13.xii.2010

THE WTO TRIPS AGREEMENT – A PRACTICAL OVERVIEW FOR CLIMATE CHANGE POLICYMAKERS[*]

The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) sets out international standards for the protection and enforcement of intellectual property (IP) rights. TRIPS also includes the substantive provisions of key treaties on IP that are administered by the World Intellectual Property Organization, notably the Paris and Berne Conventions. IP issues have been discussed extensively in the work under the UNFCCC on technology development and transfer in view of the linkage between the IP system – and patents in particular – and the development and dissemination of the technologies that will be vital to addressing climate change mitigation and adaptation.

This paper endeavours to present a neutral, practical guide to the provisions of the TRIPS Agreement that are most relevant to this discussion. A spectrum of views has been expressed as to whether IPRs present a barrier to technology development, diffusion and transfer in developing countries, whether the IP system is an essential mechanism for technology development and diffusion, and the scope and implications for technology diffusion of existing international standards, including the provisions of the TRIPS Agreement, including the flexibilities provided under that Agreement. Some proposals have been made that would lead to significant adjustments to the IP system, particularly concerning the grant and exercise of patents on green technologies. More generally, discussions are posing questions about the scope of existing standards, and the options that can be exercised within the framework of those standards, both in terms of national legislation and in terms of innovative structures for managing and sharing IP rights.

Discussions concerning climate and technology therefore present certain practical questions about the nature, scope and range of flexibility within existing legal standards, particularly within the TRIPS Agreement. This paper seeks to provide a factual background to this debate, identifying relevant TRIPS standards and setting them in the context of the climate change negotiations. It does not seek to promote, interpret, comment upon, or refute any particular position or analysis.

Several forms of IP are potentially relevant to climate change mitigation and adaptation initiatives: patents, trademarks, especially certification marks, trade secrets/knowhow, plant variety rights, and the suppression of unfair competition. However, the climate change discussions touching on the IP system have principally concerned patents.

[*] This document has been prepared as an informal note to provide background for policy discussions by Antony Taubman and Jayashree Watal of the Intellectual Property Division of the WTO

This paper is structured as follows:

- an outline of relevant provisions of the TRIPS Agreement and related instruments.

- some conclusions vis-à-vis the IP issues raised in multilateral discussions on climate change.

A. TRIPS PROVISIONS RELEVANT

expected to contribute not only to the promotion of technological innovation, but also to the transfer and dissemination of technology in a way that benefits all stakeholders and that respects a balance of rights and obligations. In addition, Article 8 recognizes the right of WTO Members to adopt measures, to protect, , not only public health and nutrition but also the public interest in sectors of vital importance to their socio-economic and technological development, provided those measures are consistent with TRIPS (for instance, in not being discriminatory). This provision also recognizes that Members may need to take appropriate measures (again provided they are TRIPS-consistent) "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."

In 2001, Ministers of all WTO Members issued the . This Declaration highlights the importance of the objectives and principles of TRIPS for the interpretation of its provisions. Although the Declaration does not refer specifically to Articles 7 and 8 of TRIPS, it refers to "objectives" and "principles", words that are the titles of these two articles respectively.

While TRIPS lays down general standards for the protection of intellectual property, achieving this "balance" under national laws and in practice is a matter for domestic policymakers and legislators to establish, through an appropriate mix of law, regulation and administrative measures within the policy space defined by the TRIPS Agreement, including through the use of flexibilities in the application of TRIPS provisions.

The most relevant IP standards for the protection of climate-friendly innovations are to

(a) Basic TRIPS standards on patents

As a general principle, WTO Members are obliged under Article 27.1 to make patents available to applicants for any invention, whether product or process, in all fields of technology, provided three criteria are met, namely that the invention is new, non-obvious or involves an inventive step and is useful or industrially applicable. Some exclusions to this rule are permitted, but are not required: these are discussed below.

This principle means that anyone interested in obtaining a patent for an invention must have the legal means to do so in every Member's jurisdiction irrespective of whether the invention is a product or a process (for example, whether it is a new reflector/concentrator system in solar power or a new process for storing heat longer) and irrespective of the field of technology (for example, whether it pertains to chemistry or mechanical engineering). Members cannot, therefore, exclude from patenting whole classes of inventions in fields of technology (apart from the specific exceptions in TRIPS, discussed below). For example, this standard would preclude Members from legislating blanket exceptions for inventions pertaining to renewable energy technologies or other designated fields of environmental technologies, although it doesn't mean any claimed invention in the environmental field need be considered eligible for a patent – eligibility for a patent gr

(b) Permissible exclusions from the scope of patentable subject matter

TRIPS sets out **three optional exceptions** which Members can use to exclude subject matter from the grant of patents, when this matter would otherwise be eligible for patents. In other words, there are certain categories of subject matter that can be entirely excluded from patent protection – if a Member so chooses – even if it would otherwise be considered new, non-obvious and useful, and a genuine invention. These exceptions are described below:

Article 27.2 permits Members to exclude from patentability subject matter inventions that are considered to be contrary to or morality.[6] In elaborating this general rule, Article 27.2 specifically mentions inventions that are contrary to human, animal or plant life or health or seriously prejudicial to the environment. However, an important proviso is that the use of this exception is subject to the condition that the commercial exploitation of the invention must be prevented and that this prevention must be for the protection of or morality. This provision does not allow exclusions, on environmental or other public policy grounds, from patent grant for inventions that are beneficial or desirable and that are actually permitted to be commercially exploited in a Member's jurisdiction.

teissibns . For example, an invention which meets the conditions for patentability, that this pnve-6 device whose explicit and only use is to de-activa

For example, a patent on a novel, more efficient method of producing a known product, say photovoltaic cells, could be used to prevent the sale of PV cells produced by that method, not to block the sale or use of any other PV cells.

Under Article 28.2, both product and process patent owners shall also have the right to assign, or transfer by succession, the patent and to conclude licensing contracts.

- not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.

These conditions apply cumulatively, each being a separate and independent requirement that must be satisfied. TRIPS negotiators adopted the approach of establishing general principles that national legislators should observe, rather than an exhaustive list that would have set out specific exceptions to be implemented at the national level. Many countries use this provision to provide that certain uses shall not infringe patent rights. Often, limited exceptions to patent rights cover the use fnatio

Considering the diverse technologies required for climate change adaptation and mitigation, this understanding among WTO Members together with the text of the TRIPS

- Licences are to be non-exclusive (TRIPS Article 31(d))

Compulsory licences must be non-exclusive – this is generally taken to mean that the licensee must not have right to exclude the grant of other licences or use of the invention by the patent owner.

- Licences are to be predominantly for the supply of the domestic market of the Member authorizing such use (TRIPS Article 31(f))

Compulsory licences shall be authorized predominantly – but not exclusively – for the supply of the domestic market of the Member authorizing such use. This condition may be relaxed when the government grants a compulsory license to remedy anti-competitive practices. Due to subsequent WTO decisions, this condition is also relaxed to permit compulsory licensing for export of pharmaceuticals to countries lacking sufficient domestic manufacturing capacities and wanting to import generic pharmaceuticals to meet a public health problem. Paragraph 6 of the Doha Declaration identified the potential problems of countries with limited or no manufacturing capacities in making effective use of compulsory licensing. Following the instruction given by the Declaration to seek an expeditious solution to this problem, Members adopted a General Council Decision on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health on 30 August 2003 (WT/L/540 and Corr.1). This waives certain obligations under the TRIPS Agreement. On 6 December 2005, a further General Council Decision transposed the waivers into a Protocol Amending the TRIPS Agreement (WT/L/641). This Protocol will enter into force when it is ratified by two thirds of the Members of the WTO.

- The right holder is to be paid adequate remuneration (TRIPS Article 31(h))

The right holder must be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the licence. When the grant of a compulsory license is to remedy anti-competitive practices, the need for such a remedy may be taken into account in determining the amount of remuneration (Article 31(k)). This condition has been waived under certain conditions by subsequent WTO decisions related to public health so as to avoid double payment of remuneration.

- Decisions on grant and remuneration are to be subject to judicial or other independent review (TRIPS Article 31(i))

There must be an avenue for any decision relating to the grant of compulsory licences, and any decision relating to the remuneration provided in respect of such use, to undergo judicial review or other independent review by a distinct higher authority or body in the Member's legal and administrative system: where a compulsory license is ordered by a court, this would typically entail an appeal to a higher court; where it is issued by a government agency, there may be an appeal to a court or to an independent higher-level body.

- Certain conditions are to be met in the case of dependent patents (TRIPS Article 31(l))

Where a later patented invention cannot be exploited without infringing an earlier patent (i.e. the case of 'dependent patents'), a compulsory licence may only be granted on the earlier

patent if the invention in the later patent involves an important technical advance. In such a case, the owner of the earlier patent has a right to obtain a cross-licence for the later patent. For instance, if a firm has developed and patented a highly efficient new carbon capture technology, which can only be exploited by using a background technology covered by an earlier patent, that firm could seek the grant of a compulsory license (normally only after trying to negotiate a voluntary license on reasonable terms).

(f) Duration of patents and revocation

Article 33 sets out that the minimum term of protection for patents shall be a period of 20 years from the filing date. It is important to note that Members may make the patent term subject to the payment of renewal or maintenance fees. If these fees are not paid, the patent lapses and the patented subject matter passes into the public domain in that country. For a variety of reasons, the overwhelming majority of patents do not proceed to the full 20 year term and most lapse well before that time. In practice, one should never assume that a patent on a particular technology will run for 20 years: an up-to-date check of the records may well reveal that despite a patent earlier having been granted it is no longer in force. (Equally, many patent applications do not mature into granted, enforceable patents, and the scope of claims as applied

restrict the rights of Members to decide on the grounds of revocation subject to the limitations prescribed under Article 5 of the Paris Convention.

2. Trade Secrets ('Undisclosed Information')

The TRIPS Agreement contains certain obligations with respect to undisclosed information that cover both trade secrets and test da

(b) Rights of a trade secret holder

The TRIPS Agreement requires that a natural or legal person lawfully in control of such undisclosed information must have the possibility of preventing it from being disclosed to, acquired by, or used by others without his or her consent in a "manner contrary to honest commercial practices". According to a footnote to the provision, a manner contrary to honest commercial practices means at least the following practices:

- breach of contract,

An inventor has invented a new catalyst for bio-diesel and hopes that Company A can produce and market the product. He is asked to disclose the invention to Company A to enable it to make the necessary assessment of the potential commercial value of the invention. Before disclosing the invention, the company signs an express contract of confidentiality with the inventor, which provides that the company should respect the confidentiality of the information disclosed by the inventor, and the company should not disclose the information to third parties. If the company finally decides not to exploit the disclosed information, but discloses it to another company, the inventor can sue the company for breach of contract.

- breach of confidence,

Confidence clauses are very popular in employment contracts, which generally provide that an employee should not disclose to any person or company any confidential information he learns in the course of his employment or use the confidential information either for his own benefit or for the benefit of a new employer. The confidence clause will often remain in effect even after the termination of the contract of employment.

- inducement to breach of contract or confidence,

A company induces an employee of a competing company to leave his job and leak the company's trade secrets to him by offering a higher salary.

- acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that dishonest commercial practices were involved in the acquisition.

commeflinventorlosenl9l ( )] 002

(b) Transfer of Technology provisions in TRIPS

Article 7 of the TRIPS Agreement recognizes that the protection and enforcement of intellectual property rights should contribute to the transfer and dissemination of technology (see the discussion of objectives and principles above).

Article 66.2 of the TRIPS Agreement requires developed-country Members to provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base. The precise nature of such incentives has not been further elaborated upon in the TRIPS Agreement. Examples of incentives reported to the TRIPS Council by developed countries can be found in the annual reports submitted under this provision cited in the annual reports of the Council (IP/C/-/- series of documents).

In 2003, pursuant to instructions given by ministers at the Doha ministerial meeting, the Council adopted a decision on "Implementation of Article 66.2 of the TRIPS Agreement" that put in place a mechanism for ensuring the monitoring and full implementation of the obligations in question. Under this Decision, developed county Members shall submit annually reports on actions taken or planned in pursuance of their commitments under Article 66.2. These submissions are reviewed by the Council at its end of year meeting each year. The review meetings are intended to provide Members an opportunity to, , discuss the effectiveness of the incentives provided in promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base. This Decision can be found in document IP/C/28.

Recent workshops held by the WTO Secretariat in the margins of the last TRIPS Council meeting in October 2008, 2009 and 2010 with the participation of LDC and developed country delegations were seen to be a helpful first step for both sides in understanding each other, and included several examples of the transfer of climate-friendly technologies (for example, see report from Australia, European Union, Japan, Norway, Switzerland and the US in document series IP/C/W/536/... and IP/C/W/551).

(c) Licensing practices or conditions pertaining to intellectual property which restrain competition may have adverse effects on trade, and may impede the transfer and dissemination of technology

In concluding the Agreement, Members recognized (in Article 40 of TRIPS) that some licensing practices or conditions pertaining to IPRs which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology. They agreed that nothing in TRIPS shall prevent them "from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of [IPRs] having an adverse effect on competition in the relevant market." In line with the principles set out in Article 8 (see above), TRIPS allows a Member to adopt, consistently with the other provisions of the Agreement "appropriate measures to prevent or control such practices," stipulating these may include "exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of [the Member concerned]."

TRIPS also provides a mechanism for consultations between Members in the event of violations of laws and regulations relating to the control of anti-competitive practices in

contractual licences. For example, if Country A has cause to believe that its laws and regulations on this matter are being violated by an IPR owner based in Country B, then it can request

B. COUNTRIES ACCEDING

- The fact that certain technologies are wholly or partially publicly funded technologies

where the grant of compulsory licences would not have been sufficient to prevent such abuses. No proceedings for the forfeiture or revocation of a patent may be instituted