MORALITY IN PATENT LAW

NATHAN LUSCOMBE

Introduction

Biotechnology is a fast growing, cutting-edge industry that lies at a peculiar intersection between science and commerce, the patent system lying at that intersection. Biotechnology is a truly disruptive element in the global knowledge economy. Where previous industrial, scientific and economic shifts (such as the industrial revolution) have altered the way we live our lives, biotechnology has the potential to alter the very nature of life itself.

This opinion will explore the question of what role (if any) morality should play in considering whether something should be allowed to be patented, and will consider:

- The current role of morality in patent law.
- Reasons why morality should play a role in the patent system.
- Reasons why morality should not play a role in the patent system.

This opinion will proceed with the definition of "biotechnology" as suggested by the committee of experts of WIPO, and used in the Law Commissions 1990 report on intellectual property law reform: [1]

> Biotechnology includes all techniques using animals, plants, microorganisms and any type of biological material which can be assimilated to microorganisms, or which can create organic changes therein.

[1] Law Commission *Intellectual property: the Context for Reform* (NZLC R13) at 59.

II. Current role of morality in patent law

This section will give a brief outline of the relevant statutory provisions in New Zealand and the European Union, as this opinion will make reference to these jurisdictions in further discussions. Reference will also be made to the United States of America in further discussion, however that jurisdiction contains to morality clause in their relevant legislation.

A. New Zealand

The Patents Act 1953 (the 1953 Act) contains a morality provision which reads:[2]

> **17 Refusal of application in certain cases**
>
> (1) If it appears to the Commissioner in the case of any application for a patent that the use of the invention in respect of which the application is made would be contrary to morality, the Commissioner may refuse the application.

The Patents Bill 2008 (now the Patents Act 2013, referred to henceforth as the 2013 Act) contains the following provision (not yet in force at the time of writing this opinion):[3]

> **15 Inventions contrary to public order or morality not patentable inventions**
>
> (1) An invention is not a patentable invention if the commercial exploitation of the invention, so far as claimed in a claim, is contrary to—
>
> (a) public order (which in this section has the same meaning as the term *ordre public* as used in Article 27.2 of the TRIPS agreement); or
>
> (b) morality.

[2] Patents Act 1953, s 17(1).
[3] Patents Act 2013, s 15.

Examples

> The commercial exploitation of the following inventions is contrary to public order or morality and, accordingly, those inventions are not patentable:
>
> - an invention that is a process for cloning human beings:
> - an invention that is a process for modifying the germ line genetic identity of human beings:
> - an invention that involves the use of human embryos for industrial or commercial purposes:
> - an invention that is a process for modifying the genetic identity of animals that is likely to cause them suffering without any substantial medical benefit to human beings or animals, or an invention that is an animal resulting from such a process.

The given examples are not a code, but rather a guideline as to what might be contrary to public order or morality:[4]

> …The committee has recommended that the bill be amended to include a list of examples of inventions where exploitation is considered contrary to public order or morality and hence are not patentable. This will provide guidance as to the type of inventions excluded from patent protection under that provision.

Patent decisions in New Zealand are made by the Intellectual Property Office of New Zealand (IPONZ) following a filing of specifications and formal examination. Formal hearings before the Commissioner of Patents are possible.[5]

---

[4] (12 September 2012) 683 NZPD 5157.

[5] Paul Sumpter *Intellectual property Law: Principles in Practice* (2nd ed, CCH New Zealand Limited, Auckland, 2013) at 245.

B. The European Union

The European Patent Convention provides that:[6]

> European patents shall not be granted in respect of:
>
> (a) inventions the commercial exploitation of which would be contrary to "ordre public" or morality; such exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States;

The principle body in the European Union responsible for the granting of patents is the European Patent Office (EPO), which is made up of a Receiving Section, and Examining Division, an Opposition Division, a Board of Appeal and an Enlarged Board of Appeal.[7]

III. Reasons why morality should play a role in the patent system

A. The moral content inherent in the patent system

According to Peter Drahos, the creation, operation and interpretation of the patent system is linked to moral standards. Patents are a form of property right, property being a key institution of social and political morality. Patents exclude others from the use of resources, and thus have an inherent moral content.[8]

Further to this, patent law can be seen has having an inherent moral content because it can be seen as a recognition and extension of John

---

[6] European Patent Convention (signed 5 October 1973, entered into force 7 October 1977), art 53.

[7] At art 15.

[8] Peter Drahos "Biotechnology patents, markets and morality" (1999) 21 EIPR 441 at 441.

Locke's theory, that the mixing of ones labour with the natural environment creates a moral entitlement to the fruits of that labour. [9]

Drahos argues that moral debates about patentability must be had within the patent system, because the patent system has an important causal role to play in the evolution of biotechnology, as the definition of property rights has historically had a major impact on economic growth. [10]

On this basis, morality should play a role in deciding whether something should be patented or not, as the patent system already has an inherent moral content, and it would be artificial to remove any moral inquiry from it.

B. The controversial nature of biotechnology and the purposes of patent law

Section 3 of the 2013 Act sets out that:

> **3 Purposes**
> The purposes of this Act are to—
> (a) provide an efficient and effective patent system that—
> (i) promotes innovation and economic growth while providing an appropriate balance between the interests of inventors and patent owners and the interests of society as a whole…

Thus, a balancing act must be conducted between economic and scientific progress, and the interests of society as a whole. It could be argued that the interests of society include moral interests – this may be particularly so for patent law (and especially in an area such as biotechnology), for the same reasons as those mentioned above at *III*

[9] John Locke, *Two Treatises of Government*, Peter Laslett (ed) (Cambridge: Cambridge University Press, 1988) at 285-302.
[10] Drahos, above n 8, at 447.

A; the patent system is linked both to economic progress and is imbued with moral content, concerned as it is with property rights, and thus (according to Drahos) moral discourse must be had within the patent system.

This suggests that morality should have a role to play in New Zealand's patent law system, as that would be consistent with the purposes of the 2013 Act.

IV. Reasons why morality should not play a role in the patent system

A. The inherent ambiguity of morals and the diversity of moral objections to biotechnology patents

The basis for moral objections to the patentability of biotechnology can be broadly placed into two categories of moral theorizing: deontological and consequentialist.

1. Deontological

Deontological arguments are those that propose that the moral element of some act is inherent in the act itself.[11]

David Resnik identifies three main deontological arguments against the patentability of biotechnology. The first of these has an overtly biblical basis, and is an argument to the effect that patenting biotechnology goes against Christian values.[12] The second is that DNA represents our common heritage, and it would therefore be immoral to patent

[11] Alexander, Larry and Moore, Michael, "Deontological Ethics" (2012) The Stanford Encyclopaedia of Philosophy <http://plato.stanford.edu/archives/win2012/entries/ethics-deontological/>.

[12] David B. Resnik *Owning the Genome* (State University of New York Press, New York, 2004) at 75.

biotechnology concerned with out DNA.[13] The third is that by patenting biotechnology, we are commodyfing nature.[14]

Each of these arguments is open to significant criticism. The first argument rests on religious beliefs that may not be shared by all of the members of the population. The second is problematic in that it attaches value to something that might to many people seem a very abstract concept. The third argument seems to ignore the fact that humanity has been commodifying nature seemingly since the agricultural revolution – we have for centuries traded in natural goods, both inanimate (such as precious metals) and living (such as livestock).

2. Consequentialist

Consequentialist moral theorising can be seen as the opposite to deontological theorising – it looks to the consequences of an act as determining the objective morality of that act.[15]

Resnik identifies one major consequentialist argument: the utilitarian argument. According to this argument, we should not allow products of nature to be patented because that will stifle scientific innovation and discovery.[16]

A major problem with that argument is that it is too quick to jump to the conclusion that biotechnology can be categorised as a product of nature. This concern is alleviated somewhat by the invention/discovery dichotomy, discussed later at *IV B 2*.

---

[13] At 77.

[14] At 82.

[15] Sinnott-Armstrong, Walter, "Consequentialism" (2012) The Stanford Encyclopaedia of Philosophy <http://plato.stanford.edu/archives/win2012/entries/consequentialism/>.

[16] Resnik, above n 12, at 74.

The above considerations show that there are a variety of moral objections to the patentability of biotechnology, and that these objections themselves are open to criticism. Each of these objections and their corresponding criticisms may find validity in the minds of each individual. The heterogeneity of moral opinions amongst a population may therefore be very great – this may be true both of the general public, and of those who actively participate in the patent system, either as those seeking patents, or those granting them. This diversity of moral standing demonstrates that the inclusion of morality into deciding whether something should be patented or not is open to the possibility of widely differing interpretations, possibly leading to the creation of an incohesive body of law on the matter.

B. The potential for redundancy of the morality requirement.

1. The Plant Genetic Systems herbicide resistant (Transgenic) Plant case[17]

Cynthia Ho examines the course of this case through the EPO's Opposition Division and Board of Appeals in detail, and arrives at the conclusion that the decision in that case by the Board of Appeals is such that as long as an invention does not have a solely destructive use, the morality provision of article 53(a) of the European Patent Convention will not apply.[18]

This suggests that the morality criteria has been given such a narrow interpretation in Europe as to be almost redundant. Because patent regimes across the world are becoming more harmonised,[19] it is possible that New Zealand may adopt such an approach, and if such

---

[17] *Greenpeace UK v Plant Genetic Systems N.V.* (1992) Opposition Div EPO , (1993) 24 INT'L REV INDUS PROP & COPYRIGHT L 618.

[18] Cynthia M. Ho "Splicing Morality and Patent Law: Issues arising from Mixing Mice and Men" (2000) 2 Washington University Journal of Law & Policy 247 at 266.

[19] Sumpter, above n 5, at 242.

an approach were to be adopted in New Zealand, s 15 of the 2013 Act might be rendered nearly redundant.

As set out at *II A* above, New Zealand's Parliament is already taking a more prescriptive approach as to what biotechnological inventions may be contrary to public order or morality. This suggests that the role of the morality criteria under s 15 of the 2013 Act has already been restricted somewhat (though the examples given under s 15(1) are not a code).

2. The invention/discovery dichotomy

The outcome in *Association for Molecular Pathology v Myriad Genetics*[20] was determined on the technical ground of the invention/discovery dichotomy (the United States having no morality provision in their relevant legislation). This suggests that moral concerns can be alleviated through the dichotomy, such as those concerned with the patenting of humanities "common heritage". The case demonstrates that a technical approach to the patentability of biotechnology can yield the same results as if a moral criteria had been applied.

The considerations at *IV A*, however, show that the moral issues concerned with biotechnology are extremely diverse. For that reason, the invention/discovery dichotomy alone is unlikely to alleviate the moral concerns of the public, and is thus on its own not a reason for the abolishment of morality criteria in the patent system.

[20] *Association for Molecular Pathology v Myriad Genetics* 569 US 12-398 (2013).

C. An economic case against the inclusion of morality into patent law

According to Oliver Mills, the patent system was designed primarily to advance economic interests.[21] On this basis, it would be inappropriate to include moral criteria into the decision making process in considering whether something should be patented or not. Because the patent system as a whole is concerned with economics and not morality, the inclusion of moral criteria would be inconsistent with the rest of the system, potentially leading to an unacceptable level of uncertainty on the part of innovators as to whether their inventions can actually be patented or not. This uncertainty could lead to a reduction in investment in biotechnology.

After considering a number of European patent application cases, Milius and Townend conclude that there has been an inconsistent approach on the part of the relevant patent granting authorities as to the issue of morality.[22] This suggests that the inclusion of morality into patent law has led to uncertainty on the part of the authorities that must make the decision as to whether an invention can be patented or not. Demonstrable uncertainty on their part could lead to a decrease in the perceived attractiveness of investing in the biotechnology sector on the part of potential innovators.

These considerations are particularly important in the New Zealand context. According to the New Zealand Institute of Patent Attorneys for New Zealand Trade and Enterprise (who use the term "life

---

[21] Oliver Mills *Biotechnological Inventions: Moral Restraints and Patent Law* (2nd ed, Ashgate Publishing, Farnham, (UK), 2010) at 11.

[22] Djims Milius and David Townend "Thoughts on the Scope and Operation of Morality Clauses in Patent Law" (2008) 7 Patentnemnd uten portefølje? En analyse av etiske utfordringer ved patentering 76 at 94.

sciences" to describe technology concerned with animal health and crop quality):[23]

> The life sciences support the backbone of the New Zealand economy…As we move away from commodity exports and into the knowledge economy, getting value from the life sciences depends upon good management of intellectual property.

Thus, the inclusion of morality into the patent system could, should it lead to high levels of uncertainty on the part of innovators and on the part of the patent examiners, affect New Zealand's competitiveness in the biotechnology field, with negative consequences for the future growth of the economy.

D. Patent law is not the proper forum for such debate

In examining European patent case law, Cynthia Ho identifies a number of problems with incorporating morality into patent law. One of these is the fact that even if patent offices conducted thorough evaluations of morality, it is unlikely that all parties would be satisfied, due to the fact that issues of morality are highly controversial.[24]

This is particularly apparent in the case of biotechnology. As discussed at *IV* A, there are a number of different arguments both for and against the patentability of biotechnology. The appropriate forum for deciding whether biotechnology can be patented should be the legislature. Parliament is equipped to facilitate such a debate, having the mechanisms (such as the ability to initiate referenda), policies and history of practice to hear and take into account these varying considerations. As Margo Bagley argues; issues of morality and

---

[23] New Zealand Institute of Patent Attorneys for New Zealand Trade and Enterprise "The Intellectual Property Guide for the Life Sciences in New Zealand" (Wellington, 2004) at 1.

[24] Ho, above n 18 at 283.

patenting should not be left to scientists, or individual examiners, as no one person is competent enough to decide and resolve such issues.[25]

The *Harvard/Transgenic Animal* proceedings (commonly known as the "Oncomouse" proceedings) saw the same result in the Unites States and Europe; a patent was granted over mammals bred with a particular genetic alteration to make them more susceptible to cancer.[26]

This shows that morally controversial subject matters have been patented in jurisdictions with and without moral criteria. This suggests that those participating in the patent system tend to subscribe to a particular moral view – in the European proceedings, for example, the European Patent Office Examination Division adopted a utilitarian approach to the moral dimension. That shows an express disregard for the deontological views, which may be held by many in society. The patent system therefore has a tendency to represent morality from only a slice of society; it would therefore be appropriate for the legislature to be far more prescriptive on the role of morality in patent law.

This is supported by Milius and Townend, who consider that United States approach of referring moral matters to Congress for consideration is more consistent with democratic principles than leaving such things to be decided by unelected public servants.[27]

In *Wisconsin Alumni Research Foundation and Wicell Research Institute Inc v The Commissioner of Patents* the Assistant Commissioner of Patents avoided a substantial discussion on the morality requirement under s 17 of New Zealand's 1953 Act with regards to stem cell research;

---

[25] Margo A. Bagley "A Global Controversy: The Role of Morality in Biotechnology Patent Law" in Peter Yu (ed) *Intellectual Property and Information Wealth* (Praeger Press, Westport (Conn) 2007) at 339.

[26] "Bioethics and Patent Law: The Case of the Oncomouse" WIPO Magazine (Geneva, June 2006 Issue 3) at 16.

[27] Milius and Townend, above n 22, at 85.

choosing instead to refer to other legislation which dealt with the monitoring and approving of stem cell research.[28]

Further to this, Ho identified that Patent examiners are trained to evaluate the technical merits of inventions, not their moral content.[29]

This is further authority for the proposition that patent law is not the appropriate forum to decide on the morality of inventions, particularly where biotechnology is concerned. The *Wisconsin* case demonstrates the speed with which recourse is had to other legislation were it is available, and Ho's considerations show that the actors in the patent system are not trained ethicists, and are therefore not the appropriate people to be making such decisions. Decisions on the morality of biotechnology patents are arguably of such importance that only the legislature should determine them – as stated in the introduction to this opinion, biotechnology has the potential to alter life itself.

An inquiry under s 17 of the 1953 Act requires the Commissioner to look to the future use of an invention.[30] This could be an ambiguous exercise. The future is anything but certain, and this is particularly so in the rapidly advancing field of biotechnology. It is possible that any new invention could have potentially immoral uses.

Firearms are inventions that routinely serve immoral purposes, yet patents are often granted in respect of such technologies. This reflects an attitude on the part of patent authorities around the world that looking to the future use of an invention is something to be left to other legislation, (such as gun control laws). This could be extended to biotechnology; it might be better to leave the moral considerations out of the process, and deal with them in separate legislation.

---

[28] *Wisconsin Alumni Research Foundation and Wicell Research Institute Inc v The Commissioner of Patents* [2007] NZIPOPAT 22.

[29] Ho, above n 18, at 284.

[30] *Pfizer Inc v Commissioner of Patents* [2005] 1 NZLR 362 at [51].

V. Conclusions

In conclusion, patent law and morality are inextricably intertwined, as set out by Peter Drahos. Furthermore, the interests of society may require the examination of morality when deciding if something should be patented or not.

In spite of this, the patent system is not the appropriate forum to deliberate and decide on such matters. The current legislative framework confers on the patent authorities a discretion to decide on matters of morality, but as the above considerations have shown, this may be inappropriate. It should left to the legislature to decide on the moral issues of patentability, as it is the legislature that will best be able to determine the moral interests of society, not the patent authorities.

Thus morality does have a role to play in considering whether something should be patented or not – but it should not be left to the patent authorities to determine the scope or application of that role.