains a critical economic and political necessity.

Secondly, because most of these emerging powers are home to a majority of the world’s indigenous and local communities, a humane and just resolution of the interface between IP and traditional knowledge will become more urgent in the new IP order. A related third point is that these emerging powers are also centres of origin of global biodiversity, and are reservoirs of cultural treasure and heritage. As such, they have a permanent and vested interest in proactively reversing the deliberate lethargy with which the developed countries have addressed those issues in the current global IP regime. Lastly, as late entrants

<sup>70</sup> *IBSA Report*, 2009, p.1.

<sup>71</sup> *IBSA Report*, 2009, p.2.

<sup>72</sup> *IBSA Report*, 2009, p.9.

<sup>73</sup> *IBSA Report*, 2009, p.10.

<sup>74</sup> Remark made by the South African High Commission (Ottawa) Policy Officer Anesh Maistry, at a presentation titled “South Africa as Emerging World and Regional Power”, under the auspices of the Dalhousie University Centre for Foreign Policy Studies at Dalhousie University, Halifax, Nova Scotia, Canada, November 25, 2010.

<sup>75</sup> *IBSA Report*, 2009, p.15.

into the extant global IP policy and lawmaking order, they are keenly aware that the system has not served their interests well. Increasingly aware of their new economic and political clout and the power in solidarity, they have an opportune moment to break the now fragile hegemony of the present global knowledge cartel.

The history of IP demonstrates that when countries transition into hi-tech creative and innovative economies, they become champions of stronger IP protection, as the United States, Japanese, German and South Korean experiences demonstrate.<sup>76</sup> It is a history of getting to the top and kicking away the ladder.<sup>77</sup> The logic of that history dictates that given the political and economic disparities among the countries of the South, especially in relation to the middle income or emerging regional powers like China, India, Brazil, Mexico, Argentina and South Korea, this group of countries could soon get to the “crossover point”. Singing the old tune, they could begin to succumb to the problematic “high-protectionist delusions”<sup>78</sup> of the present day knowledge cartels. Jerome Reichman observes that IP remains critically important to the advancement of the emerging economies. He argues, rather bluntly, that they have two clear choices on the table:

“One is to play it safe by sticking to time-tested IP solutions implemented in OECD [Organisation for Economic Co-operation and Development] countries, with perhaps a relatively greater emphasis on the flexibilities still permitted under TRIPS (and not overridden by relevant FTAs). The other approach is to embark on a more experimental path that advanced technology countries currently find so daunting.”<sup>79</sup>

Similarly, broaching the issue of choices available to the high-income emerging powers in his reflections on the undetermined future of the global IP order, Peter Yu observes:

“Although intellectual property in these countries will no doubt improve in the near future, there is no guarantee that these countries will be interested in retaining the existing intellectual property system once they cross over to the other side of the intellectual property divide. Instead, these new champions may want to develop something different — something that builds upon their historic traditions and cultural backgrounds and takes account of their drastically different socio-economic conditions.”<sup>80</sup>

Without over-flogging the issue, the ability of the emerging powers to chart a new global IP order will depend, for the most part, on how they may successfully forge meaningful IPC4D. The success of this and related efforts at coalition building will be undermined if they approach it from the sometimes unhelpful confrontational binary of “us-and-them”, South-and-North or other related sentiments. Indeed, given the reality of the boomerang effect on account of the overweening reach of the current global IP arrangement, both developed and less-developed countries have valuable stakes in a reconfigured global IP order.

It is evident in the foregoing analysis that there are more areas of shared factor deficits, and more areas of similarity in the socio-economic, political and cultural situations of the regional and emerging powers potentially positioned to lead the charge to reform the global IP order, than there are areas of disparity and difference among them. By way of just one example, those countries collectively share in the transformative experiences of the two defining technologies of the new knowledge economy—namely, bio- and digital technologies—and the latter’s ubiquitous multiplier effects. Not only have these technologies

<sup>76</sup> See Yu, *Building Intellectual Property Coalition for Development*, 2008, p.24.

<sup>77</sup> See Drahos and John Braithwaite, “Hegemony Based on Knowledge: The Role of Intellectual Property” (2004) 21 *Law in Context* 204; see also Lawrence Lessig, “The Creative Commons” (2003) 55 *Florida Law Review* 763.

<sup>78</sup> See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1121.

<sup>79</sup> Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1126.

<sup>80</sup> Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPOJ* 1, 13.

facilitated the integration of the economies of those countries into the global economy, they have also empowered them in a manner which assures their strategic importance and potential in the emerging global economic order.

In addition to the earlier allusion to the positive effects of political transformation and ideological shift in some of the emerging economic and political powers, their rise is not unconnected to the unexpected emancipatory impact of globalisation and its relationship with the two epochal technologies of the knowledge economy in whose continuing evolution these countries play major roles. Further, analysts point out also that the rise of the new economic powers coincides with the perceived decline of the neoliberal hegemony and the “Washington Consensus”.<sup>81</sup> Without question, the emergence of these new powers implicate complex factors, not the least of which is the overbearing posture of the neoliberal hegemony toward other states, its market fetishism and its insensitivity to context and balance, that is, its disregard for the need to pay appropriate attention to the omnibus issue of development.

Santos suggests that the weakening of the neoliberal hegemony is a consequence, in part, of:

“its practices over recent decades [that] intensified exclusion, oppression, and the destruction of means of subsistence and sustainability of large populations of the world.”

This attitude created the extreme situation “where inaction and conformism” by those at the receiving end were hardly options.<sup>82</sup> In a nutshell, this observation is true in regard to the overall outlook of the American-led global economic order following the Cold War. It is truer with regard to IP and trade policies as a composite ancillary part of that global ordering.

## Issues for a new global IP order

Detailing the direction for a new global governance structure for IP requires an entirely new project beyond the present one. A highlight of the key issues that should engage such an order is apposite. First, I recognise that from most indications, the emerging regional and global powers are in a better position to chart a new course for the future of global IP. In this context, much would depend on the nature of future technologies and on whether or the extent such emerging powers are able to engage MNCs in their jurisdictions as agents of influence in IP policy. Secondly, I assume that to press forward, a strategy of coalition building is critical. Thirdly, any such coalition would involve diverse and complex alignments encompassing South-South and North-South actors that share a dedicated focus on development. Fourthly, active engagement of the new global governance drivers and stakeholders, including MNCs, NGOs, IGOs, sub-state actors from North and South with expertise in IP and development, is necessary for building the coalition. The importance of these so-called unconventional actors as engineers of control mechanisms in global governance should not be underrated. Related to this is the need to boost the number of IP user advocate groups to counterbalance the over-representation of rights owner lobbies in the activities of WIPO and other relevant organisations.

Pending the transition to a reconfigured global IP regime, it would be necessary to increase the co-operative participation of less-developed countries in the WTO dispute settlement process in order to explore, exploit and stretch limits of existing flexibilities and wiggle room. Alongside, less-developed countries should take more aggressive national legislative and policy initiatives to optimally exploit or leverage their residual sovereign rights to fashion domestic IP policies. This is in regard to the rights that are not affected or constricted by the WTO/TRIPS and other multilateral agreements. Brazil, India and

<sup>81</sup> See Boaventura de Sousa Santos, “Globalizations” (2006) 23 *Theory, Culture and Society* 393; see also Boaventura de Sousa Santos, “The World Social Forum and the Global Left” (2008) 36 *Politics and Society* 247. See generally Susanne M. Soederberg, *Global Governance in Question: Empire, Class, and the New Common Sense in Managing North-South Relations* (Winnipeg: Arbeiter Ring, 2006). For an overview of the Washington Consensus (as a global economic vision chiefly driven by an unmitigated free market ideology) see Narcis Serra and Joseph E. Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance* (Oxford: Oxford University Press, 2008).

<sup>82</sup> Santos, “The World Social Forum and the Global Left” (2008) 36 *Politics and Society* 247, 248.

China, and regionally, the ANDEAN region, have shown commendable leadership in this regard through their IP and related reforms.<sup>83</sup> The rest of less-developed countries have a lot to learn from the best practices and experiences of the three countries and the Andean region in this regard.

To meaningfully initiate change, stakeholders would have to urgently pressure relevant actors and forums to put on hold the WIPO Patent Agenda, and the negotiation of various FTAs and bilateral arrangements with TRIPS-plus components. In 2007, the Geneva Declaration on the Future of WIPO called for a moratorium on such arrangements as a show of good faith toward the new Development Agenda.<sup>84</sup> Thus, a compelling logic of the Development Agenda is the need for IP policy-makers to take the issue of development seriously. As such, better training on the development aspect of IP is an imperative of a new IP order.

Refashioning a new global IP order does not mean a reinvention of the wheel. Rather, it would require the agents of the desired change and their allies in IPC4D to penetrate present institutional structures of global governance of IP with the objective of influencing a change in the institutional culture in the direction of development. For instance, taking into account the six issue clusters of the Development Agenda, they can push for an elaborate reorientation in the curriculum of the WIPO Academy and other national, bilateral, regional and professional IP education and training programmes in order to mainstream development in IP education and training.<sup>85</sup> Since institutional culture is hard to change, and assuming that changing people's orientation would impact policy direction ultimately and conceding that such an approach will take time to yield results, the best place to start is education and the training of a new crop of global IP law and policy leaders at national, regional and global levels. In this regard, the strategic support of northern NGOs and other public interest and civil society groups with expertise on IP and development in various issue linkage areas is crucial. Needless to say, education and training are critical to reforming the present misaligned global IP system.

A thorough audit of the “boomerang effects” of the current IP order is necessary to gain a comprehensive understanding of the mistakes and failures of the present knowledge cartel. In this regard, minimising the social cost of IP in relation to A2K, promoting sequential and cumulative innovation, restoring competition to moderate the prevailing IP overreach—especially in relation to the proliferation of patents of lower non-obviousness standards—and using technological protection measures (in regard to the quickly entrenched culture of copyright abuse) are all matters of priority. Another important aspect of mitigating the social cost of IP is to mainstream the notion of the creative commons and isolate platform technology and basic and public science from over-protection under a new IP norm. This must be accompanied by deliberate entrenchment of the public interest in negotiating privatisation of publicly funded research to guarantee appropriate social returns and to provide ample discretion respecting access and mitigation of the social cost of such privatisation.

Part of the challenge emerging economic powers face is:

<sup>83</sup> For instance, China's third amendment to its patent law in 2008 introduced a policy of development and promotion of innovation in China. To this end, China will require disclosure of origin of genetic resources in patent applications with the consequence of invalidation of patent when an applicant fails to disclose. The reform broaches the idea of extended exemption for scientific research and a more flexible compulsory licensing regime. Both India and China, Reichman, writes, “have recently begun to formulate competition law and policy with a view to circumscribing the exclusive rights of IP law”. See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1162. Brazil's new copyright reform proposal is hailed as progressive, in part, because of its more proactive approach to not allowing technology to subvert public-regarding considerations, as it makes allowances for aspects of user rights such as fair-dealing. See Michael Geist, “Brazil's Approach to Anti-Circumvention: Penalties for Hindering Fair Dealing”, at <http://www.michaelgeist.ca/content/view/5180/125/> [Accessed March 30, 2011] (referring to art.107 of Law 9610 of February 19, 1998 on Copyright and Neighbouring Rights).

<sup>84</sup> Sponsored by a coalition of civil society groups, non-profit organisations, scientists, academics and individuals, the Declaration called on WIPO to focus more on the needs of less-developed countries and to approach intellectual property as an instrument of development rather than underdevelopment, especially in regard to less-developed countries. It provided momentum for the adoption of the WIPO Development Agenda in 2007. For the text of the Declaration, see <http://www.cptech.org/ip/wipo/futureofwipodeclaration.pdf> [Accessed March 30, 2011]. The Declaration notes specifically that “There must be a moratorium on new treaties and harmonization of standards that expand and strengthen monopolies and further restrict access to knowledge”.

<sup>85</sup> Jeremy de Beer and Chidi Oguamanam, “Intellectual Property Training: A Development Perspective”, ICTD Issue Paper No.31 (November 2010), at <http://ictsd.org/i/publications/96914/> [Accessed March 30, 2011].

“[H]ow to adjust the shifting relations between private and public goods [including] [e]ducation and public health, agricultural improvement, scientific research and other areas still heavily dependent on the public sector in most of those countries.”<sup>86</sup>

Clearly, emerging economies have a vested interest in a new IP order that addresses these questions in a transparent and dedicated manner.

One of the obvious lessons of IP in global governance is the overwhelming reality of regime complexity and how the “regime game” more likely places less-developed countries in position of disadvantage in comparison to their developed counterparts. As much as regime dynamics is a permanent feature of the international process, the nature of IP issue linkage across regimes remains open ended. As such, the prospects of future issue linkages to IP and what regimes or intra-regime dynamics they may throw up depends on the direction of future innovation or technology and their potential socio-economic impacts, among others. Consequently, regime proliferation in IP is a consequence of the dynamic of the rotation of interest by actors in the international process, as well as an incidence of the indeterminate proliferation of IP issue linkages. In this sense, another key issue to consider in a potential reconfiguration of the global governance scheme in IP is devising a strategy for efficient regime or forum management, in contrast to the present deliberate regime proliferation or regime-shifting game which actors play on the global IP chessboard.

The logic of IP issue linkage and its correlating regime complexity is the imperative for an intentional holistic approach to IP in any attempt to reposition IP regulation in global governance. The fact that multiple, evolving and probably open-ended IP issues are linked and associated with complex regimes necessarily requires renegotiating the extant space in which institutional jurisdiction is exercised in relation to IP. Indeed, as much as WIPO and WTO’s significance in IP norm-making and administration is important, there is no single, and not even a few, institutions today that are designed to exercise comprehensive jurisdiction over IP issues in the global knowledge economy. Being an inherently complex transdisciplinary subject-matter, tackling IP policy- and lawmaking challenges in the 21st century would require tremendous flexibility and acute and concerted institutional networking between traditional IP institutions such as WIPO/WTO and innumerable others with direct and indirect jurisdiction in specific IP issue areas.

A holistic and concerted institutional approach to IP reordering is not beneficial only to the global IP arrangement. Such an approach must be premised on a similar ordering at the national level. To fully appreciate the complexity of IP in the new knowledge economy in both developed and less-developed countries, domestic IP agencies and authorities must understand the need for inter-agency collaboration. That form of collaboration is the base on which the issue linkages engaged by IP are to be navigated in order to entrench a holistic approach to IP regulation in global governance. A recent work that examined IP training and education from a development perspective found that partly because of Nigeria’s burgeoning movie industry, that country has a proactive copyright agency that dominates the IP policy space with a heavy bent on copyright enforcement only. The agency, the Nigerian Copyright Commission (NCC), embarked on a reform of IP curricula in Nigerian educational institutions with little or no consultation with other important sectors within that country’s innovation constituencies, which are also relevant to IP policy development, especially biotechnology and traditional knowledge.<sup>87</sup> Nigeria has some parallel with India in relation to their thriving movie industries and their rich biodiversity and traditional knowledge endowments. It is hard to imagine an Indian approach to global IP policy that focuses on its movie industry without accommodating its incredibly rich traditional bio-cultural knowledge, medical traditions and stakes in agricultural, pharmaceutical and biotechnology innovations.

<sup>86</sup> See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1124.

<sup>87</sup> De Beer and Oguamanam, “Intellectual Property Training: A Development Perspective”, 2010, p.31.

## Conclusion

The effects of a changing international political and economic environment and the opportunities it presents are compelling and profoundly amenable to the current swirling momentum of the global IP policy- and lawmaking process. In the words of the South African Minister of International Relations and Cooperation:

“The world we live in today has changed significantly since the end of the Cold War. A new group of economically influential countries, such as Brazil, Russia, India and China are on the ascendancy, and are mapping the contours of political and economic power in the global system ... Emerging powers are an important force in shaping the coordinates of a better global system, characterized by greater representation of fairness and equity.”<sup>88</sup>

Applying the above sentiments to IP in global governance, all actors agree that among others, the issues of fairness, equity, balance and access to knowledge, conveniently encapsulated by the notion of development, are at the core of a new IP order. Both developed and less-developed countries have vested interests in reconfiguring the global governance scheme for IP in the framework of development. It is matter of urgency if we are to stem the tide of the current global IP order from its present flow in the direction of the unaccountable deep social costs that threaten to drown the progress of our civilisation at a time that, not many would disagree, is witness to one of the greatest technological and innovation transformations in history.

Though the rise of the countries of the South as emerging powers cannot be denied or lightly accounted, it would be too simplistic to reduce the present challenges facing IP governance in the global knowledge economy to a narrow North-South binary, even if the invocation of that binary is often irresistible in an analysis of the politics of IP in global governance. However, as the US National Intelligence Council rightly observed in a 2004 self-fulfilling prediction, the rise of the emerging powers has:

“the potential to [and has since] render[ed] obsolete the old categories of the East and West, North and South, aligned and nonaligned, developed and developing. Traditional geographic groupings will increasingly lose salience in international relations ... competition for [new] alliances will be more open, less fixed than in the past.”<sup>89</sup>

This is so, as soon-to-be-displaced powers begin to re-evaluate their clout in the emergent order.<sup>90</sup> In these realignments of forces and concomitant rotation of interests, there is perhaps no better opportunity for strategically positioned emerging powers to push forward a new global IP framework that tackles, head-on, the prevailing development deficit of the extant regime.

<sup>88</sup> See Maite Nkoana-Mashabane, “The Relationship Between South Africa and the Emerging Global Powers”, a speech by the South African Minister of International Relations and Cooperation to the South African Institute of International Affairs (November 1, 2010), pp.1–2, at [http://www.saiia.org.za/images/stories/saiia/saia\\_spe\\_min\\_maite\\_nkoana\\_mashabane\\_20101101.pdf](http://www.saiia.org.za/images/stories/saiia/saia_spe_min_maite_nkoana_mashabane_20101101.pdf) [Accessed March 30, 2011].

<sup>89</sup> National Intellectual Council (US), “Mapping the Global Future, Report of National Intelligence Council 2020 Project”, Washington, D.C., at [http://www.dni.gov/nic/NIC\\_2020\\_project.html](http://www.dni.gov/nic/NIC_2020_project.html) [Accessed March 30, 2011]; see also Schmitz, “Emerging Powers in the Global System”, 2006, p.1, at <http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm> [Accessed March 29, 2011].

<sup>90</sup> See Schmitz, “Emerging Powers in the Global System”, 2006, p.5, at <http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm> [Accessed March 29, 2011]; see also Steven W. Hook (ed.), *Comparative Foreign Policy: Adaptation Strategies for Great Emerging Powers* (Upper Saddle Rivers, NJ: Prentice Hall, 2002).

# Competition Law and IP Abuse Prevention in Australia: A Comparative Study

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☞ Abuse of dominant position; Australia; Digital technology; Intellectual property

*This article aims to examine the impacts of competition law on the IP abuse prevention in Australia. The author first examines the true nature of the IP abuse conduct in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). He then provides a brief overview of the recent development of IP abuse laws in the EU and the US, particularly in the EU. He further critically examines the likely effects and potential limits of the existing Australian competition law and policy in preventing IP abuses in the digital technology market. He particularly examines major limitations and problems of s.51(3) of the Trade Practice Act 1974 (Cth)(TPA) and its impacts on the access and distribution of digital technology and products. Finally, by drawing on lessons from the experiences of the EU and the US, some practical suggestions for future law and policy reforms in Australia will be provided.*

## Introduction

Along with advances in technology, in particular, the internet technology, we have entered an era of the “digital economy” or “knowledge economy”. Knowledge, education and intellectual capital are no longer exogenous factors that fall outside our economic system. As the Stanford economist Professor Paul Romer described in his New Growth Theory, “knowledge” has become the “basic form of capital” and “the third factor of production in leading economies”.<sup>1</sup> “Economic growth” is now driven more by the “accumulation of knowledge”.<sup>2</sup> Thus the circulation and distribution of knowledge, including the transfer of technology, has become an increasingly influential factor in economic growth. This consequently justifies the “fundamental and catalysing role” of intellectual property rights (IPRs) in the current knowledge economy, since IP rules can directly determine the manner of knowledge distribution, the cost of using intellectual resources and public access to technology and a variety of intellectual resources generally.<sup>3</sup>

\* Email: George.Tian@uts.edu.au. The author would like to thank Professors Peter K. Yu (Drake University Law School), Megan Richardson (Melbourne University Law School) and Adrian Coorey (Principal Lawyer, Trade Practices Litigation Unit, Australian Competition and Consumer Commission) for their valuable comments on the early draft of this article. He also would like to thank the NSW Law Society Public Purpose Fund for its support.

<sup>1</sup> Ernst & Young, *The Knowledge Economy*, Ministry of Economic Development, New Zealand (1999), at [http://www.med.govt.nz/pbt/infotech/knowledge\\_economy/knowledge\\_economy-04.html](http://www.med.govt.nz/pbt/infotech/knowledge_economy/knowledge_economy-04.html) [Accessed March 30, 2011]. As the commentators noted, “[f]or the last two hundred years, neo-classical economics has recognised only two factors of production: labour and capital” and “[k]nowledge, productivity, education, and intellectual capital were all regarded as exogenous factors that is falling outside the system”. The article also introduced the differences between Romer’s theory and neo-classical economic theory.

<sup>2</sup> Ernst & Young, *The Knowledge Economy*, 1999, at [http://www.med.govt.nz/pbt/infotech/knowledge\\_economy/knowledge\\_economy-04.html](http://www.med.govt.nz/pbt/infotech/knowledge_economy/knowledge_economy-04.html) [Accessed March 30, 2011] See also WTO, *Intellectual Property: Protection and Enforcement*, para.1, at [http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/agrm7\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm) [Accessed March 30, 2011] (stating: “[i]deas and knowledge are an increasingly important part of trade. Most of the value of new medicines and other high technology products lies in the amount of invention, innovation, research, design and testing involved”).

<sup>3</sup> See Peter Drahos, “Intellectual Property Rights in the Knowledge Economy” in David Rooney (ed.), *Handbook on the Knowledge Economy* (2005), p. 140, at <http://cgkd.anu.edu.au/menus/PDFs/Roey%20Chapter%2011.pdf> [Accessed March 30, 2011].

However, IP rules may be abused by technology holders as a powerful measure to trigger the expansion of their monopoly power. Through creating new technology and IPRs, successful companies may sometimes gain dominance or substantial market power.<sup>4</sup> Once market power is misused, it may limit the public's rights to access information and digital technology, limit the public's enjoyment of intellectual product and adversely impact scientific research and the application of new technology.<sup>5</sup> For example, some major information technology (IT) giants and software companies, either through exclusive dealing or refusal to license IPR protected technology, make information and other digital products no longer accessible or affordable for some public users, researchers and late-comers to the technology market. This consequently represents a deterrent to further creation or innovation.

The issue of IP abuse prevention in the digital market is often deemed as a balancing act within IP law and part of legal debates on "strong" and "weak" IP protection. In fact, this is a misconception. In most cases it is a competition law problem rather than an IP one. The resolution of this issue mainly depends on whether competition law can be enforced sufficiently and effectively.

This article aims to examine the impact of competition law on the IP abuse prevention in the digital market. It particularly focuses on Australia and the European Union (EU). It examines how to use competition law to prevent IP abuses and maintain fair competition in the digital technology market.

The first part examines the true nature of IP abuse conduct under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). The second part provides a brief overview of the recent development of IP abuse laws and litigation in the EU and the United States. It particularly focuses on the recent development of case law in the EU. The third part critically examines the likely effects and potential limits of the existing Australian competition law and policy in preventing IP abuses in the digital technology market. It particularly examines major limitations and problems of s.51(3) of the Trade Practice Act 1974 (Cth) (TPA) and its impacts on the access and distribution of digital technology and products. In the fourth part, by drawing on lessons from the experiences of the EU and the United States, the author provides some practical suggestions for future law and policy reforms in Australia.

## IP abuse in the TRIPS Agreement: IP law or competition law?

The "abuse of intellectual property" is not new terminology. The prevention of IP abuse is one of important requirements in the 1994 TRIPS Agreement, which has set preventing the "abuse of IPRs" and enhancing "international technology transfer" as one of its key principles.<sup>6</sup> Article 8 of the TRIPS Agreement explicitly provides (emphasis added):

"Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the *abuse of intellectual property rights* by right holders or the resort to practices which *unreasonably restrain trade* or adversely affect the international *transfer of technology*."

This may be the first time that the term "abuse of IPRs" appears in an international agreement. It may also be the first time that the international community put "IP abuse", "innovation promotion", "anti-competition" and "technology transfer" issues altogether in one international document. It is clear that art.8 allows the World Trade Organization (WTO) Member States to adopt any measures they think appropriate to prohibit IPR abuse and any other conduct that may unreasonably restrain trade or international technology transfer.<sup>7</sup>

<sup>4</sup> Thomas O. Barnett, "Interoperability between Antitrust and Intellectual Property" (2007) 14(4) *George Mason Law Review* 859.

<sup>5</sup> Yijun Tian, *Re-thinking Intellectual Property*, 2009, p.73.

<sup>6</sup> See the TRIPS Agreement arts 7–8. Article 7 requires that the protection and enforcement of IPRs should "contribute to the *promotion of technological innovation* and to the *transfer and dissemination of technology*", the enhancement of "social and economic welfare", as well as a sound balance of rights and obligations of producers and users of technological knowledge.

<sup>7</sup> See TRIPS Agreement art.8.2.



Although the TRIPS Agreement has been known as a significant international IP agreement, if we read art.8 carefully it is not hard to find that the “abuse of IPRs” has been used as a competition law term (breach of competition law) rather than an IP law one. As a United Nations study has pointed out, art.8 to a large extent reflects the view of many developing countries, such as India, during the Uruguay Round negotiations, that “a main objective of TRIPS should be to provide mechanisms to *restrain competitive abuses* brought about by reliance on *IPR protection*”.<sup>8</sup>

This is further reaffirmed by some specific anti-competitive provisions in the TRIPS Agreement. For example, art.31 specified the conditions for compulsory licensing of patents as parts of measures to remedy anti-competitive practices. Moreover, the TRIPS Agreement includes a special section on the “control of anti-competitive practices in contractual licences”, which focuses on anti-competitive licensing practices and conditions that restrain trade.<sup>9</sup> Article 40 of the TRIPS Agreement imposes an obligation on Member States to act on “licensing practices or conditions pertaining to IPRs, which *restrain competition*” if they “have adverse effects on trade and may *impede the transfer and dissemination of technology*”.<sup>10</sup>

It is also noteworthy that these provisions have a narrower scope of application than art.8, and both are related to “compulsory licensing”. However, this does not mean the TRIPS Agreement has limited the remedial measures that each Member State may impose. As a United Nations study has pointed out, the TRIPS Agreement has not placed significant limitations on the authority of WTO Member States to “take steps to control *anticompetitive practices*”.<sup>11</sup> In addition to “compulsory licensing”, Member States may apply other remedies against anti-competitive conducts, such as injunction, damages and fines.<sup>12</sup> Indeed, in practice, many major countries in the world (such as EU and the United States<sup>13</sup>) have used competition laws to regulate IP abuses and provided a full range of competition law remedies for IP abuse conducts.

In summary, the term of “IP abuse” in the TRIPS Agreement has been used in an anti-competitive sense. The TRIPS Agreement mainly uses competition law as a main legal instrument to prevent and provide remedies for IP abuse activities. Since the TRIPS Agreement only sets up general principles for dealing with IP abuse, anti-competitive activities and technology transfer issues, it mainly relies on Member States themselves to make specific law and policies to “define the concept of abuses through appropriate domestic measures”<sup>14</sup> and to set up specific principles to determine and prevent IPR abuses. (More details on how individual countries, such as the EU and the United States, use competition laws to regulate IP abuse activities will be introduced in the next section.)

## IP abuse prevention in the EU competition law

Although it is the idea of developing countries to include anti-competitive provisions for prohibiting IPR abuse and promoting technology transfer as part of the objectives and principles of the TRIPS Agreement,<sup>15</sup> regulators in most developing countries have not developed sophisticated laws and policies to enforce competition law in the IP area. In fact, some countries, such as China, have only set up their competition laws recently.<sup>16</sup> By contrast, in developed countries, particularly in the United States and the EU countries, sophisticated laws and policies on co-ordinating the nexus between IP and competition laws and enhancing technology transfer have developed over the past two decades. In comparison with the US laws, it seems

<sup>8</sup> UNCTAD-ICTSD, *Resource Book on TRIPS and Development* (2005), p.127, at <http://www.iprsonline.org/unctadictsd/ResourceBookIndex.htm> [Accessed March 30, 2011].

<sup>9</sup> TRIPS Agreement art.40.

<sup>10</sup> TRIPS Agreement art.40.1. See also UNCTAD-ICTSD, *Resource Book on TRIPS and Development* (Cambridge: Cambridge University Press, 2005), p.554.

<sup>11</sup> UNCTAD-ICTSD, *Resource Book on TRIPS and Development*, 2005, p.128.

<sup>12</sup> Frederick M. Abbott, “Are the Competition Rules in the WTO TRIPS Agreement Adequate?” (2004) 7(3) *J. Int'l Econ. L.* 693.

<sup>13</sup> More details will be introduced in later sections.

<sup>14</sup> UNCTAD-ICTSD, *Resource Book on TRIPS and Development*, 2005, p.548.

<sup>15</sup> UNCTAD-ICTSD, *Resource Book on TRIPS and Development*, 2005, p.543 (introducing negotiation history of art.8).

<sup>16</sup> China also uses the competition law to regulate IP abuse. See Chinese Anti-Monopoly Law art.55.

that the EU competition law, particularly recent case law on major IT giants, is more in line with the general principles of the TRIPS Agreement in dealing with IP abuse issues. Thus the article will focus more on the EU competition law in this difficult area.

Generally speaking, the EU does not have a special IP provision in its competition law.<sup>17</sup> The prohibitions of arts 81 and 82 of the EC Treaty of Rome will equally apply to the exercise of IPRs and the exercise of any other property right. This means that when a firm with a dominant market position engages in abusive conduct, such as a tie-in, loyalty rebate or exclusive contractual arrangement specified in the EC Treaty, “the fact that an IPR is involved will not affect the definition of abuse”.<sup>18</sup> However, given the complexity of applying competition law in the technology market, the European Commission issued a few specific regulations and guidelines to facilitate the enforcement of competition law. By virtue of art.81(3) of the Treaty of Rome (formerly art.85), the EC first enacted the Patent Licensing Regulation in 1984.<sup>19</sup> Later, in response to the increasing economic importance of know-how and the large number of know-how licensing agreements being concluded by industry, the EC enacted the Know-how Licensing Regulation in 1989.<sup>20</sup> These two regulations were then incorporated into the Technology Transfer Block Exemption Regulation—Commission Regulation 240/1996 (TTBER 1996) in 1996.<sup>21</sup> The TTBER 1996 provides a detailed guideline on how to apply anti-competition provisions of the Treaty of Rome to certain categories of technology transfer agreements and applies “both to pure or mixed patent licensing and know-how agreement”.<sup>22</sup> The legal framework for technology transfer in TTBER 1996 was “*form-based and legalistic* in the sense that certain clauses were either exemptible or non-exemptible depending almost entirely on their form”, including: (1) a whitelist of 26 clauses, which is clearly exemptible under the regulation; (2) a blacklist of seven clauses which is clearly non-exemptible; and (3) grey clauses (all those which are not whitelisted or blacklisted) which could be approved or non-opposed under a “quick look procedure” of the Commission.<sup>23</sup>

Later, in 2001, the EC decided to move away from its “form-based and legalistic” approach to a more *economic and effects-based* approach (by taking into account the “economic analysis” of possible costs and benefits, or “efficiencies” of certain restrictions) and conducted a regulatory review on the application effects of the TTBER 1996.<sup>24</sup> As a direct result of the regulatory review, the EC enacted its new Technology Transfer Block Exemption Regulation (TTBER 2004)—Commission Regulation 123/2004—in April 2004.<sup>25</sup> The new TTBER offers many advantages, such as: applying to a wider array of IPRs; offering greater flexibility and longer periods of protection; making a clear distinction between horizontal and

<sup>17</sup> Steven D. Anderman, “The Competition Law/IP ‘Interface’: An Introductory Note” in Steven D. Anderman (ed.), *The Interface Between Intellectual Property Rights and Competition Policy* (Cambridge University Press, 2007), p.3.

<sup>18</sup> Steven Anderman, “The Relationship Between Competition Policy and Intellectual Property Rights, Study Supplement, Recent EU Experience and IPR Policy Making of Relevant to China” (June 2009), p.10.

<sup>19</sup> See Commission Regulation 2349/84 on the application of article 85(3) of the treaty to certain categories of patent licensing agreements [1984] OJ L219/15.

<sup>20</sup> See Commission Regulation 556/89 on the application of article 85(3) of the treaty to certain categories of know-how licensing agreements [1989] OJ L61/1. See also Denis F. Waelbroeck, “Know-how Licensing and EEC Competition Rules: A Commentary on Regulation No. 556/89”, *Antitrust Bulletin*, December 22, 1992.

<sup>21</sup> Commission Regulation 240/96 on the application of article 85(3) of the Treaty to certain categories of technology transfer agreements [1996] OJ L31/2 (TTBER 1996).

<sup>22</sup> See also Steven D. Anderman and Hedvig Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.82.

<sup>23</sup> Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.83.

<sup>24</sup> Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.84.

<sup>25</sup> See European Union’s new Technology Transfer Block Exemption Regulation (TTBER 2004) (Commission Regulation 772/2004 on the application of article 81(3) of the Treaty to categories of technology transfer agreements [2004] OJ L123/11–17, at [http://europa.eu/legislation\\_smarties/competition/firms/126108\\_en.htm](http://europa.eu/legislation_smarties/competition/firms/126108_en.htm) [Accessed March 30, 2011]). The TTBER 2004 replaces Commission Regulation 240/96 on the application of article 85(3) of the Treaty to certain categories of technology transfer agreements [1996] OJ L31/2.

vertical licensing agreements; and providing a shorter blacklist on “hard core restraints”. The new regulation not only simplifies the TTBER 1996 but also significantly improves the certainty of application of IP licensing agreements by IPR holders.

Over the past few years, the European Court of Justice (ECJ) has made a number of important decisions related to the enforcement of competition law in the IP area and the prevention of abuses of IPRs, including IP abuse activities conducted by world IT giants. It is noteworthy that, in *Volvo*,<sup>26</sup> *Magill*<sup>27</sup> and *IMS Health*,<sup>28</sup> the ECJ provides a general guideline on how to determine whether art.82 of the EC Treaty of Rome (a provision on a refusal to supply, including a refusal to license an IPR) could be used to override the exercise of an IPR—the “exceptional circumstances” test.

Generally speaking, following the *Volvo* case, there is normally no requirement for a dominant firm to grant a licence to its competitors to commercialise its IP protected product in the *primary market* for the product. However, in the *secondary market* (i.e. spare parts of the dominant firm) the firm could not always refuse to supply to its competitors, including both direct refusal of granting a licence and setting a high price for making supplies of protected product inaccessible to the secondary market.<sup>29</sup> In other words, the exercise of IPRs should not eliminate the competition in the secondary market. Where a dominant firm’s refusal of supply prevents competition on the secondary market, competition authorities may order compulsory supply of, or even reduced prices for the supply of, an IP protected product by virtues of art.82 of the Treaty of Rome (“secondary market competition elimination” test).<sup>30</sup>

In another landmark case, *Magill*, the implications of “exceptional circumstances” test in the *Volvo* case were considerably extended by introducing an “indispensability” test, a “new product” test and an “objective justification” test. The court held that copyright did not justify a refusal to license in the “exceptional circumstances” where there was consumer demand for the new product (“new product” test),<sup>31</sup> where right holders had a de facto monopoly over the copyright protected product, where that product was indispensable to the provision of the new product in a secondary market (“indispensability” test)<sup>32</sup> and where right holders were not themselves supplying the product to consumers.<sup>33</sup> The right holder should not use its monopoly in one market to eliminate competition in the second market in order to reserve that second market for itself.<sup>34</sup>

The ECJ made clear that the mere ownership of an IPR would not as such justify a refusal to license in “exceptional circumstances”. However, it offered little guidelines on the positive grounds for “justification” for a refusal to license which has the effect of blocking a secondary market.<sup>35</sup> It set up three main conditions of the “exceptional circumstances” test to help to determine whether a refusal to license new entrants to a market dependent upon an indispensable IP protected product is abusive under art.82:

1. the refusal would be likely to eliminate all competition in that market on the part of the person requesting the service (“secondary market competition elimination” test);
2. there was no objective justification for the refusal (“objective justification” test); and

<sup>26</sup> *AB Volvo v Erik Veng* (238/87) [1988] E.C.R. 6211; [1989] 4 C.M.L.R. 122.

<sup>27</sup> *RTE and ITPV v Commission (Magill)* (C-241/91 P) [1995] E.C.R. I-743; [1995] 4 C.M.L.R. 718.

<sup>28</sup> *IMS Health GmbH v NDC Health GmbH & Co KG* (C-418/01) [2004] E.C.R. I-5039; [2004] 4 C.M.L.R. 28.

<sup>29</sup> See also Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.56.

<sup>30</sup> Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.56.

<sup>31</sup> See also *Magill* [1995] E.C.R. I-743; [1995] 4 C.M.L.R. 718 at [54].

<sup>32</sup> See *Magill* [1995] E.C.R. I-743; [1995] 4 C.M.L.R. 718 at [56].

<sup>33</sup> See Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.57.

<sup>34</sup> Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.57.

<sup>35</sup> Anderman and Schmidt, “EC Competition Policy and IPRs” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.58.

3. that the service in itself was indispensable to carrying on that person's business, inasmuch as there is no actual or potential substitute in existence for the service ("indispensability" test).

Three years later, in *IMS Health*, the court revisited the three main conditions in *Magill* essential to a finding of "exceptional circumstances" in which a compulsory licence could be obtained. It indicates that the *Magill* conditions did not offer an exhaustive definition of the test of "exceptional circumstances". As one commentator noted, the court carefully referred to *Magill* as a case in which "such exceptional circumstances were present", and held that "it is sufficient" (rather than "it is necessary") to satisfy the three *Magill* criteria in order to show an abusive refusal to license".<sup>36</sup> As such, in *IMS Health*, the court seemed to provide a leeway for including other types of abuse in the category of "exceptional circumstances".

Later, in *Microsoft*,<sup>37</sup> the ECJ reiterated the point that *IMS Health* did not establish an exhaustive list of exceptional circumstances. It further revised and clarified the basis upon which "exceptional circumstances" can be identified, particularly the "new product" test. It added that the *Magill* and *IMS Health* "new product" rule,

"cannot be the only parameter which determines whether a refusal to license an IPR is capable of causing *prejudice to consumers* within the meaning of Article 82(b) EC ... such prejudice may arise where there is a *limitation* not only of production or markets, but also of *technical development*."<sup>38</sup>

It is clear that, in *Microsoft*, the ECJ established a new framework for analysing the test of refusal to supply under art.82(b) EC Treaty of Rome, which for the first time, "declares it an abuse to limit technical development to the prejudice of consumers".<sup>39</sup> This framework is markedly different from the test in former ECJ cases.<sup>40</sup>

This suggests that, unlike the US competition law (which uses "rule of reason" analysis as a simple balancing test), the ECJ will in the future take into account both "consumer efficiencies" and "incentives to innovate" arguments when determining whether a refusal of licensing an IPR is an IP abuse. As one commentator noted:

"When [IP abuse] conduct occurs in the ICT sector, *another policy* comes into play. The preservation of a competitor from the exclusionary abuse of a dominant firm does *not only* mean a desire to *preserve competition* in a market; it is *also* a desire to *preserve* the possibility for future innovation. Existing competitors with high quality products offer a disincentive for the dominant firm to sit on its existing products; a duopoly is more conducive to innovation than a complacent monopolist."<sup>41</sup>

It is also noteworthy that, in recent Guidance on the Commission's enforcement priorities in applying art.82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, it seems that the EC Competition Commission has formally adopted a "consumer harm" test in refusal to supply cases including IPRs. It states that refusal to supply will be given enforcement priority by the Commission if three cumulative circumstances are present:

<sup>36</sup> Anderman and Schmidt, "EC Competition Policy and IPRs" in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.62. See also John Kallagher, "Recent Development under Article 82", talk given to IBC Conference, London, April 30, 2004.

<sup>37</sup> *Microsoft v Commission* (T-201/04) [2007] E.C.R. II-3601; [2007] 5 C.M.L.R. 11. It unambiguously confirms that the prohibitions of art.82 if the EC Treaty continue to determine the line between the "normal exercise" and "abusive exercise" of IP laws.

<sup>38</sup> "Innovation incentive" test and "consumer harm" test. *Microsoft v Commission* [2007] E.C.R. II-3601; [2007] 5 C.M.L.R. 11. at [647], cited by Anderman, *The Relationship Between Competition Policy and Intellectual Property Rights*, 2009, p.7.

<sup>39</sup> Anderman, *The Relationship Between Competition Policy and Intellectual Property Rights*, 2009, p.7.

<sup>40</sup> Katarzyna A. Czapracka, "Where Antitrust Ends and IP Begins — On the Roots of the Transatlantic Clashes" (2006) 9 *Yale Journal of Law & Technology* 44. See the text between fnn.221 and 229.

<sup>41</sup> Anderman, *The Relationship Between Competition Policy and Intellectual Property Rights*, 2009 at 10.

- the refusal relates to a product or service that is objectively necessary to be able to compete in a downstream market [objective justification test],
- the refusal is likely to lead to the elimination of effective competition on the downstream market [secondary market competition elimination test], and
- the refusal is likely to lead to consumer harm [consumer harm test].<sup>72</sup>

It is clear that, unlike the United States, the ECJ's decision mainly rested on a prediction of future technological and market development.<sup>43</sup> By taking into account pro-innovation and consumer efficiency effects, the EC competition law approach on IP abuse prevention seems to be more in line with the objective provision in art.8 and the competition provision in art.40 of the TRIPS Agreement. As mentioned above, arts 8 and 40 authorise Member States to take any appropriate measures to prevent the abuse of IPRs which “restrains competition”, “restrains trade” and has adverse effects on “technology dissemination”. It arguably creates a friendlier legal environment for many ICT companies (particularly non-dominant companies) to fairly participate in market competition and to make further innovation. The experiences of the EC are arguably valuable for other countries, including Australian competition regulators, to enforce competition laws in the IP area, including determining and preventing the abuse of IPRs in the ICT sector.

## IP abuse prevention in Australian competition law

### *Historical background*

In Australia, regulators have started to consider addressing the enforcement of competition law in the IP fields since the 1980s. The Trade Practices Act 1974 (Cth) (TPA) contained a special provision on IP and provided partial exemptions for an IP-related “condition” in technology licensing and assignment agreements.<sup>44</sup> In 1991, the Australian competition law enforcement agency, the then Trade Practices Commission (TPC), issued a *Guideline — Application of the Trade Practices Act to IP* in order to clarify the interface of IP and competition laws and enhance the enforcement of competition law in the IP field. Over the past three decades, globalisation, technologies and liberalisation have constantly brought new challenges for the TPA,<sup>45</sup> including its enforcement in the IP area. As a response, the Australian Government has established a number of governmental review committees to examine the effects of the TPA in balancing IP protection, innovation stimulation and competition enforcement, such as the Industrial Property Advisory Committee (IPAC) in 1984, the National Competition Council (NCC) in 1999, the Intellectual Property and Competition Review Committee (IPCRC) in 2001 and the Trade Practices Review Committee (Dawson Committee) in 2003. Moreover, the Australian Government released a National Innovation Policy Agenda to 2020 in May 2009, which contained a special section on innovation-related regulation.<sup>46</sup>

Generally speaking, Australia has closely followed the international debate on competition law enforcement in the IP area. It seems that the Government has well recognised key principles of the current international community in this difficult area, particularly the legal approaches of advanced countries which have developed sophisticated IP and competition laws and policies. For example, Australian Government has acknowledged that IP and competition laws share consistent legislative goals in enhancing

<sup>42</sup> See European Commission, Guidance on the Commission's Enforcement Priorities in Applying article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings (text with EEA relevance), [2009] OJ C 45/02, para. 81, at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF> [Accessed March 30, 2011].

<sup>43</sup> William H. Page, “Microsoft and the Limits of Antitrust” (2010) 6 *Journal of Competition Law & Economics* 33, 49.

<sup>44</sup> Trade Practices Act 1974 (Cth) s.51(3).

<sup>45</sup> Allan Fels, “Looking back on Ten Years of Australian Competition Law” (2003) 11 *Competition and Consumer Law Journal* 117, 117.

<sup>46</sup> Commonwealth of Australia, *Powering Ideas: An Innovation Agenda for the 21st Century* (2008), p. 55, at [http://www.innovation.gov.au/innotionreview/documents/poweringideas\\_fullreport.pdf](http://www.innovation.gov.au/innotionreview/documents/poweringideas_fullreport.pdf) [Accessed March 30, 2011].

innovation, consumer protection and public welfare/public interests.<sup>47</sup> These two laws are mutually reinforcing.<sup>48</sup> The exercise of the IPR should not go beyond the boundary of competition law. Australia has also reorganised and incorporated the “substantially lessening competition” (SLC) test and the “rule of reason” approach into its legislation in determining the nature/effects of potential anti-competitive conducts.

Nevertheless, sound policies alone cannot bring the trade-off of IP and competition protection. Thus it is necessary to examine the effects of the existing Australian competition law in contributing to the achievement of the above policy goals. In practice, the existing Australian competition law seems to fall far behind its advanced IP and competition enforcement policies in promoting innovation, and has not provided sufficient legal certainty over the business operations of IP-related companies, particularly ICT companies that highly rely on technology licensing. Few IP-related competition law cases can be found in Australia.

### *Overview of IP abuse prevention provision in TPA*

Australia is one of few countries in the world which have a direct IP provision in domestic competition law.<sup>49</sup> No special provision on IP can be found in the competition laws of the United States and the EU. They both use special regulations or legal guidelines to address the enforcement of competition law in the IP area.<sup>50</sup> Unlike the US Sherman Act of 1890 and the EC Treaty of Rome which do not contain a special provision on IP, the TPA contains two special provisions (s.51(1) and (3)) specifically dealing with the nexus of IP and competition enforcement.<sup>51</sup>

Section 51(1) of the TPA provides that in deciding whether a person has contravened Pt IV of the TPA, certain things must be disregarded. The first of these is:

- “(a) anything specified in, and specifically authorised by:
  - (i) an Act (not including an Act relating to patents, trade marks, designs or copyrights);
  - or
  - (ii) regulations made under such an Act ...”.

Section 51(1) provides “full” exemptions for any activities authorised by other legislation and regulations other than IP laws at both the federal and state levels. The exemptions cover all anti-competitive prohibitions under the TPA. In other words, as one commentator pointed out, s.51(1) “rules out an approach that gives the right set out in IP statutes precedence over competition law”.<sup>52</sup> This means that the TPA applies “in full force” to IPR exploitation.<sup>53</sup> The IPR rights which IP law provides to technology holders cannot constitute a defence to proceedings under the TPA.

<sup>47</sup> The NCC reviewed TPA s.51(3), and found that “properly understood, IPRs and competition laws are *compatible and consistent*. They share the same *overall objective* of enhancing *community welfare*. The TPA seeks to *enhance community welfare* by creating an environment in which businesses compete by introducing new and improved goods and services, and by offering existing goods and services at *lower cost to consumers*. IP laws seek to enhance *community welfare* by *encouraging innovation and invention* through the grant of valuable exclusive property rights. These processes are *mutually reinforcing*.” See National Competition Council (NCC), *Review of Section 51(2) and 51(3) of the Trade Practices Act Final Report* (March 1999), at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>48</sup> NCC, *Review of Section 51(2) and 51(3)*, 1999, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>49</sup> A few countries include an IP exemption provision in their competition law, such as India (Indian Competition Law 2003 art.21), Indonesia (Act for prohibiting monopolistic conduct and unfair business competition 1999 art.50), Japan (Act for Prohibiting Private Monopoly and Ensuring Fair Trading 2005 art.21), Korea (Antitrust and Fair Trade Act 2005 art.23).

<sup>50</sup> See US Antitrust Enforcement Guidelines in IP Licensing, 1995; EC Technology Transfer Block Exemptions Regulation 2004.

<sup>51</sup> Kelvin Lindgren, “The Interface between Intellectual Property and Antitrust: Some Current Issues in Australia” (2005) 16(2) *Australian Intellectual Property Journal* 76, 76.

<sup>52</sup> Frances Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

<sup>53</sup> Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.319.

Nevertheless, so far as s.51(1) is concerned, in deciding whether a person has contravened Pt IV, it is permissible to have regard to anything specified in, and specifically authorised by, IP legislation. The issue is taken up expressly in s.51(3), which provides (emphasis added):

“A contravention of a provision of this Part IV other than section 46, 46A or 48 shall not be taken to have been committed by reason of:

- (a) the imposing of, or giving effect to, *a condition* of:
  - (i) a licence granted by the proprietor, licensee or owner of a patent, of a registered design, of a copyright or of EL [eligible layout] rights within the meaning of the Circuit Layouts Act 1989, or by a person who has applied for a patent or for the registration of a design; or
  - (ii) an assignment of a patent, of a registered design, of a copyright or of such EL rights, or of the right to apply for a patent or for the registration of a design;  
*to the extent that the condition relates to:*
  - (iii) the invention to which the patent or application for a patent relates or articles made by the use of that invention;
  - (iv) goods in respect of which the design is, or is proposed to be, registered and to which it is applied;
  - (v) the work or other subject matter in which the copyright subsists; or
  - (vi) the eligible layout in which the EL rights subsist;
- (b) the inclusion in a contract, arrangement or understanding authorizing the use of a certification trade mark of a provision in accordance with rules applicable under Part XI of the Trade Marks Act 1955, or the giving effect to such a provision; or
- (c) the inclusion in a contract, arrangement or understanding between:
  - (i) the registered proprietor of a trade mark other than a certification trade mark; and
  - (ii) a person registered as a registered user of that trade mark under Part IX of the Trade Marks Act 1955 or a person authorized by the contract to use the trade mark subject to his or her becoming registered as such a registered user;

of a provision to the extent that it relates to the kinds, qualities or standards of goods bearing the mark that may be produced or supplied, or the giving effect to the provision to that extent.”

It is clear that s.51(3) provides “limited” exemptions (“partial” exemption) for certain IP related activities. The exemptions cover all anti-competitive prohibitions other than those under s.46 (misuse of market power) and s.48 (resale price maintenance) of the TPA. In other words, when imposing *conditions* that relate to the relevant IP on technology licences/assignment agreements, IPR holders and their licensees/assignees do not need to worry about the contravention of s.45 (cartels and anti-competitive arrangements and understandings) and s.47 (exclusive dealing), including both per se prohibitions in s.45 (such as per se prohibitions on cartels) and s.47 (such as per se prohibition on third line forcing) and general prohibitions (subject to “substantially lessening competition” test) under s.45 (such as certain anti-competitive arrangements and understandings) and s.47 (such as certain exclusive dealing conducts except third line forcing).

The structure of s.51(1)(3) shows that it seems that regulators attempts to strike a sound balance of benefits between different stakeholders—IP holders, consumers and investors. It seems that the regulators intend to use s.51(1) to take away all privileges of the IPR in order to effectively prohibit all potential abuses of IPR, and to use partial exemptions in s.51(3) to balance the benefits of different stakeholders and achieve the trade-off of innovation incentive and competition protection.

However, sound legislative goals cannot always be achieved in practice. In fact, s.51(3) has incurred severe criticisms from academics, practitioners, competitive enforcement agencies and courts. In the next section, the author will examine the major problems and limits of s.51(3), including the uncertainties of applications of this provision, and its potential impacts on the operations of ICT companies in Australia.

### *Likely effects and potential limits of Australian competition law in preventing IP abuses*

Section 51(3) and other IP related provisions in TPA have been an important subject for legal debates in the recent two decades. “Poorly drafted”, “bad balance”, “uncertain”,<sup>54</sup> “no effect”, “problematic”<sup>55</sup> and “inconsistency” are some of the words that critics used with regard to IP-related provisions in the TPA.<sup>56</sup> Concerns mainly focus on the effects of Pt IV of the TPA in balancing the protection of legitimate rights of IP holders and the protection of fair competition and public interests. Many believe the current TPA has not provided a clear guideline on how a sound balance can be achieved, and consequently it brings much uncertainty for business operations of different stakeholders. Generally speaking, the scope of the current IP exemption in s.51(3) is not clear. In some circumstances, the scope of the IP exemption is too narrow to provide sufficient protection to the basic rights of IP owner under IP legislation. By contrast, in some other circumstances, the scope of the exemption is too wide to prevent anti-competitive conducts and abuses of IPRs.<sup>57</sup>

### Unclear “relate to” test

The use of the expression “relates to” in s.51(3) creates direct uncertainty for defining the scope of the IP exemption in this provision.<sup>58</sup> As mentioned above, in order to obtain the immunity in s.51(3), the described condition in a licence/assignment must “relate to” the subject-matter of the IP.<sup>59</sup> However, the TPA has not provided a statutory interpretation of the meaning of “relate to”, nor has the Australian Competition and Consumer Commission (ACCC) provided a guideline or general principles for determining whether a specific condition “relates to” the subject-matter of IP.<sup>60</sup>

In practice, the nature of some conditions may be relatively easy to tell. For example, a condition defining the qualities of the licensed IP product would normally be deemed to “relate to” the subject-matter of the IP, and a condition precluding the licensee from dealing in products, which compete with licensed IP products, would normally not be treated as “relating to” IP subject-matter.<sup>61</sup> However, the nature of some other conditions, such as a price restraint or a territorial restraint that relates to the licensed products, would be relatively hard to determine.

Furthermore, there has been very little judicial interpretation on the meaning of “relate to” in s.51(3). *Transfield Pty Ltd v Arlo-International Ltd*<sup>62</sup> seems to be the only case to date, in which the court has considered the meaning of “relate to”. Mason J. said<sup>63</sup> (emphasis added):

<sup>54</sup> NCC, *Review of Section 51(2) and 51(3)*, 1999, p.185, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>55</sup> Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>56</sup> The ACCC guideline 1991 listed eight limitations of s.51(3).

<sup>57</sup> IPCRC, *Review of IP Legislation Under the Competition Principles Agreement* (Final Report, September 2001).

<sup>58</sup> As Lindgren observed, the notion of “a condition ... to the extent that the condition relate to” the very general matters mentioned in s.51(3)(a) is problematic. See Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>59</sup> That is, it “must be one that ‘relates to’ the subject ‘invention’, ‘goods’, ‘work’ or ‘eligible layout’”: see Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>60</sup> As Lindgren pointed out in 2005, “The notion of ‘a condition ... to the extent that the condition relates to’ the very general matters mentioned in s.51(3)(a) is problematic”. Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>61</sup> See Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.322. (Such a condition seems to relate to the excluded product rather than the licensed IP.)

<sup>62</sup> *Transfield Pty Ltd v Arlo-International Ltd* (1980) 144 C.L.R. 83.

<sup>63</sup> *Transfield* (1980) 144 C.L.R. 83 at 102–103.



“In bridging the different policies of the Patents Act and the Trade Practices Act, s 51(3) recognizes that a patentee is justly entitled to impose conditions on the granting of a licence or assignment of a patent *in order to protect the patentee’s legal monopoly*. Even under American antitrust law, where there is no equivalent exception to s 51(3), the patentee is entitled to exercise some measure of control over the licensee consistent with the scope of the patent monopoly, though there has been some controversy as to the scope of permissible control: [treatises cited] ... Section 51(3) determines the *scope of restrictions* the patentee may properly impose on the use of the patent. *Conditions* which seem *to gain advantages collateral to the patent* are *not covered* by s 51(3).”

According to Mason J., it is clear that when determining the nature of an imposed condition: (1) a “proper” scope of the legitimate use of IP rights must be identified, and (2) the “condition” relating to the subject-matter of IP should be distinguished from the “collateral” matters relating to the subject-matter of IP.<sup>64</sup> It seems that Mason’s “collateral advantage” test may help to clarify certain issues, such as the legitimacy of *territorial restraints*. Since dividing the relevant IP into territories or fields of use does not extend the scope of IPR, it seems to fall under the immunity of s.51(3). However, the legitimacy of many other issues, such as exclusive grant-backs and minimum price stipulation, remains unclear.<sup>65</sup>

The difficulty of explaining the meaning of “relate to” was also evidenced by a review report produced by the National Competition Council (NCC) in 1999. The NCC conducted a special review on the effects of s.51(3).<sup>66</sup> Nearly 20 years after *Transfield*, the NCC still could not provide a clear interpretation of the meaning of “relate to”. In its review report the NCC set out three possible interpretations:

- Narrow interpretation: a condition relates to IP or the goods produced using it if it relates directly to the goods produced. On this view, a territorial restriction on where the licensee could sell would not relate to the *goods*, because it relates to the *market* for the goods rather than the *goods* themselves.
- Intermediate interpretation: a *condition* relates to IP or the goods produced using it *if* the condition seeks *to protect* and exploit the patentee’s exclusive rights or *to secure* an advantage that is *not collateral* to the patentee’s exclusive rights. On this view, a territorial restriction would fall within the section.
- Broad interpretation: a condition relates to the IP or goods produced using it unless it seeks to apply to an almost entirely unrelated transaction or arrangement. On this view, if there is some link between the condition and the IP or the goods then it will be covered by s.51(3). On the broad view, territorial restrictions, exclusive grant-backs, and non-challenge provisions would all fall within the section.<sup>67</sup>

<sup>64</sup> Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>65</sup> The Trade Practices Commission released a paper in 1991 identifying the types of restrictive conditions that might “relate to” the subject-matter of the IPRs, and therefore fall within the exemption in s.51(3), such as exclusive licences and sole licences; territorial restrictions; best endeavours clauses; price restrictions; and quantity restrictions. Nevertheless the TPC does not suggest that these conditions are necessarily anti-competitive, but that in some circumstances they may be anti-competitive. See TPC, *Application of the Trade Practices Act to Intellectual Property: Background Paper* (1991), p.13, cited by NCC, *Review of Section 51(2) and 51(3)*, 1999, pp.185–186, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>66</sup> NCC, *Review of Section 51(2) and 51(3)*, 1999, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>67</sup> NCC, *Review of Section 51(2) and 51(3)*, 1999, p.184, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

Although the NCC set out different interpretations, it has not provided a clear recommendation on which interpretation should be followed.<sup>68</sup> The NCC found that the intermediate interpretation seems to accord with Mason J.'s approach in *Transfield*.<sup>69</sup> It further pointed out that the Mason approach also has its own limitations.<sup>70</sup> Apart from the “collateral advantage” test, it has not been an easy task to make a distinction between the matters relating to the legitimate use of IPR and matters of possible interest of competition. Indeed, neither the court nor the existing statutory law, so far, has provided a clear instruction on how such a distinction can be made. As Justice Lindgren commented in one of his papers, “the distinction will often be difficult to apply”, and it is hard to propose a “better elucidation of the statutory test” in absence of “a clear statutory guideline”.<sup>71</sup> This arguably creates many uncertainties for many ICT companies operating in Australia, whose business operations rely greatly on the legitimate use of IPR (such as Microsoft) or technological licences from other technology holders (such as small and medium software application companies). (More details on how other jurisdictions, such as the United States, deal with these issues will be introduced in later sections.)

### Exemption for condition or contract?

It is noteworthy that the IP exemptions in s.51(3) only apply to *conditions* in licences and assignments, rather than the licences or assignments themselves.

First, the immunity for IP-related condition in licences or assignments would not spontaneously extend to the licences or assignments themselves. For example, as mentioned above, the IP immunity in s.51(3) does not apply to the supply of an IP licence on the condition that the licensee will not grant a sub-licence at below a specified price.<sup>72</sup> Such behaviour has breached the prohibition for maintaining resale price in s.48. Moreover, an acquisition of IP is not spontaneously exempted by s.51(3). It remains subject to the SLC test in s.50 which prohibits mergers or acquisitions that have the effect or the likely effect of SLC in a market.

Secondly, the immunity for IP-related condition cannot be extended to refusals of IP licences or assignments. As mentioned above, refusals to license or assign IP will be faced with the “full force” of the misuse of market power prohibition under s.46. This means that a refusal to license will not be exempted even if the refusal was made because the potential licensee would not agree with a condition that would be exempted as “relating to” the IP.<sup>73</sup>

Thirdly, the immunity does not apply to the IP-related condition in any agreements other than IP licences or assignments. For example, the immunity does not extend to the conditions in a contract of the supply of technology products embodying IP since the contract itself does not entail an IP licence.<sup>74</sup> Nor does it apply to an agreement between two competitors that both agree to cross-license their patents and to restrict

<sup>68</sup> The NCC pointed out that Mason J.'s judgment seems to accord with the intermediate interpretation that a condition “relates to” IP where it attempts to secure an advantage within the “purpose and scope of the exclusive rights granted by the specific IP regime” and does not attempt to gain a “collateral” advantage. But it also found that Mason J.'s approach may cause uncertainty in determining whether a condition relates to the subject-matter of IP.

<sup>69</sup> That a condition “relates to” IP where it attempts to secure an advantage within the “purpose and scope of the exclusive rights granted by the specific IP regime” and does not attempt to gain a “collateral” advantage. See NCC, *Review of Section 51(2) and 51(3)*, 1999, p.185, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>70</sup> By referring to the view of the former TPC, the NCC pointed out the test of Mason J. appears in two forms: (1) a positive question of whether a condition is within the purpose and scope of the IP owner's exclusive rights; or (2) a negative question of whether the IP owner is seeking an advantage collateral to his exclusive rights. It further pointed out that a different conclusion (on whether the alleged condition relates to the subject-matter of IP licence) may be reached depending on which question will be asked. NCC, *Review of Section 51(2) and 51(3)*, 1999, pp.185–186, at <http://www.globalcompetitionforum.org/regions/Oceania/Australia/LESe-001.pdf> [Accessed March 30, 2011].

<sup>71</sup> Lindgren, “The Interface between Intellectual Property and Antitrust” (2005) 16(2) *Australian Intellectual Property Journal* 76, 78.

<sup>72</sup> TPA s.96A; Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.323.

<sup>73</sup> Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.321.

<sup>74</sup> Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.321.

a third party's access to their IP or set a very high licensing fee for potential licensees. Although this type of cross-licence agreement entails IP licences, it also contains a restrictive arrangement (on the third party's access to IP) which exists independently from IP licences. Therefore, even if the "condition" in these types of agreements were exempted as a condition that "relates to" the subject-matter of IP, these agreements would still be subject to the horizontal prohibition under s.45.

As such, it seems that the exemption for IP related condition under s.51(3) may have a narrow application in practice. In fact, a "narrow" application itself is not necessarily "bad" for market competition. It may help to prevent major ICT companies from abusing their IPRs to disadvantage their potential/existing competitors. For example, although Microsoft and Yahoo may form strategic allies in searching engine market by cross-licensing their patents, theoretically, they cannot restrict a third party (such as their potential competitors) to access these patents—either a refusal to licence or through a forbidden high licensing fee. Otherwise, they may breach s.45 (per se prohibition on exclusionary provision). Nevertheless, in the absence of a clear enforcement guideline, it often makes it hard for ICT companies to understand the real boundary of the TPA exemption for IP-related "condition", and in what circumstances the effects of such an exemption may be extended to the whole IP-related agreement. This arguably brings some legal uncertainties for the business operations of both IP holders and IP litigants.

### Narrow application and inconsistent treatments

Section 51(3) also has some other inherent problems. First, the exemption provided by s.51(3) only applies to limited statutory IP—patent, copyright, eligible layout right, design and registered trade mark (TM). It does not cover plant breeders' right and some other important rights protected by common law or equity, such as unregistered TM, confidential information, trade secrets and know-how. Some commentators assumed that "these omissions are deliberate" because "non statutory rights are less certain" in application scope than statutory IPRs.<sup>75</sup> Nevertheless, the absence of any reference to plant breeders' right is often deemed as a "failure to monitor and update within the bureaucracy".<sup>76</sup>

Secondly, s.51(3) has not provided a unified application standard. Various forms of IPRs under s.51(3) have been treated differently.<sup>77</sup> It seems that s.51(3) has set up different conditions for various IPRs to access the immunity of s.51(3). This may arguably cause both uncertainty and ineffectiveness for the application of the exemption. For example, with respect to patents, s.51(3)(a)(iii) provides that to obtain the immunity of s.51(3) the alleged conditions must "relate to the *invention* to the patent or *articles* made by use of that invention". With respect to designs, s.51(3)(a)(iv) further provides that the conditions must "relate to goods in respect of which the design is ... registered and to which it is applied". In other words, so long as the condition relates to *products* (articles or goods) which contain patent or design, the immunity of s.51(3) will apply.

However, with respect to copyright—another important IPR—s.51(3)(a)(v) requires that the conditions must "relate to the *work or other subject matter* in which the copyright *subsists*". As we know, copyright only subsists in the works or subject-matter in their first material form rather than in reproductions or copies. Consequently, it seems that the "condition" that relates to copyright *products* (copies or reproductions of copyright works) has been excluded from the s.51(3) immunity. As the University of Melbourne Law Professor Sam Ricketson observed, within s.51(3), the condition must "relate to the first material embodiment of the work in which copyright subsists and not to any reproductions or copies of

<sup>75</sup> Ian Eagles and Louise Longdin, "Competition in Information and Computer Technology Markets: Intellectual Property Licensing and s.51(3) of the Trade Practices Act 1974" (2003) Vol.3(1) *Queensland University of Technology Law and Justice Journal* 28 at Section II.B.

<sup>76</sup> Ian Eagles and Louise Longdin, "Competition in Information and Computer Technology Markets: Intellectual Property Licensing and s.51(3) of the Trade Practices Act 1974" (2003) Vol.3(1) *Queensland University of Technology Law and Justice Journal* 28 at Section II.B.

<sup>77</sup> Lindgren, "The Interface between Intellectual Property and Antitrust" (2005) 16(2) *Australian Intellectual Property Journal* 76, 87.

the work”, and this makes s.51(3) “virtually meaningless” as it applies to copyright.<sup>78</sup> Following Professor Ricketson’s reasoning, the “meaningless” immunity for copyright may have a profound impact on ICT companies, because many softwares (particularly source codes of computer programs) which ICT companies rely on are protected by copyright. Until now, the application of s.51(3) in relation to licences and assignments of copyright has not yet been under any judicial consideration in Australia.<sup>79</sup> Presumably, the vague language expression in s.51(3)(a)(v) is one of the reasons for this.

Another example of the inconsistent treatment relates to the application scope of condition exemptions. As some commentators pointed out, it seems that s.51(3) only covers assignments of patents, copyrights and registered designs and circuit layout, but leaves assignments of TMs unprotected.<sup>80</sup>

### Out-of-date IP provisions

In addition to the absence of any reference to plant breeders, some provisions in existing s.51(3) have also become outdated, particularly the provisions on trade marks. Section 51(3)(b) relates to certification of TMs, and s.51(3)(c) deals with TMs other than certification TMs. It is noteworthy that both provisions are specific to the provisions of the Trade Marks Act 1955 (Cth) rather than those of the Trade Marks Act 1995 (Cth). Particularly, s.51(3)(c) exempts provisions in contracts, arrangements or understandings between the *registered proprietor* of the TM and a *registered user* under Pt IX of the Trade Marks Act 1955 which to that extent relate to the “kinds, qualities or standards of goods bearing the mark that may be produced or supplied”.<sup>81</sup> As we know, the Trade Marks Act 1995 does not provide for the recording of *registered users*. As such, this provision has become ineffective and needs to be amended.<sup>82</sup>

As a matter of fact, to some extent, the whole of s.51(3) has become somewhat out of date. This section has not been revised since 1995.<sup>83</sup> Unlike the United States and the EU, Australia has not yet enacted any special regulation dealing with the interface of IP and competition laws. So far, only one general guideline for implementing the TPA in the IP area is available in Australia, which was issued by the ACCC in 1991.

### Lack of an effective balancing scheme for IP-related competition enforcement

Australian competition law, including both statutory law and common law, does not seem to have provided an effective balancing scheme for achieving a trade-off of IP protection, innovation stimulation and competition enforcement.

On the one hand, unlike competition law in the EU, Australian competition law has not provided a sufficient counterweight for ICT companies to exercise their legitimate rights under competition law against IP abuses. As mentioned above, when determining the IP abuses occurred in the ICT sector, the EC Competition Commission and courts not only have a desire to *preserve competition* in a market, but also a desire to *preserve* the possibility for *future innovation*. When the ECJ determines whether a refusal of licensing an IPR constitutes an IP abuse, it will also take into account arguments of both “consumer

<sup>78</sup> Sam Ricketson, *The Law of IP: Copyright, Design and Confidential Information* (Lawbook Co., subscription service) para.151.190, cited by S.G. Corones, *Competition Law in Australia*, 4th edn (Australia: Lawbook Co./Thomson Reuters, 2007) at p.230.

<sup>79</sup> S.G. Corones, *Competition Law in Australia*, 4th edn (Australia: Lawbook Co./Thomson Reuters, 2007) at 230.

<sup>80</sup> Ian Eagles and Louise Longdin, “Competition in Information and Computer Technology Markets: Intellectual Property Licensing and s.51(3) of the Trade Practices Act 1974” (2003) Vol.3(1) *Queensland University of Technology Law and Justice Journal* 28 at Section II.B. See also TPA s.51(3)(ii). Section 51(3)(b) and (c) relate to the licensing of TMs.

<sup>81</sup> TPA s.51(3)(c).

<sup>82</sup> S.G. Corones, *Competition Law in Australia*, 4th edn (Australia: Lawbook Co./Thomson Reuters, 2007) at 230.

<sup>83</sup> Russell V. Miller, *Miller’s Annotated Trade Practices Act*, 31st edn (2010), p.511.

efficiencies” and “incentives to innovate”.<sup>84</sup> By contrast, the existing Australian competition laws (both statutory laws and case laws) have not provided a clear principal guideline for helping the ACCC or courts to determine any potential IP abuse in the ICT and other technology sectors.

On the other hand, unlike the US law, Australian law has not provided sufficient legal guarantees for ICT companies to exercise their legitimate IPRs within competition law. The United States does not have a EU-style competition enforcement regime which takes into account the desire of preserving future innovation (including innovation incentive/opportunity of IP users/licensees) when determining IPR abuse. However, it does have some general legal doctrines to balance innovation stimulation and legitimate use of IPRs, which focus on protecting innovation incentive of IP holders.

First, in *SCM Corp v Xerox Corp*,<sup>85</sup> the US court held that, with respect to patents, “competition law cannot be used to require a patent holder to forfeit its basic right to exclude others from exploiting the patent”.<sup>86</sup> In other words, the legitimate use/exploration of the IPRs under the IP laws would be protected even if such use/exploration may conflict with the provisions in competition law, such as prohibitions on exclusive dealing and refusal of licences. However, in Australia, the combined effect of s.51(1) and s.51(3) (discussed above) provides little legal certainty for IPR holders to exercise their basic right under the IP legislation. As mentioned above, it seems that s.51(1)(a) directly “rules out an approach that gives the rights set out in IP statutes precedence over competition law”.<sup>87</sup> Section 51(3) only provides limited exemptions for IP holders, and some exemptions are either uncertain or less enforceable in practice, such as the exemptions for the condition in copyright licences or assignments (see above). The court has been silent on the nexus of basic IPRs and competition enforcement. Although in *Transfield* Mason J. held that the legitimate use of IPR should be protected, he has not clarified whether the legitimate exploitation of IPRs may override certain prohibitions under competition law.

Secondly, Australia does not have a US-like judicial presumption on validity of IPR holders’ action in excluding others from using its IPR works (validity presumption doctrine), which was adopted by the US court in *Data General Corp v Grumman Systems Support Corp*.<sup>88</sup> In that case, the US court adopted this “rebuttable presumption” to manage the interface of IP protection and competition enforcement.<sup>89</sup> The court took into account the importance of protecting authors’ economic incentives under copyright law, and held:

“The desire of an author to be the exclusive user of its original work is a *presumptively legitimate business justification* for the author’s refusal to license to competitors.”<sup>90</sup>

Australia does not have a similar judicial presumption. As mentioned above, the refusal to license will face the full force of the prohibition for misuse of market power under s.46, and the s.51(3) exemption does not apply to s.46.<sup>91</sup>

<sup>84</sup> It is also noteworthy that, in recent Guidelines to the Enforcement Priorities in Applying Article 82 EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings, the EC Competition Commission has indicated that it will differentiate between these two types of fact situations and adopt a consumer harm test in refusal to supply cases including IPRs. It states that refusal to supply will be given enforcement priority if three cumulative circumstances are present: see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF> [Accessed March 30, 2011].

<sup>85</sup> *SCM Corp v Xerox Corp*, 654 F.2d 1195 (2d Cir. 1981) 1204.

<sup>86</sup> See Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

<sup>87</sup> Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

<sup>88</sup> *Data General Corp v Grumman Systems Support Corp* 36 F. 3d 1147 (1st Cir.1994).

<sup>89</sup> Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332. See also *Data General* 36 F. 3d 1147 (1st Cir.1994) at [64] (the court held: “Wary of undermining the Sherman Act, however, we do not hold that an antitrust plaintiff can never rebut this presumption, for there may be rare cases in which imposing antitrust liability is unlikely to frustrate the objectives of the Copyright Act”).

<sup>90</sup> *Data General* 36 F. 3d 1147 (1st Cir.1994) at [134].

<sup>91</sup> As Hanks criticised, the operation of s.46 does not “invite the importation of the policies that underlie IP”: Hanks, “Intellectual Property Rights and Competition in Australia” in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

In other words, when dealing with an action adopted by IPR holders to exclude others from using their IPR works, the Australian law does not seem to have sufficiently taken into account the importance of protecting IP owners' incentives for making further innovation. The current "taking advantage" test in s.46 essentially mandates a "factual inquiry"—a classic hypothetical "future with/future without" test—whether the IP holder would have been likely to grant a licence if it did not have substantial market power.<sup>92</sup> This would arguably place IPR holders, particularly IT giants, in a difficult situation. As one commentator observed:

“Without the assistance of legal rules and presumptions it might seem that a right owner's choice to exclude other from its property will routinely be found to be a taking advantages of its market power.”<sup>93</sup>

In summary, the current TPA does not seem to have appreciated the importance of achieving a trade-off between IP protection and competition enforcement. The absence of an effective balancing regime (the EU regime for protecting innovation incentive of potential competitors—IP licensees/users—and the US regime for protecting the innovation incentive of IP holders) creates many legal uncertainties for the business operations of major IP companies, particularly the operations of ICT companies in Australia.

## Recommendations

In order to create a sound legal environment for ICT companies operating in Australia, and to foster competition in the Australian ICT market, it is necessary to conduct a revolutionary reform of the IP-related provisions in the TPA and the Australian competition law regime in general. The author believes that the recommendations from the IP and Competition Review Committee (IPCRC) in 2001 have provided a sound foundation for future reforms. Nevertheless, when conducting competition law reform, it is also important for Australian regulators to draw on experiences from the recent development of competition laws in the EU and the United States, particularly the recent EU case law relating to IP abuse prevention in the ICT sector.

### *Repeal/revision of section 51(3)*

As the IPCRC recommended, s.51(3) should be repealed, and the SLC test should apply to the whole of Pt IV of the TPA, except certain per se prohibitions. In other words, as in the EU, the IP licensing and assignment arrangements would be subject to full anti-competitive prohibition under Pt IV of the TPA.<sup>94</sup> This unified approach will help to resolve the confusion and uncertainty caused by vague language expressions in s.51(3).

### *New balancing mechanism for enforcing competition law in the ICT sectors*

In order to achieve a trade-off of enhancing innovation and preventing IP abuse, Australia can draw on experiences from both the EU and the United States, and develop an effective balancing regime with its own features. On one hand, Australian regulators may critically import the EU regime for determining and preventing IP abuse in order to protect innovation incentive of "potential competitors" of dominant ICT companies. In addition to the traditional SLC test, the ACCC and Australian courts should introduce the EU-style "new product" test and "objective justification" test to help to determine the legitimate use of IPRs and the abuse of IPRs. When determining IPR abuses in the ICT sector, the Australian courts

<sup>92</sup> Hanks, "Intellectual Property Rights and Competition in Australia" in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

<sup>93</sup> Hanks, "Intellectual Property Rights and Competition in Australia" in *The Interface Between Intellectual Property Rights and Competition Policy*, 2007, p.332.

<sup>94</sup> IPCRC, *Review of IP Legislation Under the Competition Principles Agreement*, 2001, p.215.

should further take into account “consumer efficiencies” and “incentives to innovate” arguments.<sup>95</sup> As mentioned above, this also seems to be more consistent with the TRIPS Agreement’s approach in preventing IP abuses.<sup>96</sup> In doing so, Australia would create a better legal environment for encouraging more non-dominant ICT companies to participate in market competition and make further innovation.

On the other hand, Australia may critically import the US-style “legitimate use of IP” doctrine and the “presumption of validity” doctrine (as “counterweights”) in order to strengthen the protection of the legitimate use of IPRs by technology holders. In doing so, Australia would create more legal certainty for the business operations of major IP companies, particularly ICT companies, and provide more incentives for them to make further innovation.

The establishment of such a balancing mechanism is inarguably important in helping Australian regulators and courts to determine IP abuse and more easily balance the protection of innovation incentives of both IP holders and their competitors (IP licensees/users). This is not only important for creating a more competitive market environment in Australia, but also important for maintaining and fostering the innovativeness of ICT companies operating in Australia.

### *Three-step plan for law and policy reform*

The reform of competition laws and policies cannot be achieved overnight. A three-step plan may be adopted for such a reform. First, given the “breakthrough” of the ECJ in determining IP abuse in the ICT sector in recent years, it is necessary to conduct another comprehensive review on the IPR abuse prevention laws in Australia. In 1999, the IPCRC (Ergas Committee) was created to review the impact of the IP laws on competition. The committee examined the competition protection issue from the IP law perspective, and led a successful reform of the IP laws, including compulsory licence provisions in the patent law. A new committee may be established to review the impact of competition law on IP protection, and examine IP protection from the competition law perspective. Hopefully, this will lead to a successful reform of competition law.

Secondly, it is necessary to establish a US-Style ACCC Guideline for facilitating the enforcement of competition law in the IP area, and transfer the recommendations of the new review committee into feasible competition policy. The US competition law enforcement agencies have a long history of using legal guidelines to address the interface of IP and competition laws. In the 1970, the US Department of Justice (DOJ) issued a “watch list” for prohibiting anti-competitive restraints in patent licensing agreements.<sup>97</sup> Moreover, in April 1995, the DOJ and the Federal Trade Commission (FTC) enacted a joint document, *Antitrust Guidelines for the Licensing of Intellectual Property* (1995 Guidelines), which provides some general approaches (such as the “rule of reason” approach) and principles for determining IP-related monopolistic activities.<sup>98</sup> In 2007, the DOJ and FTC released a more detailed document, *Antitrust Enforcement & IPRs: Promoting Innovation and Competition* (2007 Report) in order to facilitate the understanding and application of the 1995 Guidelines and to improve the degree of certainty involved in IP licensing arrangements.<sup>99</sup> More importantly, the 2007 Report closely followed up on the most recent issues on biotechnology, computer hardware and software, the internet and pharmaceutical industries. It

<sup>95</sup> See European Commission, Guidance on the Commission’s Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings (text with EEA Relevance), [2009] C 45/02, at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF> [Accessed March 30, 2011].

<sup>96</sup> See TRIPS arts 8, 40. Article 40 authorises Member States to take any appropriate measures to prevent the abuse of IPRs which “restrains competition” and has adverse effects on “technology dissemination”.

<sup>97</sup> See Robert C. Lind, Anya V. Klymenova, Marie Miauton and Paul Muysert, *Report on Multiparty Licensing* (Charles River Associates Ltd, 2003), p.23.

<sup>98</sup> US Department of Justice (DOJ) and Federal Trade Commission (FTC), *Antitrust Guidelines for the Licensing of Intellectual Property* (1995), at <http://www.usdoj.gov/tr/public/guidelines/0558.htm> [Accessed March 30, 2011].

<sup>99</sup> DOJ and FTC, *Antitrust Enforcement & IPRs: Promoting Innovation and Competition* (2007), at <http://www.usdoj.gov/atpublic/hearings/ip/222655.pdf> [Accessed March 30, 2011].

provides many specific examples on how to enforce competition law in the ICT sector, including how to deal with patent pool and cross-licensing issues.<sup>100</sup> By contrast, the latest (and only) ACCC guideline on the application of TPA in the IP field was drafted in 1991 and has not been updated since that time. Over the past two decades, ever-improving technology, particularly digital technology, has fundamentally changed the landscape of the technology market. Thus it is necessary to have a new guideline on how to use competition law to prevent the abuses of IPRs in many new areas, such as the ICT sector.

Thirdly, it is necessary to establish EU-style regulations to provide legal guarantees for using competition law to prevent the abuse of IPR in the new technology market. In comparison with legal guidelines, regulations have a binding effect and are easy to be enforced. This would arguably provide significant certainty for the business operations of ICT companies against the abuse of IPRs in Australia.

## Conclusion

In the current globalisation and knowledge economy environment, an increasingly number of countries have regarded innovation capability building as one of the most effective strategies for them to maintain the sustainable growth of national economy, and they believe that the “innovation policy can create long-term growth”.<sup>101</sup> Although both competition law and IP law play a significant role in enhancing innovation, the role of competition law in preventing IP abuses and enhancing innovation has not been given sufficient attention by regulators in many countries, including Australia.

This article examined the impact of competition law on the IP abuse prevention in the digital market, particularly the ICT sector. It first examined the competition law nature of IP abuse conduct under the TRIPS Agreement. It then examined the recent development of IP abuse prevention laws and litigation in the EU, particularly its recent case law. After that, it provided a comprehensive analysis of likely effects and potential limits of the existing Australian competition law regime (particularly s.51(3) of the TPA) and its impacts on IP abuse prevention in the ICT sector.

The article contended that, in order to achieve a trade-off of enhancing innovation and preventing IP abuse, Australia should draw on experiences from both the EU and the United States and develop an effective balancing legal mechanism with its own features. It is imperative to reform the current IP-exemption provisions in the TPA in order to improve the effectiveness of Australian competition law in balancing IP protection and competition enforcement, and to create strong incentives for both IP holders (e.g. dominant ICT companies) and users (e.g. potential competitors of dominant ICT companies) to make further innovation. Such a reform would contribute to a sustainable growth of the innovation-oriented national economy and the international competitiveness of Australia.

<sup>100</sup> DOJ and FTC, *Antitrust Guidelines for the Licensing of Intellectual Property*, 1995, Ch.3, at <http://www.usdoj.gov/atr/public/guidelines/0558.htm> [Accessed March 30, 2011].

<sup>101</sup> Roy Green, *Australia's knowledge-based future — How innovation policy can create long-term growth and jobs*, speech at UTSpeaks, July 14, 2009, at <http://www.uts.edu.au/new/speaks/2009/July/1407.html> [Accessed March 30, 2011].



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