

plants and animals or from Maori traditional knowledge . . .” and 1:3:e specifically notes that the patent regime of NZ should take into account international developments.

This sets the stage for the most significant departure from current practice in New Zealand. According to patent law, an invention is: “novel if it does not form part of the prior art base.”<sup>103</sup> The prior art base is determined:

... in relation to an invention so far as claimed in a claim, means all matter (whether a product, a process, information about a product or process, or anything else) which has at any time before the priority date of that claim been made available to the public (whether in New Zealand or elsewhere) by written or oral description, by use, or in any other way.<sup>104</sup>

This introduced an absolute standard of novelty, not one just based on what is published in New Zealand. The revised legislation would clearly include the TK from India as part of the prior art. Unlike European legislation, TK is clearly in mind under the proposed legislation in New Zealand. The bill is still being debated to minimize the risk of unintended consequences.<sup>105</sup>

## 8. *Databases*

A TM database would put information in the public domain.<sup>106</sup> It would allow patent examiners to identify what is novel in reference to TK. If a patent application were the same as what was recorded in the database, it would be denied. If the application was sufficiently different from what is recorded in the registry, than a patent could be granted. As one commentator has suggested: “... as long as the patent requirements of usefulness, novelty, and inventive step are strictly upheld by patent offices there is no reason for the traditional communities to feel exploited since if their knowledge were simply copied there would be no invention to patent.”<sup>107</sup> This statement of course assumes that the TK in question has been published. The database would offer a powerful platform for establishing prior art.

After the neem patent controversy, India, along with several other countries with extensive TM traditions, recognized the need for a central database that would record TM traditions that were often only available in oral form. This initiative was stimulated by a meeting of the South Asian Association for Regional Cooperation (SAARC), and it was envisaged that every country in the organization would prepare a TK database. The SAARC would pay for the infrastructure, but each country would fund the costs of the work itself. The overall structure of the database would be according to the international standards of TK as adopted by the intergovernmental committee of WIPO in 2003. Already in 2001, India had developed a system of clas-

<sup>103</sup> See *id.* at Part 1 cl 6, for an explanation of “novel”.

<sup>104</sup> See *id.* at Part 1 cl 8, for an explanation of “prior art base”.

<sup>105</sup> See *id.* Topics Summary.

<sup>106</sup> See Soutik Biswas, *India hits back in ‘bio-piracy’ battle* (2005), BBC News, [http://news.bbc.co.uk/go/pr/fr/-/1/world/south\\_asia/4506382.stm](http://news.bbc.co.uk/go/pr/fr/-/1/world/south_asia/4506382.stm) (last visited Sept. 1, 2006).

<sup>107</sup> Dutfield, *supra* note 29.

sifying TK resources that was adopted by the International Patent Classification (IPC). The IPC agreed to include about 200 sub groups of drugs derived from Indian medicinal plants.<sup>108</sup> The fact that this is a regional effort is particularly important. TK does follow national boundaries.

This project gained particular popularity after the revocation of the patent on uses of tumeric. TK was taken seriously by patent granting authorities. In late 2005, the EPO was due to sign<sup>109</sup> an agreement with the National Institute of Science Communication and Information Resources (NISCIR) in India so that the EPO could search a database of Indian TM. This would allow patent agencies to search the database for prior art. The NISCIR is negotiating with patent offices in the US, UK, Sweden, and Japan, and the NISCIR hopes that in the future there will be an international legal mechanism established by WIPO to protect TK.<sup>110</sup>

Some have suggested that the database could be used to further bio-piracy. The Traditional Knowledge Digital Library Task Force found 4,896 patents or applications based on 90 medicinal plants in the USPTO database. Apparently 80 % of the references pertained to just seven Indian medicinal plants. The Task Force studied the patents and found that 360 of the 762 patents on medicinal plants that were granted by the USPTO could be categorized as traditional.<sup>111</sup>

The database may run into difficulty in that a patent examiner is trained in science,<sup>112</sup> whereas the database would present TK. Literature can be understood on a number of levels, and allusions are not uncommon. Where are lines to be drawn in such situations? How would scientists go about searching a database of TK?

Despite these problems there have been calls to stop the project for fear that it might be too effective. Some in the pharmaceutical industry are concerned that by treating all medicines and healing remedies as IP, it would be difficult in the future to derive new medicines from plants.<sup>113</sup> This would have an impact particularly on small to medium sized enterprises. Large corporations could isolate or synthesize slightly different active ingredients that would likely pass the novelty and inventive step hurdles.

108 See *T.V. Padma Digital Library to protect indigenous knowledge* <http://www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=1840&language=1> (last visited Sept. 5, 2006). The scope of the database according to this report is: "traditional medicine, foodstuffs, architecture and culture." It appears that the main focus of the database is TM, so it is quite logical that it would contain information about foodstuffs as well. It is more difficult to appreciate why architecture would be included, as this would apparently involve images that would use a proportionally tremendous amount of memory space in any database. Aspects of culture in general may well be difficult to organize and search.

109 The author could find no evidence that this agreement has been signed as of Sept 10 2006.

110 See Mary Ann Liebert Inc., *EPO Takes Step Toward Blocking Patents on Traditional Medicines*, 24 BIOTECHNOLOGY L. REP. 445 (2005).

111 Devinder Sharma, *Digital Library Another Tool for Biopiracy* (2002). <http://www.mindfully.org/GE/GE4/Traditional-Knowledge-Digital-Library-TKDL29may02.htm> (last visited Sept. 1, 2006). The author also suggests that both WIPO and UNCTAD are eager to support a system that would legalize their monopoly positions in controlling TK. This seems an usually harsh assessment, as the systems would not directly involve these organizations.

112 Someone with understanding of TK should analyze the prior art to determine if the invention involves an inventive step. See N.S. Gopalakrishnan, *TRIPS and Protection of Traditional Knowledge of Genetic Resources: New Challenges to the Patent System*, 27(1) E.I.P.R. 14 (2005).

113 See *Traditional Knowledge Digital Library Seeks to Prevent Biopiracy*, [http://sippi.aaas.org/ipissues/updates/?res\\_id=618](http://sippi.aaas.org/ipissues/updates/?res_id=618).) (last visited Sept. 5, 2006). See also J. Lancaster *India Digitizes Age-old Wisdom*, THE WASHINGTON POST, 8 Jan. 2006, at A22. The article also suggests that the Digital Library would be made available to foreign patent offices "at some point later this year". *Id.*

The Workshop on Traditional Knowledge and Biological Diversity called for the suspension of registering TK. The USA has also raised the issue that medical research could be impeded with the formation of such a registry, and that it may be in violation of the TRIPS agreement.<sup>114</sup> The latter assertion appears to be difficult to support.

From media reports, many proposed authors did not want to participate in a venture that could be damaging to their communities.<sup>115</sup> There is also a general reticence of some to commit an oral tradition to writing. These groups worry that after publication they will lose control of their sacred or cultural property. At first the compilers will put materials on the database that have already been printed, although perhaps originally in a number of non-European languages. Later original materials will be collected from a number of sources.<sup>116</sup> As is the case with much TK, it may be controlled by community members who may change the TK over time. There can thus be older static elements as well as newer elements attributable to an individual. A member of a 'traditional' community could enjoy copyright as an author on these new additions according to western standards, although under traditional law it may be the community as a whole that retains these rights.

## 9. Fair Use

The proposed TK database would cover a vast subject area. Increasing amounts of information, some of it perhaps appearing for the first time in written form, would be of interest to academics.<sup>117</sup> Specialist academic attention could perform useful functions. Gaps in the information could be identified and faulty data could be corrected. The danger remains that if the database were simply produced by a small group of people and used by another select group it would be a self-pollinating system.

One option would be to 'code for fair use' by allowing some users – academics for example – to view material for a certain period of time, perform a certain number of searches on the database, or to extract a certain amount of material. The main problem is simple. The program restricting access would be, by necessity, complicated. It almost certainly would not anticipate the range of needs encountered by 'fair use' research. The other option is to appoint a controlling body that would act as a gate-keeper for the database. The unique circumstances of every case could be carefully accessed and bona fide fair use research could be used to improve subsequent versions of the database. Author representatives could be involved in controlling access by dis-

<sup>114</sup> See Thomas J. Krumenacher, *Protection for Indigenous Peoples and their Traditional Knowledge: Would a Registry System Reduce the Misappropriation of Traditional Knowledge?* 8 MARQ. INTELL. PROP. L. REV. 143, 158 (2004).

<sup>115</sup> See Lancaster, *supra* note 113, at A22.

<sup>116</sup> See Biswas, *supra* note 106.

<sup>117</sup> There are many proposals regarding the proposed database. While some state that only patent examiners will have access, others state it will be a resource for academics as well. Some form of digital rights management system is envisaged. See Caroline Ryan, *Patent to protect ancient knowledge* (2002) BBC News, [http://news.bbc.co.uk/1/hi/in\\_depth/sci\\_tech/2002/boston\\_2002/1828438.stm](http://news.bbc.co.uk/1/hi/in_depth/sci_tech/2002/boston_2002/1828438.stm) (last visited Sept. 5, 2006).