ment of products that may otherwise remain undeveloped. In the case of neem, this would lead to the products derived from the plant being available to European customers only in the US but at 'monopolistic' pricing levels. Those in favor of geographic disparity would suggest:

> It is reasonable to assume that, absent a geographic distinction (*i.e.* absent patent rights), a pharmaceutical firm would not invest millions of dollars in commercialization efforts, thus depriving all consumers. Moreover, exploiting the patent in the rich United States market could lead to significant profits that would form part of a benefit sharing arrangement.[99]

The fear is that Grace's patent in the US will deny Indian access to the US market. This may in turn allow Grace to control the cash-crop market of neem in India, as well as potentially bidding the price of neem seed beyond the reach of competitors.[100]

There are arguments both for and against the retention of geographical disparity in US patent law. However, it is clear that the framers of the law were concerned with the development of innovation in the US. In 1836 they did not envisage that the disparity could allow a US company to effectively control the world wide market in a product, such as could be said for neem. While such a monopoly could effectively develop a product, there is a great risk that such a position in the market could be abused.

7. *Neem Patent in New Zealand*

The New Zealand Patent Office had also issued an equivalent patent to the EPO. The main difference is that the standard of novelty is determined according to prior publication in New Zealand. Unless the TK has been published in that country, there can be no countering the claim for lack of novelty. The neem patent in New Zealand was not revoked. This has raised a number of problems in New Zealand where a large indigenous community with extensive oral traditions exists.

In 2000, the government of New Zealand began a review of the Patents Act of 1953. In March 2002, the document Boundaries to Patentability[101] was released. Information from submissions was incorporated into the Patents Act Review on 28 July 2003. On 20 December 2004 a Draft Patents Bill was released for public consultation and submissions closed on 11 March 1995. A main goal of the proposed act is to tighten the procedures for granting patents, particularly by more rigorously determining what could be considered a valid invention. The previous 'presumption of patentability' has been removed and has been replaced with a 'balance of probabilities test'.

The Draft for Consultation Patents Bill[102] Part 1:3:c specifically addresses: "Maori concerns relating to the granting of patents for inventions derived from indigenous

99 *See id.* at 910.
100 *See* Kadidal, *supra* note 76, at 401.
101 Boundaries to Patentability. *See* http://med.govt.nz/templates/MultipageDocumentTOC__1451.aspx (3-17) (last visited Sept. 5, 2006).
102 Draft for Consultation Patents Bill http://www.med.govt.nz/upload/3358/draftbill.pdf (last Sept. 5, 2006).

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.”[103] 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.[104]

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.[105]

8. *Databases*

A TM database would put information in the public domain.[106] 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.”[107] This statement of course assumes that the TK is 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-

103 *See* i*d.* at Part 1 cl 6, for an explanation of “novel”.
104 *See id.* at Part 1 cl 8, for an explanation of “prior art base”.
105 *See id.* Topics Summary.
106 *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) (last visited Sept. 1, 2006).
107 Dutfield, *supra* note 29.