

targets. CDM projects may also include transfer of green technology from developed countries to developing countries.

B. Compatibility with TRIPS Flexibilities

1. Technology Transfer Obligation under TRIPS Articles 7, 8(1) and 66(2)

The TRIPS Agreement includes provisions for creating favourable conditions in developing countries to attract technology through trade and investment (pull factors).⁷⁷ However, TRIPS also recognizes LDCs' special need for flexibilities with respect to their national laws in order to allow them to establish "a sound and viable technological base."⁷⁸ To list a few TRIPS provisions that emphasize such equilibrium between rights and obligations, Article 7 provides that the protection and enforcement of IP should "contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users."⁷⁹ Article 8(1) allows Members to "adopt measures necessary to protect public health and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that those measures are consistent with TRIPS."⁸⁰ Article 66(2) also provides, as a basis for the active transfer of technology to developing countries, that developed country members shall provide incentives (monetary or otherwise) to institutions to encourage transfer to LDCs for their technology base.⁸¹

2. Exceptions to Rights under TRIPS Article 30

To cure potential market inefficiencies occurring as a result of exclusive rights, the scope of patents may be balanced out mainly through two mechanisms:⁸² (i) ex-

77 *Supra* note 56 (by setting strong minimum standards of protection on patent terms, exclusive rights and national treatment).

78 TRIPS Agreement, *supra* note 8 at the Preamble.

79 *Id.* at art. 7.

80 *Id.* at art. 8(1).

81 *Id.* at art. 66(2). *Cf.* TRIPS Article 66(1) provides an extendable transition period of ten years for LDCs.

82 WIPO Standing Committee on the Law of Patents 13th Session, Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights, Mar. 23-27, 2009, Paras. 10-11, WIPO Doc. SCP/13/3 (Feb. 4, 2009).

cluding certain uses of a patented invention from infringement;⁸³ and (ii) allowing third parties to use a patented invention subject to remuneration (e.g., compulsory licensing). These mechanisms are foreseen by Articles 30 and 31 of the TRIPS regimes, respectively. (Article 31 is discussed further below.)

According to Article 30, countries may provide limited exceptions to the exclusive rights conferred by a patent, as long as such exceptions (i) do not unreasonably conflict with a normal exploitation of the patent; (ii) do not unreasonably prejudice the legitimate interests of the patent owner; and (iii) take into account the legitimate interests of third parties.⁸⁴ Examples either codified or recognized in common law include private use, research or teaching, preparation of a medicine under individual prescription, experimentation on the invention, prior use, experiments for seeking regulatory approval for marketing a product after the patent expiration, or import of patented products legally marketed in another country (i.e., the principle of exhaustion).⁸⁵

In connection with the proposals made by developing countries in the process of climate change negotiations, especially the revocation of IP rights or compulsory sharing of publicly funded research, it may be noted that in some developed countries, national legislation concerning the IP management of publicly funded research can limit government options. In the US, for example, the so-called Bayh-Dole Act⁸⁶ permits universities, small enterprises and non-profit research institutions to own IP rights generated from research funded by the federal government. Even if the government is granted a license (non-exclusive and non-transferable), further use is subject to permission by the patentee.⁸⁷

83 *Id.* at Para. 83 (stating that, for instance, Article 27 of the Convention on International Civil Aviation of 1944 contains exceptions to patents regarding “international air navigation so that the authorized entry of an aircraft in the territory shall not entail any seizure of the aircraft on the grounds of a patent infringement” and “the storage of spare parts and spare equipment for the aircraft and the right to use and install the same in the repair of an aircraft” subject to certain conditions).

84 TRIPS Agreement, *supra* note 8. at art. 30.

85 DANIEL GERVAIS, *THE TRIPS AGREEMENT DRAFTING HISTORY AND ANALYSIS* 2.271-2.275 (Thomson Reuters (Legal) Limited 3rd ed. 2008).

86 University and Small Business Patent Procedures Act, 35 U.S.C. §§ 200-212 (1980). Japan and Korea also have similar law.

87 *Cf.* however, the Bayh-Dole Act retains the so-called “march-in rights” exception. In case the university or research organization does not reasonably seek patent protection and does not commercialize the patented technology, the federal government can deny the exclusive rights conferred to the patent owner and use the technology.

3. Compulsory Licensing under TRIPS and Beyond

a) For Public Health

Additional to general conditions for patent exceptions under Article 30 of the TRIPS Agreement,⁸⁸ Article 31 provides conditions for ‘other use’⁸⁹ of an invention without the approval of a right-holder upon authorization from the government. Article 31(b) waives the requirement of *ex-ante* efforts to obtain a license from a right-holder in cases of a national or other extreme emergency or public non-commercial use.⁹⁰ For example, countries have granted or considered granting compulsory licensing for pharmaceutical products treating malaria, HIV/AIDS,⁹¹ anthrax,⁹² bird flu,⁹³ cancer and heart diseases.⁹⁴

As part of these conditions, TRIPS Article 31(f) stipulates that compulsory licensing shall be “predominantly for the supply of the domestic market.”⁹⁵ In the context of public health, this provision resulted in restriction of the amount of drugs that could be manufactured and exported under compulsory licensing. It also made it difficult for LDCs with insufficient manufacturing capability to find suppliers under compulsory licensing. To address this issue, the WTO TRIPS Council adopted the Doha Declaration on TRIPS and Public Health in 2001⁹⁶ and, in 2003, the WTO General Council decided to waive the requirement under Article 31(f) so as to

88 TRIPS Agreement, *supra* note 8, at art. 30 (providing for such exceptions that they “do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties”).

89 “Other use” refers to use other than that allowed under TRIPS Article 30.

90 TRIPS Agreement, *supra* note 8, at art. 31(b).

91 See generally, Frederick M. Abbott, *The Doha Declaration on the TRIPS Agreement and Public Health: Lighting a Dark Corner at the WTO*, 5(2) J. OF INT. ECONOMIC LAW 469 (Oxford University Press, 2002).

92 See generally, *In re Ciprofloxacin Hydro chloride Antitrust Litigation*, 166 F. Supp. 2d 740 (E.D.N.Y. 2001); Timothy J. Burger, *Chuck Pushes Plan to Let Other Firms Make Cipro*, N.Y. DAILY NEWS, Oct. 19, 2001, http://www.nydailynews.com/archives/news/2001/10/19/2001-10-19_chuck_pushes_plan_to_let_oth.html; and James Thuo Gathii, *Balancing Patent Rights and Affordability of Prescription Drugs in Addressing Bio-Terrorism: An Analysis of In Re Ciprofloxacin Hydro chloride Antitrust Litigation*, 13 ALB. L. J. SCI. & TECH. 651 (2003).

93 E.g., Eileen McDermott, *Flu Crisis Could Lead to Compulsory Licenses*, MANAGING INTELL. PROP., May 3, 2009, <http://www.managingip.com/Article/2193267/Search-Results/Flu-crisis-could-lead-to-compulsory-licences-full-version.html>.

94 E.g., The Ministry of Public Health and The National Health Security Office of Thailand, *Facts and Evidences on the 10 Burning Issues Related to the Government Use of Patents on Three Patented Essential Drugs in Thailand* (Feb. 2007); and The Ministry of Public Health and The National Health Security Office of Thailand, *The 10 Burning Questions on the Government Use on the Four Anti-Cancer Drugs in Thailand* (Feb. 2008).

95 TRIPS Agreement, *supra* note 8, at art. 31(f).

96 WTO, Ministerial Declaration of 12 November 2001, WT/MIN(01)/DEC/1, 41 I.L.M. 746 (2002) [hereinafter Doha Declaration].