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**THE PROTECTION OF INDIGENOUS
PEOPLES' TRADITIONAL KNOWLEDGE:
A NEW APPROACH**

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ABSTRACT

The claims by indigenous peoples to the protection of their traditional knowledge from expropriation and inappropriate use are increasing. The intellectual property rights system cannot accommodate the breadth of protection that indigenous people seek for their knowledge. This failure is due to fundamental differences in the way indigenous people and the Anglo intellectual property rights system value knowledge.

However there are modifications that can be made to existing intellectual property rights such as patents which will increase their ability to protect traditional knowledge. Ultimately in order to provide the type of protection that indigenous people claim for their knowledge a new approach must be taken. The paper concludes that the granting of legal personality to traditional knowledge may provide a novel answer to the concerns of indigenous peoples.

WORD LENGTH

The text of this paper (excluding contents page, footnotes, bibliography and annexures) comprises approximately 13811 words.

I INTRODUCTION

The claims of indigenous peoples for sovereignty and ownership of land and natural resources has been debated for many years. Recently indigenous peoples have claimed intellectual property rights for their folklore, biodiversity and traditional knowledge. The United Nations sees the protection of the cultural and intellectual property of indigenous peoples as connected fundamentally to the realisation of territorial rights and self-determination,¹ and as essential to the cultural and economic survival of indigenous peoples.² Protection is viewed by indigenous peoples, including Maori, as an inalienable right. Inherent in the concept of this inalienable right is a guardianship responsibility to future generations which indigenous peoples take very seriously.³ The claims of indigenous people for protection of traditional knowledge will be considered in the context of the Anglo intellectual property rights system.

The intellectual property rights system poses three major threats to the protection of indigenous peoples' traditional knowledge, namely:

- (a) the system does not protect knowledge which is in the public domain, like that of indigenous peoples;
- (b) the system allows intellectual property rights to be created over inventions based upon traditional knowledge with no recognition, financial or otherwise, of the contribution of the traditional knowledge to the invention; and
- (c) once such a right is created, the invention based on the traditional knowledge may be used in a manner which is offensive to the indigenous people who created the knowledge.

These problems are due to the nature of the Anglo property rights system. The claims of Maori to the protection of their traditional knowledge will be investigated in the context of the Anglo intellectual property rights system and a model of Maori knowledge. The Anglo system is designed to reward innovation and to facilitate its commercial exploitation. Knowledge which is not new is not protected because it should be able to be freely used by all as a base for the creation of new knowledge.

1 E/CN.4/Sib.2/1992/30 para 4.

2 Above n 1, para 9.

3 Mead Aroha, "Indigenous Rights to Land and Biological resources". Paper presented at a conference organised by the Institute for International Research 1994.

Te Puni Kokiri ("TPK") sees the current system as unable to protect Maori traditional knowledge.⁴ This paper addresses the question of how protection of the intellectual property rights system may be extended to traditional knowledge. Whether such knowledge should be protected is a question for Parliament to decide and is beyond the scope of this paper.

Three potential solutions for the protection of Maori traditional knowledge will be examined:

- (a) a collective monopoly right of unlimited scope;
- (b) amending the Patents Act 1953; and
- (c) the granting of legal personality to types of Maori traditional knowledge as taonga.⁵

The first two options view Maori traditional knowledge as intellectual property protected by a property right. A collective monopoly right is incompatible with the notion of intellectual property rights of limited scope and duration. The second option could provide some protection to Maori traditional knowledge. However it would not address the underlying problem that the modern patent system was designed specifically to exclude protection of any type of traditional knowledge. It would merely provide a limited amount of protection on an ad hoc basis.

The proposal to grant legal personality to Maori traditional knowledge as taonga is the most effective of the three because it does not view traditional knowledge as property. By rejecting the concept of traditional knowledge as property this option allows a more creative approach to issues of guardianship.

An understanding of the definition of intellectual property in the Anglo intellectual property rights system is necessary to properly evaluate the claims of indigenous people for the protection of traditional knowledge.

A *The Definition of Intellectual Property in the New Zealand Legal System*

Intellectual Property is a collective term used to describe certain types of intangible property. It is however a phrase without an authoritative definition.

⁴ However TPK considers that the current legal framework is adequate for the protection of contemporary Maori Intellectual and Cultural property.

⁵ Taonga is generally understood to mean "all their treasured possessions".

It is useful to look at the basic notion of property in the New Zealand legal system. The word property has two meanings; the title to rights of ownership in goods or other property and the thing owned over which title is exercised.⁶ Intellectual property is intangible personal property⁷ which may be the subject of an intellectual property right. This can be contrasted with cultural property which is regarded as referring to tangible property

Cornish⁸ describes intellectual property as that which "protects applications of ideas and information that are of commercial value". The Oxford Companion to Law⁹ defines it as "... a convenient label for such kinds of property as copyrights, patents, trade-marks, which fall under the heading of a chose in action or incorporeal moveable property".¹⁰

It can be argued that on the basis of the system described above there is an inter-relationship between the definition of intellectual property and the legal rights associated with it. That is, that intellectual property is often defined with specific reference to the different types of legal rights which a particular subject may attract. It is difficult to define intellectual property without referring to these property rights.

This feature of the system becomes problematic in defining the intellectual property of indigenous peoples. Reference may be made by indigenous peoples to their intellectual property rights, without referring specifically to the subjects of those rights. For example the Mataatua Declaration 1993 often refers to the cultural and intellectual property rights of indigenous peoples, in a sense that embraces a wider definition of intellectual property than the one recognised by the present system.¹¹ The problem is that the only Intellectual Property rights we have to refer to in understanding Indigenous peoples concerns are the existing ones.

B *The Claims For Intellectual Property Rights by Indigenous Peoples*

⁶ David M Walker *Oxford Companion to Law* (Clarendon Press, Oxford, 1980).

⁷ This can be contrasted with cultural property which is tangible.

⁸ Cornish, WR *Intellectual Property: Patents, Copyright, Trademarks and Allied Rights* (2ed Sweet and Maxwell, London, 1989) 5.

⁹ Above n 6, 1007.

¹⁰ A United Nations convention states that intellectual property consists of two main branches; industrial property and copyright. Convention Establishing the World Intellectual Property Organisation (1967) Article 2 (viii).

¹¹ See Clauses 1.2, 2.4, Maatua Decalaration 1993 and Waitangi Tribunal Claim Wai 262, Claim 5.

Indigenous peoples have made claims internationally for the protection of their folklore, biodiversity and traditional knowledge. These claims are increasingly being recognised at an international level particularly with respect to biodiversity. In New Zealand a landmark claim has been lodged with the Waitangi Tribunal for ownership and guardianship rights of selected species of native flora and fauna.

The claims by indigenous people to intellectual property rights have been recognised at an international level.¹² Article 8(j) of the Convention on Biodiversity requires States to;¹³

respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities, embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices.

It has been suggested that this subsection includes the traditions of local and indigenous communities with the current Intellectual Property Rights System.¹⁴ The article recognises that the use of Indigenous Peoples knowledge may have economic benefits and that these should be shared. Further the article identifies Indigenous Peoples as the "holders" of their knowledge which is the type of language used for the definition of a proprietor of an intellectual property right.¹⁵

In 1993 the Mataatua Declaration on the Cultural and Intellectual Property Rights of Indigenous People was signed. The declaration contains recommendations to States about the development of a cultural and intellectual property rights regime addressing the concerns of indigenous peoples. The regime should include the following;¹⁶

12 The United Nations Conference on Environment and Development (UNCED) Agenda 21 is a document issued by the conference that provides a moral framework that is legally binding on those states that have signed it. Chapter 22 recognises the traditional scientific knowledge that indigenous peoples have developed. The United Nations Draft Declaration on the Rights of Indigenous Peoples recognises the right of Indigenous Peoples to ownership and control of their cultural and intellectual property and a right to special measures to protect it.

13 The Convention on Biodiversity resulted from the The United Nations Conference on Environment and Development (UNCED) or Earth Summit held in Rio de Janeiro, Brazil in June 1992.

14 E da Costa e Silva "The Protection of Intellectual Property for Local and Indigenous Communities" [1995] 11 EIPR 546.

15 Above 14, 546.

16 Clause 2.5 of the Mataatua Declaration 1993.

- Collective as well as individual ownership and origin
- Retroactive coverage of historical as well as contemporary works
- Protection against debasement of culturally significant items
- Co-operative rather than competitive framework
- First beneficiaries to be the direct descendants of the traditional guardians of that knowledge
- Multi-generational coverage span

The Declaration also stated that Indigenous Peoples have the right to create new knowledge based on cultural traditions.¹⁷ The signatories of the declaration formed the Independent Association of Mataatua Declaration.¹⁸

In New Zealand in 1990 a claim was filed with the Waitangi Tribunal based upon the guarantee of te tino rangatiratanga o te iwi Maori given to Maori in Article II of the Treaty of Waitangi 1840 with respect to certain species of fauna and flora. This includes a claim to Maori intellectual and cultural property rights with respect to these species. In the claim Maori intellectual and cultural property rights are described as "biodiversity rights, ownership and management rights to certain natural resources, traditional knowledge rights and intellectual property rights."¹⁹

The protection of Maori traditional medical knowledge will be used in this paper to illustrate the difficulties of protecting indigenous peoples' traditional knowledge in an intellectual property rights system and in particular the patents system. The major difficulty in protecting traditional knowledge is that the patents system is designed to protect innovation as opposed to knowledge in the public domain.

II THE ANGLO INTELLECTUAL PROPERTY RIGHTS SYSTEM

A *The Protection of Intellectual Property in New Zealand*

New Zealand has inherited from England a property rights based approach to facilitate the commercial exploitation of intellectual property. This consists primarily of specific property rights being granted by statute to different types of intellectual

¹⁷ Clause 2.2 of the Mataatua Declaration 1993.

¹⁸ The association is self-funded and has 200 members worldwide. IAMA submissions to the Commerce Select Committee on the GATT(Uruguay Round) Bill 1994 C/94/422.

¹⁹ Further Submissions of Claimant Counsel on request for priority hearing (in response), Wai 262, 7 September 1995.

property. While some property rights come into existence on the creation of an eligible work i.e. copyright, others must be sought from a state body, i.e. patents.

The property right is owned by the author or inventor of the work, or their assignee. The right of ownership gives the owner a bundle of rights including the right to possess, use, use up, abuse, lend, let for hire, grant as security, gift, sell and bequeath the object.²⁰ While the right of ownership is exclusive it is not unrestricted. The law contains restrictions on how the rights associated with ownership may be exercised. Most intellectual property rights exist only for a limited duration.²¹ The bundle of property rights accompanying each specific intellectual property right is different depending upon the nature of the subject.²² Simply, a new idea may be the subject of a patent granting the owner a twenty year right to exclusively make, use and vend the invention, while a poem may be the subject of copyright, and be protected for fifty years from the death of its author from unauthorised copying by a third party.²³

1 The place of patent law in the Anglo intellectual property rights system

Patents law is concerned with the protection of inventions which are often the outcome of research. An invention may be patentable if it is a new manner of manufacture or any new method or process of testing applicable to the improvement or control of manufacture.²⁴ That is patent law protects products and processes which have an industrial application and represent an improvement or innovation on existing products and processes. In New Zealand a patentable invention must be new in that it is not known in this country.²⁵ All the information that is known is regarded as part of the common knowledge of humanity that can be used freely as the basis for innovation and further development.

20 Some of those rights may be relinquished temporarily without loss of ownership i.e. a license to use the work. Ownership of such a right can be lost in two ways; if the work is used up or it is transferred without any reversionary right. Above n 6, 1007.

21 For example patents, copyright, registered designs, and plant variety right's. The notable exception is trademarks.

22 As a result a subject can be defined not only by its technical properties but also by the particular set of legal restrictions governing the use and exchange of the item. L McCabe "The Economics of Property Rights, Intellectual Property and Canadian Copyright and Law Reform" Intellectual Property: The Context for Reform-Report No 13 (Wellington 1990) 118.

23 Cornish attributes this difference in restrictions on ownership rights to the fact that: "Each type of subject matter calls for a different balance of public and private interests-the interests of society as a whole in its economic and cultural development, and the interest of the individual to secure a "fair" value for his intellectual effort or investment of capital or labour." Above n 8, 5.

24 Section 2 of the Patents Act 1953..

25 See sections 13 and 14 of the Patents Act 1953.

A patent provides the owner with a twenty year²⁶ limited monopoly within which the owner has the exclusive right to "make, use, exercise and vend" the invention.²⁷ This right reflects the value that society places on the creation of this new knowledge. A patent includes the right to grant an exclusive or non-exclusive licence to others to use the invention. It also prevents use of the subject matter of a patent by a third party (including an independent inventor of the same invention) without the permission of the owner. The patentee is the sole person entitled to remuneration from the exploitation of the patent, subject to any contractual obligations.

B *Justification for the Intellectual Property Rights System*

Attempts have been made to justify the present system from the perspective of moral philosophy²⁸ and economics.²⁹ From a moral philosophical perspective the inventor should be rewarded with a property right in their creation because by applying their intellect and therefore their labour, they now own the creation.³⁰ In addition it is just that they receive a reward from society in proportion to the contribution they have made.

From an economic perspective the creation of knowledge is a public good.³¹ Consequently private investors will not invest in the creation of knowledge unless economic incentives exist for its production.³² The pattern of incentives present at any time is influenced by the prevailing property rights structure.³³ Any property rights over the subject in question should allow inventors and creators to capture the full value of the invention.

26 Patents Amendment Act 1994.

27 Form A Letters Patent, in Schedule 3 of the Patents Regulations 1953.

28 See Spector HM "An Outline of a Theory Justifying Intellectual Property Rights" [1989] 8 EIPR 270.

29 See generally Hammond G "Intellectual and Industrial Property: Philosophy, Process and Problems" Intellectual Property: The Context for Reform-Report No 13 (Wellington 1990) 33. McCabe L "The Economics of Property Rights, Intellectual Property and Canadian Copyright and Law Reform" Intellectual Property: The Context for Reform-Report No 13 (Wellington 1990) 117. Ministry of Commerce *Review of Intellectual Property Rights: Patents, Trademarks and Designs* (Wellington, 1990)

30 This explanation is based on John Locke's Labour Theory, *The Second Treatise on Government*. For a discussion of the strengths and weaknesses of this theory in relation to intellectual property rights see above n 28.

31 A public good is one which cannot be exclusively produced or consumed in comparison with a private good which can be.

32 Ministry of Commerce *Review of Intellectual Property Rights: Patents, Trademarks and Designs* Vol II (Wellington, 1990)

33 Above n 22, 119.

It has been noted in respect to the patent system that it is needed not so much to support invention but the costly research and development of innovation.³⁴ The idea is that the duration and scope of the right should provide sufficient returns to producers but only when this is in the long-run interest of society as a whole. As a result different types of knowledge are assigned different intellectual property rights of varying scope and duration.

III AN ALTERNATIVE APPROACH TO INTELLECTUAL PROPERTY

This part of the paper will examine indigenous peoples' intellectual property claims, the nature of indigenous knowledge and the protection sought for it by indigenous people. It will then investigate the nature of the intellectual property rights system and the issues that arise in protecting indigenous knowledge within it.

A *Indigenous Peoples Definition of Intellectual Property*

A United Nations Report of the Secretary-General³⁵ suggested that the intellectual property of indigenous peoples may be usefully divided into three groups;

- Folklore and crafts;
- Biodiversity
- Indigenous knowledge.

Biodiversity relates to the plant varieties that indigenous peoples have developed in their traditional territories through experimentation and cultivation for use as food, medicine or as construction materials.³⁶ The Wai 262 claim could be described as claiming ownership of the biodiversity Maori developed in New Zealand. The question of the ownership by indigenous peoples of the physical and genetic resources in indigenous plants is beyond the scope of this paper.³⁷

34 Above n 22, 123.

35 E/CN.4/Sib.2/1992/30. While this definition has been used it is noted that the opinion has been expressed that Indigenous people should have the right to define their own intellectual property.

36 Above n 27, 2.

37 For a discussion of the issue in New Zealand see J Robertson and D Calhoun "Treaty on Biological Diversity: Ownership Issues and Access to Genetic Materials in New Zealand"

Indigenous Knowledge, refers to indigenous peoples' existing and evolving knowledge about their environment including the plants and animals that live within it.³⁸ This specifically includes their knowledge about the medicinal uses of any plants.³⁹

Given the difficulties with the Anglo definition of intellectual property being so closely linked to the legal rights which protect it, any definitions of indigenous people's intellectual property should be read with caution. One reason for this caution is that indigenous peoples' treasures such as knowledge have evolved in a completely different context from the Anglo property rights system. This may have consequences as to the subject and type of protection indigenous peoples seek.

B *The Dominant Model of Maori Knowledge*

This model of Maori knowledge is based upon the observations of early anthropologists.⁴⁰ It is used to highlight the difficulties of protecting Maori knowledge in the Anglo property rights system.

In Maori mythology the world was originally barren of any superior forms of knowledge. Tane ascended into the uppermost heavens and brought back three baskets of knowledge. The knowledge in these baskets has been transferred from generation to generation. Maori believed that all esoteric knowledge was connected to the gods. Certain types of knowledge were regarded as more sacred than others and was therefore tapu. For example knowledge pertaining to metaphysical concerns was regarded as more sacred than that of historical tradition .

Historically the transmission of this knowledge occurred in two ways. Informally from grandfather to grandson or from father to son⁴¹ or formally through a

[1995] 5 EIPR 219 and A Mead " Indigenous Rights to Land and Biological Resources" paper presented to the Institute for International Research, August 1994.

38 Te Puni Kokiri, is currently examining the characteristics of Maori genetic, cultural and intellectual property so that they can be compared with this definition. Te Puni Kokiri draft document *Nga Taonga Tuku Iho No Nga Tupuna* (Maori Genetic, Cultural and Intellectual Property Rights)(Wellington, 1994).

39 Above n 34, 3. It was noted that indigenous peoples' knowledge of the medicinal uses of plants has been and continues to be a source of Western pharmacology.

40 E Best *The Maori School of Learning* (Government Printer, Wellington, 1959).

41 Riley states that woman were not taught in the whare wananga because their presence would have made it noa, literally devoid of tapu. M Riley *Maori Healing and Herbal* (Viking Sevensseas NZ Ltd, Paraparaumu New Zealand, 1994), 8.

whare wananga or school of learning.⁴² The object of the schools was to preserve all desirable knowledge pertaining to metaphysical concerns and historical traditions "free from alteration, omission, interpolation or deterioration".⁴³ The schools prohibited any form of change or questioning of the teachings on the grounds that it was an affront to Tane, who was the origin of all higher forms of knowledge.⁴⁴

Some knowledge was surrounded by restrictions and tapu and was known only by a few. There were restrictions placed on the repetition of such matters, some knowledge was only allowed to be imparted to those of learning and ordinary people were not allowed to hear.⁴⁵ The teachers and conservers of this knowledge were regarded as highly important members of the community.⁴⁶ All learned persons were tohunga.⁴⁷ Students had to be of good background and have good powers of retention. The knowledge was taught orally and memorised by the students. There were certain religious type ceremonies for students associated with progressing to learning tapu or more sacred knowledge.⁴⁸

1 *Maori Medical Knowledge*

Medical matters were taught in the whare wananga. Knowledge relating to healing was part of the sacred knowledge. It has been suggested that only the sons of tohunga could acquire this knowledge.⁴⁹ Students were taught which herbs and quantities to apply as well as the correct karakia to recite depending on the different illness. As a result most people could not administer first aid and had to rely upon the tohunga. The plant remedies they made were called rongoa. No distinction was made between the spiritual healing and the use of herbs as they were part of a whole and one was not effective without the other. Maori believed that plants and people had a common origin both being offspring of Tane in his capacity as controller of the forests.

There is dispute as to the extent of experimentation with medicines by Maori before the European arrived. Certainly after that time Maori did develop the knowledge

42 The word "whare" in the phrase which literally means house, was used in a figurative sense to refer to a particular course of teaching or curriculum. E Best *The Maori School of Learning* (Government Printer, Wellington, 1959), 10.

43 Above n 40, 6.

44 Above n 40, 7.

45 Above n 40, 29.

46 Above n 40, 5.

47 Above n 40, 15.

48 Above n 40, 5.

49 Above n 41, 11.

they had. With the arrival of Christianity and European medicine the mana of many tohunga and their traditional remedies diminished. The special knowledge of the whaka wananga was almost lost with the deaths of the old instructors. The converts to Christianity sought to blend the systems of healing. Riley asserts that what has remained constant is the Maori belief that herbal cures can only be effective where karakia are used with the treatment.⁵⁰

Indigenous peoples' knowledge of medicinal plants has been described as "a coherent system linking social behaviour, supernatural beings, human physiology, and botanical observations."⁵¹ The use of medical plants is usually based on a theory of disease and disease causation. Maori believed that disease was caused by demons associated with Whiro the god of darkness, who was associated with death. Treatment of disease began as a religious ceremony expelling the demon from the body of the afflicted person.⁵² The knowledge of healing plants is usually based on the use of a vast number of plants and has developed over a long period of time. For this reason its origins and development often cannot be traced.⁵³

The use by Maori of plants for medicinal purposes is well documented.⁵⁴ The Wai 262 claim includes a claim to ownership under the Treaty of Waitangi to the intellectual property rights in the Maori medicinal knowledge relating to four species of plants; Kumara, Pohutukawa, Koromiko and Puawananga. Examples of the use of these four plant species for medicinal purposes are well documented.

The leaves of the kumara were used to make a liquid which was used to treat skin disorders, sores, rashes and inflammation. Dried kumara or "kao" was used to make a gruel for the sick.⁵⁵ The inner bark of Pohutakawa and related species was said to clot blood and was used to stop the flow of blood from a wound. Alternatively it was stepped in water and taken internally as a remedy for diarrhoea, dysentery.⁵⁶ It was also said to have antiseptic and astringent qualities.⁵⁷ The leaves of koromiko were

50 Above n 41, 7-11.

51 M Huft "Indigenous Peoples and Drug Discovery Research: A Question of Intellectual Property Rights" 89 NWULR 1678.

52 E Best *Maori Religion and Mythology Part 1* (Government Print, Wellington, 1996).

53 Above n 51, 1700.

54 Above n 41..

55 Above n 51, 249..

56 Above n 51, 355.

57 Above n 51, 114.

used as a poultice for ulcers,⁵⁸ while the sap of Puawananga was used to treat wounds and eye infections.⁵⁹

The examples above represent the type of knowledge that Maori wish to protect their intellectual property in. At a basic level this knowledge is the identification of certain plants as useful in the treatment of specific illnesses. At a more advanced level it includes "recipes" for producing certain remedies using plants. This includes information as to the parts of the plants used, the method of preparation and the amounts of different ingredients.

C The Interaction of Maori Knowledge and the Anglo Intellectual Property Rights System

Maori traditional knowledge is not viewed as belonging exclusively to one person. Instead it is known to a few, who have the privilege of deciding whom it will be passed onto. In some situations the knowledge may only be disclosed to certain persons for the purpose of passing the knowledge onto a new generation. In the Anglo system knowledge which is the subject of an intellectual property right is owned exclusively by the owner of the right. For the duration of the right the owner determines who may use the knowledge and how they may do it. Intellectual property rights do not have a separate identity from their owner. With respect to patents this means that there is one person or entity that is easily identifiable as the owner of the knowledge.

The way in which the most sacred knowledge is kept is also interesting. In Maori tradition only a few people are aware of the most sacred knowledge, its use is restricted. However in the western tradition it is desirable that all knowledge, especially that which is highly regarded is to be available to everyone in the community. An example of this is the requirement that the details of an invention be published once it is accepted as eligible for the grant of a patent. The invention is then (technically) available to the general public. It is part of the social contract on which a patent is granted, that in exchange for the reward of a limited monopoly to the inventor he or she must share their invention with society.

Maori traditional knowledge is regarded by the patent system as "known" and therefore of less value than other "new" knowledge. As a result a patent cannot be

58 Above n 51, 233-38.

59 Above n 51, 369.

granted over the knowledge, but may be granted over an invention which utilised the traditional knowledge. This is in keeping with the theme of rewarding the improvements made on the current knowledge. It denies the Maori view of knowledge by not valuing their most valued knowledge and facilitating its appropriation and from one viewpoint denigration by valuing improvements upon it.

D The Claim for Protection of Maori Traditional Knowledge

TPK regards the current Intellectual Property Rights framework as inadequate for the protection of traditional Maori knowledge. The protection of traditional Maori knowledge is viewed as important because it embodies the fundamental socio-economic elements of tikanga Maori, that is the cultural rules and customs.

In order to determine the type of protection that this knowledge needs, TPK initially identified the threats to that knowledge. Three major threats were identified;⁶⁰

- Expropriation
- Inappropriate use
- Overprotection

Two inherently opposed concepts can be viewed in the threats identified above; protection and development. All three of these threats demonstrate this link between protection and development. On the one hand Maori traditional knowledge is a taonga to be protected and conserved, on the other it is a productive asset to be used to achieve social and commercial development for Maori.⁶¹

1 Expropriation

The threat of expropriation is that ownership and control of Maori traditional knowledge could be alienated from Maori by the operation of intellectual property rights. For example that a patent could be granted for a drug developed using Maori traditional knowledge. This expropriation has two aspects. The first is that Maori traditional knowledge can be used to create a patentable invention, yet it cannot be patented because it is regarded as in the public domain. The second is that economic rights are able to be created over an invention based on Maori traditional knowledge, that exclude Maori. That is they wish to capture the economic benefits of use of the

⁶⁰ Above 38.

⁶¹ Above n 38.

knowledge. In addition expropriation is seen as threatening the integrity of tikanga Maori and as a result Maori custom.⁶²

2 *Inappropriate Use*

The concept of inappropriate use relates solely to the protection of the integrity of the knowledge. This reflects the Maori view of knowledge that it is to be treasured and used appropriately in an integrated context which includes spiritual and traditional ritual considerations.

Inappropriate use has two parts; procedural and substantive. With respect to procedure it identifies the threat of a third party using Maori traditional knowledge without permission from the holders of that knowledge. As to substantive use, it relates to the use of the knowledge in a way that is culturally offensive to Maori. With respect to Maori medical knowledge the focus would be on how the use of the Maori traditional knowledge affected the integrity of the organism. Maori believe that every living thing (including micro-organisms) has a mauri, that is a life force given to it by the gods. As all people and plants and animals come from the gods they are part of same heritage and so each must respect the mauri in the other. The concept of mauri could also be described loosely as integrity.

The use of Maori traditional knowledge in a gene manipulation treatment may be regarded as inappropriate use in that Maori regard gene manipulation of a plant or animal as a denial of the mauri of the organism in question. Similarly the use of Maori traditional medicine to make someone sick would be regarded as inappropriate. A drug based on Maori traditional knowledge that could be used to aid voluntary euthanasia may be culturally offensive to Maori for this reason.⁶³

3 *Overprotection*

TPK states that the threat of overprotection is that an overly restrictive property right could result in the under utilisation of the productive capacity of the knowledge, as third parties may be deterred from using the right for financial purposes. As a result Maori would lose out financially, and without the opportunity for traditional Maori knowledge to be developed and modified there is a risk that it would become irrelevant to Maori.⁶⁴ The previous sentence identifies the how closely linked the opposite

62 Above n 38, para 5.

63 Joan Ropiha, TPK, Telephone conversation 28 November 1996.

64 Above n 38.

concepts of protection and development are. While Maori traditional knowledge needs protection from development by non-Maori, it requires development to maintain its relevance to Maori.

While Maori seek legal protection for their traditional knowledge they also want a means of exploiting it. The difficulty is devising a mode of protection that reconciles these two conflicting aims. The intellectual property rights in the Anglo system are designed primarily as a means of commercially exploiting their subject. Any protection of the integrity of the knowledge rests with the current owner of the knowledge and not its creator.⁶⁵ TPK's solution to this problem is the creation of a collective monopoly property right.

F A Solution to Protection of Maori Traditional Knowledge

A collective monopoly property right is seen as able to facilitate commercial utilisation of the traditional knowledge in a way that allows its integrity to be maintained. Maori aspirations are for an enduring, inter-generational protection for non-novel property. Maori should be in a position to claim ownership, to judge how and if they want it to be used, and what sort of returns they would be expecting from that.⁶⁶ While no mention is made of the duration of the right, the nature of the right suggests that it will be unlimited. The balance between development and protection is addressed through a system of use consents and royalties by which third parties may utilise the traditional knowledge.

TPK envisages that different types of knowledge will have different owners. So that while some knowledge may belong to all Maori, other knowledge will belong to a specific iwi. It offers several suggestions as to the owner of the collective property right. These range from a decentralised iwi ownership structure to a centralised agency or commission. However no mention is made of the means of determining ownership. Given that traditionally Maori knowledge was held by a few for the benefit of many, the question of how to allocate ownership of the new rights is crucial.

⁶⁵ It should be noted that copyright recognises a division between moral rights and economic rights in some copyright material. See Part IV of the Copyright Act 1994.

⁶⁶ Te Taru White *Can Traditional Maori Knowledge be protected and Commercialised* Paper presented to the Inaugural National Association of Maori Mathematicians, Scientists and Technologists Conference.

The concept of a collective property right is seen as the main technical barrier to this type of right. However in reality there are many examples of collective ownership. The fact that the property is intangible instead of tangible should make no difference. It is easily conceivable that four people may have equal shares in the ownership of a picture or a horse. Why not a collective property right? Similarly in certain respects a company represents a form of collective ownership. The legal fiction of incorporation of a legal person fronts the reality that the assets of the company are jointly owned by the shareholders.

The main barrier to the current proposal for a collective property right is that it is a right without a definite owner. A property right cannot exist in a vacuum without a means of determining the eligibility of an individual or group to the ownership of that right. TPK's reluctance to state a means of determining ownership is understandable given that the origin of much Maori traditional knowledge is unclear. As a result it may be extremely difficult to determine who among Maori has an exclusive right to use the knowledge to the exclusion of others. However, without this fundamental requirement the collective property right is impotent and confined to the realms of theory.

G A Critical Analysis of TPK's Solution

As we have seen earlier the current New Zealand Intellectual Property Rights System is structured around the allocation of property rights of different scope and duration depending on the type of knowledge which is being protected. Eligibility for an intellectual property right is based upon the creation of something new or different. The property right is a reward for the effort the inventor has invested in the creation of the invention which may benefit society. It is also a means of facilitating the commercial exploitation of the invention.

The duration and scope of the right are balanced to allow the author or inventor to be rewarded for their effort and reap the economic value of their invention, and then for the reversion of the knowledge into the public domain. This knowledge in the public domain will form the basis upon which future inventions are created. The allocation of property rights to only certain types of knowledge determines that knowledge which is the subject of an intellectual property right is more valuable than knowledge which is not. These features of the Intellectual Property Rights System pose a number of barriers to the protection of indigenous knowledge within them.

Indigenous traditional knowledge is not subject a formal system of ownership rights. As a result it is often regarded as unowned and therefore part of the common knowledge of humanity. In addition no formal distinction is made between the value of new and old knowledge. As there is no system of rights, there is no objective mechanism by which to the value of the knowledge may be assessed. This is in comparison to a formal intellectual property rights system where the eligibility of new knowledge for protection clearly denotes its value.

Any rights which do arise in respect of the knowledge are collective and inalienable, the knowledge is held on trust for future generations. Therefore they exist so that the knowledge will be treasured and preserved for future generations. Their purpose is primarily non-commercial. As the rights are inalienable and owned collectively for the community a commercial value is never given to the rights by their potential monetary value to be brought and sold or licensed.

In the absence of a property rights based system over the knowledge there is no fixed means of determining ownership of the knowledge in a way that the intellectual property rights system recognises. Yet it is a fundamental that the way in which the intellectual property right is originally acquired is certain. The creator or inventor of the knowledge or their assignee own the intellectual property rights in it. Ownership is clearly tied to the notion of a reward or incentive of the person who created the subject. In contrast, traditional Maori knowledge may have no identifiable originator. The knowledge relating to the medical uses of a certain plant may have been passed down for generations and be held by a certain person on behalf of the iwi. The same knowledge may be held by another iwi. How then is exclusive ownership of an intellectual property right in respect of the knowledge to be determined?

The purpose of intellectual property rights in our present system is to facilitate the commercial exploitation of the subject of that right. Any protection of the integrity of the knowledge is a by product of the ownership rights over the knowledge and therefore of limited duration. In contrast the rights of indigenous people over their knowledge are primarily focused on protecting the integrity of the knowledge and safeguarding it for future generations. The result is that presently the current intellectual property rights system cannot fully protect the integrity of the knowledge.

One of the biggest barriers to protection of indigenous knowledge within the current system is that it is designed to protect knowledge that is new or novel. The idea

must be different or an improvement on the pool of common knowledge.⁶⁷ All knowledge in this pool is considered to be unowned and therefore able to be used as the basis on which to invent. Indeed the patent system encourages this idea by requiring publication of the subject of the patent once it is accepted for grant.⁶⁸ Under this system where the traditional knowledge is "known" then it will not be patentable but and innovation based on that knowledge will be.

H Summary

This part of the paper has examined the increasing international recognition for the protection of indigenous peoples knowledge and the nature of that knowledge. The concerns of indigenous about the protection and development of that knowledge have been examined. The operation of our current intellectual property rights system was analysed to detect the assumptions underlying it about the value of different types of knowledge. It was shown that due to the operation of the system and the way in which value is assigned to knowledge, the type of protection sought by indigenous peoples of their knowledge is difficult within our present system.

One solution has been the creation of a community intellectual property right of unlimited scope and duration. It is submitted that this kind of right could not be accommodated within the current framework and that sui generis legislation would have to be enacted. It is submitted that before a sui generis right is created the present system should be closely examined. It may be that a degree of protection for indigenous knowledge could be achieved within the present system. The next part of the paper will examine the patent system to see whether it poses any threats to the protection of indigenous knowledge, and if it does, what is the nature of those threats? It will also ascertain the ways that Maori traditional knowledge can be protected within the parameters of the current patents system.

III THE PLACE OF INDIGENOUS KNOWLEDGE IN THE PATENTS SYSTEM

The patent system is often identified as a major threat to Maori traditional knowledge, offering it no protection and facilitating its expropriation by others. The reality is somewhat different. Patent law is based upon certain fundamental principles

⁶⁷ See the definition of novelty Section 2 Patents Act 1953.

⁶⁸ Section 20 Patents Act 1953.

which ensure that only subjects which are new and an invention are patentable. This means that any Maori traditional knowledge that is known cannot be the subject of a patent. However that knowledge may be used as a basis for further creation and the results of that process may be patentable.

The threat posed by patent law to Maori traditional knowledge is dependent upon what is sought to be protected. If what is sought to be protected is the continuing practice of Maori traditional knowledge using indigenous plants, then patent law does protect this. But, if Maori seek to protect the sole right to create new knowledge based on traditional knowledge,⁶⁹ then patent law does pose a threat. Patent law may grant protection to any one who creates an invention based on traditional knowledge.

In investigating the effect of patent law on Maori traditional knowledge it is important to bear in mind these different concerns with respect to the protection and exploitation of their traditional knowledge.

A *Patent Protection in New Zealand*

A patent is applied for using a standard form application at the New Zealand Patent Office.⁷⁰ The application is then examined as to form and novelty and either accepted or rejected.⁷¹ If the application is accepted the contents of the application are then published.⁷² Within three months of that publication a third party may oppose the granting of that patent on specific grounds.⁷³ If the opposition is dismissed then the patent is granted.⁷⁴ The patent is deemed to have been in effect since its priority date. This may be the date the patent application was filed in New Zealand, though in certain circumstances it may be earlier.⁷⁵

The rights of the patentee come from the granting of letters patent. These state that the patent owner has the exclusive right to make use and vend the invention, and enjoy the whole profit or advantage accruing by reason of the invention during the term of the patent.⁷⁶

69 This is a stated aim of the Mataatua Declaration 1993.

70 Section 10.

71 Section 19 states that the applicant must put the application in order for acceptance (by overcoming the objections of the examiner) within a specified time limit.

72 Section 20.

73 Section 21.

74 Section 27.

75 Section 11.

76 Letters Patent, Form A, Schedule 3, Patents Regulations 1953.

There are two fundamental requirements for a patent. A patentable invention must be new or novel and it must be an invention under the Patents Act.

1 *Invention*

An invention is defined in the Act as;

any method of new manufacture the subject of letters patent and grant of privilege within section 6 of the Statute of Monopolies and any new method or process of testing applicable to the improvement or control of manufacture; and includes an alleged invention.⁷⁷

Under this definition of invention both patents as to products and processes are available.

An invention must be more than a mere discovery it is the creation of something different than what is already known. The invention must embody an inventive step between what was known before and the patentable product. The invention lies in the practical, technical or industrial application of the discovery, either by way of process or product.⁷⁸ Patents are granted to reward special creative effort not the results of routine investigation.

2 *Obviousness*

Obviousness amounts to an assertion that the claimed process or product lacks inventive step based upon what was known or used before the application was filed. The impugned product or process would be refused a patent due to want of invention. Evidence of either prior publication or prior use of an invention may be used to oppose the grant of a patent on this basis.⁷⁹ Whether or not a product or process is obvious is to be judged by the "notional addresses", a person who is a skilled technician and knowledgeable of the literature in the field, but incapable of a scintilla of invention.⁸⁰

3 *Novelty*

⁷⁷ Section 6 of the Statute of Monopolies imposes three limitations on the granting of patents. That they may not be contrary to law, mischievous to the state by raising the price of commodities at home or liable to hurt trade, or generally inconvenient.

⁷⁸ Peace/Christie: "IP Protection for the Products of Animal Breeding" [1996] 4 EIPR 219.

⁷⁹ Section 21(e).

⁸⁰ *Beecham v Bristol Myers* (No 2) [1980] 1 NZLR 192.

The grant of a patent is a reward for innovation for the creation of something new. A novel invention is one which has not been made available to the public by documentary publication, use or sale in New Zealand before the priority date of the claims in the patent.⁸¹ An invention that lacks novelty is said to have been anticipated and cannot therefore be patented.

Novelty is determined with respect to whether the invention has been previously published in New Zealand in any patent specification or other document.⁸² As well as whether the invention has been claimed in any prior New Zealand patent specification.⁸³ In addition the use of the invention before the priority date will in most circumstances invalidate the invention.

It is the requirement of novelty that it is cited as the main barrier to the granting of patent protection for Maori traditional knowledge. Mead has commented that the fact the patents system only protects an innovation relating to traditional knowledge and not the original knowledge itself is racist.⁸⁴ Yet the concept of novelty is at the heart of the patent system. That a patent may not be granted for an invention that has been anticipated by use or publication and is therefore no advance to science and deserves no reward. In addition the requirement of novelty prevents that which has been patented being patented again in another manner.⁸⁵

The requirements of novelty will be examined here from the perspective of their usefulness in preventing the patenting of inventions based on Maori traditional knowledge.

4 *Prior Publication*

An invention that has been anticipated in a prior publication may not be patented. Anticipation is determined by a search of the relevant literature by examiners

81 Section 11 of the Act determines the priority date that the claims in an application will have, this may vary depending on the mode of making the application and its contents.

82 Section 13.

83 Section 14.

84 A Mead, "Indigenous Rights to land and Biological Resources". Paper presented to the Institute for International research, July 1994.

85 See *Merrell Dow Pharmaceuticals Inc and Others v HN Norton & Co Ltd* 33 IPR 1. In that case a later patent claimed a product made by operation of an earlier patent. The earlier patent did not isolate the product but relied upon its existence for its efficacy. The later patent was held to be invalid on the basis of anticipation.

at the Patent Office.⁸⁶ There have been numerous books published in New Zealand with respect to the use by Maori of indigenous plants for the preparations of medicines.⁸⁷ These range from the anecdotal to catalogues based on historical and modern observations.⁸⁸ In addition there are publications available specifically relating to the efficacy of Maori plant remedies.⁸⁹

An invention will be anticipated by the existence of a published document that contains a clear description of the invention.⁹⁰ The mere publication of material related to an invention is not enough to constitute anticipation. In *General Tyre v Firestone Tyre*⁹¹ the court held that a signpost on the road to the applicant's invention was not sufficient. The prior publication must be at the precise destination of the invention. This description must contain clear instructions to do or make something that would infringe the applicant's invention once it was patented. This is known as the inevitable infringement test for prior publication.⁹²

5 Prior Use

An examiner does not search for evidence of prior use as a potential objection to an application. However if prior use of the invention is found then the subject matter of the invention is found to have been anticipated, that is it's not new and therefore not an

⁸⁶ Anticipation is not defined in the Act but a meaning of it has been determined by case law. The literature searched includes all the patent specifications published within the 50 years of the priority date ss13(1) and any documents published in New Zealand before the priority date of the application ss13(2).

⁸⁷ Searching this type of literature is one method of initially identifying plants which may have a medicinal purpose and the specific type of purpose that they may have. Above n 51, 1718.

⁸⁸ See generally *Traditional Uses of plants in New Zealand and the Pacific*, S Rolleston *He Kohikohinga: A Maori Health Knowledge Base*, T Paul *Nga taonga o te ngahere, Treasures of the Forest*, L K Gluckman *The Medical History of New Zealand Prior to 1860*, Riley *Maori Healing and Herbal: New Zealand Ethnobotanical Sourcebook*. plus Parsons.

⁸⁹ J Walker & A Cole *Antibiotic from New Zealand Native Plants a New Look at Maori Medicine in Nga Mahi Maori o te Wao Nui A Tane, Contributions to an International Workshop on Ethnobotany* Ed W Harris and P Kapoor DSIR, 150. Cited by Nga Kaiwhakamarama I Nga Ture Inc Detailed Scoping Paper on the Protection of Maori Intellectual Property in the Reform of the Industrial Statutes and Plant Varieties Act, commissioned for TPK April 1994.

⁹⁰ The term "published" is defined in s 2 of the Patents Act to mean made available to the public. For further discussion of the meaning of published see *Bristol Myers Application* 1969 RPC and *Bakelights Application* [1967] FSR 582. Section 59 of the Act provides certain circumstances where publication will not be regarded as anticipatory of the invention and therefore invalidate the invention for lack of novelty.

⁹¹ [1972] RPC 457.

⁹² Above n 80. The New Zealand Court of appeal has held that this test does not apply to semi-synthetic compounds because there may be an invention in isolating a certain compound that has been previously identified even if a skilled chemist would have realised that it was practicable to make the compound by routine means.

invention within the definition in s2 of the Act.⁹³ Both prior use by the applicant or inventor and a third party are relevant. The Act provides that certain types of prior use will not be deemed to anticipate an invention.⁹⁴

There are two types of prior use; public use and secret use.⁹⁵ Secret use will only anticipate the invention in limited circumstances.⁹⁶ A single instance of prior use is sufficient.⁹⁷ Any commercial use of an invention before the date of the application is prior use. However the use of the invention need not be for the purpose of trade as long as the user derives a practical benefit from it.⁹⁸ The mere offer for sale of the invention constitutes prior use.⁹⁹

B *The Position of Maori Traditional Property under the Patents 1953*

The protection of Maori traditional knowledge is seriously affected by the definition of invention under the Act.

1 *Protection of Maori Traditional Knowledge Under the Notion of Invention*

Maori traditional knowledge which identifies a certain plant such as pohutukawa and uses it for a specific therapeutic effect, its ability to clot blood, cannot be patented. These constitute a mere discovery. The grant of a patent over a certain substance does not include that substance as it is found in nature. A patent cannot be granted over any of the natural ingredients used by Maori in preparing traditional plant based medicines. Nor can a patent be obtained for the discovery of the active ingredient in the plant that gives it a specific therapeutic property. For example a patent cannot be obtained for either pohutukawa bark or the active ingredient in the bark which may clot blood. Nor would a patent be granted for the gene sequence information of the active chemical ingredient in the inner bark.¹⁰⁰

93 Prior use is a ground of opposition section 21(1)(d) and revocation section 41(1)(e). The Patent Office has set down specific requirements that the opponent must meet to establish this ground including an allegation on public use and full factual details of the use. Practice Note Vol 76 Patent Office Journal 714 (Issue No 1287, July 1986).

94 Sections 60(2) (a) and (c) and 60(3).

95 In order to qualify as secret use, the use of the subject matter must have been intentionally concealed by the user. *Bristol Myers Company* [1975] RPC 127.

96 Section 42(1)(l).

97 *Craig & Connelly's Application* 17 March 1982, Asst Cmmr Burton.

98 *Wheatley's Application* [1985] RPC 91.

99 *Fortune Machine Corp v Ainsworth Nominee's* 29 November, 1993 and *Cincinnati Grinders (Inc) v BSA Tools Ltd* 48 RPC 33.

100 *Genetech v Wellcome* [1989] RPC 147.

As an invention must involve an inventive step there are certain developments which may be made using known ingredients which are not patentable. This means that different plant medicines Maori have made using their knowledge of the therapeutic properties of different plants may not be able to be patented by third parties. For example Maori may discover that manuka oil can be used to make insect repellent cream as well as antiseptic cream. The insect repellent cannot be patented.¹⁰¹ Similarly, once a certain ingredient is found to have therapeutic properties, such as the inner bark of pohutukawa, then a patent cannot be granted relating to any new therapeutic properties it may subsequently be discovered to have.¹⁰²

Maori recipe's for a certain plant based medicine are given a degree of protection under patent law. For example if a lotion is made for a skin disorder and it contains several different plants which are all known to have a therapeutic effect with respect to skin disorder then the resulting product will not be patentable.¹⁰³

The Patents Act excludes inventions from patentability whose use would be contrary to morality.¹⁰⁴ A patent may not be granted for a method of treating disease or illness in human beings.¹⁰⁵

The notion of invention offers some protection of Maori traditional knowledge, specifically preserving the unrestricted use by Maori of their traditional knowledge. The price of this protection is that Maori cannot use patent law as a means of exploiting the commercial development of this knowledge.

2 *Perceived Threats to Maori Traditional Knowledge from the Notion of Invention*

101 An application for a patent may be refused for making a known article using a known substance that has never been made before. *American Braided Wire v Thompson (1889) 6 RPC 518 at 525.*

102 A patent cannot be obtained for a new therapeutic use for a known substance of therapeutic properties. *MIT's Application*, New Zealand Patent Office, 1990.

103 Where the combination of known ingredients produces a result which would be expected when those ingredients were combined the result is not patentable. *British Celanese v Courtalds* 1935 RPC 193.

104 Section 17. Before TRIPS came into force, section 17 also gave the Commissioner a discretion to exclude inventions which were contrary to the laws of nature (ie a perpetual motion machine) and inventions which were a mere admixture of ingredients which could be used as a food or a medicine.

105 *Wellcome Foundation Ltd Application* [1983] NZLR 385. A patent was granted for a method of inhibiting hair growth but its use was restricted for cosmetic purposes only. The claims in the patent had to specifically exclude treatments of diseases leading to excessive hair growth. *Joseph Handelmans Application* NZPO 1993.

A patent may be granted when something extra is added to an invention that distinguishes it from what has gone before and results in a process or product which can be industrially applied. While the raw ingredients of Maori traditional knowledge cannot be patented, inventions based upon them may be.

A patent may be obtained for products relating to these raw ingredients where technology has been applied to them, which was beyond the scope of Maori traditional medicine. The creation of a synthetic equivalent of the active chemical ingredient in the inner bark of Pohutukawa, that can be industrially applied, is patentable. As is a product that incorporated the gene sequence of the active chemical ingredient in the inner bark, as long as the product is novel. The gene sequence which is part of an invention will not lose its novelty even though it is found in nature.¹⁰⁶

While a patent may not be granted for a second therapeutic use of a substance one may be granted for a new non-therapeutic effect of the substance. For example if it is discovered that the active chemical ingredient in manuka oil can be used to speed up decomposition of certain chemical compounds, then a method of using it in that manner can be patented.¹⁰⁷

An invention based upon a Maori formulation for a medicine may be patentable. If the formula relies on a combination of different plants with unique therapeutic effects and the resulting medicine has an unexpected therapeutic effect then synthetic version of this medicine may be patentable. For example if a lotion was prepared using plants known for their antiseptic properties and the lotion turned out to have a blood clotting affect to due the interaction of the different antiseptic ingredients then the medicine may be patentable.¹⁰⁸

The notion of invention is also affected by the contents of the 'state of the art', that is everything known about a particular subject before the priority date of the patent application. It includes everything that was published, discussed or used with respect

106 *Genetech v Wellcome* [1989] RPC 147.

107 A patent may be obtained for a new and economically useful effect of a known substance or process. *NRDC's Application* 1961 RPC 135. The High Court of Australia held in this case that a method of eradicating weeds using a known chemical previously unknown to possess these qualities was patentable. This decision challenged the doctrine that a new use for a known substance or process was not patentable. The High Court of Australia's approach was accepted by the New Zealand Court of Appeal in *Wellcome Foundation Ltd v Commissioner of Patents* [1983] NZLR 385.

108 A patent will be granted where the combination of the known ingredients produces an unexpected result. There must be a synergy in the inter-action of the known ingredients so that the total result of their inter-action is greater than a mere sum of their parts. This new or improved result is patentable. *British Celanese v Courtalds* 1935 RPC 193.

to the field the invention is in. The granting of a patent for an invention may be opposed by a third party on the basis that the invention was obvious and did not involve an inventive step.

3 *Obviousness*

Maori could try and use obviousness to oppose the granting of any patents based upon Maori traditional knowledge. It may be that while an invention utilises sophisticated scientific technology the creation of the product or process would have been obvious to someone aware of the technology and the Maori traditional knowledge.

4 *Prior Publication*

It is submitted that much of the literature with respect to Maori knowledge of the healing properties of plants provides no more than a signpost on the road to the applicant's invention. Of course the more technical the literature is, and the simpler the invention, the greater the likelihood of anticipation by prior publication. However prior publication of this nature is more likely to damage the validity of the patent on the grounds of obviousness than anticipation.

Anticipation due to prior publication will only be available with respect to inventions based on Maori traditional knowledge in extremely limited circumstances. The inevitable infringement test places the emphasis on the specific contents of the invention not its genesis.

5 *Prior Use*

It is submitted that an invention based on a Maori medicine using a certain formula is the type of invention most likely to be affected by prior use. That is a product consisting of a combination of known active ingredients from different plants. Traditional use by Maori of plant based medicines is too crude to constitute use of an invention that is more sophisticated.

Anticipation by prior use like that by prior publication is closely tied to the nature of the invention, little account is taken of the precursors to the invention.

C *The Seriousness of the Threat Posed to the Protection of Maori Traditional Knowledge under the Patents Act 1953*

The threats to Maori traditional knowledge under the patent system are more economic than cultural. The granting of a patent with respect to traditional Maori knowledge will never stop Maori continuing to use the knowledge they have developed

in a traditional manner. The patent system will allow a third party to obtain protection for an invention utilising Maori traditional knowledge without having to acknowledge the contribution of that knowledge from Maori or pay for its use. In addition the patent system cannot protect Maori knowledge per se from being used in this manner or restrict the way in which it used with respect to the patented inventions based upon it.

The patents system, far from being deliberately racist, reflects a choice by society as to which knowledge it values most highly. The creator of the highly valued new knowledge is given a special benefit by the state, in the form of a patent, in an effort to reward its creation and facilitate its commercial exploitation. All other knowledge is considered to be in the public domain. This knowledge is purposefully excluded from receiving such a benefit so that it is freely available for anyone to use as a base for invention. The grant of a patent over knowledge in the public domain would exclude the general public from using it thereby restricting the material on which new inventions could be developed. Maori traditional knowledge is not treated any differently under this system than any European traditional knowledge is. Neither are eligible for patent protection.

However there may be changes that can be made to the patents system to better accommodate the need of Maori. Maori have two main needs in relation to the use of their traditional knowledge. The first is a share in the economic benefit enjoyed by owners of patents based on Maori traditional knowledge. The second is protection of this knowledge from use in a way that is culturally offensive to Maori. Given the increasingly international nature of intellectual property law it is submitted that any changes made to the patent system must be made within the parameters set by the TRIPS agreement. These parameters will be explored in the next part of the paper.

IV THE INTERNATIONAL CONTEXT

New Zealand's accession to the recent General Agreement on Trade and Tariffs ("GATT") Uruguay Round in 1993 had important implications for its domestic intellectual property laws. Included in this latest version of GATT was the Trade Related Aspects of Intellectual Property Rights agreement ("TRIPS"), which sets minimum standards of intellectual property law protection for all member states.

The GATT (Uruguay Round) Bill was drafted in 1994 to amend New Zealand law to comply with the provisions of TRIPS. The Bill was later divided into a number of acts, including the Patents Amendment Act 1994 and the GATT(Uruguay Round)

Act 1994.¹⁰⁹ The legislation was passed quickly and with minimum consultation with interested parties.¹¹⁰ Maori concerns about the effect the Act may have on their intellectual and cultural property rights, particularly the patenting of life forms and indigenous medical knowledge, were dismissed by the government.¹¹¹

While the TRIPS agreement imposes binding legal obligations on signatories, its real strength comes from the fact that it is included in GATT dispute resolution procedures which include trade sanctions. It is unlikely that any New Zealand government would consider the need to protect Maori traditional worth the risk of economic trade sanctions, if such protection required that the provisions of TRIPS be breached. This means that solutions for the protection of Maori traditional knowledge will have to be compatible with TRIPS. Any amendments to the Patents Act 1953 would have to comply with the provisions of the Paris Convention on Patents.

As a result of the Patents Amendment Act 1994 several changes were made to the Patents Act 1953. The term of a patent was lengthened from sixteen to twenty years.¹¹² The provisions for compulsory licensing and the exclusion of certain matters from patentability were amended.¹¹³

Section 5 of TRIPS deals with patents. It prescribes;

- what shall be patentable,¹¹⁴
- what may be excluded from patentability by member states,¹¹⁵
- the rights that a patent owner shall have,¹¹⁶
- the conditions imposed upon patent owners,¹¹⁷ and

109 In addition the Trade Marks Amendment Act 1994, the Fair Trading Amendment Act 1994, the Layout Designs Act 1994 and the Geographical Indications Act 1994.

110 The GATT(Uruguay Round) Bill 1994 was introduced in 13 July 1994 and was enacted on 9 December 1994. It was reviewed by the Commerce select committee which heard oral and written submissions. For a detailed discussion of the consultation between Maori and the government on the bill see M Neill *Intellectual Property Law Reform and the Marginalisation of Maori* Unpublished Thesis, Department of Anthropology, University of Auckland, 1994.

111 See generally ", "New Zealand Herald, March 31 1994 p9, "GATT deal 'could lead to patent on Maori race' " Evening post, 15 April 1994 and "Patenting worry in GATT" Evening Post, 8 April 1994.

112 Article 33 of TRIPS requires that the term of protection be twenty years. Sections 31-33 of the 1953 Act for an application for an extension of patent term were repealed.

113 Article 31 prescribes conditions of unauthorised use of the subject matter of a patent by the government or a third party. re compulsory licensing Sections 46-54. Article 27 paragraphs 2 and 3 state what may be excluded from patentability re exclusions s17.

114 Article 27.

115 Article 28.

116 Article 29.

117 Article 30.

- the exceptions to patent owner's rights that member states may impose.¹¹⁸

An invention is patentable in any field of technology provided that it is new, involves an inventive step and is capable of industrial application.¹¹⁹ This does not represent significant change in the current New Zealand patent law. Patent Owners are guaranteed certain rights under the agreement. These include the right to exclude unauthorised third parties from making, using, selling or importing the invention, and the right to assign the right and conclude licensing agreements.¹²⁰ The agreement allows member states to have some exceptions to these requirements.

The TRIPS agreement specifically recognises the right of each state to exclude certain subjects from patentability. It is within this context that Maori could seek the exclusion from patentability of their traditional medical knowledge. This option will be explored later in the paper. An alternative means of protecting Maori traditional knowledge would be to place restrictions on the use of any patents based on that knowledge. Any restrictions would have to be reasonable within the terms of Article 30. The type of restrictions which could be placed on a patent over Maori indigenous medical knowledge will be explored later in this paper.

While TRIPS is to be re negotiated in 1998 any future reform of the Patents Act 1953 will have to be made in the context of the minimum standards prescribed by GATT. The increasing awareness of the protection of indigenous peoples' intellectual property rights ensures that it will be a subject on the agenda. However, if progress is to be made in the protection of Maori traditional knowledge today, the solutions posited need to be workable within the overall TRIPS framework.

V FUTURE PROTECTION OF MAORI TRADITIONAL KNOWLEDGE WITHIN THE INTELLECTUAL PROPERTY RIGHTS SYSTEM

Any proposals for reform of the existing intellectual property laws must attempt to address either the threat to the integrity of Maori traditional knowledge or help to secure an economic benefit for Maori from a patent based on their traditional knowledge. As New Zealand's intellectual property laws operate in an international

118 Article 31.

119 Article 27.

120 Article 28.

context any proposed amendments must conform to the provisions of the TRIPS agreement. Three proposals will be examined in this part;

- an extension to the current compulsory licensing scheme;
- an extension of the type of inventions able to be excluded from patentability;
- and
- the imposition of conditions of use on certain inventions.

A An Infrastructure for the Proposals

The three proposals are based on the establishment or recognition of a central national Maori body which has responsibility for the protection and development of Maori claims to protection for their knowledge and other taonga. This body would be recognised by statute and have exclusive jurisdiction to represent Maori interests with respect to the protection of their traditional knowledge. The advantage of a pan-tribal organisation is that Maori would have one recognised voice for the protection of traditional knowledge. The alternative of individual iwi representation, would exacerbate any disputes amongst Maori about ownership of knowledge,¹²¹ jeopardising the potential economic benefits to Maori which the proposed amendments may bring. The method by which any benefits are distributed amongst Maori could be formulated by the central body or be prescribed by statute.

The proposed amendments to the Patents Act 1953 are based on a requirement that an applicant for a patent in New Zealand declare whether the invention sought to be patented was developed using Maori traditional knowledge. Where the applicant denied such a link the central Maori body would have an opportunity to oppose that assertion. The declaration is required in order to balance the rights of Maori and the patentee. Only patentee's whose inventions are based upon Maori traditional knowledge should be subject to any requirements relating to the protection of that knowledge. However patentees, having all the information as to the creation of the invention, are best placed to advise whether or not their invention was devised using Maori traditional knowledge.

B Compulsory Licensing

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In 1994 The Body Shop, a UK company approached the Ngati Porou people in Ruatoria to discuss the possibility of buying Manuka oil from the tribe. The visit was opposed by the Wai 262 claimants on the grounds that it represented an example of Maori knowledge being used by overseas companies, with no part of the profits going to Maori. This example shows the difficulty when there is not an identifiable owner of the knowledge. One group may benefit to the exclusion of others who also have a proprietary right to the knowledge. "Maori anger at beauty plan for native plants" Sunday Star Times 24 April 1994, "Ngati Porou angered by opposition to manuka use" Gisborne Herald 28 April 1994

Before 1994 the compulsory licensing scheme under the 1953 Act¹²² allowed any person to apply to the Commissioner of Patents for a compulsory licence for a granted patent, anytime after three years from the day the patent was sealed, upon any of the grounds specified in the Act. The compulsory licensing scheme was directed at ensuring that New Zealand was not deprived of any of the new technology that it gave patent protection to. This could occur for a number of reasons. For example, a patent owner may not exploit the invention in New Zealand themselves and refuse to grant any person in New Zealand a licence. Alternatively the terms and conditions of any licences offered by the patentee may be oppressive. The Act included a separate provision with respect to obtaining a compulsory licence for an invention that could be used as a food or medicine. An application did not have to be made under any specific grounds and would only be refused if in the Commissioner's opinion there were good reasons for refusal.¹²³ The purpose of this provision was to make drugs available to the public at the lowest possible price.¹²⁴ The statutory bias in favour of the granting of compulsory licences for inventions relating to food or medicine was removed in 1992.¹²⁵ Only a few applications for compulsory licences have ever been made in New Zealand.¹²⁶

1 *The current scheme*

The Patents Amendment Act 1994 made several changes to the compulsory licensing provisions in the Patents Act 1953. An application is now made to the High Court not to the Commissioner of Patents. The principal sections under the old scheme were repealed. A licence may be obtained only on the ground that the market in New Zealand is not being supplied either at all or on reasonable terms. The terms of the licence which may be granted are restricted. The licence is to be non-exclusive, mainly limited to the supply of goods in New Zealand and assignable only with the goodwill of the business. A licence will only be granted if the applicant has taken all reasonable steps to obtain a licence. The new scheme clearly represents a shift away from the protection of New Zealand interests to those of the patent owner. The Ministry of Commerce views the scheme solely as a means of correcting anti-competitive practices. It is within this context that amendments to the current provisions must be considered.

122 Sections 46-54 Patents Act 1953.

123 Section 51 Patents Act 1953.

124 Brown and Grant *The Law of Intellectual Property in New Zealand* (Butterworths, Wellington, (1988), 6.67, 539.

125 Section 8(1) Patents Amendment Act 1992.

126 Above n 124..

2 *International Obligations*

Article 31 of TRIPS governs use without the right holder's authorisation which includes rules governing compulsory licences. While the amendments made in 1994 to the compulsory licensing scheme were done with the intention of compliance with TRIPS they went considerably further than required. The law restricted the eligibility for a compulsory licence to failure to supply a market in New Zealand. Article 31 prescribes that each authorisation be considered on its merits and that the applicant has made all efforts to obtain a licence from the right holder on reasonable commercial terms. It does not provide any further limitations on the grounds on which compulsory licences may be granted. As a result New Zealand may grant compulsory licences on any grounds within these limits.

3 *The Proposed Amendment*

A new ground for obtaining a compulsory licence could be inserted into the Patents Act 1953. An application for a compulsory licence could be made by the central Maori body where the patented invention was based upon the utilisation of traditional Maori knowledge. The licence would be non-assignable and would be confined to the working of the invention in New Zealand. While the central Maori body would be the sole holder of the compulsory licence it would have the power to grant sub-licences for the exploitation of the invention.

In order to receive a compulsory licence the applicant would have to prove the following;

- the use by Maori of the traditional knowledge in question;¹²⁷
- how the invention in question was based upon it; and
- that it had tried to obtain a licence from the patent owner.

In determining the terms and conditions of the licence the court would be required to consider specific statutory considerations. These would include:

- the degree to which the Maori traditional knowledge contributed to the creation of the invention;
- whether the invention was currently being exploited in New Zealand; and
- the terms and conditions of any licences offered by the patent owner.

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A Register of Secret Maori traditional knowledge could be compiled to provide a record that could be checked as to the use by Maori of the knowledge in question. This idea is based upon the protection of Industrial secrets by the Andean Pact under the Common Provisions on Industrial Property. See E da Costa e Silva "The Protection of Intellectual Property for Local Indigenous Communities."

The greater the contribution of Maori traditional knowledge to the invention the lower the price of royalty payable to the patent owner under the licence should be. Correspondingly where the contribution of Maori traditional knowledge is minimal it may be appropriate that a licence is granted on the patent owner's standard conditions to a third party.

4 *The advantages of the proposal*

The implementation of this amendment would provide a means by which Maori could capture some of the economic benefit enjoyed by the patent holder, which is due in part to Maori traditional knowledge. Eligibility for the licence is clearly linked to the use by the patent owner of Maori traditional knowledge. There is no threshold test as to what extent that knowledge was used or relied upon. The mere existence of some link is sufficient. However the strength of the link is relevant in determining the terms and conditions of any compulsory licence granted. This balances the right of the patent owner to decide to whom it grants licences and the interest of Maori in participating in the benefit of the utilisation of their traditional knowledge.

This amendment provides Maori with a means of sharing in the economic benefits of the exploitation of their traditional knowledge. It adequately balances the interests of the patent owner and Maori by creating an interest for Maori in inventions which are based on a fusion of Maori and European knowledge. The proposed extension of the grounds for obtaining a compulsory licence are compatible with the requirements of Article 31 of TRIPS.

5 *Disadvantages of the proposal*

The proposal does not address the issue of protecting the integrity of that knowledge. This issue could be focused on by the imposition of conditions of use on patented inventions which were based upon Maori traditional knowledge. Compulsory licences are regarded by many as draconian because they impinge upon the rights of the patent owner.

C *A Statutory Exclusion to Patentability*

A more radical solution to the protection of the integrity of Maori traditional knowledge is to exclude from patentability inventions based on such knowledge, the use of which would be culturally offensive to Maori. An application based on Maori

traditional knowledge would be submitted to the national Maori body which would decide whether the use of invention was such that it should be excluded. The patentee would have an opportunity to appeal to the High Court.

Until the Patents Amendment Act 1994 s 17 of the Patents Act 1953 provided three grounds on which the Commissioner of Patents could refuse an application for a patent.¹²⁸ In 1994 the 1953 Act was amended to comply with TRIPS and today the only ground on which an application may be refused is that use of the invention would be contrary to morality. The exclusions of these inventions from patentability demonstrates that the mere existence of a new invention, as defined under the Act, is not enough to deserve the reward of the state that a patent gives. This privilege should not be extended to inventions the use of which would be harmful to society in general. The use of inventions that would be culturally offensive to a number of the population, could be excluded on the basis that they are detrimental to society and therefore not deserving of the state's rewards.

1 *Inventions excluded from patentability*

In the 1930's patents for contraceptives were refused in the United Kingdom as contrary to morality.¹²⁹ In the United States patents were refused, on a similar basis, for gambling devices and inventions that could be used to defraud. These are examples of inventions being excluded because they were regarded as immoral or wrong, and therefore contrary to morality. These decisions contain the type of moral judgement that is seen as inappropriate in a statutory context. The exclusion of contraceptives from patentability is an example of how the detrimental such as exclusion may be.

However a modern example demonstrates the use of a morality exclusion to preclude activity that is "socially undesirable". The patenting of nuclear weapons technology has been prohibited in the United States because Congress decided that the public would not benefit and the public would be threatened if the patent disclosure and incentive requirements were applied to technological innovations in this field.¹³⁰ This example illustrates that the concept of morality can be applied in a manner which is relevant today and able to be applied in a statutory context as "socially undesirable" or "against the public interest".

128 This provision was based on s10 of the British patents Act 1949.

129 See *Riddlesbarger's Application* (1936) 53 RPC 57, the Royal prerogative was exercised to prevent granting a patent for a contraceptive device. Later however the patenting of contraceptives was allowed. *Schering AG's Application* [1971] RPC 337 and *Organon Laboratories Ltd's Application* [1970] RPC 395.

130 A Wells "Patenting New Life Forms: An Ecological Perspective [1994] 3 EIPR 111, 113.

It is clear then that patent law has and is being used to consider ethical and moral issues. The decisions reflect the ideology of the time, as is shown by the decisions with respect to contraceptives. However, patent law has proven itself to be flexible when the ideology has changed.

2 *Exclusions from patentability under TRIPS*

The TRIPS agreement specifically recognises the right of each state to exclude certain subjects from patentability under Article 27. Article 27 states;

2. Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made not merely because the exploitation is prohibited by their law.

3. Members may also so exclude from patentability:

(a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals:

(b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof.¹³¹ The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.

The exception in paragraph 2 has been described as allowing the exclusion of inventions that infringe public policy.¹³² The exclusions in paragraph 2 and 3 are especially relevant to the patenting of new biotechnology inventions, which include the patenting of certain human cells and genetic material.

3 *The British Approach to exclusions from patentability*

The British Patents Act 1977 takes a public policy approach and excludes from patentability an invention the publication or exploitation of which would be generally

¹³¹ New Zealand has a *sui generis* system in the Plant Varieties Act 1987.

¹³² P Raworth, Summary and Overview Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), in J Denni ed *Law and Practice of the World Trade Organisation* Oceana Publications, Inc (New York 1995) 88.

expected to encourage offensive, immoral or anti-social behaviour.¹³³ Bainbridge comments that there is still some discretion to accept an application and that it will depend upon whether the invention is expected to encourage the sort of behaviour described. He cites a booby-trap bomb as an example of inventions which may be rejected as encouraging offensive, immoral or anti-social behaviour.¹³⁴

The UK Act can be seen as an example of how the meaning of the term "morality" in Article 27 is to be interpreted in its widest sense, in accordance with the French concept of *ordre public*. That is, beyond excluding what is deemed to be "morally wrong" and towards excluding inventions, the use of which would jeopardise the way society operates and the well being of those in it. The exclusion of inventions whose use would be culturally offensive is similarly encompassed in an enlarged definition of "morality". This enlarged definition needs to explicitly include use in a culturally offensive manner.

4 Exclusions from patentability in New Zealand

The Ministry of Commerce has proposed that there should be no exclusions to patentability and that consequently the remaining exclusion regarding morality should be repealed.¹³⁵ It considers that patent law is not an effective way of controlling the use of socially undesirable inventions because although the inventions will not be able to be patented, they will still be able to be used. Instead the Ministry recommends that it is preferable to control "socially undesirable" inventions with laws that control their use and/or development.¹³⁶ This position negates the impact that the granting of a patent for an invention gives. The granting of a patent provides not only the state's assent to the commercial exploitation of the invention, but provides incentives for the owner to do so.

The Ministry's recommendation denies the role that patent law already plays in acting as a "social and moral filter".¹³⁷ Patent law is not morally neutral, it embodies certain ethical and moral values. At a basic level it represents a belief by society that invention is so valuable to the good of that society that it warrants the granting of a

133 Section 1(3)(b) Patents Act 1977(UK). In addition any variety of animal or plant or any essentially biological process for the production of plants or animals, not being a micro-biological process or the product of such a process are excluded, s1(3)(b).

134 D Bainbridge *Intellectual Property* Pitman Publishing (London, 1992), 279.

135 With respect to the exclusion of patents the use of which would be contrary to morality the Ministry states that it is inappropriate for the Commissioner for Patents to be deciding what is moral and what is not. Business Policy Division, Ministry of Commerce *Intellectual Property Law Reform Bill Maori Consultation Paper*, (Wellington, 1994) 16.

136 Above n 135, 17.

137 Above n 130., 112.

limited monopoly, which is usually outlawed by the state. It also reflects a form of social contract, that in exchange for a limited monopoly the patent holder will disclose their invention to society.¹³⁸ At a more detailed level certain statutory provisions demonstrate certain values. For example s10(7) of the Patents Act 1953 states;

Where a complete specification claims a new substance, the claim shall be construed as not extending to that substance when found in nature

This provision embodies the belief that any substance occurring in nature belongs to everyone. That it is part of our common knowledge or heritage and cannot be owned by one person to the exclusion of others.

Patent law, which is often at the edge of technological and scientific developments, is becoming increasingly fraught with ethical decisions as these advances become more sophisticated. The growth of biotechnology and subsequent patenting of recombinant DNA sequences has been accompanied by a public outcry.¹³⁹ Maori firmly oppose the patenting of any life forms on a spiritual basis that it represents the commodification of life. It may be argued that the ability to patent certain matter is accompanied by an implicit judgement that it is acceptable to use them. Patents are essentially a means of facilitating commercial exploitation of an invention.¹⁴⁰

The present exclusion in s17 of the Patents Act 1953 could be amended to specifically include inventions, the use of which would have an "anti-social" or "socially undesirable" effect.

5 *Advantages and Disadvantages of the Proposal*

Patent law provides a suitable context within which the use of Maori traditional knowledge in a culturally offensive manner can be minimised. In New Zealand there is a move led by the Ministry of Commerce to abolish any type of exclusion from patentability. This is unrealistic and undesirable given the increasing number of ethical issues that biotechnology raises which are brought into the public arena by the patenting of its outcomes.

¹³⁸ The complete specification which includes the subject of the patent is published in the New Zealand Patent office Journal once an application has been accepted.

¹³⁹ See *Moore v Regents of the University of California* (1990) 51 Cal 3d 120;793 P 2d 479, where doctors developed and patented a cell line from cancerous cells taken from Moore's liver. The California Supreme Court held that Moore had no rights to any profits, but he did have the right to informed consent.

¹⁴⁰ For a contrary viewpoint see above n 130..

D *Conditions of Use*

A patent identified as utilising Maori traditional knowledge would be granted subject to certain conditions as to use. These conditions would form part of the Letters patent granted and are designed to prohibit inappropriate use of the invention. Each patent granted would be subject to a defined set of conditions individually designed to specifically address areas of likely inappropriate use in the exploitation of the patent. The imposition of conditions would not be automatic, but would be assessed on the nature of the invention. The conditions would be imposed by the central Maori body. The conditions imposed could be appealed to the High Court, but would remain in force until overturned. An appeal mechanism would ensure that the rights of the patent owner and third parties are safeguarded.

1 *Advantages of the proposal*

This specific approach is preferred to a blanket prohibition on the exercise of all patents in a manner culturally offensive to Maori. The conditions are imposed only on those inventions which have a link to Maori traditional knowledge and custom designed for each invention so that the limitations on patent owners rights are minimised.

2 *The international context*

Article 30 of TRIPS allows members to place some limitations on the use of inventions by patent owners. Article 30 states;

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with the 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.

The proposed amendment fall within the exception in Article 30. The actual instances of situations where such conditions will be imposed will be a small fraction of the overall patents granted. The conditions themselves are specific to the nature of each invention. This proposal also gives the patent owner a degree of certainty as to the nature of their rights. As opposed to a system where individual acts could be impugned for being culturally offensive.

2 *Disadvantages of the proposal*

A careful balance would have to be found between safeguarding the interest of Maori with respect to inappropriate use and the rights of the patent owner to exploit

their invention. The threat of overprotection is evident with this proposal, because if conditions imposed were to restrictive it may act as a disincentive to the owners of inventions to seek patent protection in New Zealand.

V AN ALTERNATIVE TO THE NOTION OF MAORI TRADITIONAL KNOWLEDGE AS PROPERTY¹⁴¹

Throughout this paper Maori traditional indigenous knowledge has been treated as property. Its ability to be the subject of intellectual property rights has been investigated. Some of the difficulties encountered in that investigation may be attributed to the way in which Maori regard their knowledge in contrast to Europeans. The value to Maori of their traditional knowledge is due more to its position as an intrinsic part of their culture than its potential utility as a commercial commodity. Maori often regard their traditional knowledge as a taonga, that is a valued possession. This is a concept which does not have an equivalent in a European property rights system. As a result the system cannot fully protect and recognise the complex nature of a subject which is a taonga.

One solution posited to the problem of recognising the unique nature of taonga under an Anglo Intellectual Property Rights System is to give certain taonga legal personality.¹⁴² Instead of being regarded as property the taonga is recognised as a person within the legal system with rights and obligations of its own. Legal personality gives the taonga legal status and capacity. This could be done by statute. Professor Angelo suggests the sole purpose of such an Act would be to declare that under state law the particular taonga has legal personality and indicate how long the taonga will exercise its rights and perform its duties. The interests of the new legal entity could be looked after by a statutorily established board of management or a board of trustees. The founding document would have to identify the interests of the taonga and their application in different cases.

A *Advantages of this proposal*

The greatest advantage of this model is that it eliminates the problem of identifying an owner of the knowledge. As discussed earlier in this paper, intellectual property rights are based around the notion that the subject matter is owned by a person, and that both the person and the subject matter are eligible for the intellectual

141 The idea for this part of the paper is taken from an article by Professor Tony Angelo, Victoria University. A H Angelo "Personality and Legal Culture" (1996) 26 VUWLR 395.

142 Above n 141.

property right in question. Often the owner of a piece of Maori traditional knowledge cannot be identified and so access to protection of the knowledge under the intellectual property rights system is diminished. This problem of ownership is reflected in TPK's model of a collective intellectual property right that does not include a means for determining ownership of the subject matter of the right.

Another advantage of granting taonga legal personality is that the specific interests of each taonga can be defined independently. In comparison each intellectual property right in our current system embodies a fixed set of pre-determined interests regardless of the subject matter of the right. For example some types of Maori traditional knowledge may be regarded as so sacred that the protection of their integrity is foremost, while others may be more amenable to commercial exploitation.

Professor Angelo states that the grant of legal personality recognises that the feature is exceptional and worthy of special respect and protection.¹⁴³

The advantage of the use of personality is that the taonga would be regarded as different from property, that there would be legal recognition of the continuity of management, and that the focus would shift from humans and their interests to the character, attributes and spirit of the taonga....The personality of the taonga would be made to transcend any human rivalries and any stark property analysis.

B Disadvantages of this proposal

Maori traditional knowledge poses a particular challenge to this proposal because of the difficulties in defining its boundaries. If legal personality is granted to a river or Maori carving the "legal person" is clearly defined. However, if legal personality is granted to Maori traditional knowledge the identification of that "legal person" is uncertain. The radical nature of this proposal means that its adoption is unlikely. Despite the different ways in which the value of knowledge is determined in Maori culture and the Anglo intellectual property rights system, Maori traditional knowledge fits into the concept of intangible property. It may well be that the adoption of a notion such as legal personality would only alienate Maori traditional knowledge from mainstream intellectual property further marginalising its cultural, scientific and potential commercial value.

VI CONCLUSION

143 Above n 141, 410.

The patents system is designed to reward innovation and facilitate its commercial exploitation. The claim by indigenous peoples to the protection of their traditional knowledge from expropriation and inappropriate use are not accommodated within the patent system. If the claims of indigenous peoples with respect to their traditional knowledge are to be heeded, then a system which recognises the validity of that protection must be found or created. These claims provide an opportunity to look at what intellectual property is in a system of intellectual property rights. It becomes clear that intellectual property is nothing more than the subject of a set of defined property rights. Intellectual property has little existence separate from these rights.

Hence the claims of indigenous people to intellectual property rights for the protection of their traditional knowledge are misplaced. Intellectual property rights do not provide the answer as they do not recognise the value or integrity of traditional knowledge. Rather they are designed to provide an incentive for innovation and its exploitation.

If such claims are to be met then granting legal personality to traditional knowledge may provide a novel answer to the concerns of indigenous peoples. Granting of legal personality to the traditional knowledge sought to be protected overcomes the difficulty of treating such knowledge as property and recognises the value of the knowledge independently of any legal rights attaching to it.

SELECT BIBLIOGRAPHY

Texts

- W Aldous, D Young, A Watson, S Thorely *Terrell on the Law of Patents* (13 ed, Sweet & Maxwell, London, 1982).
- D Bainbridge, *Intellectual Property* (Pitman Publishing, London, 1992).
- E Best *Maori Religion and Mythology Part 1* first Published 1924 (Government Print, 1995.)
- E Best *The Maori School of Learning* (Government Printer, Wellington, 1959).
- M L Blakeney J McKeough *Intellectual Property Commentary and Materials* (The Law Book Company Ltd, Sydney, 1987).
- T A Blanco White *Patents For Inventions* (5 ed, Stevens & Sons, London, 1983).
- A Brown, A Grant, *The Law of Intellectual Property in New Zealand* (Butterworths, Wellington, 1989).
- J Denin (ed) *Law & Practice of the World Trade Organisation* (Oceana Publications, Inc, New York, 1995)
- L.K. Gluckman, *Medical History of New Zealand Prior to 1860*, (Whitcoulls Limited, Christchurch, 1976).
- T Paul, *Nga Taonga o te Ngahere Treasures of the Forest* (Department of Conservation, Wellington, 1987).
- M Riley, *Maori Healing and Herbal* (Viking Sevenses N.Z. Ltd, Paraparaumu, New Zealand, 1994)
- Rural Advancement Foundation International *Conseriving Indigenous Knowledge: Intergrating Two Systems of Innovation.* .
- R Saliwanchik, *Protecting Biotechnology Inventions A Guide for Scientists* (Science Tech Publishers, Madison, Wisconsin, 1988).

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