

## *IPAN issue brief - no. 8*

### **genetic resources and traditional knowledge - the key IP issues**

Intellectual property law is largely a creature of the industrial west. Patents and trade secrets can protect new inventions; trade marks protect the reputation of traders; copyright protects the creative output of authors, artists and musicians (and their publishers). But not all valuable intellectual creations can be protected. One class of creation which is (in general) not capable of such protection is the indigenous knowledge of traditional societies, frequently referred to as "traditional knowledge" ("TK").

Western science tends to be disdainful of such knowledge: as at best unsystematic and unproven, at worst mere superstition ("old wives' tales"). Nevertheless such knowledge has formed the basis of numerous advances that have been of value to the world as a whole. Many drugs are based on TK - starting with aspirin (originally a derivative of the willow tree): and more recently the new antimalarial, artemisinin, is based on a traditional Chinese medicinal herb.

There is no general system for recognising the contribution of TK to modern developments, or rewarding the communities who have preserved and handed on such the knowledge on which they are based. Similarly, artistic works based on traditional folk-tunes, or stories, or traditional styles of ornamentation, are exploited without reward or even reference to the originating communities: and sometimes in ways which scandalise them (example: misuse for commercial purposes of sacred emblems of Australian aborigines) . This is seen as unjust, particularly where those communities are poor, and those who exploit the developments make substantial profits from them. The exploiters, however, see the knowledge they have used as part of "the public domain" (like a large proportion of published Western science and technology). For them, public knowledge not specifically protected is (and should remain) free for all to use.

A special grievance for indigenous peoples is the patenting of indigenous knowledge. This is termed "biopiracy", and a number of examples are notorious: neem, turmeric, Basmati rice: as well as the widespread practice of patenting genes found in indigenous and other natural resources. Indigenous people say that these patents are an unconscionable attempt to monopolise knowledge freely provided by them. The patents enrich the patentees at the expense of the indigenous people: who are at the same time deprived of the right to continue age-old practices.

In reply, patentees defend the principles of patenting, even if the practice is sometimes deficient. The patents on neem and turmeric were both revoked after

being challenged by the Indian government (after much time and expense). Neither patent claimed the indigenous material as such: in both cases particular uses were claimed (which were eventually shown not to be new, and hence unpatentable). Similarly, the Basmati rice case, upon challenge, was reduced to claiming three specific new varieties of rice of the Basmati type: but it never claimed traditional Basmati rice as such, only an allegedly new form of it. Patentees say that in principle public traditional knowledge is not patentable. No patent can legally take out of the public domain what is already known. Whatever has been done traditionally cannot be impeded by a subsequent patent. Patents such as those cited arise only because searches carried out by Patent Offices are inherently fallible. They say, however, that inventive improvements to traditional knowledge are and must remain patentable, to encourage further development for the benefit of all (e.g. artemisinin could be crucially important in combating malaria, especially in poor countries).

### **Two proposals arise out of these concerns:**

- a general scheme for IP-like protection of indigenous knowledge; and
- a specific proposal to require patent applicants to disclose the origin of biological resources used in their inventions.

Both of these are under discussion in Geneva at the World Intellectual Property Organisation (WIPO). The Intergovernmental Committee on Traditional Knowledge, Genetic Resources and Folklore was set up in 2000, and has held its 10th session in December 2006. Progress is slow, as fundamental questions are not agreed. The specific proposal is also discussed in WTO; and both are debated in the Convention on Biodiversity (CBD).

- **The general scheme**

Developing countries seek an international treaty to control access and use of traditional knowledge. Their objectives are: to eliminate biopiracy; to control use of TK and to obtain a fair return for its use. Developed countries see no need for a treaty, and are concerned about extending exclusive rights to cover subject-matter (TK) which is very difficult to define, and may mean paying royalties on, or ceasing to use, materials and methods which are well-known (in the 'public domain'). Matters are complicated by the presence at the negotiations of numerous observer representatives of indigenous peoples. They also seek control over their TK, but not necessarily in order to recover royalties from its use: some reject the idea of an IP right on TK as inconsistent with their worldview. Also they have many issues with their own governments over ownership of their TK, human rights, access to tribal lands, etc.

- **The specific proposal**

This is put forward for two reasons: to inhibit biopiracy and to promote observance of the CBD. This international treaty (with over 180 country

members, but excluding USA) has three objectives: to conserve biodiversity; to promote its sustainable use; and to share equitably the benefits of such use. To promote the third objective, Article 15 provides that each party may access genetic resources from others, but only with the prior informed consent (PIC) of the party providing the resources. To conform to Article 15, it is proposed that any mention of genetic (or perhaps biological) resources in patent applications should require disclosure of the origin of the resource, and (in some versions) to provide evidence of PIC. Similar requirements are suggested for TK (which is mentioned in Article 8j of the CBD).

Proponents say that such proposals would discourage illegal access to genetic resources, and inhibit the grant of patents improperly claiming TK already known. Patent applicants say that genetic resources are widely distributed, and in large part legally accessible without formality. The proposed requirements are unclear, burdensome and disproportionate. They would discourage use of genetic resources, and do little to promote sharing of benefits from such use. However an increasing number of countries are putting such requirements into their laws (India, Philippines, South Africa, the Andean Pact and Norway have such requirements: Brazil, China and Switzerland are introducing them: the European Union is open to discuss the question). If the WTO "Doha round" succeeds, it might introduce a provision of this type.

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### **suggested links for further reading:**

#### **General background to TRIPs and the CBD:**

- [\*World Trade Organisation \(WTO\)\*](#)
- [\*paper by the International Chamber of Commerce \(ICC\)\*](#)

#### **Disclosure of origin or source in patent specifications**

- [\*difficulties and problems\*](#): Chartered Institute of Patent Attorneys (CIPA)
- [\*options and perspectives of users and providers\*](#): Chatham House report: May 2006

#### **Traditional knowledge and disclosure of origin:**

- [\*disclosure of origin: time for a reality check?\*](#)  
*WTO Public Symposium, Geneva, April 21 2005* - Prof. Graham Dutfield  
observations from a well respected academic expert,
- [\*IP and genetic resources, traditional knowledge and folklore\*](#)  
WIPO background discussion paper
- [\*various WTO discussion papers from the different parties to the controversy\*](#)
- [\*Biodiversity and ownership of research results:\*](#)  
booklet from the IPR Helpdesk summarising the basic points clearly  
[note the [IPR-Helpdesk](#) is a Project funded by the European Commission, DG Enterprise and Industry, under the 6th RTD Framework Programme of the European Union - the guide is made available free of charge]

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