STOCKHOLM NETWORK

Know IP - Stockholm Network Monthly Bulletin on IPRS

Commentary

Resurrecting the TRIPS Agreement - Helen Disney & Meir P. Pugatch*

A decade has passed since the General Agreement on Tariffs and Trade (GATT) was turned into the World Trade Organisation (WTO). A decade has passed since the WTO was described and perceived as the ultimate neo-liberal clearing house for international trade – an institution with a clear pro- free trade agenda (though not an extreme one), solid consultation mechanisms and most importantly – the ability to litigate as well as enforce its members' obligations. A decade has passed and the WTO is now at a cross–road as is its agreement on trade related aspects of intellectual property rights - TRIPS.

Signed in Marrakesh, (15 April 1994) as annex 1C to the Final Act establishing the WTO, the TRIPS agreement came into effect in January 1995. It was one of the most innovative and important subjects to be included in the multilateral negotiations of the Uruguay Round. Indeed, some scholars considered TRIPS to be a revolution in international intellectual property law.

To all intentions and purposes TRIPS was established as a right-holders' agreement. It was envisaged, advocated and lobbied by the developed countries, in particular the US, seeking to maintain the vital interests of their knowledge-based industries. The linkage between the TRIPS Agreement and business interests, such as the pharmaceutical, music and film industries is also clear. No one denies that these industries were the main driving force behind the agreement. However, when adopting a more international systemic view, one can explain the formation of TRIPS as an attempt by the developed countries to secure their competitive advantage in a rapidly interconnecting world. The most eminent threat to the vital interest of the leading knowledge-based economies was the ability of some developing countries to engage in reverse engineering activities (or in other words – counterfeit).

And so TRIPS was created and along with it came a promise that, over time, TRIPS would not only serve the interests of developed countries but also those of developing nations. After all, Article 7 stated that: *"The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge…"*

The decade of TRIPS can roughly be divided into three periods. The first period – 1995 to early 1999 – may be described as the period of "determination". Developed countries were positively convinced about TRIPS' ability to provide a long-term platform for the protection and enforcement of their IP rights world-wide (one need only look at the different WTO disputes between the US/EU and India/Pakistan on the so-called patent "mail-box" provisions in order to understand why such optimism was in place.) It was also a period in which developed countries underestimated the growing opposition to TRIPS by developing countries, and particularly the least developed countries.

The second period – November 1999 to November 2001- may be described as the period of "resentment". Developing countries, backed by a new wave of anti-IP sentiment within the NGO community, expressed a growing sense of antagonism about

* Helen Disney is Director of the Stockholm Network. Dr. Meir Perez Pugatch, Haifa University, heads the Intellectual Property and Competition Programme of the Stockholm Network

their obligation to implement TRIPS as of 2000. Briefly put, some developing countries felt that the TRIPS agreement was too one-sided, with limited prospects for the interests of their own nationals. This resentment was fuelled, in part, by two separate events – the colossal failure of the Seattle Ministerial Conference in late 1999, and the case of patented AIDS medicines in South Africa.

The third period – November 2001 to date – may be described as the period of "flexibility" (though not in a positive sense for all parties concerned, as will shortly be argued). This period brought two major changes. First, the subject matter of the discussion on TRIPS has narrowed down to an almost exclusive focus on pharmaceutical IPRs. Second, discussions no longer focused on the implementation of TRIPS. Rather they focused on the "flexible" interpretation of TRIPS – or in other words on the manner in which developing and least developed countries could essentially avoid or bypass the agreement. The epitomes of this era are the 2001 Declaration on the TRIPS Agreement and Public Health (as part of the Doha Development Agenda), and the August 2003 Agreement on the implementation of Paragraph 6 of the declaration (focusing on the manner in which least developed countries with no manufacturing capacities can import generic substitutes to existing patented pharmaceutical drugs).[1]

But the era of TRIPS flexibilities, while celebrated in the media and by some NGOs, proved to be the most dangerous period in the existence of TRIPS and to its future prospects. To a large extent, TRIPS flexibilities proved to be too flexible, leading to two different yet interconnected outcomes. The first is the surge of regional and bilateral agreements led by the US and also the EU. These agreements establish IP commitments of a TRIPS+ level – that is, developing countries are required to implement stronger and more detailed IP provisions than those stated by TRIPS (which is based on the minimum standards approach)[2]. The second is almost a complete stagnation in the negotiating agenda of TRIPS. In the decade that has passed, we have experienced vast and rapid technological developments – such as in the World Wide Web, mobile and digital mediums. These fields encompass highly complex and important IP issues, most of which are not covered in TRIPS. Some may argue, with a certain degree of certainty, that TRIPS have been forsaken (although others may argue that the recent changes in India's patent regime do prove its vitality).

Over the long run, the phenomena of "TRIPS flexibilities" and "TRIPS+" may prove incompatible with the interests of both developing and developed countries. Instead, TRIPS should be strengthened and expanded in a manner that would represent the growing importance of knowledge-based factors in the global economy – both in developed countries and in developing countries, such as India, and even China. Significant technical assistance, as well as some concessions, should also be given to those countries that have yet to experience greater innovation and technology transfer. Put briefly – and in advance of the WTO Ministerial Meeting in Hong Kong (December 2005) - it is time to resurrect TRIPS!

[1]. WTO *Ministerial Declaration on the TRIPS Agreement and Public Health- Adopted on 14 November 2001*; Council for TRIPS, Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health (30 August 2003).

[2]. Pugatch M.P. "the International Regulation of IPRs in a TRIPS and TRIPS *plus* World", *Journal of World Investment and Trade*, volume 6 number 3 (July: 2005), pp. 231-265

Topic of the Month

*Europe Rejects The Linguistic Struggle….and the Software Patents Directive - Uma Suthersanen**

Nearly every treatise and judgment in the last twenty years has declared that European patent law does not protect "computer programs". In February 2002, the European Commission drafted a directive on the patentability of computer-implemented inventions[1] which sought to clarify this position by stating the following principles of law:

(a) *computer programs as such* cannot constitute patentable inventions, irrespective of novelty or inventiveness ;
(b) *computer-implemented inventions* (CII), on the other hand, can constitute patentable inventions as long as they are novel, inventive and make a technical contribution.

Spot the difference? Well, not many Parliamentarians and lobbyists could. Considerable delays and controversy ensued as the proposed directive was heavily amended so that more and more clarification was made in order to distinguish the two types of inventions. At its final stage, the European Parliament tabled 21 new amendments to the proposed directive. However, these were to no avail, and the Directive was resolutely rejected by the Parliament at its second reading on July 6th 2005.

Political victory or policy disaster for Europe?

In broad policy terms, it is clear what this proposed legislation was about. The recent Enterprise Policy Scoreboard published in 2004 by the European Commission,[2] shows that the most innovative sector in the EU is electrical and optical equipment, which tend to be driven by embedded software. Another finding by the European Innovation Scoreboard 2004 indicates an "innovation gap" between the US and Japan, on the one hand, and the EU (as a whole) on the other.[3] This gap, interestingly, is explained by comparing 3 factors within the US and the EU research and economic infrastructure. One of these factors is the patent registration rate which shows a 50% patenting gap, with US high-tech firms patenting seven times more in Europe than European firms patenting in the US.[4] Moreover, the European Commission reports that 50% of granted CII patents are held by US companies. This is a highly relevant fact if one accepts recent studies, which show that patents do operate for the benefit of SMEs, and that software patents create jobs.

Legally speaking, the rejected CII directive was an attempt to clarify the issue of "software patents". The patentability of inventions in the EU is governed primarily by Article 52 of the

---

* Dr. Uma Suthersanen, Reader in Intellectual Property Law & Policy, Queen Mary, University of London

[1] Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions, COD/2002/0047.

[2] A Pocketbook of Enterprise Policy 2004: How Member States and Candidate Countries rank in the 2004 enterprise policy scoreboard, available at http://europa.eu.int/comm/enterprise/enterprise_policy/competitiveness/doc/pocketbook_2004.pdf

[3] European Innovation Scoreboard 2004. Comparative Analysis of Innovation Performance. Commission Staff Working Paper [Sec(2004) 1475], available at http://register.consilium.eu.int/pdf/en/04/st15/st15189.en04.pdf

[4] Annual Reports by the European Commission, 1991-2004.

European Patent Convention (EPC), which states that certain types of inventions, including computer programmes are excluded "as such". The Commission explained that the goal of the directive was to provide legal certainty to potential patentees by resolving the legal ambiguities concerning the ambit of Article 52, EPC – i.e. what exactly is the difference between "computer programs as such" and "computer-implemented inventions". Related to the objective of legal certainty within Europe was the need to harmonise the current divergent approaches to the issue of CII patenting between the national patent offices vis-à-vis the European Patent Office (EPO).

Word games and the proposed role of the CII directive

Is there really such a divergence within Europe? If there is, would not the proposed software patent directive have solved it?

It is undeniable that there is divergence between the German and British approaches. There are views that the UK patent regime is the most liberalised regime in relation to CII patents compared to the German Patent Office, which applies Art. 52, EPC strictly.

In one sense, the failed CII Directive was not aimed at introducing new legislation making computer software suddenly patentable but, as it stated, it was aimed at consolidating and codifying existing case-law. However, it is this very case law that lies at the heart of the debate and that led to an almost surreal linguistic debate between the supporters and detractors of the directive. On the one hand, the written law is clear that no patent protection can be granted to computer programmes. On the other hand however, for the past twenty years the EPC has interpreted the law so as to grant patent protection to *computer-implemented inventions*.[1] The rejected CII directive confirmed this by stating that CIIs are protected if they are new, inventive and industrially applicable. The proposed directive sought to resolve the debate by introducing for the first time a written statute, a new criterion for the protection of one type of technology i.e. CIIs must fulfill the criterion of *technical contribution*.

This notion of *technical contribution* was probably the downfall of this directive – and it will continue to be a thorn in any future legislation concerning software patents. Throughout the lifetime of the proposed directive, several definitions of *technical effect* or *technical contribution* were floated.

Indicative of the semantic stranglehold that "technical" had over this particular directive is the usage of vague and inchoate terms such as technical contribution, technical features, field of technology and technical field.

It is not surprising that this convolutedly written directive, with more than 100 amendments, which nevertheless only focused on a single issue, was finally rejected by the European Parliament.

The needs of the European software industry

Another factor which probably led to the downfall of the proposed directive was that the debates did not focus on the right issue. The debates did not focus on whether the European software industry needed the directive, or whether the proposed directive ensured a balance between the freedom to innovate and the right to stop others free riding on another's innovation. Do CII patents stifle future innovation and creativity especially

[1] See decisions T208/84 *Vicom*, T26/86 *Koch*, and T115/85 *IBM*.

with respect to open or free source software? Do they create patent thickets and patent trolls (i.e. companies like Acacia which acquire and licence patented software and thus derive licensing incomes but do not actually develop software)?[1]

The amendments tabled by the European Parliament in relation to interoperability between different systems appeared to note the balancing exercise that must be achieved between past and future innovators. However, a majority of the amendments and debates descended into a rather pointless discussion on technologies and *technical contribution*.

This was made more futile when we recall that these terms do not appear in the European Patent Convention for a very good reason – they were rejected by the framers of the Convention from the outset as being untenable.[2] If we dig deeper, we find that the concept of technical contribution/effect was introduced into German patent law in the late nineteenth century so as to prioritise industrial applicability over inventiveness and novelty.[3]

Future lessons

Perhaps the CII directive fiasco serves as a salutary lesson for future lobbyists and policy makers that at the end of the day, what matters more is good policy rather than semantic cul-de-sacs. For instance, it is quite shocking that there was either lukewarm or no debate on these crucial policy points:

1. Do we need dual protection under both patent and copyright laws considering that international copyright law was specifically amended in the TRIPS Agreement to include computer programmes?

2. Are software patents in the interest of the EU's industrial economy, and if patents for software (and business methods) are thought to be essential to our regional well-being, why are we not abolishing them from the list of excluded subject matter within Article 52, EPC?

3. Do we need clarification, either from the European Patent Office or within the future Community Patent Convention, of *technical contribution*?

There always has been, from the beginning of the rejected directive's life, little "official" evidence and consultative documents from European stakeholders (electronics companies, local government authorities, patent attorneys and agents and software developers) to show what improvements or developments such stakeholders saw as being vital to build a competitive and innovative society. IPR protection cannot work in a vacuum and certainly not without a supportive infrastructure in terms of educated and encouraging businesses. Indeed, it would have been more fruitful had the discussions concentrated, not on whether certain fields of technologies should be patented, but on the quality of the patent system in relation to criteria of patentability, and on the accessibility of the system in terms of cost and priority.

---

[1] Note Ronald Mann's view that patent thickets are a fiction - , "Do Patents Facilitate Financing in the Software Industry?", available at The University of Texas Law and Economics Working Paper No. 022, March 2005: http://ssrn.com/abstract=510103.

[2] Patents Working Party, "Proceedings of the 1st meeting of the Patents Working Party", Brussels, 17-28 April 1961, Council of Europe Doc IV/2767/61-E (1961).

[3] See the 1889 German Supreme Court's decision in *Congo Red / Congo Rot*, discussed in G. Dutfield, *Intellectual Property Rights and the Life Science Industries*, 2003, at page 81.

Experts' Corner

IPRs and SMEs: are IPRs scale neutral? – Grant Isaac*

The role that Small and Medium Sized Enterprises (SMEs) play in the innovation process is significant and an excellent article by Anne Jensen in the July 2006 edition of Know-IP provides a helpful overview of the opportunities and challenges – namely financing and enforcement – that SMEs face when trying to protect their innovations. In a general sense, the issue here is whether or not IPRs – especially patents – are scale neutral. That is, is their effectiveness a function of organisation size? Building on this article, it is useful to consider the strategic decisions faced by innovative SMEs.

Large organisations typically have endogenous financial resources, that is, they have the internal financial resources to fully support their research and development portfolios. SMEs require exogenous resources. That is, they do not have the internal financial resources and must rely upon external investors to fund their research, development and commercialisation project(s). The result is differential implications for the strategic management of intellectual property by SMEs.

Consider the following strategic options facing both large innovative organisations and SMEs.

First are the drivers for obtaining intellectual property. Unlike tangible assets such as buildings and equipment, intellectual assets are intangible and accounting for their value is the source of considerable debate. That is, what is the proper value of an idea, especially a truly novel idea where significant market development would have to occur before a commercial opportunity is realised? Within this environment, patents have become a proxy for valuing ideas. The logic is that if the scientific community considers an idea to be novel enough to grant it protection, then this connotes that the scientific team has some intangible technical value which can be considered as part of the organisation's asset base.

Large innovative organisations are not as beholden to the value of their intangible intellectual assets as their smaller counterparts are. Their internal resources – both financial and non-financial – mean that large innovative firms can use patents to focus on more long-term strategic resource alignment and to protect those sources of perceived long-term competitive advantage. The strategic implication is that large innovative organisations are freer to invest internal resources in more novel and less incremental knowledge-based products.

In contrast, for small innovative organisations intellectual assets may well be all that they have. These assets are used to attract equity investors whose capital is used to fund research and development projects. Without the internal resources – both financial and non-financial – small innovative organisations typically use patents to secure short-term investment funds. In other words, financial resources are often dedicated to research and development in areas where patents are quicker and more likely to obtain and this may not be congruent with areas more aligned with a long-term competitive advantage. The strategic implication is a bias towards less novel and more incremental innovations that do not require as much financial resources to investigate. In this sense, patents are not scale neutral with

* Grant E. Isaac, Ph.D. The Childers' Chair Professor of Biotechnology Management College of Commerce University of Saskatchewan

respect to the drivers for patenting intellectual assets.

Second, getting the patent application right is crucial, but not easy, and organisation size impacts the ability to identify optimal patent space. On the one hand, an organisation has an incentive to maximise the protection it can obtain in the product space because this represents the potential monopoly profits that can be realised. On the other hand, if the claim is granted such that the organisation either infringes a previous application or the patent cannot actually be enabled for all claimed protection then an expensive legal challenge can ensue. Finding this *optimal* patent space is not an inexpensive proposition in knowledge-based areas such as biotechnology and nanotechnology.

For large innovative organisations there are often financial resources and experienced and expert patent analysts and agents to undertake this work in a manner consistent with the long-term strategy for competitive advantage. In contrast, small innovative organisations with limited financial resources are strategically motivated to minimise the amount of cash spent on these activities. In addition, they tend to lack the experience and expertise to identify the *optimal* patent space to apply for in the application. Yet, the lack of resources to undertake proper application diligence leaves the organisation vulnerable to legal challenge based on either infringement or non-enablement. Again, in comparison, patents as an intellectual property policy instrument are not scale neutral. With respect to patent applications, large innovative organisations are much better positioned to identify *optimal* patents as an intellectual property policy instrument than are small organisations.

Third, when potentially patentable ideas are identified, organisations face an important strategic decision with respect to the timing of a patent filing. On the one hand, filing right away ensures that the cash spent on ascertaining technical feasibility is protected if the innovation results in a marketable product. However, it also limits the time that monopoly profits can be realised in the marketing phase. Inversely, filing when an innovative product is ready for the marketing phase maximises the time that monopoly profits can be realised but also leaves the organisation vulnerable to the possibility that another innovator will patent essentially the same idea. This strategic patenting decision is not scale neutral, organisational size does matter.

Recall that small innovative organisations need to protect and then promote their ideas in order to obtain the investment capital necessary to achieve technical feasibility let alone begin the market development process. Strategically, this means that for a small organisation timing is not really an endogenous strategic variable; they cannot be patient and instead must patent early to attract investors at the expense of perhaps a greater period of time realising monopoly profits. Yet, for a large organisation, internal resources mean that timing is an endogenous strategic resource creating an opportunity for these organisations to move farther along the product development phase before disclosing their idea through a patent application.

Fourth, in the case of a potential patent infringement it is up to the patent holder to make a strategic decision to enforce or not to enforce. This is a strategic decision because defending a patent requires significant cash to cover the legal expenses and to sustain the organisation while the litigation occurs. For small innovative

organisations the financial resources available are targeted toward innovation efforts in order to develop an idea to the stage where it can be patented and to ensure that the patent application is as close to optimal as possible. That is, many small organisations are quite vulnerable to predatory infringement because they simply lack the resources to make the challenge. Large innovative organisations, on the other hand, have the willingness and ability to enforce their patent protection. Therefore, as an intellectual property policy instrument, patents are not scale neutral as strategic patent decisions can again be differentiated based on organisational size.

The comparative assessment above reveals that patents are not scale neutral with respect to their impact upon the strategic options of why an organisation might patent, the patent application, the patent timing and the patent enforcement.

This is not to suggest that IPRs are not useful for SMEs, but rather to highlight that different strategic options are available that the organisations, potential lenders and policy makers need to be aware of.

Forthcoming Event

Stockholm Network Westminster IP Debate – 15 November 2005

As part of the Westminister Fringe debate series, The Stockholm Network is arranging a debate entitled: *"Unregulated free-riding on others' ideas will harm consumers and cripple innovation"*

Growing competition from the Asian giants is making Western economies ever more reliant on the development of knowledge-based products and services. Yet ideas are unique among resources because they are potentially limitless, but possess no value until realised and utilised. Should, therefore, ideas be treated as public goods because of their ephemeral nature? Or does the very difficulty of transforming an idea into reality merit some reward? Are consumers best served by allowing all to profit from the reproduction of another's original work? Or can the fruits of an idea reach its largest potential market if their reproduction is restricted?

This provocative debate is aimed at capturing the fundamental economic question: should we establish property rights in knowledge resources (public goods)? In other words, the debate will not address legalistic interpretations of IPRs, but rather focus on the more economic policy level. The IP debate will consist of two teams - one focussing on the perils of unrestricted free-riding (a world with no IPRs) and the other seeking to justify IPRs by focussing on the perils of IP monopolies. The event will then be followed by a session of Q&As.

Speakers include Professor Stefan Szymanski, FT MBA Programme Director, Tanaka Business School, Imperial College London; Mr. Julian Mount, Senior Director, Head of European Trade, Pfizer; Mr. Phil Evans, Visiting Lecturer, Bristol Business School and Dr. Alan Story, Senior Lecturer in IP Law, Kent Law School, University of Kent. Chair is Dr. Meir P. Pugatch, University of Haifa, Head of the Stockholm Network Intellectual Property and Competition Programme.

Date: November 15th 2005 . Time: 6 (for 6:30 p.m.) – 8 p.m., with a drinks reception to follow. Venue: One Great George Street, Westminster SW1, London. To RVSP for the event, please e-mail: sacha@stockholm-network.org Numbers are limited.