to offer to the public free of charge.²⁴⁸ A patent can join the Commons if it belongs to one of the IPC classes acceptable to WBCSD's Eco-Patent Classification List and is accompanied by a statement describing environmental benefits. Except the so-called "defensive termination" discussed below, a pledger shall not assert the pledged patents against an implementer for making, using, selling and importing machines, manufactures, processes, or compositions of matter that alone, or when in a larger product or service, achieve environmentally beneficial results.²⁴⁹ The non-assertion pledge survives and remains in force even after the pledger withdraws from the Commons. Pledgers may provide technical support, but are not obliged to do so.

The defensive termination option allows a patent pledger of the Commons to terminate its pledge towards a specific implementer when confronted with either of two scenarios: (i) one pledger asserts infringement of a pledged patent against another pledger; or (ii) a non-member of the Commons challenges a pledged or non-pledged patent of a member of the Commons.²⁵⁰

As of August 2010, eleven companies had pledged some 100 patents. One criticism of this scheme has been that participants in the Commons "were not pledging their bread-and-butter patents." Inclusion in the Commons is flexible as long as patents satisfy the aforementioned requirements, and no mechanism currently exists to measure the usefulness of pledged patents; for example, beneficiaries of pledged patents are not required to report their usage. 252

2. Japan Intellectual Property Association Proposal

Established in 1938, the Japan Intellectual Property Association (JIPA) represents Japanese IP creators and users and presents recommendations on important IP issues. As an alternative to compulsory licensing and an attempt to make transfer of ESTs beneficial to licensors and licensees, JIPA has proposed the so-called Green Technology Package Program (GTPP).²⁵³

The proposal discerns certain potential challenges of a licensing negotiation with developing countries: *e.g.*, difficulties of negotiation, concerns over payment and

²⁴⁸ See generally WBCSD, Eco-Patent Commons, at http://www.wbcsd.org/web/epc/. Cf. although pledgers are free to let pledged patents lapse, pledgers nonetheless may choose to maintain pledged patents intact and at the same time keep the defensive termination option available.

²⁴⁹ Id.

²⁵⁰ Id.

²⁵¹ Stephen Mulrenan, *Eco-Patent Commons Responds to Critics*, AIPPI Congress News, Sept. 10, 2008, *available at* http://www.managingip.com.

²⁵² Id.

²⁵³ JIPA, Proposal of Green Technology Package Program (Executive Summary), at http://www.jipa.or.jp/english/opinion/pdf/GTPP.pdf (last visited July 17, 2010).

contractual compliance, and the need for technical assistance from the licensor for implementation of the licensed technology. Developing countries wishing to assess the options for introducing environmental technologies cannot always access the basic information concerning a possible license deal. Sometimes the decision-maker for introducing a new technology is not a patent expert, and the patent specification itself is insufficient for deciding the technology's attractiveness. ²⁵⁴ In addition, details on licensing terms, competitive advantages of the licensed technology *vis-à-vis* alternatives, or the availability of technical assistance are not always publicly disclosed. Thus, it is difficult to use the patent lists themselves as technology transfer tools. ²⁵⁵

To help developing countries find the necessary information, the GTPP would offer an online-managed database where rightholders, confidentially if they so wish, may post information on the features of their green technology, the patents involved, comparison with competing technologies, and available licensing terms. For successful implementation of ESTs, the GTPP scheme encourages licensors to provide a 'green technology package' including such business requisites as patents, knowhow, technical assistance and consulting, and parts and materials supply. ²⁵⁶ Licensors can pre-determine modes of commercialization (assignment, exclusive or non-exclusive license, etc.) and transaction prices. The elements of a standard license agreement under this scheme should be fair and reasonable. ²⁵⁷ As a further transfer incentive, the GTPP contemplates an insurance program for the event of IP infringement. ²⁵⁸

3. Open Innovation: GreenXchange

The GreenXchange is an online open innovation platform where participants can share IP to develop sustainable business models and innovation.²⁵⁹ Created as a result of "brainstorming" at the World Economic Forum in Davos, Switzerland involving Nike, Yahoo! and other companies,²⁶⁰ the GreenXchange aims to offer information on participating companies, patents and licensing conditions as well as a members' forum for collaboration and exchange.

²⁵⁴ Hideo Doi, Japan's Green Technology Plan, 196 Managing Intell. Prop. 125, 125-144 (2010).

²⁵⁵ Supra note 253.

²⁵⁶ Id.

²⁵⁷ Supra note 254.

²⁵⁸ Id.

²⁵⁹ GreenXchange (beta), http://greenxchange.force.com (last visited Aug. 14, 2010).

²⁶⁰ Don Tapscott, *Davos: Nike and Partners Launch the GreenXchange*, Businessweek, Jan. 27, 2010, *available at* http://www.businessweek.com.