



January 2003

# Towards Developing a Natural Law Jurisprudence in the U.S. Patent System

Wendy Lim

Follow this and additional works at: <http://digitalcommons.law.scu.edu/chtlj>



Part of the [Law Commons](#)

### Recommended Citation

Wendy Lim, *Towards Developing a Natural Law Jurisprudence in the U.S. Patent System*, 19 SANTA CLARA HIGH TECH. L.J. 561 (2002).  
Available at: <http://digitalcommons.law.scu.edu/chtlj/vol19/iss2/12>

This Other is brought to you for free and open access by the Journals at Santa Clara Law Digital Commons. It has been accepted for inclusion in Santa Clara High Technology Law Journal by an authorized administrator of Santa Clara Law Digital Commons. For more information, please contact [sculawlibrarian@gmail.com](mailto:sculawlibrarian@gmail.com).

## TOWARDS DEVELOPING A NATURAL LAW JURISPRUDENCE IN THE U.S. PATENT SYSTEM

Wendy Lim<sup>†</sup>

There are at least two commonly-held legal misconceptions when it comes to IP law: patent law is a wholly practical area of law created entirely by legislation;<sup>1</sup> and that jurisprudence and the study of legal philosophy and justification is an exercise in esotericism, devoid of any practical significance to those in the practice of law.<sup>2</sup> It is submitted that law and jurisprudence are inextricably connected: “[i]mplicit in every decision where the question is, so to speak, at large, is a philosophy of the origin and aim of law, a philosophy

---

<sup>†</sup> Wendy Lim, LL.M in Intellectual Property Law, Santa Clara University; LLB (Hons) National University of Singapore, Faculty of Law. I would like to thank Professor Donald S. Chisum, Professor of Law at Santa Clara University, who supervised my LL.M thesis (which was adapted into this present Article) for sparking my interest in patent law and for his helpful comments throughout my writing process, Professor June Carbone, Professor of Law and Presidential Professor of Ethics and the Common Good at Santa Clara University, for her encouragement and for taking time to discuss and challenge my views, Professor Janice Mueller, Associate Professor of Law, The John Marshall School of Law and Visiting Professor, Santa Clara University, for her encouragement and for referring me to some excellent reading materials and Professor Andrew Phang, Professor of Law and Chair, Department of Law at the Singapore Management University, for his comments on my paper, his encouragement and for instilling in me a sense of the importance of legal jurisprudence during my law school days. I would also like to thank Mrs. Elizabeth Enayati Powers, former assistant dean of Santa Clara University’s High Tech Law Institute, for encouraging me to publish my LL.M thesis. All views expressed in this article and any errors contained herein remain entirely mine.

1. BRUCE W. BUGBEE, *GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW* 10 (1967) (“It may therefore be argued that the granting of a patent . . . involves what is essentially a contractual relationship between grantee and government . . . Thus what one hand of the Government would give, another hand would take away.”) *Id.*

2. *But see* BENJAMIN N. CARDOZO, *THE GROWTH OF THE LAW* 23 (1924).

You think that there is nothing practical in a theory that is concerned with ultimate conceptions. That is true perhaps while you are doing the journeyman’s work of your profession. You may find that in the end, when you pass to higher problems, that instead of it being true that the study of the ultimate is profitless, there is little that is profitable in the study of anything else.

*Id.*

which is however veiled, is in truth the final arbiter."<sup>3</sup>

This Article attempts to correct these misconceptions. Perhaps due to the fact that copyrights are more readily linked to First Amendment rights of speech, copyright law has generated some discussion on natural rights and natural law-type theories.<sup>4</sup> Comparatively, patent law seems to be a poorer cousin as far as any discussion on natural rights or natural law jurisprudence is concerned.<sup>5</sup> It is hoped that this Article will go some way towards remedying this deficiency.

As a prologue, it is appropriate to set out some methodology to determine which is the most satisfactory justification of the patent system since this Article seeks to develop a coherent justification of the patent system.

In the first part, I will argue that a utilitarian justification of the patent system is not a viable explanation. As a theory, utilitarianism holds that all actions are justifiable if they promote the common good. Another interpretation of this theory holds that an action is right or wrong, depending on the consequences of that action.<sup>6</sup> Utilitarians justify the patent system because it tends to produce and promote innovations and inventions.<sup>7</sup> I will examine the cracks in the logic of a purely utilitarian justification of patent law, and I argue that, if one is a deontologist,<sup>8</sup> one cannot at the same time accept utilitarianism as a justification for the patent system.

3. *Id.* at 25.

4. See Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 359, (observing that "[p]roponents of cutting back copyright protection usually invoke free speech and the marketplace of ideas, if not a direct appeal to first amendment, as a "trump" over the copyright clause." See also Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533 (making the argument that "a properly conceived natural-rights theory of intellectual property would provide significant protection for free speech interests" and supports her thesis using copyright cases as illustrations.").

5. See Edward C. Walterscheid, *The Early Evolution of the United States Patent Law: Antecedents (Part I)*, 76 J. PAT. & TRADEMARK OFF. SOCIETY 697, 699 (1994) ("Patent law systems and patent systems developed out of a realization that there was indeed a societal need to recognize and protect a property right in invention . . . although for reasons having very little to do with any perceived "natural law" right.").

6. Utilitarianism "is an approach to morality that treats pleasure or desire-satisfaction as the sole element in human good and that regards the morality of actions as entirely dependent on consequences or results for human (or sentient) well-being." THE OXFORD COMPANION TO PHILOSOPHY 890 (Honderich ed. 1995).

7. See *infra* Part II B 2: Specific Critique of Utilitarianism: Problems with the Disclosure of Inventions and Encouragement of Inventions Rationales.

8. Deontology is the belief that "certain acts are right or wrong in themselves." THE OXFORD COMPANION, *supra* note 6, at 187.

The second part of this Article describes and critiques the natural rights theories which have been increasingly advanced as a justification of intellectual property rights, namely (1) the labor theory/just desserts theory propounded by the English philosopher, John Locke,<sup>9</sup> and to a lesser degree, (2) the personality theory articulated by Georg Hegel.<sup>10</sup> I will argue that a theory that focuses on natural rights without highlighting natural duties is, at best, incomplete. At the worst, a natural rights theory runs into the same problem of justification—one key criticism being the argument that “rights themselves need to be justified somehow, and how other than by appeal to the human interests their recognition promotes and protects?”<sup>11</sup> This seems to be the uncontroversial insight of classical utilitarians.

In the third part, I will argue that despite its historical origins, and perhaps, against the wishes of some of America’s founding fathers, U.S. patent law contains fertile grounds for the development of a natural law jurisprudence. I will propose a third alternative justification for the patent system: its justification lies in the foundations of justice, as embodied in classical natural law.

There have been some attempts towards introducing natural law into the intellectual property law scene, but mainly in the context of copyright and on the basis of a “no-harm” principle advocated by John Locke.<sup>12</sup> I will explore the classical natural law theories of property, as enunciated by St. Thomas Aquinas<sup>13</sup> and Hugo Grotius, and argue that those theories (in particular, Aquinas’s theory) are an advance over pure natural rights or utilitarian theories or even the abovementioned Lockean natural law theory. I will argue that the idea of justice under classical natural law is not merely passive but pro-active because a natural law approach towards patent law would seek to strike a balance between recognition of the rights of an individual inventor and its duties towards his community.<sup>14</sup>

---

9. JOHN LOCKE, *Second Treatise on Civil Government*, in TWO TREATISES OF GOVERNMENT ch. V (Peter Laslett ed., Cambridge Univ. Press 1988) (1690).

10. G.W.F. HEGEL, PHILOSOPHY OF RIGHT 41–45 (T.M. Knox trans. 1967) (1821) (“[I]ndividual demonstrates ownership of property by imposing its will on it and thereby occupying it.”).

11. T.M. SCANLON, CONSEQUENTIALISM AND ITS CRITICS 74 (Scheffler ed. 1998).

12. See Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533 (1993).

13. See THOMAS AQUINAS, SUMMA THEOLOGICA 267–73 (New York, Benziger Bros., 1947–48).

14. See *infra* Part VI B. Application of Natural Law Principles to the U.S. Patent System (discussing this point in greater detail).

Finally, I will test my natural law hypothesis against the hard questions raised in patent law which have not been adequately answered by any of these schools of thought and submit that a classical natural justification is the best way forward for the U.S. patent system.

## I. PROLOGUE - THE NATURE OF JUSTIFICATION: SUGGESTED METHODOLOGY

This Article essentially tries to answer two questions: first, "How has the U.S. patent system been traditionally justified?;" and second, "How *ought* the U.S. patent system be justified?" In attempting to find a coherent framework of justification, it may be useful to set out some ground rules. Since we are dealing with patent law, an analogous use of the patent claim construction rules may be instructive. In determining a patent claim, the court can look at intrinsic and extrinsic evidence.<sup>15</sup> The court should always look first to the intrinsic evidence of record which is the patent itself.<sup>16</sup> Words in the claim are usually given their ordinary and customary meaning, but the patentee can be his own lexicographer.<sup>17</sup> Next, it is necessary to review the specification to determine whether there is any use of terms inconsistent with their ordinary meaning. Third, the courts may consider the prosecution history.<sup>18</sup>

Under an analogous approach, arguably, the intrinsic evidence is Article I, Section 8, Clause 8, which provides the constitutional basis of the U.S. patent system. On a plain reading, one of the main objectives of this clause is to "promote the Progress of the useful arts."<sup>19</sup> At the same time, the clause also clearly talks about "securing" to inventors the "right" to their inventions.<sup>20</sup> An ordinary interpretation is that this right must have existed *prior to* the Constitution; otherwise, why should there be a need to "secure" the

15. *Vitronics Corp. v. Conceptor Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("In determining the proper construction of a claim, the court has numerous sources. These sources. . . include both intrinsic evidence. . . and extrinsic evidence.".) *Id.*

16. *Id.* ("It is well-settled that, in interpreting an asserted claim, the court should look to the intrinsic evidence of record, i.e., the patent itself.") *Id.*

17. *Id.* ("Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.") *Id.*

18. *Vitronics*, 90 F.3d at 1576.

19. U.S. CONST. art. I, § 8, cl. 8.

20. *Id.* ("To promote the Progress of Science and useful Arts. . . by securing for limited Times to. . . Inventors the exclusive Right to their. . . Discoveries.".)

rights? Why not “create” such rights?<sup>21</sup> It appears, therefore, that Article I, Section 8, Clause 8 envisions the patent system to be one that balances progress with inventors’ rights.

The “prosecution” history surrounding Article I, Section 8, Clause 8 also suggests that a natural law approach is not an implausible option. The preamble of the Constitution refers, *inter alia*, to the idea of establishing “justice,”<sup>22</sup> which is one of the central concerns of natural law.<sup>23</sup> It is true that there may be some “prosecution history” showing that some of the founding fathers<sup>24</sup> did not subscribe to the natural rights theory, but there is other evidence<sup>25</sup> that counters this fact, as will be shown later.

In summary, from the foregoing, it is submitted that there is a *prima facie* case for developing a natural law jurisprudence in the U.S. patent system. It is further submitted that it is imperative for the patent system to build its foundations on a coherent, justified framework so that both practitioners of patent law and policy-makers will be better equipped to respond to the hard and unforeseen questions that are being raised in an increasingly complex world.<sup>26</sup>

21. See DEC. OF INDEPENDENCE (U.S. 1776): “We hold these truths to be self evident, that all men are created equal; that they are endowed by their Creator with certain *inalienable rights*. Among these are life, liberty and pursuit of happiness; that *to secure these rights* Governments are instituted among men.” *Id.* (emphasis added).

See also George Ramsey, *The Historical Background of Patents*, 18 J. PAT. OFF. SOC’Y 6, 19 (1935):

I began to see and feel that when an inventor had complied with the law. . . he came there not as a beggar . . . but that he came really as a matter of right, and that my job was to *survey the metes and bounds of his invention*. . . The “rights” herein referred to are inherent *rights*, not the right of an applicant to become a burden on the patience of the Examiner or a nuisance to the Patent Office. . .

*Id.* (emphasis in original).

22. U.S. CONST. Pmb1.

We the people of the United States, in order to form a more perfect union, *establish justice*, insure domestic tranquillity, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.

*Id.* (emphasis added).

23. Richard Wright, *Principles of Justice*, 75 NOTRE DAME L. REV. 1859, 1860 (2000) (“It has been said that the elaboration of. . . substantive equality and its implications for morality, justice and law from the core of the natural law (or natural right) theory of law. . .”). *Id.*

24. *E.g.*, Thomas Jefferson. See *infra* Part II A. Historical Justification.

25. James Madison and Charles Pickney. See *infra* Part II C. Summary: Why Utilitarianism Should Not be a Justification and What about the Constitution?

26. See *infra* B. Application of Natural Law Principles to the U.S. Patent System An example of a hard issue that will be explored later will be the issue of cloning.

## II. THE FIRST ALTERNATIVE: UTILITARIANISM—A HISTORICAL JUSTIFICATION OF THE U.S. PATENT LAW SYSTEM

“To promote the Progress of Science and useful Arts . . . by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries.”<sup>27</sup>

### A. *Historical Justification*

Historically, the U.S. patent system has always been justified on utilitarian or consequentialist grounds.<sup>28</sup> The oft-cited evidence is the Intellectual Property Clause<sup>29</sup> found in Article I, Section 8, Clause 8 of the U.S. Constitution – “To promote the Progress of . . . the useful Arts.”<sup>30</sup> This view is further reinforced by the writings of Thomas Jefferson, one of the founding founders of the U.S. Constitution:

It has been pretended by some . . . that inventors have a natural and exclusive right to their inventions . . . Inventions . . . cannot, in nature, be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done according to the will and convenience of society, without claim or complaint from anybody.<sup>31</sup>

The utilitarian/consequentialist justification is premised on two arguments which will be discussed below. The first is that the patent system encourages the disclosure of secrets. This argument is

27. U.S. CONST, art. I, § 8, cl. 8.

28. Consequentialism holds that “all actions are right or wrong in virtue of the value of their consequences.” THE OXFORD COMPANION TO PHILOSOPHY 154 (Honderich ed. 1995). I shall be referring to utilitarianism and consequentialism interchangeably in this Article, although it should be noted that consequentialism encompasses broader theories which include nonutilitarian branches which deny that the value of consequences is determined solely, or possibly at all, by the welfare of individuals. See 2 ENCYCLOPEDIA OF ETHICS 1264 (Lawrence C. Becker and Charlotte B. Becker eds., 1992). See also *Grant v Raymond*, 31 U.S. 218, 243 (1832) (“The great object and intention of the act is to secure to the public the advantages to be derived from the discoveries of individuals”). *Id.*

29. Apparently, the Intellectual Property Clause of the Constitution was unanimously accepted with no recorded debate. See BUGBEE, *supra* note 1 at 1 (citing 2 JAMES MADISON, RECORDS OF THE FEDERAL CONVENTION OF 1787, 509–10 (Max Farrand ed., New Haven 1911–37)).

30. Contrary to contemporary notions, “Science” is to be promoted by copyright and “useful Arts” by patents. See Giles S. Rich, *The “Exclusive Right” Since Aristotle*, Address Before the Foundation for a Creative America: Bicentennial Celebration—United States Patent and Copyright Laws (May 9, 1990). (“In 1787 “science” did not mean what we take it to mean today, but knowledge in general.”).

31. JEFFERSON WRITINGS 1291–92 (M. Peterson ed. 1984) [hereinafter, JEFFERSON WRITINGS].

discussed using social contract terminology.<sup>32</sup> The second argument is that the patent system encourages inventions which lead to the industrial progress.

### 1. Disclosure of Secrets

The first argument is formulated as follows:

In the absence of protection against imitation by others, an inventor will keep his invention secret. This secret will die with the inventor, and society will lose the new art. Hence, a means must be devised to induce the inventor to disclose his secret for the use of his invention for a period and in return he agrees to disclose his secret in order that it will later be available to society.<sup>33</sup> In "social contract" terminology, there is a contract between the inventor and society whereby the inventor agrees to disclose the secrets of his invention in exchange for limited exclusivity.<sup>34</sup>

### 2. Encouragement of Inventions

The second argument can be summarized as follows:

Industrial progress is desirable. Inventions and their exploitations are necessary to secure industrial progress. Neither invention nor the exploitation of invention will be obtained to any adequate extent unless inventors and capitalists hope that successful ventures will yield profits which make it worthwhile to invest their time and money. These profits would not likely be possible unless special measures are taken to prevent others from exploiting the inventions. The simplest, cheapest, and most effective measure is an exclusive patent right in inventions.<sup>35</sup>

### B. *Cracks in the Historical Justification*

It is undeniable that the public disclosure and other requirements of the patent system have brought much desirable progress for society.<sup>36</sup> I therefore agree with the utilitarian that the patent system

---

32. *Id.*; see also *Grant v. Raymond*, 6 Peters 218 (1832) ("A patent is a contract made by the acceptance by the government of the offer which the patentee by his application makes to disclose his invention in consideration that the United States will secure to him the exclusive use and sale of it for 17 years.").

33. EDITH TILTON PENROSE, *THE ECONOMICS OF THE INTERNATIONAL PATENT SYSTEM* 32 (1953).

34. *Grant*, 6 Peters 218.

35. PENROSE, *supra* note 33, at 34-35.

36. See, e.g., Robert Solow, *Technical Change and the Aggregate Production Function*, 39 REV. ECON. & STATIS. 312 (1957) (tracing the link between technology and growth and



is a very useful system. However, the utilitarian claim is something quite different. There are various versions of utilitarianism,<sup>37</sup> but for the purposes of this Article, it would suffice to summarize the utilitarian theory as follows: *[u]tility is the standard of morality;*<sup>38</sup> *therefore, the patent system is good because it is useful.*

This Article will argue below that the utilitarian justification of the U.S. patent law system is flawed for the following reasons: i) most utilitarians simply cannot follow their premises to their logical conclusion, as such, there is a serious flaw insofar as utilitarianism purports to be an appropriate philosophical theory; ii) the specific utilitarian rationales as applied to patent law (namely that form of disclosure of inventions and encouragement of inventions) are mere hypotheses, which are not sufficiently supported by empirical evidence, and provides at best, a shaky foundation for the patent system.<sup>39</sup>

### 1. General Critique of Utilitarianism

A true utilitarian's only moral yardstick is based on the welfare of the common good.<sup>40</sup> However, in reality, most utilitarians who argue on the basis of the common good and economics are not true "utilitarians." To illustrate this point, I will borrow two illuminating

---

found that 87.5% of the growth of American economic output between 1904 and 1949 is attributable to technological factors). Shanker A. Singham, *Competition Policy and the Stimulation of Innovation: TRIPS and the Interface between Competition and Patent Protection in the Pharmaceutical Industry*, 26 *BROOK. J. INT'L L.* 363, 375 (citing Charles Jones, *Sources of U.S. Growth in a World of Ideas*, Stan. Fac. Workshop Paper (September 1999) (arguing that from 1965 to 1990, over 40% of U.S. growth is attributable to the rise in research and development)).

37. See, e.g., JEREMY BENTHAM, *AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION* (J.H. Burns and H.L.A. Hart eds., London: Athlone Press 1970) (1978). Bentham is one of the leading proponents of utilitarianism and his theory is often espoused in the hedonistic maxim "greatest happiness for the greatest number." *Id.* See also JOHN STUART MILL, *UTILITARIANISM* (J.M. Robson ed., Toronto: University of Toronto Press 1969) (1861). Mill's form of utilitarianism tries, but, in the author's opinion, fails to justify utilitarianism by trying to define happiness as intended pleasure and absence of pain, leading to the conclusion that the morality of human actions should be judged by the amount of pleasure or pain it evokes. Mill's theory raises the question, which he fails to answer, of the standard by which to judge pleasure or pain: is it wealth, power, or leisure the yardstick and is happiness to be lasting or fleeting?

38. THE OXFORD COMPANION TO PHILOSOPHY 890 (Honderich ed. 1995) (defining utilitarianism as "an approach to morality that treats pleasure or desire-satisfaction as the sole element in human good and that regards the morality of actions as entirely dependent on consequences or results for human (or sentient) well-being."). *Id.*

39. *Id.*

40. *Id.*

examples used by Professor Leo Katz:<sup>41</sup>

#### Hypothetical 1 – The Case of the Out-of-Control Trolley<sup>42</sup>

An out-of-control trolley was heading down an incline when its driver discovers that the brakes are not working. On the track ahead are five people who will not be able to get off the track on time. If he swerves, he will avoid killing the five people. Unfortunately, in doing so, he will kill one person who happens to be standing by the side. Is it all right to minimize lives by turning the trolley?

#### Hypothetical 2 – The Case of the Heart, The Lungs and the Kidneys<sup>43</sup>

A surgeon has five patients, all of whom are doomed to die unless they receive transplant organs. Two need kidneys, two need lungs and one needs a heart. There is no donor to be found except for a perfectly healthy patient who walks into the surgeon's office for his annual checkup. On seeing him, the surgeon realizes that the healthy patient is a walking reservoir of useful spare parts. Can the surgeon quickly and painlessly kill his healthy patient and use his organs to save the other five?

Professor Katz suggests that many people will try to justify the driver turning the trolley in the first hypothetical but not of the surgeon killing his healthy patient in the second hypothetical. They may, for example, argue that if organ harvesting is a common practice, sick people will be afraid to go to doctors and many will die from lack of treatment, or that doctors may make wrong choices and harvest organs for patients who are too sick to benefit from them.<sup>44</sup> Professor Katz makes a persuasive argument:

If you really believe that the reason the trolley driver can turn his trolley is because that minimizes the number of lives lost, then you must, at least, under some circumstances, also approve of what the utilitarian surgeon does, at least if the utilitarian surgeon engages in organ harvesting only to prevent many more such instances of

---

41. LEO KATZ, *ILL-GOTTEN GAINS, EVASION, BLACKMAIL, FRAUD AND KINDRED PUZZLES OF THE LAW* 53–55 (Univ. of Chicago Press 1996).

42. See Judith Jarvis Thomson, *The Trolley Problem*, in *RIGHTS, RESTITUTION AND RISK* 94–116 (Cambridge, Mass.: Harvard Univ. Press, 1986).

43. See JONATHAN GLOVER, *CAUSING DEATH AND SAVING LIVES* 102 (Hamondsworth: Penguin 1977).

44. KATZ, *supra* note 41, at 54.

organ harvesting in the future. If you are prepared to take that stand, you are a utilitarian at heart.<sup>45</sup>

A true utilitarian, who dismisses all other moral standards except utility, would have to, by his own reasoning, accept that it would be all right for the surgeon to kill the healthy patient. A prominent example would be bioethicist Peter Singer, whose appointment to Princeton University attracted much controversy because some argue that he advocates infanticide and euthanasia.<sup>46</sup> Francis Fukuyama observed that as an "unabashed utilitarian" Peter Singer "is simply more consistent than most people on the consequences of abandoning the concept of human dignity."<sup>47</sup>

Some utilitarians, who are better called consequentialists, argue otherwise. Consequentialism, they argue, demands that the right thing to do is the act which produces the best overall outcome. They would argue that from a consequentialist point of view, it is acceptable not to kill the healthy patient because in the long run, it is good to maintain the natural aversion. Without this strong aversion, one may be tempted to inflict harms later that do not produce optimal results but are merely for personal advantage.<sup>48</sup> However, consequentialists fail to explain why some ends are *more* optimal than others. After all, as Nozick observed,

[T]here is no social entity with a good that undergoes some sacrifice for its own good. There are only individual people, different individual people, with their own individual lives. Using one of these people for the benefit of others, uses him, and benefits the others. Nothing more. Talk of an overall social good covers him up (intentionally)?<sup>49</sup>

Not many in the U.S. will be prepared to approve of the utilitarian surgeon killing the healthy patient. If you are not prepared

45. *Id.* at 55.

46. *E.g.*, the Princeton Students Against Infanticide signed a petition to protest the hiring of Professor Singer (*see* <http://www.geocities.com/Athens/Agora/2900/psai.html>). The President of Princeton University addressed the controversy surrounding the hiring of Professor Singer on the Princeton Weekly Bulletin dated Dec. 7, 1998, available at <http://www.princeton.edu/pr/pwb/98/1207/singer.htm>.

47. FRANCIS FUKUYAMA, *OUR POSTHUMAN FUTURE* 154 (Farrar, Strauss and Giroux 2002).

48. The author would like to thank Professor June Carbone of Santa Clara University for pointing out this possible argument from a consequentialist viewpoint. This does not necessarily reflect Professor's Carbone's personal views, and all errors remain the author's own.

49. ROBERT NOZICK, *FROM ANARCHY, STATE AND UTOPIA* (1974), (cited in SCANLON at 140-141, *supra* note 11).

to do so because you think that killing the healthy patient would be wrong, then you are a deontologist at heart; and consequently, you cannot at the same time, accept utilitarianism as a valid theory. If you purport to be a deontologist, the logical conclusion is that it would be equally wrong to knowingly swerve the trolley and kill one bystander to save five passengers.

## 2. Specific Critique of Utilitarianism: Problems with the Disclosure of Inventions and Encouragement of Inventions Rationales

In Part II A above, I noted that the utilitarian theory in patent law is premised on two arguments: patents induce disclosure of inventions; and patents encourage inventions. Here, I will argue that these arguments have their limitations and at most, describe some of the *possible* consequences of the patent law system, but cannot serve as a justification of it.

### a. *Disclosure of Inventions Rationale*

There are three main theoretical grounds<sup>50</sup> of attack with regard to this rationale: i) it is difficult to keep important inventions secret for long; ii) even if the secret is kept, the fact that inventions, by their nature, usually respond to the needs of society, would mean that others would soon come up with the same invention; and iii) the patent system has evolved into a highly expensive and complicated process such that “inventions are in fact only patented only when secrecy is impossible.”<sup>51</sup> A more practical problem with this rationale is that “there is no way of determining whether or to what extent patents prevent the loss of new inventions and ideas to society because inventors would otherwise carry their secrets to the grave.”<sup>52</sup>

### b. *Encouragement of Inventions Rationale*

This rationale runs against the same limitation as the first— it is simply not possible to evaluate or accurately test the proposition that patents encourage inventions. A survey<sup>53</sup> conducted amongst

50. PENROSE, *supra* note 33, at 33.

51. *Id.*

52. *Id.* at 34.

53. PENROSE, *supra* note 33, at 37–38 (describing various investigations ranging from hearings before the Temporary National Economic Committee (United States, 1939), to the investigation of the Zurich Chamber of Commerce on the protection of inventions (Switzerland, 1886) and the proceedings of the Select Committee on Letters Patent, House of Commons

inventors and businessmen came up with a list of nearly equal length of those who favor patents and those who think that patents are neutral or harmful. The only group that was virtually unanimous as to the desirability of the patent law was, unsurprisingly, the patent lawyers!<sup>54</sup>

Overall, the two rationales, that patents both induce and encourage inventions, are tenuous, and at best, describe what happens most of the time. I submit that it is inappropriate to justify the patent system on such tenuous rationales.

*C. Summary: Why Utilitarianism Should Not be a Justification and What about the Constitution?*

Thus far, I have argued that the fact that the patent system has utilitarian consequences does not necessarily mean that utilitarianism *should* be its justification. Just because something is useful does not make it right. In the patent law context, it is highly possible that a patent system whose focus is on rewarding the inventors may conflict with the interests of the common good. By its definition, utilitarianism would resolve this conflict by arguing that common good always prevails. Natural law argues this too, but on an entirely different reasoning that takes into account the natural rights *and* natural duties of the inventor in the process of trying to achieve the common good.

Trying to justify patent law on a natural law approach is a Herculean task though, which flies in the face of almost everything that is on record. Most prominently, there is the Intellectual Property clause in the Constitution and the historical writings evidencing the motivations of the founding fathers.<sup>55</sup> A comparative analysis does not help: except for France in its early years,<sup>56</sup> most other nations also justify their patent systems on a utilitarian theory.

In response, I would point out that it is almost axiomatic that the

---

(United Kingdom, 1871)).

54. *Id.* at 38.

55. JEFFERSON WRITINGS. *supra* note 31.

56. See Frank D. Praeger, *A History of Intellectual Property From 1545 to 1787*, 26 J. PATY. & TRADEMARK OFF. SOC'Y 711, 756-757 (1944) (citing the French 1790 Industrial Property Statute which read: ". . . it would be a violation of the Rights of Man, in their essence, not to regard an industrial discovery as property of its author. . . . Any discovery or new invention, in any kind of industry, is the property of its author." (emphasis added) ( It should be noted, though, that France would later retreat from its view of Rights of Man as a justification of granting property rights in inventions, partly because the 1791 statute "failed to make it clear, why a right, called a property right, should be limited in time". *Id.*

legality or correctness of an act can never be justified by the fact that everyone else is doing it. History has a proper place in the interpretation of laws but heretical as it may sound, I pose the following question: *what if* the founding fathers, wise as they were but nonetheless not infallible, were wrong about the justification of the patent law system? In this regard, we would do well to heed Judge Rich's advice appearing in the preface to a patent law textbook:

Read on and learn all about it, but be careful. I believe that progress in legal thinking is not only possible but essential and that this generation should have a clearer understanding of patent law than previous generations, notwithstanding *stare decisis*. So THINK!<sup>57</sup>

Furthermore, that this was the unanimous view of *all* the founding fathers far from concludes the matter. Although the Intellectual Property Clause<sup>58</sup> was adopted unanimously at the Constitutional Convention of 1787, there was no recorded debate;<sup>59</sup> so arguably, the justification of the clause is still open to debate. In the same way we construe patent claims,<sup>60</sup> it can be argued that Jefferson's view, as expressed in his writings, constitutes only *one of* the extrinsic aids in a proper construction of the Clause. On a plain reading, the clause mentions "securing" exclusive rights to inventors, which implies the idea that such rights are inherent.<sup>61</sup> As for other

57. CHISUM, NARD, SCHWARTZ, NEWMAN & KIEF, *PRINCIPLES OF PATENT LAW* vi. (2d ed. 2001).

58. U.S. CONST. art. I, § 8 cl. 8.

59. BUGBEE, *supra* note 1, at 128; *cf* Ramsey, *supra* note 21 (citing a report in the Annals of Congress of a debate on the Patent Bill. According to Ramsey, one Mr. William D. Murray, a Congressman from Maryland, spoke on the pending Patent Bill on January 30, 1793 as follows:

The law ought to facilitate the granting of patents. . . . A country in Europe (Great Britain), had afforded it was true much experience on the subject; but regulations adopted there would not exactly comport in all respects either with the situation of this country or the rights of the citizens here. . . . There is this strong feature which distinguishes that doctrine in that country from the principles on which we must settle it in this. These patents are derived from the grace of the monarch, and the exclusive enjoyments of the profits of a discovery is not so much a right inherent as it is a privilege bestowed. . . . Here, on the contrary, a citizen has a *right* in the inventions he may make, and he considers the law but as the mode by which he is to enjoy the fruits. *Id.* (emphasis in original).

Subsequent to the adoption of the Constitution, there seems to be some evidence of debate.

60. See *supra* I. PROLOGUE - THE NATURE OF JUSTIFICATION: SUGGESTED METHODOLOGY.

61. See Ramsey, *supra* note 21, at 16 ("The rights of an inventor to his invention at common law were "secure" only so long as he could control them and that was just as long as he could keep his secret. . . . His rights were far from "secure". Therefore, it seems reasonable to conclude that when this clause in the Constitution was drafted, it meant just what it says, that

extrinsic evidence contrary to Jefferson's views, there is also evidence that James Madison,<sup>62</sup> the chief architect of the Constitution, and Charles Pickney<sup>63</sup> had suggested using the words "to secure" and similar rights language.<sup>64</sup>

If one accepts that the utilitarian argument is flawed, it is possible to do one of two things. The first is to adopt a "if it ain't broke, don't fix it" approach. This approach argues, why bother about the esoteric issue of justification when the system works, inventions are at a faster rate than ever before, and society reaps those benefits? To use a mathematical analogy, it is possible, *sometimes*, to arrive at the right answer using the wrong reasoning. In almost every case, one never gets full marks for doing that, simply because the reasoning is wrong. The situation is compounded when it gets to more advanced problems, where one will find that one has no choice but to resort to first principles: "[a] wrong sum can be put right: but only by going back till you find the error and working it afresh from that point, never simply by *going on*."<sup>65</sup>

This is true of the patent system as well. When the problems get more complex, one inevitably returns to the question of justification. So, in a sense, the only viable option remaining is to explore the alternative justifications for the patent system until one finds satisfactory answers.

### III. THE SECOND ALTERNATIVE: NATURAL RIGHTS JUSTIFICATION

In this part, I will examine the natural rights theories which have been raised as an alternative justification for the patent system. I will

---

Congress shall have powers to *secure* their *rights*."). *Id.* (emphasis in the original)

62. Madison's suggestion to the second draft of the Constitution debated on August 18, 1787 was for Congress to have the power "[t]o secure to literary authors, their copyrights for a limited time and to encourage by premiums and provisions the advancement of useful knowledge and discoveries." Ramsey, *supra* note 21. Although the emphasis is on copyrights, Madison later wrote, "The copyright of authors has been solemnly adjudicated in Great Britain to be a right of common law. The right to useful inventions seems with equal reason to belong to inventors." *Id.*

63. Pickney's suggestion for the second draft of the Constitution was that Congress shall have the power "[t]o grant patents for useful inventions and to secure to authors exclusive rights for a certain time." *Id.* Although Pickney's proposal seems to reinforce the view that patents are granted (as a privilege), Ramsey argues that this was an incident of history because at that time, copyrights had received more substantial recognition than patents. *Id.*

64. BUGBEE, *supra* note 1 at 129 ("The language of this Constitutional clause also contained little that was new . . . its immediate ancestry was plainly visible in Madison and Pickney's proposals, which employed such terms as . . . 'exclusive rights' (but not property)"). *Id.*

65. C.S. LEWIS, *THE GREAT DIVORCE* 8 (1946).

argue that a theory that focuses on natural rights without highlighting natural duties is, at best, incomplete. At worst, a natural rights theory runs into the same problem of justification as utilitarianism.

### A. *Natural Rights Theories*

Like its utilitarian counterpart, the natural rights theory comes in various forms but generally, it is the theory that “the rights of inventors are of primary importance and the patent law exists to protect these rights, irrespective of the consequences the grant of the patent would have on the public welfare.”<sup>66</sup> There are two permutations to the natural rights theory which will be explored below. The first is the theory that a patent is the “reward for services rendered” (also known as the “fruit of one’s labor” argument); and the second is a pure natural rights theory of property.

#### 1. Reward for Services Rendered (Fruit of One’s Labor Argument)

This rationale is based on both natural rights and economic rights and can be summarized as follows:

A man has a right to receive, and therefore society is morally obligated to give, reward for his services in proportion as these services are useful to society. Inventors render useful services. An exclusive privilege in the form of a monopoly patent is the most appropriate reward to inventors.<sup>67</sup>

or alternatively,

What a person produces with her own intelligence, effort and perseverance ought to belong to her and no one else. Why is it mine? Well, it is mine because I made it, that’s why. It wouldn’t have existed but for me.<sup>68</sup>

By its definition, this rationale is immediately limited by one problem: if a person has a right to receive a reward for his inventions, how should we measure the amount of the reward? Justifying the patent system on this rationale suggests that market value is the measure of the reward; in other words, *leave it to the market to*

---

66. See CHISUM ET.AL., *supra* note 57.

67. PENROSE, *supra* note 33, at 26.

68. Edwin C. Hettinger, *Justifying Intellectual Property*, 19 PHIL. AND PUB. AFF. 31, 36 (1989).



determine how useful the invention is.<sup>69</sup> The theory here is that because resources are scarce, the price for which people are willing to pay for a good is a reflection of how useful the good is.

However, arguably, this theory is flawed for the following reasons:

- The market price does not always correlate to the labor invested, nor for that matter, to the usefulness of the good: For example, I can spend a lot of time and effort inventing something nobody wants to buy, whereas another may chance upon a bright idea in an evening, which results in an invention that is an instant success.<sup>70</sup> Also, the market price depends on other factors besides one's labor: for example, the income distribution and taste of the people who buy the product, existing substitutes and other institutional arrangements.<sup>71</sup>
- This theory applies only to directly marketable inventions: What about important scientific discoveries which though not marketable, are, nevertheless, used to invent marketable products?<sup>72</sup> Therefore, despite its appeal, this argument is flawed if used as a justification of the patent system, as it "is simply an argument for rewarding inventors, and not at all an argument for the patent method of doing it."<sup>73</sup>

## 2. Natural Rights

The second rationale, which is a pure natural rights justification of property, is slightly more persuasive. Generally, the argument here is

[A] man has a natural property right in his own ideas, the appropriation of which by another should be condemned as stealing. Society is morally obligated to recognize this property right. Property is in essence exclusive, and therefore an exclusive privilege is the only appropriate way for society to recognize this

---

69. PENROSE, *supra* note 33, at 28.

70. *Id.* at 30–31.

71. *Id.* at 30.

72. *Id.*

73. *Id.* at 31.

particular right.<sup>74</sup>

There are two alternative theories that have been advanced as justifying intellectual property as the author/inventor's natural rights, which are briefly described and critiqued below. A detailed critique of each theory is outside the scope of this Article; it will suffice to highlight the limitations in each theory.

*a. Locke's Labor Theory*

An alternative theory that is often advanced today as a justification for intellectual property is the labor theory propounded by English philosopher, John Locke.<sup>75</sup> His theory can be summarized as follows:<sup>76</sup>

1. God gave the earth to people in common;<sup>77</sup>
2. Every person has a property interest in their own person;<sup>78</sup>
3. Every person owns their own labor;<sup>79</sup>
4. Whenever a person mixes their labor with something in the common they make it their property;<sup>80</sup>
5. The right to private ownership is conditional upon a person leaving in the common enough and as good for the other commoners;<sup>81</sup> and
6. A person cannot remove more out of the commons that they can make use of (the "non-waste" condition).<sup>82</sup>

Recall the first natural right rationale mentioned above—that a creator is entitled to the fruits of one's labors. The Lockean theory derives from that notion but expands on it to argue that as the person is entitled to property as just desserts. In the context of intellectual

---

74. *Id.* at 22.

75. See Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287; Jeremy Waldron, *From Authors to Copiers: Individual Rights and Social Values in Intellectual Property*, 68 CHI.-KENT. L. REV. 842 (1993); GORDON, *supra* note 12.

76. PETER DRAHOS, A PHILOSOPHY OF INTELLECTUAL PROPERTY 43, 44 (1996).

77. LOCKE, *supra* note 9, at ch. 5, ¶ 26.

78. *Id.* at ¶27.

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.* at ¶31 ("As much as any one can make use of to any advantage of life before it spoils; so much he may by his labour fix a Property in. Whatever is beyond this, is more than his share, and belongs to others. Nothing was made by God for Man to spoil or destroy."). *Id.*

property, propertization of ideas can be justified by the following propositions:<sup>83</sup>

1. production of ideas requires a person's labor;
2. these ideas are appropriated from a "common" which is not significantly devalued by the idea's removal; and
3. ideas can be made property within breaching the non-waste condition.<sup>84</sup>

The Lockean labor theory has been subjected to much critique,<sup>85</sup> and it is not my intention to dissect the theory in this Article. In the patent law context, natural rights proponents have not been able to surmount at least three major criticisms against a natural rights view of patents.

- *Patent Term* - if patents were natural property rights, why should there be a term limitation? "It would be logical to espouse the cause of perpetual patents—a position which led to unacceptable recognition that it forced the recognition of the social element in the patent grant."<sup>86</sup>
- *Independent Creations* - if the same invention was made independently by another without reference to the first, why should the second inventor be deprived of his natural right to a patent just because he was unlucky enough to be second in time?<sup>87</sup>

---

83. Hughes, *supra* note 75, at 299. One of the objectives of his Article was to test the strength of the Lockean justification. He concluded that Locke's theory presents a powerful but incomplete justification of intellectual property, and that such justification should be complemented by adopting Hegel's personality theory.

84. *Id.*

85. See LAWRENCE C. BECKER, PROPERTY RIGHTS 36–48 (1977); HUGHES, *supra* note 75, at 299–328; Hettinger, *supra* note 68, at 40–45.

86. PENROSE, *supra* note 33, at 24. This was a stumbling block for France. In part because of their inability to reconcile the natural rights of the inventor within the context of the patent system, in 1844, France adopted the utilitarian/social-contract view of patents. Eventually, by 1884, the highest court in France had declared that there was no such thing as intellectual property. Praeger, *supra* note 56, at 734 (citing BULL. COUR DE CASSATION, CIV. 131 (1887)). Praeger observed that the weakening of the notion of intellectual property in France coincided with decline of France's relative industrial strength compared to her neighbors. One can only speculate as to what would have become of the French patent system, had it been able to justify intellectual property more cogently.

87. PENROSE, *supra* note 33, at 27.

- *Justification of Rights* - natural property rights themselves must be justified. Writers have often stopped short at simply endorsing the Lockean labor theory of property rights without more. As I mentioned in the Introduction, one criticism against natural rights is that “rights themselves need to be justified somehow, and how, other than by appeal to the human interests their recognition promotes and protects? This seems to be the uncontrovertible insight of classical utilitarians.”<sup>88</sup>

Hence, a theory that consists solely of natural rights, without considering natural duties, is rooted in a false notion of liberty, and is as extreme in its individualism as utilitarianism is with its overemphasis on the collective good.

b. *Hegel's Personality Theory*

When used to justify intellectual property, the “personality theory” articulated by German philosopher, Georg W. Hegel, has been used to argue that “an idea belongs to its creator because the idea is a manifestation of that creator’s personality.”<sup>89</sup> Elsewhere, the Hegelian theory has been described to be a “personhood perspective;” that is, “to be a person, an individual needs some control over resources in the external environment.”<sup>90</sup> “The necessary assurances of control take the form of property rights.”<sup>91</sup>

It has been noted that this theory does seem to fit easily into the patent law context because one tends to associate inventions with the solution of specific problems, not an expression of one’s personality. For example, it has noted that Thomas Edison searched for the filament material that would burn the longest, not one that would reflect his personality.<sup>92</sup>

Because of copyright law’s concern to protect the expression of an idea, the personality theory seems to be a better fit. However, I agree with Hughes that the state of the art protected by patent law is not all that different from the “art” protected by copyright law<sup>93</sup> and it

---

88. SCANLON, *supra* note 11.

89. Hughes, *supra* note 75, at 329.

90. See Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957 (1981).

91. *Id.*

92. Hughes, *supra* note 75, at 340.

93. See Hughes, *supra* note 75 (arguing for a more expansive justification of intellectual property to include a personality justification. Specifically at 340, he admitted that there were

would be an "oversimplification to think that some genres of intellectual property *cannot* carry personality."<sup>94</sup> For example, writing a computer program can involve some vision; if there are ten ways to write the program, the choice of one method out of the ten may demonstrate personality.<sup>95</sup>

It should be noted that the notion that ideas are a manifestation of the creator's personality is not inconsistent with the Lockean theory. There is at least one writer who argues that Locke "perceived the fruits of labor to be an extension of the laborer's personality, and since it was therefore part of the laborer's sphere of personality or "suum," it should be protected from harm."<sup>96</sup> It is submitted that even if the inventor's personality is manifested in the invention, the Hegelian theory encounters the same difficulties faced by the Lockean theory, when applied in the patent law context.<sup>97</sup> Finally, I respectfully disagree with Professor Radin's interpretation of "personhood," her claim that "to be a person—an individual needs some control over resources in the external environment."<sup>98</sup>

Intuitively, it is possible that a person may *feel* that his existence is validated by his control over the external, but that is different from asserting that one's control over the environment is what makes him a person. This conclusion will not go down well with many, but it seems to be a logical extension of Professor Radin's personhood perspective.

Other alternative definitions of personhood seem more persuasive: one is the Judeo-Christian concept of human beings as being made in the image of God, possessing qualities of reason, and the knowledge of good and evil.<sup>99</sup> In other words, personality is what separates humans from animals, that is, a human being, characterized by his rationality, is an "end-in-itself."<sup>100</sup>

---

"more difficult problems for the personality justification" posed by "technological categories of intellectual property" like patents, but argued that such technology "may not be categorically different" from what is protected by copyright (like atlases and maps)).

94. *Id.* at 342.

95. *Id.*

96. GORDON, *supra* note 12 at 1609 (citing Karl Olivecrona, *The Term "Property" in Locke's Two Treatises of Government*, 61 ARCHIV FÜR RECHTS-UND SOZIALPHILOSOPHIE 109, 112-14 (1975)).

97. *See* BECKER, *supra* note 85.

98. Radin, *supra* 90, at 957.

99. JAMES W. SIRE, *THE UNIVERSE NEXT DOOR: A BASIC WORLDVIEW CATALOG* 27 (Intervarsity Press 1997).

100. *See* Wright, *supra* note 23, at 1860 ("Natural law theory is based on rational reflection on the nature, conditions and experience of being a human being in a world with such

Overall, I agree with the Hegelian theory insofar as it describes one's ideas as being a manifestation of one's personality but it is not substantial enough to justify the proprietization of intellectual labor. Hughes, who advocates adopting both the Hegelian and Lockean theories, admits that there are weakness in the Hegelian theory: "a property system protecting personality will have difficulty finding indicia for when people do and do not have a "personality stake" in particular objects.<sup>101</sup> The personality justification also leaves some nagging theoretical questions."<sup>102</sup>

#### IV. THE THIRD ALTERNATIVE: NATURAL LAW JUSTIFICATION

##### *A. Classical Natural Law: A Suggested Predicate*

Thus far, I have explored both the utilitarian and natural rights justifications and found them lacking. The utilitarian justification focuses on promoting inventions without due emphasis on the inventor. On the other hand, the natural rights justifications focuses on the rights of the inventor without due emphasis on the duties of the inventor to the society at large. I submit that this conundrum cannot be resolved until one accepts natural law as the starting point.<sup>103</sup>

In this Part, I will first justify the relevance of natural law to the patent system. Next, I will explore some of the natural law theories of property which influenced the writings of John Locke. A major influence on Locke was the Dutch international law jurist, Hugo Grotius<sup>104</sup> (1583-1645). Hugo Grotius, in turn, drew much of his inspiration from St. Thomas Aquinas<sup>105</sup> (1225-1274).

Second, I will then deal with some objections to natural law.

---

other beings. As Finnis states, "By nature – that is, precisely as human beings, - all human beings are both free and equal. "Free" here refers both to the radical capacity for free choices. . . to be free is to be – unlike a slave – an end in oneself."). *Id.*

101. Hughes, *supra* note 75, at 339.

102. *Id.*

103. See GORDON, *supra* note 12 (adopting Locke's theory of natural law as a way of reconciling individual and public rights). Gordon looks at natural law norms outside Lockean theory and argues that a "properly-conceived" natural rights theory is necessarily concerned with the rights of the public as well as with the rights of those whose labors create intellectual products. Her essay, however, centers on copyright, reinforcing my observation on the scarcity of writings focusing on patent law jurisprudence.

104. See HUGO GROTIUS, *DE JURE BELLI AC PACIS LIBRIS TRES* (1625) (THE RIGHTS OF WAR AND PEACE (F.W. Kelley, et. al. trans., Classics of International Law. New York: Oceana, 1964)) [hereafter, *De Jure Belli Ac Pacis*]]. This seminal work instituted a new approach to questions of justice, especially international justice.

105. AQUINAS, *supra* note 13.

And finally, I will argue that natural law *is* relevant to the U.S. patent system. If a conscientious effort is made to think along such lines, one may find that natural law provides some answers to the hard questions which have not yet been satisfactorily answered by other theories.

## 1. The Relevance of Natural Law

### a. *The Purposes of John Locke*

Even those who support a Lockean system of intellectual property law sometimes miss the point of why John Locke wrote his TWO TREATISES OF GOVERNMENT in the first place. In his title page, he clearly wrote that it was to refute the “false principles and foundation of Sir Robert Filmer.”<sup>106</sup>

Filmer (1588-1653) was a supporter of the monarchy and his theory, based on the right of fatherhood,<sup>107</sup> argues that the Monarch, who is the Father over many families “holds a natural, unlimited and arbitrary right of private property.”<sup>108</sup> Locke opposed this view because of his belief in creationism—that because man is born subject to God, not to man, he is born equal without subordination and subjection.<sup>109</sup> Hence, Locke’s purpose in writing his Treatise was to refute the idea of an absolutist and arbitrary rule of government and re-establish natural law and the equality of man into political theory. It is therefore, entirely relevant to look to the natural law tradition from which Locke drew inspiration.

### b. *The U.S. Constitution and its Emphasis on Justice*

The second reason why natural law is possibly relevant to the patent law system can be located in the preamble of the Constitution. Attempts to justify the patent system have always focused on the Intellectual Property clause.<sup>110</sup> However, it should be noted, that

106. LOCKE, *supra* note 9, at 154.

107. JAMES TULLY, A DISCOURSE ON PROPERTY: JOHN LOCKE AND HIS ADVERSARIES 59 (Cambridge University Press 1980 (Filmer bases his right of fatherhood on the art of begetting “[E] very Man that is born so far from being free, that by his very Birth he becomes a subject of him that begets him.”). *Id.*

108. *Id.*

109. LOCKE, *supra* note 9, at 1.53 (“They who say the Father gives Life to his Children, are so dazzled with the thoughts of Monarchy, that they do not, as they ought, remember God, who is the Author and Giver of Life: ‘Tis in him alone we live, move and have our being’ [Acts 17:28]”). *Id.*

110. U.S. CONST. art. I, § 8, cl. 8.

clause and all other articles in the Constitution are preceded by the overarching general principles of the preamble, which states that the Constitution was established in order to "... establish Justice . . . promote the general Welfare, and secure the blessings of Liberty."<sup>111</sup> The notion of justice and promoting general welfare (or the common good) are one of the main concerns of natural law.<sup>112</sup> Accordingly, it is arguable that the promulgators of the Constitution intended to depart as little as possible from the principles of natural law.

*c. The Common Law Roots of the U.S. Patent System*

Thirdly, there is strong evidence to suggest that the U.S. patent system, modeled after the English Statute of Monopolies, has common law roots. The common law is originally based on natural law and in particular, Christian principles.<sup>113</sup> It is arguable, therefore, that natural law is a relevant consideration to the patent law inquiry.

It is generally believed that the U.S. patent system in its infancy was largely influenced by and modeled after the English patent system.<sup>114</sup> It is believed that the framers of the first U.S. Patent Act of 1790 knew of no other form of European patents, with the limited exception of French patent laws and the English common law relating to patents.<sup>115</sup>

It is therefore relevant to consider how the English patent system developed. It has been somewhat erroneously suggested that the English Statute of Monopolies of 1624 was the basis of the English patent system.<sup>116</sup> The beginnings of the English patent law system

111. U.S. CONST. pmb1.

112. Wright, *supra* note 23 ("In both theory and everyday practice, the concept of justice has long been thought to encompass not merely a formal equality. . . but also a substantive equality. . . The elaboration of this substantive equality and its implications for morality, justice and law form the core of the "natural law" (or "natural right") theory of law. . ."). *Id.*

113. See JOHN C.H. WU, FOUNTAIN OF JUSTICE 63-131 (1955) (tracing the connection between Christianity and the common law. He stated that in his opinion, "while the Roman law was a deathbed convert to Christianity, the common law was a cradle Christian"). *Id.* at 65.

114. See Walterscheid, *supra* note 28, at 698.

115. LOCKE, *supra* note 9.

116. Walterscheid, *supra* note 28, at 849 n.2) (citing CHRISTINE MACLEOD, INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM, 1600-1800 (Cambridge 1988)). Section 6 of the Statute of Monopolies provides an exception against monopolies:

Provided also, and be it declared and enacted, that any declaration, before-mentioned, shall not extend to any letters patent and grants of privilege for the term of fourteen years, or under, hereafter to be made, of the sole working or making of any manner of new manufactures, within this realm, to the true and first inventor and inventors of such manufactures. . .



can be found in its common law tradition, most notably in the 1602 case of *Darcy v. Allin*,<sup>117</sup> known otherwise as *The Case on Monopolies*, and by a later 1615 case of *The Clothworkers of Ipswich*.<sup>118</sup>

The critical contribution of *Darcy v. Allin* (endorsed by *The Clothworkers' case*) was its pronouncement of an exception to the rule that monopolies were *prima facie* against the common law and statutes of England:

. . . [w]here any man by his own charge and industry, or by his own wit or invention doth bring any new trade to the realm . . . and that for the good of the realm: that in such cases, the king may grant to him a monopoly patent for some reasonable time, until the subjects may learn the same. . .<sup>119</sup>

Hence, a view that a patent's legal status derived entirely from the Statute of Monopolies in 1623 is erroneous because "letters patent for invention had legal status under common law, and the Statute was largely a recapitulation of that law."<sup>120</sup>

The common law, itself, was based on classical natural law. Lord Coke, the rumored author of the Statute of Monopolies, declared that the "law of nature is part of the law of England"<sup>121</sup> and that the "law of nature is that which God at the time of creation of the nature of man infused into his heart for his preservation and direction; and this is the *lex aeterna*, the moral law, called also the law of nature."<sup>122</sup> And finally, it is submitted that natural law is relevant because arguably, it is the only theory that is able to adequately and coherently explain many of the more troubling questions which are explored below.

*Id.*

117. *Darcy v. Allin*, 74 Eng. Rep. 1131 (K.B. 1602). In this case, a patent was originally granted to one Bowes and another, Bedingfield in 1576, which was reissued in 1578 and in 1588 was reissued to Bowes alone. Bowes died before the expiration of the full term, so in 1598, the patent was reissued to Darcy with a term of 12 years. The objection here was on the monopoly held by the inventors.

118. *Clothworkers of Ipswich Case*, 78 Eng. Rep. 147 (K.B. 1615) (endorsing *Darcy*, 74 Eng. Rep. 1131).

119. *Darcy*, 74 Eng. Rep. at 1139.

120. Walterscheid, *supra* note 28, at 880; BUGBEE, *supra* note 1, at 39 ("The chief contribution made by the Statute of Monopolies of 1624 was to clarify and reinforce the *existing* English law concerning patents of invention.") (emphasis added).

121. WU, *supra* note 113 at 91 (citing Lord Coke in *Calvin's Case*, 77 Eng. Rep. 377 (K.B. 1608)).

122. *Id.*

## 2. What is Classical Natural Law?

There are different variations of natural law,<sup>123</sup> but the essence of natural law can be summarized as follows: “Natural law is an assertion that there are objective moral principles which depend upon the nature of the universe and which can be discovered by reason.”<sup>124</sup>

### a. Grotius’ Natural Law View of Property

Grotius starts from the premise that the nature of law is a divine creation.<sup>125</sup> To him, law is not arbitrary, even though it is the command of an arbitrary divine ruler, because “He has drawn up certain laws not graven on tablets of bronze or stone but written in the minds and on the hearts of every individual, which even the unwilling and refractory must read them.”<sup>126</sup>

A very brief summary of Grotius’ theory of property can be stated as follows:

1. God conferred the natural world for the use of human beings, in so far as that use is necessary for their preservation.<sup>127</sup>
2. The term “property” (or its Latin equivalent, *dominium*) did not always have the same meaning of exclusivity or private ownership as it does today.<sup>128</sup> In the early days,

123. Very briefly, the history of natural law has four phases: that of ancient stoicism (Aristotle, Cicero), that of the Middle Ages (Aquinas); that of 17<sup>th</sup> and 18<sup>th</sup> century Protestant Europe and finally, that of contemporary, mainly Catholic-inspired attempts at revival (Fuller; Finnis).

124. M.D.A. FREEMAN, *LLOYD’S INTRODUCTION TO JURISPRUDENCE* 80 (6<sup>th</sup> ed. 1994).

125. HUGO GROTIUS, *MARE LIBERUM*, GROTIUS ON THE FREEDOM OF THE SEAS 53 (R.V.D. Magoffin, trans., New York: Oxford University Press, 1916) (1609) [hereinafter, *MARE LIBERIUM*]. Note that *MARE LIBERIUM* was published in 1609 but the discovery of the unpublished treatise *DE JURE PRAEDAE COMMENTARIUS* in 1864 showed the former work to be essentially Chapter 12 of the latter. See STEPHEN BUCKLE, *NATURAL LAW AND THE THEORY OF PROPERTY* 6, n12 (Clarendon Press, Oxford 1991). The principal aim of *MARE LIBERUM* to criticize the Portuguese who opposed the principle of freedom of the seas; but for our purposes, we will focus on Grotius’ appeal to the law of nature to justify his position.

126. *Id.* at 2.

127. *Id.* at 2; see also HUGO GROTIUS, *DE JURE BELLI AC PACIS* I. 1, (“Some things belong to us by a right common to mankind, others by our individual right.”) [hereinafter, *DE JURE BELLI AC PACIS*].

Soon after the creation of the world, and a second time after the Flood, God conferred upon all the human race a general right over things of a lower nature . . . The enjoyment of this universal right then served the purpose of private ownership; for whatever each had thus taken for his own needs another could not take from him except by an unjust act.

*Id.* at II.2.ii.3.

128. *DE JURE BELLI AC PACIS*, *supra* note 127, at 226–27:

“property” was a universal use-right, that is, it was merely the power to make use of what was not privately used.

3. The practice exercising the use-right evolved to become a form of private
4. property because some things, once used up, cannot be re-used, without a diminution of their value. To some degree, using may amount to using up, which leads to the exclusion of use by others. A key feature of his property theory is the fact that the creation of “the law of property was established to imitate nature.”<sup>129</sup>
5. Hence, although occupation is a conventional way of acquisition of property,<sup>130</sup> it is by no means the only way, because there was something natural about the development of the institution of private property from the basic and inherent human right to use the material world and no agreement was needed.<sup>131</sup>
6. “Rather, all that was necessary was labor of some kind. Men had physically to take possession of the material object or to alter it in some way: with respect to movables, occupancy implies physical seizure; with respect to immovables, it implies some activity involving construction or the definition of boundaries.”<sup>132</sup>

---

It must be understood that, during the earliest epoch of man’s history, ownership [*dominium*] and common possession [*communio*] were concepts whose significance differed from that now ascribed to them. For in the present age, the term ‘ownership’ connotes possession of something peculiarly one’s own . . . whereas the expression ‘common property’ is that assigned to several parties . . . with reference to the early age, the term ‘common’ is nothing more nor less than the simple antonym of ‘private’ [*proprium*]; and the word ‘ownership’ denotes the power to make use rightfully of common [i.e. public] property.

129. MARE LIBERUM, *supra* note 125, at 25; *see also* DE JURE BELLI AC PACIS, *supra* note 118, at 229:

The recognition of the existence of private property led to the establishment of a law on the matter, and this law was patterned after nature’s plan . . . This process known as ‘occupation’ [*occupatio*], a particularly appropriate term in connexion with those goods which were formerly at the disposal of the community.

130. Note though that Grotius’ main purpose of writing MARE LIBERUM was to argue for the freedom of the seas, and he achieved his purpose by arguing that since the sea could not be occupied in a way that imitates nature, the seas should be free.

131. *See* RICHARD TUCKER, NATURAL RIGHTS THEORIES: THEIR ORIGINS AND DEVELOPMENT 61 (Cambridge University Press 1979).

132. *Id.* at 62 (citing HUGO GROTIUS, DE IURE PRAEDAE COMMENTARIUS 217 (James

7. A caveat to his theory of property was that the concept of the original use-right constrains private ownership through the *right of necessity*,<sup>133</sup> which comes in two forms: i) the right to use things which have become the property of another;<sup>134</sup> and ii) the right to such acts as human life requires.<sup>135</sup>

Grotius justified the first necessity by looking at the purpose for which private property was instituted:

We must, in fact, consider what the intention was of those who first introduced the individual ownership; and we are forced to believe that it was their intention to depart as little as possible from natural equity. For as in this sense even written laws are to be interpreted, much more should a point of view prevail in the interpretation of usages which are not held to exact statement by the limitations of a written form.<sup>136</sup>

By linking natural equity to property ownership, Grotius presents a model of property ownership that seeks to balance private and universal use rights.

#### *b. Natural Law as articulated by Aquinas*

Just as Locke built upon the works of Grotius, the latter similarly built his theory, particularly his idea of necessity, on the foundation laid by St. Thomas Aquinas.<sup>137</sup> It is therefore relevant to consider Aquinas' views on natural law and on property.

Aquinas divided law into four categories: (1) the divine law (*lex aeterna*), which is divine reason that is known only to God; (2) the eternal law (*lex divina*), which is the law of God found in Scriptures; (3) the natural law (*lex naturalis*) which consists of participation in

Brown Scott ed., Gladys L. Williams trans., 1964)). Note that Locke's labor theory develops and expands upon this theory and makes it the centerpiece of his labor theory.

133. Grotius was clearly influenced by Aquinas when he articulated the right of necessity. Grotius interprets the right of necessity to mean that there is no general duty imposed on the property holder to secure the welfare of the less fortunate but it operates in situations of direst need and not when the need is genuinely unavoidable (for example, a needy is not entitled to take from another in equal need, and it is to be treated as a debt to be repaid if possible.) See BUCKLE, *supra* note 125, at 47 (citing DE JURE BELLI AC PACIS II.2.vii and II.2.viii-ix).

134. DE JURE BELLI AC PACIS, *supra* note 127, at vi.

135. *Id.* at xviii. It has been argued that Grotius seems to treat this second necessity as the right to trade in necessities, and is directed against politicians from restricting trade in such necessities. The interpretation concludes that it is not a right to free trade per se but a right to trade in necessary goods and to pay a fair price for them. See BUCKLE, *supra* note 125, at 48.

136. DE JURE BELLI AC PACIS, *supra* note 127, at II.2.vi.1 (emphasis added by author). BUCKLE, *supra* note 125, at 46.

the eternal law by rational creatures; (4) and human law (*lex humana*) which is positive law or human legislation, which is an application of natural law to practical living, necessary to force selfish people to act reasonably.<sup>138</sup> Under natural law, justice determines whether a piece of legislation is law or not: a law that is unjust is not law at all.<sup>139</sup>

My focus will be on trying to bridge natural law with human law in the context of patent law. This approach is not new, at least not in the context of copyright law.<sup>140</sup> For instance, Professor Gordon has argued for a natural law approach towards copyrights by utilizing the Lockean proviso of “enough and as good for.”<sup>141</sup>

I shall, however, argue further that because of the unitary nature of Aquinas’ theory of laws, the eternal law, found in the Scriptures, is equally relevant. At this point, the reader may be tempted to stop reading especially if he or she does not espouse any religious viewpoints or espouses one other than Christianity. I shall try to confine my arguments as much to natural reason and not require the reader to assume any faith. I shall, however, try to “steer between the Scylla<sup>142</sup> of imposing [my] faith upon others, as though it were a matter of logical reasoning so that it would be irrational to reject it, and the Charybdis<sup>143</sup> of refraining from altogether speaking about it, as though faith were entirely irrelevant to the science of law.”<sup>144</sup>

### c. Aquinas’s View on Private Property

Aquinas’s treatise does not formally specify how property rights are acquired, in fact, the Lockean and Hegelian theories of property acquisition are foreign to him.<sup>145</sup> Aquinas, in fact, did not believe that

138. AQUINAS, *supra* note 13, at II Q91.

139. See BRIAN BIX, JURISPRUDENCE – THEORY AND CONTEXT (Carolina Academic Press, 2d 1999) (citing Augustine as saying “A law that is unjust seems not to be a law.”).

140. See GORDON, *supra* note 12.

141. GORDON, *supra* note 12, at 1562 (“The provision that “enough and as good be left” lies at the center of this Article’s thesis: that creators should have property in their original works, only provided that such grant of property does no harm to other person’s equal abilities to create or draw upon pre-existing cultural matrix and scientific heritage.”).

142. In Greek mythology, Scylla was a sea monster who lived underneath a dangerous rock at one side of the Strait of Messina, opposite the whirlpool, Charybdis.

143. Charybdis was another monster which sucked water in and out three times a day. Both Scylla and Charybdis formed a dangerous threat to passing ships. The reference to “between Scylla and Charybdis” means to be in a position where the avoidance of danger leads to another.

144. WU, *supra* note 113, at 222.

145. JOHN FINNIS, AQUINAS 189 (Oxford University Press 1988).

everyone had a property in his “own” body.”<sup>146</sup> However, Aquinas’s justification of property is somewhat similar to Locke’s theory because he recognizes “taking possession” as a basis of legitimate possession because it is an appropriation of “what from the outset was ‘common’” (i.e. available to all).

It is instructive to set out in full Aquinas’ answer to the question “Is it lawful for a man to possess something as his own?”

Two things are competent to men in respect to exterior things. One is the power to procure and dispense them and in this regard it is lawful for man to possess property. Moreover this is necessary to human life for three reasons. First because every man is more careful to procure what is for himself alone than which is common to many or to all: since each one would shirk the labor and leave to another which concerns the community, as happens where there are a great number of servants. Secondly, because human affairs are conducted in more orderly fashion if each man is charged with taking care of some particular thing himself, whereas there would be confusion if everyone had to look after any one thing indeterminately. Thirdly, because a more peaceful state is ensured to man if each one is contented with his own. Hence it is to be observed that quarrels arise more frequently where there is no division of things possessed.

The second thing that is competent to man with regard to their external things is their use. In this respect man ought to possess external things, not as his own, but as common, so that to wit, he is ready to communicate them to others in their need.<sup>147</sup>

Aquinas’s theory of private property can thus be summarized as follows:

1. There is a hierarchy of goods and private property is only a part thereof.<sup>148</sup> The highest good is God, who is the absolute good.<sup>149</sup> There are relative goods: i) goods of the soul, ii) goods of the body, and iii) external goods. Private property falls into the third category.<sup>150</sup>

146. Aquinas may have a point here: even accepting Locke’s labor theory *arguendo*, since we are the product of our parents’ labor, why should we own our bodies?

147. AQUINAS, *supra* note 13, at Iia–Iiae, a.66 art.2.

148. See WILLIAM J. McDONALD, *THE SOCIAL VALUE OF PROPERTY ACCORDING TO ST. THOMAS AQUINAS* 47 (The Catholic University of America Press 1939) (a diagrammatic presentation of Aquinas’ hierarchy of goods).

149. AQUINAS, *supra* note 13, at I a, q6, art. 2.

150. McDONALD, *supra* note 148, at 24.

2. Appropriation or taking possession is one method of gaining ownership to private property.<sup>151</sup>
3. Private property is simply a determination of the indefinite right which all men have to the right use of the goods of the earth.<sup>152</sup>
4. Private property is lawful and necessary because of human nature's contradictory inclinations toward sloth and ambition and therefore, private property is a good way of administering human affairs in an orderly fashion.<sup>153</sup>
5. There are two types of necessity:<sup>154</sup> i) absolute necessity (resources one needs for the very survival of oneself and one's dependents), and ii) relative necessity (which are resources needed to fulfill one's responsibilities, for the support and education of one's relatives and household, for maintaining one's business,<sup>155</sup> profession, or vocation, for launching one's children in such ways of life, for paying one's debts<sup>156</sup> and other genuine necessities).
6. "[E]verything one has is 'held as common' (or in common)" in the sense that it is morally available, as a matter of right and justice to anyone who needs it to survive.<sup>157</sup>
7. One's excess (*residuum*; *superflua*) after making reasonable provisions for both types of necessities mentioned above, are held in common, in the sense that one has a duty of justice (not merely charity)<sup>158</sup> to dispose them for the benefit of the

---

151. Other methods include (a) donation (b) contract (c) will or testament. See AQUINAS, *supra* note 13, at Ia-IIae q. 105 art 2.

152. MCDONALD, *supra* note 148, at 29.

153. AQUINAS, *supra* note 13.

154. *Id.* at II-II q. 32 a. 5c.

155. *Id.* at II-II q. 32 a. 6c.

156. *Id.* at II-II q. 31 a. 3.

157. FINNIS, *supra* note 145, at 191.

158. *Id.* at 192 n. 26 ("Misleadingly (in some respects), Aquinas' main treatment of the duty to make one's goods available to the poor (II-II a.31 a. 3, q. 32 aa.5-10) is under the heading of 'charity' (love of God and neighbor) rather than 'justice,' although it is outlined again under justice (II-II a. 66 a.7)").

poor.<sup>159</sup> The poor have a natural right that the whole of this residuum be distributed in their favor.<sup>160</sup>

8. Finally, the true measure of one's needs is based on the bona fide judgment of a practicable reasonableness, which includes general justice and love of neighbor as one oneself.<sup>161</sup>

### 3. Objections to a Natural Law Approach

A natural law approach is not problem-free; the same generality which makes the natural law approach versatile in handling difficult issues also makes a consistent application almost impossible. However, these flaws pale in comparison with two fundamental obstacles that may hinder the adoption of a natural law jurisprudence: first, the problem of God, which is a fundamental premise in classical natural law; and second, the seeming impossibility of objectivity in an increasingly skeptical world.<sup>162</sup>

#### *a. Source of the Higher Law – What about Atheists and Agnostics?*

Classical natural law, as espoused by Aquinas, Grotius, and Locke, assumes the existence of God and His gift of the commons for the benefit of mankind.<sup>163</sup> Understandably, one objection may be that this approach is unacceptable in a secular and pluralistic society. To this objection, I proffer the following responses for consideration:

First, it is submitted that classical natural law is rooted both in faith *and* reason.<sup>164</sup> Whilst these theories attribute the ultimate source

159. *Id.* at 192.

160. AQUINAS, *supra* note 13, at II–II q. 66 a. 7c.

161. FINNIS, *supra* note 145, at 194.

162. See Andrew Phang, *Security of Contract and the Pursuit of Fairness*, 16 JOURNAL OF CONTRACT LAW 158, 174–183 (discussing the existence of God and the problem of objectivity).

163. AQUINAS, *supra* note 13 (referencing the divine and eternal law). Grotius premised his thesis on “by the law of the nations navigation is free to all persons whatsoever” because God Himself says this speaking through the voice of nature. . . so that by the decree of divine justice it was brought about that one people should supply the needs of another. MARE LIBERIUM *supra* note 125, at 7. LOCKE, *supra* note 9, at 303 (“God, who hath given the World to Men in common hath also given them reason to make sue of it to the best advantage of Life and convenience.”).

164. It has been argued that the reconciliation of faith and reason is a central feature of Aquinas' work. See Phang, *supra* note 162, at 176 (quoting AQUINAS, SUMMA CONTRA GENTILES, Bk 1, ch. 7 (“Now although the truth of the Christian faith. . . surpasses the capacity



of law to God, they also derive and justify principles of law and legal institutions from reasonable observations about human nature and acknowledge the advantages and necessity of society,<sup>165</sup> a fact that is also explicitly acknowledged by the utilitarians.

Second, earlier, I submit that many who claim to be utilitarianists are, *in fact*, deontologists.<sup>166</sup> If this is true, I further submit that deontologists are only one step removed from the classical naturalist's view of a higher law that is rooted in God. True, there will be competing theories about what that "higher standard" should be, but it cannot be denied that in every case, whether it be a philosophical debate, a mundane quarrel or in the patent context, an original inventor whose novel ideas are stolen, the intuitive appeal is always to a standard of fairness and justice.

But the nagging question is, how did you get the idea that things are fair or unfair? It has been argued that "[a] man does not call a line crooked unless he has some idea of a straight line."<sup>167</sup> This Article does not intend to debate highly controversial theological issues. Classical natural law, as articulated by Aquinas, believes that "reason can be used to prove that God exists but cannot be used to force persons to believe in that fact, which requires an act of will (in faith) on the part of the persons concerned."<sup>168</sup> It suffices, for my purposes, to convince the reader that there is an objective moral standard out there, even if we all choose to disagree on what that standard is. This brings me to the issue of objectivity.

### *b. Objectivity*

Opponents of classical natural law may argue that objectivity is not possible given the "significant differences of opinion as to the extent of the actual relationship between morality and law in difficult societies."<sup>169</sup> There are also the American Realists, most notably Justice Oliver Wendell Holmes, who hold the view that "[t]he life of the law has not been logic— it has been experience."<sup>170</sup> Another

---

of the reason, nevertheless [the] truth that the human reason is naturally endowed to know cannot be opposed to the truth of the Christian faith. . . . It is impossible that the truth of faith should be opposed to those principles that the human reason knows naturally.")).

165. See *supra* note 13 (summary of Aquinas' theory of property and summary of Grotius' theory).

166. See *supra* Part II B. Cracks in the Historical Justification.

167. C.S. LEWIS, *MERE CHRISTIANITY* 45 (1972).

168. AQUINAS, *supra* note 13, at 2a2ae Q2 art 2.

169. Wright, *supra* note 23.

170. *THE COMMON LAW* 1 (Little, Brown & Co. 1990) (1891).

commonly adopted view, adopted by both the utilitarians and the realists, is that one should divorce the “is” from the “ought” and view the law as a means to social ends, not as an end in itself, and therefore, the law must always be judged in the light of its social purpose.

In response, I submit the following counter-arguments for consideration:

- i. It has been pointed out that a statement that there is no objectivity is, *itself*, an objective statement.<sup>171</sup>
- ii. It is true that there are many disagreements about what are the “oughts” and “ought nots.” Seemingly, this disagreement reinforces the case against the possibility of objectivity; yet, I submit that the very fact that this disagreement exists proves the case for objectivity.<sup>172</sup> To use a recent example, most countries condemned the September 11 attack on the U.S. Nonetheless, in the subjective minds of the terrorists involved, that was the right thing to do. Is this reasoning acceptable to the subjectivist camp? I suspect not. My point is that when the issue becomes no longer abstract but personal, one inevitably tries to appeal to a standard that is objectively good, bad, or decent, and in doing so, proves the reality of an objective moral standard.
- iii. Coming back to the U.S. patent system, it is a central tenet of the patent system that objectivity is both possible *and* mandatory.<sup>173</sup> Its focus on rewarding the true inventor, and awarding patents only to inventions

---

171. See Phang, *supra* note 162 (arguing about the inevitability of objectivity (“Indeed, even the argument that there are no objective truths is itself a truth-claim.”)).

172. See C.S. LEWIS, *supra* note 167, at 25 (giving an example of a disagreement between two people about which of their idea about New York is more or less true, and arguing that the reason why your idea of New York can be truer or less true than mine is that New York is a real place, existing quite apart from our imagination). If New York is only a figment of our imagination, then how can any of us have truer ideas than the other. *Id.* Lewis states “I conclude then, that though the differences between people’s idea of Decent Behavior often make you suspect that there is no real natural Law of Behaviour at all, yet the things we are bound to think about these differences really prove just the opposite.” *Id.*

173. See F.O. Richey, *Some Objective Tests*, 27 J. PAT. OFF. SOC’Y 187 (1945) (The recommendation of President Roosevelt’s Patent Planning Commission was that “there shall be a declaration of policy that patentability shall be determined objectively.”).

that are novel, new, useful, and nonobvious are all acts which implicitly reinforce the concept of a set of objective standards.

If you agree that there is *some* validity in my arguments above (even if you do not agree completely with me), then there is some common ground on which we can proceed to explore the development of a natural law jurisprudence for the U.S. patent system.

### *B. Application of Natural Law Principles to the U.S. Patent System*

To develop a natural law jurisprudence in the U.S. patent system requires an identification of general natural law principles that can be worked out into specific working principles. In the following discussion, I will propose three natural law principles that are relevant and applicable to the U.S. patent system. They are the principle of fairness, the duty to act in the interests of the common good, and the principle upholding the sanctity of human life, including that of the human embryo. Under each proposed guiding principle, I will discuss whether the current law is or is not consistent with natural law principle and explore some reforms to the law.

#### 1. Natural law's Equal Emphasis on the Rights of the Inventor (Fairness Principle)

##### *a. Inventors' Rights Under Natural Law*

As argued above, the U.S. patent law system is modeled after the English patent system, which is based on the Statute of Monopolies and the common law with its accompanying natural law concepts. According to Lord Coke's exposition on the Statute of Monopolies, for a patent to be valid under Section 6 of the Statute of Monopolies, it must be "granted to the first and true inventor."<sup>174</sup> Prior to the codification of the common law in 1561, a central justification (apart from the other objective of stimulation of the English economy) of Elizabethan policy was that persons who "introduce new things for the benefit of the public should be rewarded for their efforts in doing so."<sup>175</sup>

---

174. Walterscheid, *supra* note 120, at 876 (citing Lord Coke's Institutes of the Laws of England). "Coke was a major participant in the development of the laws relating to monopolies in the first quarter of the seventeenth century." *Id.*

175. Justine Pila, *The Common Law Invention in Its Original Form* 5, University of

These arguments are consistent with the natural rights theory mentioned earlier. I suggest that the underlying theme here is the principle of fairness, that is consistent with natural law principles.

*b. Inventors' Rights under the U.S. Patent System*

The U.S. patent system has incorporated the natural law principle in 35 U.S.C. § 102: "A person shall be entitled to a patent unless. . . (f) he did not himself invent the subject matter sought to be patented."<sup>176</sup> Under the regulations, the applicant is required to declare under oath that he "believes the named inventor or inventors to be the *original and first inventor or inventors* of the subject matter which is claimed and for which a patent is sought."<sup>177</sup> Indeed, if an inventor is incorrectly listed on or omitted from an issued patent, the patent may be invalid.<sup>178</sup>

However, it is conceivable that a strict application of this requirement may lead to unfair results, for example, where there was an inadvertent mistake<sup>179</sup> or where the patent application was submitted without the true inventor's knowledge (and hence the inventor could not have listed himself).<sup>180</sup> The patent system responded to this unfairness problem by enacting amendments to Section 116<sup>181</sup> and 256,<sup>182</sup> allowing applications to be amended and patents to be corrected where inventors were included or omitted by error and without any deceptive intention.

---

Melbourne, Public Law and Legal Theory, Working Paper No. 18 (2001), available at <http://papers.ssm.com>.

176. 35 U.S.C. § 102 (f) (2002).

177. 37 C.F.R. § 1.63 (a)(3) (2002) (emphasis added).

178. See *Frank's Casing Crew & Rental Tools, Inc. v. PMR Techs., Ltd.*, 2002 U.S. App. LEXIS 10765 (Fed. Cir. 2002).

179. See *e.g.*, *In re Roberts*, 263 F. 646 (1920) (describing a situation where it was proved that a co-applicant who had no part in the invention was included through mere inadvertence). Thankfully, in that case, the courts allowed the true inventor to file a continuation application so that he could receive the benefit of the previous priority date. *Id.*

180. See *Ex parte Benes*, 1925 Commr. Pat. 75, (describing a situation where a sole inventor was not allowed to amend his application to include another inventor).

181. 35 USC § 116 (2002) ("Whenever through error a person is named in an application for patent as the inventor or through error an inventor is not named in an application, and such error arose without deceptive intention on his part, the Director may permit the application to be amended accordingly, under such term as he prescribes.").

182. 35 USC § 256 (2002) ("Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent, and such error arose without any deceptive intention on his part, the Director may. . . issue a certificate correct such error.").

*c. Fairness as a Guiding Principle*

In my opinion, the inventorship provisions of the Patent Act achieves some measure of fairness to the inventor for his contribution, even though it is not entirely problem-free, as is the case with all fact-based inquiries into the intention of parties, the nature of an error and the nature of the invention, and the contribution of each inventor. Notwithstanding these problems, we can derive a principle of fairness to the inventor as a guiding natural law principle in the determination of cases.

It would be illustrative here to discuss the case of *Lough v. Brunswick Corporation*<sup>183</sup> and examine how the fairness principle therein derived can be applied. In this case, a small-time Florida inventor, Mr. Lough, who was also a repairman for a boat dealership, invented a marine propulsion device for boats. He made some prototypes and gave them to his employer and longtime friends (who were also in the marine industry) to install on their boats. He did not charge them for the prototypes nor did he attempt to sell the invention. A year and a half later, he applied for and eventually obtained a patent. The patent infringement suit was filed against Brunswick Corporation, a major corporate player in the marine industry. The jury upheld the patent on grounds that the prior uses were experimental and did not offend the public use statutory bar, and consequently found infringement.<sup>184</sup>

On appeal to the Federal Circuit, the majority reversed the jury decision on experimental use and found the patent invalid.<sup>185</sup> They reasoned that the experimental use exception was a question of law to be determined on a totality of circumstances and, quite reasonably, singled out control as a critical factor. However, the majority went on further to draw a bright-line test: "If he does not inquire about the testing or receive reports concerning the results, he is not experimenting."<sup>186</sup>

Although the majority accepted that on the undisputed findings of facts there was no commercialization, they found that Mr. Lough did not monitor the use of his prototypes, did not keep records or

183. *Lough v. Brunswick Corp.*, 86 F.3d 1113 (Fed. Cir. 1996).

184. *Id.* at 1114 (citing jury verdict at *Lough v. Brunswick Corp.*, No. 92-799-CIV-T-21A (M.D. Fla. 1995) (amended judgment); *Lough v. Brunswick Corp.*, No. 92-799-CIV-T-21A (M.D. Fla. Mar. 27, 1995) (second amended judgment); *Lough v. Brunswick Corp.*, No. 92-799-CIV-T-21A (M.D. Fla. April 13, 1995) (permanent injunction)).

185. *Lough*, 86 F.3d 1113.

186. *Id.* at 1120.

reports. Without such control, the majority found that there can be no experimental use, stating, “[t]he law does not waive statutory requirements for inventors of lesser sophistication.”<sup>187</sup>

The court was not asked to waive any “statutory” requirements or favor less sophisticated inventors. Indeed, to do so would offend another natural law principle that one must have “no arbitrary preferences among persons,” which natural lawyer, John Finnis, defines as a basic requirement of practicable reasonableness.<sup>188</sup> Corporations have the right to have their day in court, provided it is *fair*. It is submitted that if the courts found that there was experimental use, which is really a question of fact that underlies the legal question of whether the public use/on-sale bar applies, it would not be waiving any statutory requirements. The only ‘requirement’ it would be violating is its own rigid interpretation of what “control” means.

An alternative, and in my view, a more enlightened approach, was suggested by the dissenting judge, Circuit Judge Plager. The issue, in his opinion, was “whether in fact the challenged use was experimental”<sup>189</sup> and “whether a reasonable jury, on all the evidence before it, could have arrived at the conclusion it did.”<sup>190</sup> The issue is not whether, on the facts, the courts are “persuaded Lough retained all the control a well-designed test of the seals would have afforded.”<sup>191</sup> Judge Plager opined that although Mr Lough did not put in the “set of tight controls the majority would have wanted,”<sup>192</sup> he did “what seemed appropriate in the setting in which he worked: he waited to hear from his test cases what problems might emerge and, hearing none, at least none that convinced him he was on the wrong track,”<sup>193</sup> he proceeded to patent his invention. In his words:

Yes, he failed to conduct his testing, his experiments with the careful attention we lawyers, with our clean and dry hands, have come to prefer. But, under all the facts and circumstances, it is more likely than not that he was testing and perfecting his device, rather than simply making it available gratis to members of the public for what the law calls “public use”. . . The jury chose to accept Lough’s view of events, and under that view there was

---

187. *Id.* at 1122.

188. See JOHN FINNIS, *NATURAL LAW AND NATURAL RIGHTS* (Clarendon, 1981).

189. *Lough*, 86 F.3d at 1124.

190. *Id.*

191. *Id.*

192. *Id.*

193. *Id.*

more than enough evidence to support a jury finding . . . I believe it is improper and *unjust* to deny Lough his victory at trial on . . . a question properly put to and decided by the jury.<sup>194</sup>

If applied substantively and procedurally, a principle of fairness would have decided the case in favor of Mr. Lough, and not simply because he was a less sophisticated inventor. If anything, it is arguable that in wrongly characterizing experimental use as a question of law, the majority was waiving the statutory requirements to the detriment of less sophisticated inventors.

*d. Equitable Principles under Natural Law*

Equity has been defined as the “power to meet the moral standards of justice in a particular case. . . to mitigate the rigidity of the application of the strict rules of the law.”<sup>195</sup> Historically, the rules of equity were based on the law of God but later, they were based on natural justice or the laws of nature.<sup>196</sup> However, as I argue in this Article, these two concepts are not inconsistent.

*e. Equitable Principles under the U.S. Patent System: Independent Creations*

One dilemma that proponents of a natural rights justification of the patent system could not explain was why a second, independent inventor cannot claim the patent rights.

I submit that it is possible to reconcile this objection applying historically equitable maxims. In this case, one can argue that the law prevails where the equities are equal. Hence, where the inventor can show that he was the first to invent, and did not derive the invention from another, he will be entitled to the invention. In this respect, it is arguable that the U.S. system’s “first to invent” system compared to the “first to file” system adopted by most countries, is superior in terms of giving due consideration to the rights of the inventor.

2. Natural Law’s Emphasis on the Common Good (Duty Principle)

The natural law perspective has substantial roots in the philosophy of Thomas Aquinas. According to Aquinas, “every law is

---

194. FINNIS, *supra* note 188 (emphasis added).

195. MCCLINTOCK ON EQUITY 1 (2d ed. 1948) [hereinafter MCCLINTOCK].

196. *Id.* at 6.

ordained to the common good.”<sup>197</sup> In the Thomistic tradition, positive laws can be derived from natural law in two ways. The first method is direct or indirect deduction, for example, deriving a prohibition against murder from the natural law proposition that the killing of innocent persons is intrinsically unjust.<sup>198</sup> The second method is less direct: the legislator is allowed to derive positive laws, not by deduction, but by applying his practical intellect and creativity to come up with a variety of schemes or legislation which are consistent with natural law.<sup>199</sup>

### a. *The Idea of the Patent System*

The promulgation of patent legislation falls into the second category. From the premise that the laws should promote the common good, and the fact that inventions generally improve the well-being of the society, one can deduce a secondary principle that inventions should generally be encouraged. There are different ways of promoting inventions, for example, the government could fund or undertake research and development themselves.<sup>200</sup> The patent system is another option, and a sensible one too, given the limited resources of the government.<sup>201</sup>

### b. *The Patent Term & “Submarine” Patents*

Having decided on the grant of a patent monopoly as the method of fostering the common good, the idea of having a limited patent term is perfectly justifiable within the legislative scheme. In the modern context, the U.S. patent has a term of 20 years from the earliest filing date.<sup>202</sup> Previously, I noted that the natural rights theorists were unable to explain why there should be a patent term limitation if patents were natural property rights.<sup>203</sup> Under the proposed natural law approach, there is no objection to the idea of

197. AQUINAS, *supra* note 13, at II, Q. 90 Art 3.

198. See GEORGE, IN DEFENSE OF NATURAL LAW (Clarendon Press, Oxford 1999).

199. *Id.*

200. See, e.g., Hettinger, *supra* note 68, at 31–52 (suggesting that “increased government funding of intellectual labor” should be “seriously considered”).

201. *Id.*, Hettinger makes the argument that the use of the patent system is paradoxical because, citing economist Joan Robinson, “. . . the justification of the patent system is that by slowing down the diffusion of technical progress it ensures that there will be more progress to diffuse. . . Since it is rooted in a contradiction, there can be no such thing as an ideally beneficial patent system.”

202. 35 U.S.C. § 154(a)(2) (2002).

203. See *supra* Part II.



having a limited term.

A more constructive topic of discussion may be *how long* that term ought to be. Prior to June 8, 1995, the patent term was 17 years from the date the patent *issued*.<sup>204</sup> This gave rise to the problem of what is commonly known as “submarine patents.” These patents result from applications which are kept pending for many years through appeals and continuations. One objection to this scenario is that the applicant follows the related industry’s development and amends his application so that it covers technology that may not have existed at the time of filing. When these submarine patents eventually issue, the consuming public finds that it suddenly has to bear the added costs of what they have assumed to be patent-free technology.<sup>205</sup>

A recent example of this is the recent case of *Symbol Technologies v. Lemuelson Medical, Education and Research Foundation*.<sup>206</sup> Mr. Jerome H. Lemuelson filed his original patents in 1954 for machine vision and automatic identification technology. His patent eventually issued some 40 years later, after many pending applications. The assignee to the Lemuelson patent tried to enforce a patent that against Symbol Technologies’ bar code scanning technology. On appeal, the Federal Circuit applied the doctrine of prosecution laches and held that the Lemuelson patents, which issued after an unreasonable and unexplained delay in prosecution, were unenforceable.<sup>207</sup> Judge Newman disagreed. In her dissent, she argued that the patentee had fully complied with the statute and rules and therefore, “unless one is prepared to abandon the *rule of law* in favor of *subjective preferences*, when there is a statute, it must prevail.”<sup>208</sup> Judge Newman’s statement makes two assumptions: first, that the majority’s approach is subjective; and second, that the rule of law approach she is proposing is somehow, more objective, and therefore is a superior approach. I respectfully disagree with both.

---

204. In 1994, the United States and other countries agreed to the Trade-Related Aspects of Intellectual Property Agreement (TRIPS) under the Uruguay Round trade negotiation under the General Agreement on Tariffs and Trade (GATT). TRIPS provided that the term of patent protection shall not end before the expiration of a period of twenty years counted from the *filing date*. Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, art.29 (1994) [hereinafter TRIPS].

205. A prominent example is the many patents filed by Jerome Lemuelson, which have been accused of being submarine patents. See K. Ferguson, *20/20 Foresight*, FORBES, Apr. 19, 1999, <http://www.forbes.com/1999/04/19/feat.html>.

206. *Symbol Techs. Inc. v. Lemelson Med.*, 277 F.3d 1361 (Fed. Cir. 2002).

207. *Id.*

208. *Id.* at 1370 (emphasis added).

Contrary to Judge Newman's first assumption, the majority reasoning can, arguably, be justified on objective facts and natural law principles. It may be true that the majority's reasoning, which relied heavily on *stare decisis* instead of principled reasoning, is somewhat weak. However, the majority decision based on the equitable defense of laches is justifiable. The natural law principle that is applicable here is that where "a party has unreasonably delayed the assertion of an equitable claim until the other party has acted. . . so as to result in prejudice because of the delay, equity will hold the party claiming the right to be guilty of laches and will deny relief to him."<sup>209</sup> Given that the Supreme Court found that a prosecution delay of 8 years to be objectively unreasonable,<sup>210</sup> a delay of 40 years should, *a fortiori*, be considered unreasonable.

However, delay alone will not create laches; the delay must result in harm or prejudice.<sup>211</sup> In the case of "submarine patents," the harm can be located in the fact that the public was allowed to assume that the technology was patent-free; inventors and corporations that have invested much in designing around technology are harmed when their patent pending technology is suddenly torpedoed by 'submarine' patents.

As highlighted above, implicit in Judge Newman's dissent is the assumption that the rule of law is an objective and presumably, fairer approach, even though she concedes that "compliance with statutory law can lead to inequity in individual cases."<sup>212</sup> Her approach is not new. The rule of law approach was also purportedly justified as having an "inner morality" by Lon Fuller,<sup>213</sup> who advocated a minimum set of rules which, if complied with, would give laws their of legality.<sup>214</sup> These rules include the need for rules to be promulgated, to be understandable, and for retroactive rule-making and application to be minimized.<sup>215</sup>

---

209. MCCLINTOCK, *supra* note 195, at 69.

210. *See* Webster Electric Co. v. Splitdorf Electrical Co., 264 U.S. 463 (1924).

211. MCCLINTOCK, *supra* note 195, at 69.

212. *Symbol*, 277 F.3d 1361.

213. *See* LON FULLER, *THE MORALITY OF LAW* (New Haven, Conn.: Yale University Press, 1969).

214. *Id.* at ch. 2.

215. Fuller states eight criteria of legality: (1) prospectivity (i.e. non-retroactivity), (2) absence of impediments of compliance with the rules by those subject to them, (3) promulgation of the rules, (4) their clarity, (5) their coherence with one another (6) their constancy through time (enabling people to be guided by the rules), (7) their generality and (8) their congruence between official action and declared rule. *Id.* The controversial aspect of Fuller's theory is his claim that if fulfilled, these criteria constitute an "internal morality of law." *Id.*

The philosophical argument, implicit in Fuller's writing and explicit in Judge Newman's dissenting judgment, is that the procedural approach rule of law, being free of subjective values, is more objective and therefore, preferable. I will make a few comments here.

First, I agree that a legal system based on the rule of law is more likely to guarantee individual liberties than legal systems which do not.<sup>216</sup> Second, their approach is not procedural but substantive, because they make a moral judgment that all values are subjective.<sup>217</sup> As a substantive conception, it runs into the same problem of subjectivity. Finally, and most importantly, as warned by Plato, "whenever the rule of law enjoys ideological prestige evil men will find it convenient to adhere to constitutional procedures and other legal forms as a means of maintaining or enhancing their power."<sup>218</sup> Nazi Germany and apartheid South Africa are examples of the abuse that can take place under the auspices of "law."

In returning to the Lemuelson patent, the question of how the case should have been decided remains. The patent term of 17 years from the date of issue was in fact changed to a term of 20 years from the filing of the earliest application from which priority is claimed after the Uruguay Round of the General Agreement on Tariffs and Trade (GATT).<sup>219</sup> This change was not made applicable to existing patents or to pending applications filed before the effective date of June 8, 1995.<sup>220</sup> Perhaps, for clarity and guidance to the general public, Judge Newman is correct that further restraint on submarine patents should be by statutory change. Pending any statutory change, one can argue that on a natural law approach, submarine patents ought to be unenforceable if there is unreasonable delay which harms the public or if there are other legitimate legal grounds to attack the validity of the patent (for example, if there is no adequate and enabling written disclosure under 35 U.S.C. §112.)

### *c. Pharmaceutical Patents*

One of the challenges that may confront the U.S. patent system

216. For example, procedural laws tend to provide some minimum protection against arbitrariness of government.

217. This, at least, is the implication in Judge Newman's statement that is cited at footnote 206.

218. PLATO, STATESMAN 291a-301d (Martin Ostwald ed. & J.B. Skemp trans., 1957).

219. CHISUM, NARD, SCHWARTZ, NEWMAN & KIEF, PRINCIPLES OF PATENT LAW 831-832 (2d ed. 2001).

220. *Id.*

in the future is what sort of policy it ought to adopt towards pharmaceutical patents in the event of a bioterrorist attack on public health. There are no easy answers but, I will venture a few observations.

I will first state the general perceived U.S. position on pharmaceutical patents, and then discuss the dilemma faced by the U.S. during the anthrax crisis after September 11, 2001. Finally, I will examine the legal position after the November 2001 Doha Declaration on the TRIPs Agreement. I will argue that the Doha Declaration, instead of being a move in the “wrong direction” as some critics say,<sup>221</sup> is consistent with the natural law approach, notwithstanding the fact that there are details that require further fine-tuning.

#### i. U.S. Policy on Pharmaceutical Patents

The U.S. has traditionally taken a protective stance towards pharmaceutical patents, whereas the developing countries, especially those affected by the HIV/AIDS epidemic, have argued for a relaxation in patent protection.<sup>222</sup> The arguments for both sides are compelling. Developing nations, especially sub-Saharan Africa, have staggering figures to show the severity of the AIDS epidemic.<sup>223</sup> “Much of the problem is attributed to the prices charged by pharmaceutical companies for their patented medications.”<sup>224</sup> On the other hand, developed nations and pharmaceutical companies argue that relaxing patent protection reduces incentives for research and in the long-run, harms both developing and developed nations.<sup>225</sup> Furthermore, developed nations point to the TRIPs Agreement, where

221. Alan O. Sykes, *TRIPs, Pharmaceuticals, Developing Countries and the Doha “Solution,”* Univ. of Chicago, John M. Olin Law & Economics Working Paper No. 140 (2002), <http://papers.ssrn.com/>

222. E.g., the U.S. often accuses developing nations of piracy, and has initiated unfair trade cases against such countries for inadequate intellectual property protection. See Alan O. Sykes, *Constructive Unilateral Threats in International Commercial Relations: The Limited Case for Section 301*, 23 L. & POL’Y INT’L BUS. 263 (1992).

223. According to UN statistics, sub-Saharan Africa is the worst affected region, being home to “29.4 million people living with HIV/AIDS. Approximately 3.5 million new infections occurred there in 2002, while the epidemic claimed the lives of an estimated 2.4 million Africans in the past year. Ten million young people (aged 15–24) and almost 3 million children under 15 are living with HIV.” UNAIDS Fact Sheet 2002, [http://www.unaids.org/worldaidsday/2002/press/factsheets/FSAfrica\\_en.doc](http://www.unaids.org/worldaidsday/2002/press/factsheets/FSAfrica_en.doc).

224. Sykes, *supra* note 221, at 1.

225. Some industrial surveys have arrived at this conclusion. See C. TAYLOR & Z. SILBERSTON, *ECONOMIC IMPACT OF THE PATENT SYSTEM* 250–252, 263–266 (Cambridge University Press 1973).

developing countries agreed that patents must be made available to “all inventions, whether products or processes,” and should last “at least twenty years from the date of the filing of a patent application.”<sup>226</sup>

ii. The U.S. Dilemma During the Anthrax Crisis

In 2001, the U.S. was confronted with threats of bioterrorism when anthrax-contaminated mail was discovered, causing the deaths of five people, and creating panic in a nation which was still reeling after the tragedy of the September 11 attacks. Perhaps for the first time, the international debate between developed and developing countries over what constitutes the “common good” became an intense domestic debate.<sup>227</sup>

Bayer held the patent to ciprofloxacin (Cipro) which was generally recognized as an effective vaccine against anthrax. The anthrax scare had sent tens of thousands of people rushing to purchase Cipro, causing a national shortage and fears that there were insufficient Cipro to go around.<sup>228</sup> One possible solution was to purchase generic Cipro.<sup>229</sup> However, generic Cipro has not been approved for manufacture by the Food and Drug Administration (FDA) even though some companies had purportedly met the safety requirements.<sup>230</sup> The Hatch Waxman Act prevents generic drug companies from proceeding with an abbreviated new drug application if there was an unexpired patent and the patentee opposed the introduction of generics. Bayer’s patent on Cipro is still valid and expires only in December 2003.<sup>231</sup>

The legal issue faced by the federal government, in particular, the Health and Human Services Department (HHS), was whether they could override Bayer’s patent. Applying FDA laws would uphold Bayer’s patent, but applying another federal law would mean the federal government could essentially override Bayer’s patent. 28

226. TRIPS, *supra* note 204, at art. 33.

227. See Anthony dePalma, *Handle With Extreme Care*, N.Y. TIMES, Mar. 10, 2002, at § 3.

228. See Jessica Reaves, *Drug of the Moment*, TIME, Oct. 18, 2001, [www.time.com/time/nation](http://www.time.com/time/nation).

229. See Matt Fleischer-Black, *The Cipro Dilemma*, AM. LAW., Jan. 8, 2002, available at <http://www.law.com>.

230. *Id.* (citing Senator Charles Schumer as saying that “at least five companies had facilities approved by the Food and Drug Administration to manufacture the generic versions of Cipro.”).

231. *Id.*

U.S.C. §1498, a historical provision enacted during World War II, allows unlicensed manufacturers to sell their products to the federal government without fear of patent infringement litigation:<sup>232</sup>

[W]henever an invention. . . covered by a patent. . . is used or manufactured by or for the United States without license of the owner . . . the owner's remedy shall be by action against the United States in the . . . Court of Federal Claims for his reasonable and entire compensation for such use and manufacture.<sup>233</sup>

Unlike Canada, the U.S. never had to make a formal stand on the legal issue. When faced with this same issue, Canada initially ignored Bayer's patent and signed an agreement with a generic manufacturer to stockpile Cipro.<sup>234</sup> Canada eventually rescinded their generic deal in return for discounted rates by Bayer, and their deal paved the way for the U.S. government to negotiate a similar deal with Bayer. Eventually, Bayer agreed to sell up to 300 million Cipro tablets at 95 cents per tablet,<sup>235</sup> which was half the original price, resulting in \$82 million in savings for the U.S. government.<sup>236</sup>

During this crisis, the Secretary of HHS, Tommy G. Thompson, was criticized for taking what seemed like an equivocal stand on whether to override the Bayer patent.<sup>237</sup> He tried to avoid the issue by saying that there was enough Cipro. When pushed, Thompson was reported to have said in Congressional hearings that he was prepared to go to generic companies if Bayer did not cooperate, but failed to mention aloud the eminent domain provision of 28 U.S.C. §1498.<sup>238</sup>

At its heart, the debate is over different concepts of what is the "common good". Some argue that the readiness of the government to override patent rights would deter pharmaceutical companies from developing drugs that would help fight bioterrorism in the future.<sup>239</sup> The pro-public health was focused on the present "common good" that was being harmed. As one critic said, "[t]he U.S. will respect the

---

232. Fleischer-Black, *supra* note 229.

233. 28 U.S.C. § 1498 (2002).

234. Fleischer-Black, *supra* note 229.

235. *Id.*

236. *Id.*

237. *Id.*

238. See *Government Threatens Bayer Patent Suspension Unless Cipro Prices Are Lowered*, SAN FRANCISCO CHRON., Oct. 12, 2001, <http://www.sfgate.com>.

239. *Id.* ("If the federal government is going to threaten to break valuable patent rights at the first sign of a crisis . . . it will likely serve as a significant deterrent to other drug companies who would like to do the 'right thing' and use their R&D capabilities to help the government fight bioterrorism.").

patent right, even if it means endangering public health. That's a hell of a lot of respect, I must say."<sup>240</sup>

The criticism of Mr. Thompson seems, perhaps, unduly harsh. After all, both sides had seemingly valid arguments, and if one were in his position, one might be similarly hard pressed for the "right" response. However, Mr. Thompson could have avoided some of the criticism if he had emphasized the right of eminent domain under §1498.<sup>241</sup>

Arguably, the abovementioned provision provides a solution to the legal impasse, and would have avoided the semblance of what appeared to be arbitrary, strong-arm tactics of the government overriding the rights of patent owners. The historical background to §1498 shows that it is not meant as a *carte blanche* for the government to override patents, but should only be used sparingly during times of national emergency, for example during World War II when the government needed to produce huge supplies of wartime weapons.<sup>242</sup> What requires legal fine-tuning is what constitutes a "national emergency," perhaps through a vote passed by the democratic process.

Also, §1498 refers to "reasonable compensation."<sup>243</sup> Compulsory licensing, coupled with just and fair compensation may represent a credible attempt towards reconciling patent owners' rights and the common good. After all, according to estimates, it costs Bayer 20 cents to make one Cipro tablet which it sells at \$4.67 per tablet.<sup>244</sup> I venture a tentative (although I would argue, not unreasonable) guess that an intermediate figure can be arrived at with further statistics and calculation that would provide sufficient economic incentives for research and development but which would provide urgent health care to the public in times of emergency.

### iii. The Doha Declaration

A month after the Cipro patent dispute was settled, the U.S. and other nations passed the Doha Declaration on the WTO Agreement on TRIPs.<sup>245</sup> Though the Doha Declaration may require fine-tuning, it arguably, makes some progress towards reconciling patent rights and

240. Fleischer-Black, *supra* note 229 (quoting an economist, James Love).

241. 28 U.S.C. § 1498 (2002).

242. Fleischer-Black, *supra* note 229.

243. 28 U.S.C. § 1498 (2002).

244. See Fleischer-Black, *supra* note 229.

245. The Fourth Ministerial conference was held in Doha, Qatar in November 2001.

the duty towards the common good. For the same reasons stated above on §1498, the clarification on compulsory licensing for public health crises is the best solution to what would otherwise be an irreconcilable chasm for an urgent problem.

Under TRIPs, there are a few possible provisions that may limit patent rights:

**Article 27.2** provides that “[m]embers may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public*. . . including to protect human. . . health. . . provided that such exclusion is not made merely because the exploitation is prohibited by their law.”<sup>246</sup> This exception requires that the inventions themselves must be harmful to the public in the first place, and would be inapplicable to useful pharmaceutical patents.

**Article 30** states that “[m]embers may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not reasonably conflict with normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner. . .”<sup>247</sup> This widely-worded exception is not usually relied on as a solution and it would be very difficult to justify that stockpiling generic drugs does not conflict with “normal exploitation of the patent” or is not unreasonably prejudicial.<sup>248</sup>

**Article 31** is most pertinent to the issue of pharmaceutical patents. It allows a member country to authorize compulsory licensing, provided it has satisfied certain conditions. For example, it must be preceded by efforts to negotiate a license over a

---

246. TRIPs, *supra* note 204, at art. 27.2.

247. TRIPs, *supra* note 204, at art. 30.

248. See Sykes, *supra* note 221.



“reasonable period of time”<sup>249</sup> although this limitation may be waived in a “national emergency.”<sup>250</sup> The right holder must also be paid “adequate remuneration... taking into account the economic value of the authorization.”<sup>251</sup> The use must also be “predominantly for the supply of the domestic market.”<sup>252</sup>

The Doha Declaration<sup>253</sup> purported to clarify Article 31, providing, *inter alia*, that:

- a) In applying the customary rules of interpretation of public international law, each provision of the TRIPS Agreement shall be read in the light of the object and purpose of the Agreement as expressed, in particular, in its objectives and principles.<sup>254</sup>
- b) Each Member has the right to grant compulsory licences [sic] and the freedom to determine the grounds upon which such licences are granted.<sup>255</sup>
- c) Each Member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those relating to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency.<sup>256</sup>
- d) The effect of the provisions in the TRIPS Agreement

---

249. TRIPS, *supra* note 204, at art. 31(b).

250. *Id.*

251. *Id.* at art. 31(h).

252. *Id.* at art. 31(f).

253. This refers to the Fourth Ministerial conference held in Doha, Qatar in November 2001.

254. World Trade Organization, *Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (Nov 14, 2001), [http://www.wto.org/english/thewto\\_e/minist\\_e/minist01\\_e/mindecl\\_trips\\_e.doc](http://www.wto.org/english/thewto_e/minist_e/minist01_e/mindecl_trips_e.doc).

255. *Id.*

256. *Id.*

that are relevant to the exhaustion of intellectual property rights is to leave each Member free to establish its own regime for such exhaustion without challenge, subject to the MFN and national treatment provisions of Articles 3 and 4.<sup>257</sup>

The Doha Declaration may be unduly broad and subject to possible abuse. For example, whilst I agree that public health crises, as listed and which are supported by credible statistics, would be fairly interpreted as national emergencies, a *carte blanche* interpretation would be overly liberal. A more in-depth critique of the Doha Declaration is discussed elsewhere,<sup>258</sup> but I suggest that its approach on compulsory licensing and adequate remuneration for public health crises, like the U.S. equivalent of §1498, may represent a credible attempt at balancing both the rights and duties of inventors.

Future, and more beneficial, debate ought to focus on what constitutes “adequate” remuneration. For example, it has been suggested that adequate remuneration should take into account *both* successful *and* unsuccessful research for the same medical problem; or that “cash-strapped developing nations might be permitted to spread payments out over time in a sensible fashion under this standard, as long as the present value of the payment stream represented a reasonable return on R&D expenditures.”<sup>259</sup>

### 3. Natural Law’s Emphasis on the Sanctity of Human Life and Human Dignity: Genetic Engineering and Human Cloning

“There will be no patents on monsters, at least not while I am Commissioner.”<sup>260</sup>

“2002 will be the year of the clones . . . The genie is already out of the bottle. Let’s make sure it works for us, not against us. Let’s do it here. Let’s do it right.”<sup>261</sup>

257. *Id.*

258. See Sykes, *supra* note 221.

259. *Id.* at 24.

260. Charles McManis, *Re-engineering Patent Law: The Challenge of New Technologies*, 2 WASH. U. J. L. & POL’Y 1, 16 (2000) (quoting U.S. Patent Commissioner, Bruce Lehman), <http://law.wustl.edu/Journal/2/p1mcmans.pdf>.

261. See MSNBC News Services, *Genie out of the Bottle on Cloning*, MSNBC.COM, May 15, 2002 (quoting fertility expert Panayiotis Zavos), available at <http://stacks.msnbc.com/news/752767.asp>.

The debate on cloning was revived in late December 2002 with a bold claim by a French company, Clonaid, announcing that it had successfully cloned a baby named "Eve." This eventually was ruled by most to be a hoax, when Clonaid failed to produce the cloned baby.<sup>262</sup> Even if the Clonaid claim was a hoax, it has been reported that "there are at least two other laboratories reportedly working to produce human clones."<sup>263</sup> What is not a hoax, though, is the fact that on February 14, 2003, the first animal cloned from an adult cell, a sheep named Dolly, was euthanized due to a progressive lung disease.<sup>264</sup> These events were followed on by a flurry of legislative activity to be explored below.

First though, a working definition of the technology is in order. Genetic engineering has been described as the "process by which scientists alter or add specific genes to the genetic material present in the embryo so that an individual could be born with characteristics that he or she would not have had otherwise."<sup>265</sup> Cloning, by itself, is not genetic engineering.<sup>266</sup> Human cloning involves the duplication of human fetus which would develop into a human being. It has been said that "when the techniques of cloning and genetic engineering are combined... the human species will gain control over its own destiny."<sup>267</sup>

In this final section, I ask the question: "should human clones be patentable?" Under a natural law approach, I would argue that the answer is no. I will also explore the positions taken by the USPTO and U.S. legislation.

Although there is some consensus on human cloning, there is still much controversy over many of the following issues:

- **Definitions** - What does it mean to be "human"? Would be all right to clone parts of the human, if we do not clone an entire human embryo? This brings about the familiar pro-life/pro-choice issue of when life begins and the process of creation. (Ultimately, I argue that one

---

262. Debbie Nevins, *Double Take*, TEEN NEWSWEEK, Jan 15, 2003, <http://www.msnbc.com/news>.

263. *Id.*

264. See Press Release, Roslin, We are sorry to report that Dolly the Sheep is dead (Feb. 14, 2003), <http://www.roslin.ac.uk/news/press/articles/174.html>.

265. LEE M. SILVER, REMAKING EDEN: HOW GENETIC ENGINEERING AND CLONING WILL TRANSFORM THE AMERICAN FAMILY 151-52 (Avon Books 1997).

266. *Id.* at 152.

267. *Id.* at 152.

cannot remain neutral on this issue, because there is a real possibility that in our lifetime, or at least in our children's, the consequences of genetic engineering and cloning will impact us, for better or worse.)

- *Limits of cloning* - save for a small minority, like fertility expert Dr. Panayiotis Zavos, there seems to be some general consensus that *some* human cloning, specifically reproductive cloning, ought to be banned.<sup>268</sup> The point of contention is the extent to which human cloning should be banned. For example, should therapeutic cloning, i.e. cloning to create embryos to produce stem cells, which are then used to produce material for the treatment of diseases like Parkinson's and Alzheimer's disease, be allowed?

I take the position that to uphold the sanctity of human life, the right thing to do is to ban all cloning. First, I will examine the legal position on human cloning. I will then set out arguments both for and against cloning. Finally, I will argue that it is not too late to make legal and ethical changes, even if the "genie is out of the bottle."<sup>269</sup> I will suggest some ways in which the existing patent laws can be used and reformed to draw the line between science and morality.

#### a. *The Legal Position on Human Cloning*

The U.S. PTO's policy has, reportedly, been that human life cannot be patented.<sup>270</sup> However, it has been observed that the PTO's position is just—a policy which "is subject to change, to court challenge and to simple oversight by patent examiners."<sup>271</sup>

What is needed are clear laws, which are, unfortunately, lacking

268. See FUKUYAMA, *supra* note 47. As of Nov. 2001, "24 countries have banned reproductive cloning . . . In 1998 the Council of Europe approved an Additional Protocol to its Convention on Human Rights and Dignity with Regard to Biomedicine, banning human cloning. . . The U.S. Congress was just a number of other legislatures deliberating on similar measures. The French and German governments have proposed that the United Nations enact a global reproductive cloning ban." *Id.*

269. See *Genie Out of the Bottle on Cloning*, MSNBC.COM, May 15, 2002, <http://stacks.msnbc.com/news/752767.asp> [hereinafter *Genie Out of the Bottle*].

270. See Justin Gillis, *A New Call for Cloning Policy*, WASHINGTON POST, May 17, 2002 (quoting Brigid Quinn, spokeswoman for the U.S. PTO, saying, "Our policy has not changed. It is not changing. We do not patent claims drawn to humans.").

271. *Id.*

at the present time. Patent caselaw has not had to deal with this issue specifically, although its position on patentable subject matter has traditionally been extremely liberal since the 1980s, following the case of *Diamond v. Chakrabarty*.<sup>272</sup> In this case, the U.S. Supreme Court held that that a living and genetically engineered bacterium was patentable subject matter.<sup>273</sup> This liberal judicial approach led to a surge of patents applications for genetically-altered life forms.

While there is a patchwork of state legislation banning human cloning to some degree,<sup>274</sup> there is no specific federal law yet that renders cloning or other genetic modification of humans illegal or prevents cloned products of such processes from being covered by patents. That may soon change however; on February 27, 2003, the Human Cloning Prohibition Act of 2003<sup>275</sup> was passed in the House of Representatives by an overwhelming vote of 241 to 155.<sup>276</sup> If passed into legislation, this Act “would ban all human cloning, including cloning to create a pregnancy or for medical research[;] [i]t also would make it a crime to ‘receive or import a cloned human embryo or any product derived from a cloned human embryo,’ with fines of \$1 million and 10 years in prison.”<sup>277</sup>

Proponents of the total ban, including U.S. President George Bush, have urged the Senate to pass this bill into law. Anything other than a total ban, it has been argued, “would license the most ghoulish

272. *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

273. *Chakrabarty*, 447 U.S. at 309.

274. See National Conference of State Legislatures website, at <http://www.ncsl.org/programs/health/Genetics/rt-shcl.htm> (reporting that as of January 22, 2003, six states have laws pertaining to the use of human cloning, which was first addressed by the state of California with a ban on human cloning in 1997). The other five states are Louisiana, Michigan, Rhode Island, Virginia and Iowa.

In addition to prohibiting the creation of human embryos for the purpose of initiating a pregnancy, Michigan and Iowa extend their restrictions to the creation of human embryos via cloning techniques regardless of the intended use. Virginia’s law also was intended to prohibit human cloning for any purpose, but the law does not define human being, which could be interpreted as from the moment of fertilization onward, from the fetal stage onward or beginning at birth. Finally, Missouri forbids the use of public funds for human cloning research.

*Id.*

275. A similar bill known as the Brownback-Landrieu bill, S. 1899, 107<sup>th</sup> Cong. (2002), [hereinafter Brownback-Landrieu] was passed last year but it stalled in the Senate. See Sheryl Stolberg, *House Republicans Press Senate on Cloning*, N.Y. TIMES, May 16, 2002.

276. See Maggie Fox, *US House Votes to Ban Human Cloning*, REUTERS, Feb 28, 2003, <http://story.news.yahoo.com>

277. *Id.*

and dangerous enterprise in human history.”<sup>278</sup> On the other hand, opponents of this bill have argued that a total ban would also ban important research like therapeutic cloning.<sup>279</sup> In therapeutic embryonic cloning, stem cells from an embryonic clone are inserted into a diseased organ to grow healthy tissues. In scientific terms, embryos are pluripotent because they have the ability to develop into all or nearly all of the tissues of the human body.<sup>280</sup> The human embryonic clones are destroyed thereafter.

It remains to be seen how the Senate will vote on this issue. Even if the Senate delays its vote, there may, conceivably be in the near future, a case where the Federal Circuit, the Supreme Court, or the PTO has to deal with this issue. Advocacy groups have reported that they have uncovered a patent that can be interpreted as applying to cloned human beings.<sup>281</sup> There could conceivably be another case where anti-biotech activists like Jeremy Rifkin<sup>282</sup> would seek a patent on human/animal chimeras and possibly provoke an interference.<sup>283</sup>

---

278. See BBC, *US House Passes Cloning Ban*, Feb. 28, 2003 (quoting Republican representative Sue Myrick), <http://news.bbc.co.uk/2/hi/science/nature/2806843.stm> [hereinafter BBC].

279. *Id.* (quoting Democrat representative James McGovern as saying that the bill would “close the door to important research” using what is known as therapeutic cloning.”).

280. See NATIONAL INSTITUTES OF HEALTH, *STEM CELLS: A PRIMER*, <http://www.nih.gov/news/stemcell/primer.htm> [hereinafter NIH].

281. U.S. Patent No. 6,211,429 on a method of developing pigs whose organs could be transplanted to save humans. The patent claims “the cloned products produced by these methods,” *Id.*, but unlike patents of this type, this patent fails to include explicit language saying that the mammal in question does not include human beings. The view that the broad language can extend to humans is not without merit. In *MSM Investments v. Carolwood*, 259 F.3d 1335 (Fed. Cir. 2002), the courts interpreted a claim to a “method of feeding. . . an animal” to extend to humans. *Id.*

282. Jeremy Rifkin, who founded the advocacy group “The Foundation on Economic Trends,” is an active critic of biotech.

283. Rifkin and researcher Stuart Newman had applied for a patent application to create human-animal chimeras, moving genetic material from one species and placing it into the embryo of another. Although these inventors stated that they had no intention of using the patent to produce chimeras, they list as a possible application the production of organs for transplant into humans. Their objective was to obtain standing to be able to declare interference proceedings when similar patents are filed. PTO released a statement within days stating that patents on part human inventions are not allowed, because it would violate public policy and morality aspects of the utility requirement. See Margaret A. Clark, *Ethical Issues*, FRONTLINE, <http://www.pbs.org/wgbh/pages/frontline/shows/organfarm/regulators/clark.html>. The PTO cited Justice Story’s statement of the utility requirement which excludes inventions that are “injurious to the well-being, good policy or good morals of the society.” *Lowell v. Lewis*, 15 Fed. Cas. 1018 (C. C. D. Mass. 1817).

*b. Pro-Cloning Arguments*

There are two main arguments made in favor of human cloning, namely, the argument against repression (the libertarian argument) and the argument that a ban on all cloning deprives society of potential benefits (the utilitarian argument). A third reason argues that since it is too late to stop the advance of cloning, we might as well embrace it.

i. The Libertarian Argument Against Repression

This argument was made in a petition letter signed by 40 Nobel Laureates opposing the Brownback-Landrieu bill,<sup>284</sup> stating:

By declaring scientifically valuable biomedical research illegal, Senator Brownback's legislation, if it becomes law, would have a chilling effect on all scientific research in the United States. Such legal restrictions on scientific investigation would also send a strong signal to the next generation of researchers that unfettered and responsible scientific investigation is not welcome in the United States.<sup>285</sup>

It is interesting to note though, that in the same petition, these Nobel Laureate petitioners pressed for a ban on reproductive cloning. This is an implicit acknowledgment that some limits are necessary in the search for knowledge. I submit that limits are necessary because knowledge is not purely objective, but can have a commodity value. Limits are also necessary on an issue as important as biotechnology, because we cannot always rely on the self-restraint of scientists to do the "right" thing. In particular, it has been noted that when the U.S. biotech industry spends nearly \$11 billion on research in the year 2000 alone and employs over 150,000 people, "most biotechnology companies simply do not have the incentives to observe many of the fine ethical distinctions that will need to be made."<sup>286</sup> Hence, the only compelling argument in favor of cloning rests on its argument that there are possible societal benefits that will be lost if therapeutic cloning is banned.

ii. The Utilitarian Argument Against Societal Benefits

---

284. Brownback-Landrieu, *supra* note 275.

285. See Statement by 40 Nobel Laureates Regarding Cloning, The American Society for Cell Biology, Apr. 10, 2002, <http://www.ascb.org/publicpolicy/Nobelletter.html>, [hereinafter Statement].

286. FUKUYAMA, *supra* note 47.

In the above mentioned petition, the Nobel Laureates argued that the Brownback-Landrieu bill “would impede progress against some of the most debilitating diseases known to man:”

For example, it may be possible to use nuclear transplantation technology to produce patient-specific embryonic stem cells that could overcome the rejection normally associated with tissue and organ transplantation. Nuclear transplantation technology might also permit the creation of embryonic stem cells with defined genetic constitution, permitting a new and powerful approach to understanding how inherited predispositions lead to a variety of cancers and neurological diseases such as Parkinson’s and Alzheimer’s diseases.<sup>287</sup>

There are empirical problems with this utilitarian argument: how do you weigh the harms and benefits of such genetic engineering, especially when the harms may not show up until many years later? The post-mortem examination of Dolly may provide some insight into this problem. If there is a link between the fact that she was a clone and her death, “it will provide further evidence of the dangers inherent in reproductive cloning and the irresponsibility of anybody who is trying to extend such work to humans.”<sup>288</sup>

Also, how does one measure the cost of a human embryo, which some regard to be human life? Even if you take the view that up to a certain stage, the embryo is not life, there are other consequences of genetic engineering that are not factored into the equation. For example, pro-cloning expert, Professor Lee Silver, himself admits that the dilemma of genetic engineering: the slippery slope is that the advance of science may move beyond merely therapeutic cloning, into genetically altering the genes of children. On this issue, Professor Silver writes “while each individual use of the technology can be viewed in the light of reproductive choice—with no ability to change society at large—together, they could have dramatic, unintended long-term consequences.”<sup>289</sup>

One of the harmful consequences he foresees is the further stratification of society into the gene-enriched people, whom he calls GenRich, and the rest of us, whom he calls Naturals. He draws this possible long-term scenario:

[A]fter three hundred years of selection and enhancement, these

---

287. Statement, *supra* note 285.

288. BBC, *supra* note 278 (quoting Professor Richard Gardner, chair of the Royal Society working group on stem cell research and therapeutic cloning).

289. SILVER, *supra* note 265, at 11.



GenRich individuals have athletic skills that are clearly “nonhuman” in the traditional sense. It would be impossible for any Natural to compete . . . If the accumulation of genetic knowledge and advances in genetic enhancement technology continue at the present rate, then by the end of the third millennium, the GenRich class and the Natural class will become the GenRich humans and the Natural humans – entirely separate species with no ability to cross-breed, and with as much romantic interest in each other as a current human would have for a chimpanzee.<sup>290</sup>

Advocates of embryonic cloning ought to remember that there are alternatives to embryonic stem cells. Stem cells are cells which have the “ability to divide for indefinite periods in culture and to give rise to specialized cells.”<sup>291</sup> Research studies have shown that adult stem cells have the ability to form multiple types of tissue.<sup>292</sup> Adult stem cell research would avoid the ethical implications of embryonic stem cell research; as in the former case, cells are taken from the body of a living person. Admittedly, there are problems with adult stem cells.<sup>293</sup> However, there are promising lab results,<sup>294</sup> which may be a “demonstration that adult stem cells are not necessarily locked into their current fate and furthermore, we can re-program them into becoming other cell types.”<sup>295</sup>

290. *Id.* at 5–8.

291. NIH, *supra* note 280.

292. See NIH BACKGROUND ON STEM CELLS, U.S. Department of Health and Human Services (2003), <http://www.nih.gov/news/backgrounders/stemcellbackgrounder.htm>. *E.g.*, until recently, it was thought that stem cells were not present in the adult nervous system, but, in recent years, neuronal stem cells have been isolated from the rat and mouse nervous systems. The experience in humans is more limited. In humans, neuronal stem cells have been isolated from fetal tissue and a kind of cell that may be a neuronal stem cell has been isolated from adult brain tissue that was surgically removed for the treatment of epilepsy. *Id.*

293. The NIH notes two limitations: adult stem cells have not been isolated for all cell and tissue types, and adult stem cells are present in only minute quantities, are difficult to isolate and purify, and their numbers may decrease with age. *See id.*

294. University of Minnesota, *Adult Bone Marrow Stem Cells Can Become Blood Vessels*, Jan. 30, 2002 [http://www1.umn.edu/urelate/newsservice/newsreleases/02\\_01stemcells.html](http://www1.umn.edu/urelate/newsservice/newsreleases/02_01stemcells.html) (stating that their findings “suggest that these adult stem cells may be an ideal source of cells for clinical therapy. For example, we can envision the use of these stem cells for therapies against cancer tumors by, for instance, introducing anti-angiogenesis genes. Or, they could be used to heal wounds such as ulcers or diabetic wounds or to treat atherosclerosis.”).

295. BBC, *Stem Cell Therapies May Grow Tissue*, Feb 11, 2002, <http://news.bbc.co.uk/1/hi/english/health/> (quoting Farshid Guilak, Director of Orthopedic Research at the Duke University Medical Center).

iii. The Pessimistic Argument That It is Too Late

This argument was made by Dr Panayati Zavos when he predicted cloned babies to arrive by the year 2002. He argues in favor of cloning simply because “the genie is already out of the bottle.”<sup>296</sup> This argument is a non sequitur—it is never too late to stop the advance of science although as time goes on, it gets harder. As suggested by Francis Fukuyama, we “need at all costs to avoid a defeatist attitude with regard to technology that says since we can’t do anything to stop or shape developments we don’t like, we shouldn’t bother trying in the first place.”<sup>297</sup>

c. *Anti-Cloning Arguments: Human Dignity*

I have already set out some responses objecting to the libertarian and utilitarian arguments for cloning. However, the key objection against cloning based on a natural law approach is the natural law principle that upholds human dignity on the basis that human life, even in its embryonic form, is sacred.<sup>298</sup> Natural law holds the fundamental normative principles of fairness and of rights and wrongs; these normative principles mandate that certain lines be drawn against the advances of science.<sup>299</sup>

Opponents of this view often attack the problem of justifying such a norm. Classical natural law, being rooted in the Judeo-Christian faith, justifies this norm on the basis that Man is created in the image of God. In his book, *OUR POSTHUMAN FUTURE*,<sup>300</sup> Francis Fukuyama asks, “Is there a secular ground for believing that human beings are entitled to a special moral status or dignity?”<sup>301</sup>

From a non-religious perspective, Fukuyama argues that there are secular grounds to believe that human beings are entitled to a special moral status. His argument goes as follows: rights can emanate from three possible sources, God, Nature, and Man.<sup>302</sup> He acknowledges the reality that rights from “revealed religion”<sup>303</sup> are

296. *Genie Out of the Bottle*, *supra* note 269.

297. FUKUYAMA, *supra* note 47, at 11.

298. This natural law principle has been discussed *supra*, at Parts III and IV, where I refer to human beings as an “end in themselves.”

299. This natural law principle is discussed *supra*, at Part IV: IV.THE THIRD ALTERNATIVE: Natural Law Justification.

300. FUKUYAMA, *supra* note 47.

301. *Id.* at 151.

302. *Id.* at 111–113.

303. *Id.* at 111.

not today acknowledged as the basis of liberal political rights. He further debunks the positivistic approach that rights emanate from Man.<sup>304</sup> This theory holds that rights are whatever the people agree on, and emphasizes the rule of law to ensure that there are procedures to ensure that the laws reflect the will of the people. Fukuyama correctly points out that if there are no universal standards, “who is to say what the right procedure is? . . . The answer is that no response is possible since it has been declared at the outset that there are no transcendent standards for determining right and wrong beyond whatever the culture declares to be a right.”<sup>305</sup>

Fukuyama, therefore, argues the justification of rights is based on Nature, human nature specifically. He first distinguishes humans from animals on the basis of the complexity of human nature, like the ability to make moral choices, reason and the “broad emotional gamut” that humans possess.<sup>306</sup> He argues that this serves as a basis for universal equality, even though there may be a reasonable gradation of rights for example, children versus adults, adults with Alzheimer’s versus healthy adults and unformed embryos versus infants.<sup>307</sup>

On the issue of therapeutic cloning, Fukuyama remains ambivalent. He, at least, argues that because an embryo has the “potential” to become a full human being, it has a moral status in between that of an infant and other types of cells.<sup>308</sup> He suggests that if humans are to harvest stem cells from embryos, “we should put a lot of limits and constraints around this activity to make sure that it does not. . . push the envelope further.”<sup>309</sup> The question he posed though is “will we know when to stop?”<sup>310</sup>

I submit that if embryonic cloning is allowed, the envelope will be pushed further. As one member of the public observed, “[i]t’s science. If the ability is there, somebody’s going to do it.”<sup>311</sup> More importantly, if one takes the assumption that an embryo is a human being, not merely one with the “potential” to become one, then there are even more compelling reasons to ban all cloning, embryonic

---

304. *Id.* at 113.

305. *Id.* at 113.

306. FUKUYAMA, *supra* note 47, at 143–47.

307. *Id.* at 174–77.

308. *Id.* at 176.

309. *Id.* at 177.

310. *Id.* at 177.

311. The Wellcome Trust, *Public Perspectives on Human Cloning*, <http://www.stanford.edu/dept/HPS/SciMedOrg/Sources/clonrpt.pdf>.

cloning included.

Ultimately, there are no easy answers. Fukuyama's attempt at critiquing the biotech revolution is commendably honest. He recognizes the futility of trying an amoral approach to this whole issue. For example, in response to Lee Silver's pro-cloning stance, Fukuyama makes the following observation:

Silver. . . is horrified at the possibility that [genetic engineering] could be used to create a class of genetically superior people . . . He dismisses the moral concerns of virtually every religion or traditional moral system with regard to future genetic engineering but draws the line at what he perceives as threats to human equality. He does not seem to understand, that given his premises, there are no possible grounds on which he can object to the GenRich . . . since there is no stable essence common to all human beings. . .<sup>312</sup>

He tries a moral, but non-secular approach to justify giving rights to embryos on the basis of the consciousness of human nature. However, while he says that "the problem of how consciousness arose does not require recourse to the direct intervention of God," he concedes, "[i]t does not, on the other hand, rule it out either."<sup>313</sup> In the final analysis, whether you agree with the classical natural law approach, or with Fukuyama's reasoning, it cannot be denied there are moral limits which must be taken into account when drawing up rules.

Any argument, to be meaningful, cannot go on *ad infinitum*, and must rest on some reasonable assumptions. In the end, you may find that the only satisfactory explanation is the classical natural law approach because unlike all other theories, natural law, in acknowledging the existence of a transcendent source beyond human nature, provides an explanation, as far as probabilities can do so take us using human reasoning, as to why human beings ought to have any rights at all. Whether one is willing to acknowledge God as that transcendent source, ultimately, calls for some measure of *faith*, although that faith is *not* necessarily an *unreasonable* one.

### C. Suggested Approach: A Natural Law Response

How, then, should the laws, in particular, the patent laws, respond to the issue of human cloning? As argued above, a classical

---

312. FUKUYAMA, *supra* note 47, at 154.

313. *Id.* at 216.

natural law approach would deem cloning to be wrong on the basis of its commitment to human life and dignity. Because natural law sees human life beginning at the embryo stage, embryonic cloning for stem cell research would be equivalent to murder. Likewise, under a natural law approach, all cloning ought to be banned. Professor Susan R. Martyn observed that “[l]aw embodies the moral judgments of a society.”<sup>314</sup> “Once people decide which of many, often-competing moral views they desire, law can provide the tool to create the desired outcome.”<sup>315</sup>

If we come to the conclusion that something is intrinsically wrong, it is imperative to use every means possible to close the gap, including removing the possibility of commercial exploitation through the patent monopoly, and our laws need to clearly reflect our moral choices. Because the stakes are so high with human cloning, the burden should be placed on those who wish to use it to demonstrate its safety and benefits.<sup>316</sup> Until that time, it is more prudent to “agree with those who stress human fallibility, misplaced self-confidence and the risks of arrogance.”<sup>317</sup>

I would argue that if the cloning ban is passed, the best approach is to amend the patentability provision<sup>318</sup> to specify clearly that patenting of research related to reproductive and/or embryonic cloning is prohibited, and not on utility grounds as some have suggested. It is conceded that cloning is potentially useful to some extent; the objection to cloning is clearly a moral one, and patent rules ought not be stretched beyond their ordinary meaning.

Instead, the U.S. patent system could consider an approach along the lines of that taken by our European counterparts. Article 53(a) of the European Patent Convention prohibits patents on any invention that is contrary to public order or morality.<sup>319</sup> In any case, adopting similar provisions would be consistent with the U.S. obligations under the TRIPS agreement Article 27.2.<sup>320</sup>

---

314. Susan R. Martyn, *Human Cloning: The Role of Law*, 32 U. TOL. L. R. 375, 375 (2001).

315. *Id.*

316. *Id.* at 385.

317. *Id.* at 386.

318. 35 U.S.C. § 101 (2002).

319. Convention on the Grant of European Patents, Oct 5, 1973, art. 53, 13 I.L.M. 271, <http://www.european-patent-office.org/legal/epc/e/ar53.html>.

320. TRIPS, *supra* note 204, at art. 21.2 (This Article permits certain subject matter to be deemed unpatentable if they are inventions contrary to *ordre public* or morality; this explicitly includes inventions dangerous to human, animal or plant life or health or seriously prejudicial to

In order for the human cloning ban to be truly effective however, there must be a certain symmetry among the international laws in place. If there were no harmonized laws, scientists would simply move their research to a country where human cloning was legal. There are already certain efforts being made in that direction.

The European Union has tried to harmonize European laws by its Directive 98/44,<sup>321</sup> in particular Article 5 which prohibits, *inter alia*, the cloning of human body parts.<sup>322</sup> Article 6 considers human cloning unpatentable, because it would be “contrary to ordre public or morality.”<sup>323</sup> However, Directive 98/44 falls short of the standards proposed by the Brownback-Landrieu bill because it creates an exclusion for therapeutic cloning of embryos.<sup>324</sup>

This divisive issue is not easy to resolve. Historically, we have often tended to react with retrospective vision, as in the case of pharmaceutical drugs like thalidomide, so it “may be that the regulations concerning human cloning will have to await the birth of a horribly deformed child who is the product of an unsuccessful cloning attempt.”<sup>325</sup> Hopefully though, we can call a moratorium to engage further discussion of the ethical issues of such cloning, so that we can proceed with *informed* consent into the biotechnological revolution.

In conclusion, I recognize that the application of natural law principles will be challenging, because of the complexity of the issues and the diversity of opinions and beliefs. What I hope to have achieved though, is to show the reader that natural law principles are *still* relevant, and that the traditional ways of justifying the U.S. patent system may have to be re-examined in the light of natural law principles.

In the more controversial issues relating to the patent system, I do not assume to have arrived at the perfect solution. I do assume, however, that there are objective moral standards which are

the environment. This is subject to the condition that the commercial exploitation of the invention must also be prevented and that this prevention must be necessary for the protection of *ordre public* or morality.).

321. European Community, Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998, On the Legal Protection of Biotechnological Inventions, 1998 O.J. (L 213) 13, [hereinafter Directive], <http://europa.eu.int/eur-lex/prl/en/oj/dat/1998/>

322. *Id.* art. 5 (providing *inter alia*, that the “human body, at various stages of its formation and development . . . cannot constitute patentable inventions.”).

323. *Id.*

324. *Id.* at § 42 (stating *inter alia*, that “whereas, in any case such exclusion does not affect inventions for therapeutic or diagnostic purposes which are applied to the human embryo and are useful to it.”).

325. FUKUYAMA, *supra* note 47 at 216.

discoverable by reason, and through informed debate. Only on this assumption would this Article, or any debate for that matter, make any sense at all.

## V. CONCLUSION

Endless invention, endless experiment,  
Brings knowledge of motion, but not of stillness . . .  
All our knowledge brings us nearer to our ignorance,  
All our ignorance brings us nearer to death,  
But nearness to death no nearer to GOD  
Where is the Life we have lost in living?  
Where is the wisdom we have lost in knowledge?  
Where is the knowledge we have lost in information?

— *T.S. Eliot, Choruses from the Rock*

The starting point of this Article is the observation that patent law and jurisprudence are inextricably connected. One of the aims of this Article has been to call for a reprieve to the attitude of encouraging “endless inventions,” in order to consider the issue of what sort of jurisprudence ought to be adopted in the U.S. patent system.

In conclusion, a summary of my arguments towards the development of a natural law jurisprudential approach to the U.S. patent system is set out as follows:

### *A. The Limits of an Unitarian Approach*

The traditional justification of the U.S. patent system is a utilitarian argument based on economic grounds. This view argues that the patent system encourages the disclosure of secrets; disclosure helps spur further inventions. In turn, inventions lead to industrial progress. This economic argument has some validity, although there may be insufficient empirical evidence that proves this beyond a reasonable doubt. I agree that the U.S. patent system exists, in part, to promote the progress of technological arts.

Whilst I accept the economic explanation for the U.S. patent system, I argue against an adoption of utilitarianism as the underlying philosophy of the U.S. patent system. Utilitarianism is a morality unto itself, and is one that exalts the common good. A strictly

utilitarian view rejects the possibility of any other moral standard other than the common good.

I make the observation that most people, consciously or unconsciously, espouse moral standards that places a value on the human individual *per se*, quite apart from the common good. This observation is supported by historical accounts of the motivations of the founding fathers. Indeed, the United States was founded on the creed that all men were created equal and were endowed with “inalienable” rights of “life, liberty and the pursuit of happiness.”

### *B. The Limits of a Natural Rights Approach*

The competing justification, besides utilitarianism, is the natural rights justification. This view argues that the inventor ought to be rewarded for the fruits of his labor. The grant of the patent is the appropriate reward. The natural rights argument has been rejected as a justification for the U.S. patent system because in exalting the inventor’s rights, it fails to appropriately address the socio-economic rationale for the existence of the patent system.

### *C. The Classical Natural Law Middle Ground*

My thesis rejects both utilitarianism and natural rights as a form of justification for the U.S. patent system. Instead, I propose adopting classical natural law as a justification of the U.S. patent system. Natural law has been defined in various ways, but at the lowest common denominator, it can be defined as a set of universal prescriptions that are accessible to all who are capable of reason.

I propose the adoption of the classical natural law paradigm as a way of viewing the U.S. patent system and dealing with some of the hard issues raised thereby. I define classical natural law to be that proposed by Thomas Aquinas and Hugo Grotius. These thinkers predicate their theories on a belief in God and on the assumption that objective moral standards exist. Classical natural law is also predicated on the fact that these objective moral standards are discoverable by reason, and therefore are relevant for our consideration.

The reader is not required to assume any faith to adopt my proposal, although if one tries to justify natural law itself, I argue that, as far as probabilities take us, a belief in God is the most satisfactory and consistent explanation.

I argue that the natural law paradigm provides the *most* satisfactory approach towards justifying the U.S. patent system. As a



philosophy, natural law acknowledges that the moral obligation to foster the common good of one's community and hence is superior to the natural rights theory which downplays the duty of the inventor to the community. At the same time, it avoids the moral inconsistency of a strictly utilitarian approach, because it also acknowledges the intrinsic worth of the human individual.

Classical natural law is also premised in the weakness of human nature, in particular, the human inclination towards selfishness. From this perspective, the patent system's limited patent term is perfectly justifiable under a natural law approach. Most inventors would not otherwise freely disclose or allow the free use of their invention to benefit the common good.

It is important to recognize that the U.S. patent system is more than a thicket of technical arcane rules. The system's patentability requirements of novelty, non-obviousness, utility and written description, the notion of a limited patent monopoly and other inventorship rules are in-built limits that attempt to balance the common good and the rights of the inventor. These moral choices are in turned, played out in the political and judicial arena.

Generally, the traditional economic rationale espoused by the utilitarian is consistent with the natural law approach. However, the differences between the utilitarianism/natural rights approach on one hand and the natural law approach on the other show up sharply in the hard/borderline cases. I argue that one of the greatest challenges that the U.S. patent system faces may be in the area of biochemistry and pharmaceutical patents. What the courts and Congress decide today may well impact our way of life in the future in a significant and possibly, detrimental manner.

The present development of the U.S. patent system seems to have one rallying call: "to promote the progress of the arts." The question remains, at what expense? This Article has suggested that 'progress' should never be at the expense of universal principles endorsing the sanctity of human life and dignity, nor should principles of fairness and equity be forgotten in the process of "progress."

The call for the development of a natural law jurisprudence requires, as a basic premise, the recognition that absolute moral standards exist. Without this consensus, one view will be as good as another, and any assertion of right and wrong would be futile. However, by acknowledging that absolute moral standards exist, there is hope that present and future debates (including this Article) will lead to more fruitful resolutions to the hard questions faced by the

modern society.

