

An Exploration of the Principles, Precepts and Purposes that Provide Structure to the Patent System

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ABSTRACT

The patent system is an integral part of national economies. This article is founded on a belief that the underlying structure of that system is, currently, incompletely understood. This lack does not impact on the operation of the system but may contribute to the effectiveness of attempts to reform the system. A structure is proposed that includes aspects of the system that are fundamental to its operation – the principles of state power, individual choice and the value of knowledge – and normative aspects, or “precepts”. These precepts are incentive, accountability, accessibility and the acceptance of risk. The precepts are connected to, but distinct from, the purposes of individual players in the system. The suggested structure allows for an understanding of the system that separates the mutable from the immutable: a distinction that provides guidance for that which may be changed, and that which may not be altered, by government policy.

I. INTRODUCTION

The patent system is an established part of the economies and societies around the world. The elements of the system are well recognised; an inventor has little problem in finding out how to apply for a patent, firms know how to exploit a patent, and patent professionals are trained in the pursuit, and protection, of patent rights for their clients. If any of these individuals were asked, however, to describe the *principles* that underpin the patent system, there may be significant differences in their responses. As a matter of day-to-day patent practice, this lack of consensus has little impact. As a matter of systemic analysis, though, the question is of more importance or, at least, of more use.

This article is aimed at remedying this situation. Its purpose is to provide a set of principles (and second order “precepts”) that may be understood to underpin the

* The author would like to thank Andrew Christie, Dan Hunter and Kimberlee Weatherall for their comments on earlier versions of this paper. The research for this article was supported by an ARC Discovery grant (DP0666803 ‘...and by opposing, end them: A Comparative Examination of Opposition Processes in Patent Law’).

patent system as it exists today. The discussion draws on legal, economic, political and psychological literatures to posit a structure for the patent system that incorporates the role of the state, government policy and the decisions and purposes of individual actors in the system; a structure that may be used to assess the impact of current, and proposed, aspects of the system.¹ The principles and precepts included in this article will, no doubt, be contested. There may be value, however, in commencing a debate as to the underlying structure of the patent system as a whole.

The approach adopted here may be seen as “quasi-postmodern”. Two of the benefits of adopting such a perspective on a question such as the one posed in this article is that it both allows for an opportunity to “step back” from the technical detail of the patent system and provides a framework to support the approach taken. This capacity is useful as, for the purposes of this article at least, the patent system is best seen as a structured body of knowledge and practices; and ideas around such structured bodies of knowledge and practices are well-established in the area of critical theory.² Michel Foucault, for example, analysed, in great depth, the institutional nature of medicine and the prison system.³ His work provides an understanding of the centrality of principles, or discursive “Truths”,⁴ to the operation of a structured body of knowledge.⁵ The approach taken here will borrow from Foucault’s ideas in order to offer a nuanced perspective of the operation of the patent system as a set of “discursive” practices⁶ and a discussion of the principles that may be seen to underpin those practices.

¹ Take, for example, the patent opposition process. In Europe, there is a post-grant opposition; in Australia, there is a pre-grant opposition; and in the US, there is the re-examination of patent applications. Each of these represent the way in which a competitor of a patentee firm may challenge a patent, or a patent application in the case of Australia, without going to court. A recent piece – F. Rotstein and C. Dent, ‘Third Party Challenges in Europe, the United States and Australia: A Comparative Analysis’ (forthcoming, *International Review of Intellectual Property and Competition Law*) – sought to compare and contrast the different procedures. The article could not, however, provide a strong argument as to which was the best of the three forms of challenge as there are no agreed upon standards against which to judge them.

² Work on this, with respect to the patent system, has already started: see C. Dent, ‘To See Patents As Devices Of Uncertain (But Contingent) Quality: A Foucaultian Perspective’ [2007] *Intellectual Property Quarterly* 148.

³ *Birth of the Clinic*, Vintage Books, New York, 1975; and *Discipline and Punish – The Birth of the Prison*, Peregrine, London, 1979, respectively.

⁴ See, for example, M. Foucault, ‘Order of Discourse’ in R. Young (ed), *Untying the Text: A Post-Structuralist Reader*, Routledge & Kegan Paul, Boston, 1981.

⁵ For an application of Foucault’s ideas in this area to the discourse of law, see C. Dent and I. Cook, ‘Stare Decisis, Repetition and Understanding Common Law’ (2007) 16 *Griffith Law Review* 131.

⁶ The central nature of discursive practices to Foucault’s work was emphasised in a short piece often attributed to Foucault himself. Two of the three methodological ‘principles’ necessary to his project

II. FIRST ORDER PRINCIPLES UNDERPINNING PATENT SYSTEM

For many commentators, the patent system is – and is only – the set of rules regarding patentability, with those rules arising from the national patent laws and the international agreements on patents.⁷ This article argues from the position that the system is much broader than that. For this discussion, the system can be best seen as the totality of decisions and actions made by those parties who operate within the system – with those actions and decisions being constrained by a number of factors including the laws and international agreement.

Taking the lead of Foucault, any principles that underpin such a system, then, may be understood as those elements of the system that, were they not there, would mean the system would operate differently.⁸ To an extent, the first order principles highlighted here (state power, individual choice and knowledge is power) are the ‘always-already’ aspects of the patent system;⁹ the aspects that are so integral to the system that they are no longer questioned.¹⁰ The second, and subsequent, order principles or precepts (discussed below) stem from these first order principles and are more likely to be contested or contestable. No hierarchy of principles, or precepts, should be inferred from the order within the two Parts.

were: a ‘return toward the study of the concrete practices by which the subject is constituted in the immanence of a domain of knowledge’ and ‘of appealing to “practices” as a domain of analysis, of approaching one’s study from the angle of what “was done”’: M. Florence, ‘Foucault, Michel, 1926 –’ in G. Gutting (ed), *The Cambridge Companion to Foucault*, Cambridge University Press, Cambridge, 1994, 317-8.

⁷ One leading textbook from Australia has a chapter entitled “The Patent System” with all but one paragraph devoted to a history of patent law and a description of the processes of gaining patent protection (that odd paragraph out is headed “Role of patent attorneys”): J. McKeough, A. Stewart and P. Griffith, *Intellectual Property in Australia*, 3rd ed, LexisNexis Butterworths, Sydney, 2004, Chapter 11. Further, a UK textbook considers the changing laws and administration of the granting of patents in its “History of the British Patent System Up Until 1977”: L Bently and B. Sherman, *Intellectual Property Law*, 2nd ed, Oxford University Press, Oxford, 2004, 324-327.

⁸ “Principles” could also be discussed as normative statements with which elements of the patent system should comply. Such a definition would both not be in keeping with the Foucaultian flavour of the piece and it would raise issues with respect to the justifications of the principles. For the purposes of this article, the normative statements are referred to as “precepts” and are discussed separately to the principles.

⁹ Dent and Cook, above n 5, 141.

¹⁰ This “always-already” nature of the principles results in a lack of their acknowledgement in patent law decisions – that is, the principles are so foundational, they literally go without saying. There is a greater level of judicial discussion of the consequential (normative) precepts as they are used by the courts to guide their decisions.

A. “State” “Power”

Patents for invention were, it is often said, first granted in Venice in the fifteenth century.¹¹ Prior to that, in England, the Crown had granted privileges to individuals in order to further the development of key domestic industries.¹² That is, the Crown, by its prerogative right, offered benefits to particular people for the presumed benefit of the wider population.¹³ In other words, the King or Queen, by right of their office, had the power to grant a monopoly. This power of the Crown persists today in three forms: (1) the power of a state to pass legislation authorising, and limiting, monopolies; (2) the power of a state to negotiate with other states with respect to international agreements around patents; and (3) the power of a state to adjudicate disputes over patents between individuals and between individuals and the state.

A patent is a creature of national law as a patent grants a monopoly right that is only enforceable in a national court.¹⁴ Legislation enacted by national parliaments governs the application process and the enforcement procedures.¹⁵ In the United Kingdom, for example, a patent is granted in accordance with sections of the *Patents Act 1977* and infringement proceedings are brought under s. 60 of that Act.¹⁶ Further, there are a number of international agreements that impact on the national patent laws in a given country. These include the Paris Convention, the TRIPS Agreement,¹⁷ the Patent Cooperation Treaty and for some countries, the European Patent Convention and various free-trade agreements.¹⁸ Such agreements tend to set minimum standards with which

¹¹ D. Guellec, ‘Historical Insights’ in D. Guellec and B. van Pottelsberghe de la Potterie, *The Economics of the European Patent System*, Oxford University Press, Oxford, 2007, 16.

¹² King Edward III, for example, gave a royal grant to John Kempe in 1331 so that he could instruct others in the ways of the textile industry: E. W. Hulme, ‘The History of the Patent System under the Prerogative and at Common Law’ (1896) 12 *Law Quarterly Review* 141, 142.

¹³ For a discussion of the public policy reasons for the monopoly grants in early modern England, see C. Dent, ‘Patent Policy In Early Modern England: Jobs, Trade And Regulation’ (2006) 10 *Legal History* 71. Even the much derided playing card patent behind the case of *Darcy v Allen* (1602) Noy 173, 74 ER 1131 may be justified on employment policy grounds: *ibid*, 81-85.

¹⁴ The European Patent Office does grant patents, however, the patents are still national patents enforceable in national courts. There has been discussion around the creation of a European patent litigation procedure in the form of the European Patent Litigation Agreement – negotiations that are not complete, in part due to competing (national) interests in a potential Europe-wide Community Patent.

¹⁵ The European Patent Convention governs the application process for patents granted by the European Patent Office.

¹⁶ Another aspect of state power in this area is, in the UK at least, the Crown’s capacity to exploit a patent without infringing the patent: *Patents Act 1977* s. 55. If the Crown does use a patented invention without the consent of the patentee under this provision then the Crown must compensate the patentee for the use: *Patents Act 1977* s. 57A.

¹⁷ The Agreement on Trade-Related Aspects of Intellectual Property Rights is binding in member states of the World Trade Organisation.

¹⁸ Such as the Australia-United States Free Trade Agreement.

the national laws must comply. These agreements are negotiated between states by virtue of their power to do so as recognised nations. There is no question, within the patent system, that each state that has entered into an international agreement, or passed laws, with respect to patents has the power to do so.¹⁹ Without this power, the patent system could not exist in its current form.²⁰

The final aspect of the power of the state is the adjudicatory power. There is a strong tradition of state involvement in the adjudication of disputes between individuals and between individuals and the state.²¹ The (obvious) acknowledgement of this as a principle of the patent system is not meant to imply that the state should not have the power to adjudicate disputes; it is simply meant to highlight that the system could not be the same without it. To remove the courts from the system as it operates now would render any patents unenforceable and, therefore, effectively useless; the exploitation of inventions may, then, rely on the use of trade secrets²² and inter-firm negotiations over the transfer of those secrets (negotiations which, in many cases, will be compromised by unequal bargaining power).

¹⁹ It may be noted that, for the purposes of the patent system, this is best seen as a power of the state rather than as a reflection of the “will of the people” that constitute the nation. Not all the states that have passed patent legislation or have negotiated international agreements are democracies; to consider the will of the people as a principle of the system would be counter to the validity of the patent laws of those countries.

²⁰ An alternative way of viewing the patent system as an exercise of state power is to see the system as a form of “ordering” of the economy on behalf of the state. Governing practices generally now are aimed at rendering the ordering of society along economic lines (T. Lemke, “‘The Birth of Bio-Politics’: Michel Foucault’s Lecture at the Collège de France on Neo-Liberal Governmentality” (2001) 30 *Economy and Society* 190, 203). After all, patents are, by law, a form of personal property authorised by the state (for example, the Australian *Patents Act 1990* (Cth) s. 13(2)) and one feature of property is the entitlement to exclude others from use of the property (F. Cohen, ‘Dialogue on Private Property’ (1954) 9 *Rutgers Law Review* 357, 373; see also W. Gordon, ‘A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property’ (1993) 102 *Yale Law Journal* 1533). The patent system, therefore, may be understood as a scheme for establishing and maintaining particular (economic) relationships between (economic) actors. Further, processes of ordering may be seen, from a Foucaultian perspective, in terms of discursive control (Foucault, ‘Order of Discourse’, above n 4; and in the legal context C. Dent, ‘The Privileged Few and the Classification of *Henwood v Harrison*: Foucault, Comment and Qualified Privilege’ (2005) 14 *Griffith Law Review* 34; and Dent and Cook, above n 5).

²¹ The doctrine of the separation of powers justifies the state playing a role in the judging of the actions of its servants: the ‘separation of powers ensures that the three arms of government operate as checks and balances upon each other so that no one governmental arm unduly harms the interests of the governed: S. Joseph and M. Castan, *Federal Constitutional Law: A Contemporary View*, 2nd ed., Lawbook Co., Sydney, 2006, 11.

²² For a history of the role of secrecy in the transmission of technical knowledge, see P. Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance*, John Hopkins University Press, Baltimore, 2001.

B. Individual “Choice”

The patent system is not best understood simply as the set of legal rules and regulations that arise from the power of the state. To do so would be to discount the existence, and impact, of the decisions made, and the actions carried out, by the different parties based on the legal rules and regulations. These decisions and actions reflect the second principle, one that may be described, in a shorthand way, as individual “choice”. More fully, the patent system requires that those who participate in it are understood to be individuals who know what is in their interests, what those interests are and how they should pursue them – in other words, individuals are seen to understand the options available to them and to weigh them up and decide which option to take based upon their own interests.²³ To more fully describe this principle requires a brief summary of the actors, and their decisions, that constitute the patent system.

One of the key sets of individuals in the system are those private sector individuals and firms who participate in it. These people include those who seek patent protection for inventions, those who could seek patent protection but choose not to, and those who compete in the market alongside those who have gained patents for their inventions. These individuals are, most obviously, captured by the principle of “choice”. A firm has a clear interest and, in the case of publicly listed company, a legal obligation, in seeking financial profit. Individual firms decide, on the basis of their knowledge and experience, whether or not to pursue patent protection and whether or not to compete in a market that features patented inventions.²⁴ Empirical research has shown, for example, that not all who produce an invention that could be patented seek such protection.²⁵ Other research has shown that firms also have

²³ It may be noted that the assessment that individuals can choose does not necessarily mean that individuals are fully “rational” beings – an idea critiqued by feminists (see, for example, J. Gibson-Graham, *The End of Capitalism (as we knew it)*, Blackwell, Cambridge MA, 1996, 103-104) and problematised with the creation of the economics sub-discipline of behavioural economics (see, for example, M. Altman (ed), *Handbook of Contemporary Behavioural Economics*, ME Sharpe, Armonk NY, 2006). More complex decision making theories have developed that do not rely on fully rational actors (see, for example, D. Kahneman and A. Tversky, ‘Choices, Values and Frames’ in T. Connolly, H. Arkes and K. Hammond (eds), *Judgment and Decision Making: An Interdisciplinary Reader*, 2nd ed., Cambridge University Press, Cambridge, 2000).

²⁴ A corollary, therefore, of this principle is the freedom to make contracts in the interests of an individual or a firm. Tied to this, then, is the state power of adjudication that provides the court system that facilitates the effective carriage of contractual relations.

²⁵ The literature shows that there is significant variation between industry sectors as to the level of use of the patent system as a means to protect inventions and market share. See, for example, R. Levin, A. Klevorick, R. Nelson and S. Winter, ‘Appropriating the Returns from Industrial Research and

multiple reasons for pursuing patent protection. These include a desire to protect technology; create ‘retaliatory power against competitors; create ‘better possibilities of selling licences’; provide ‘motivation for employees to invent’; provide a ‘measure of R & D productivity’; and improve the ‘corporate image’.²⁶ Firms, therefore, may be usefully understood as “choosing” to use the system and to use the system in a manner that best suits their interests.

The other significant set of individuals relevant here is the group that may be loosely described as “patent professionals”. These individuals are those whose decisions, and actions, with respect to the patent system are constrained by the rules of the system itself. They, therefore, include patent examiners, patent agents (known as patent attorneys in some jurisdictions) and, to a lesser extent, lawyers who specialise in patent law. Patent examiners decide, based on the law, whether or not a given patent application identifies an invention that complies with the tests of patentability. Patent attorneys “choose” the language of the patent claims that best suit the invention and the needs of the client. Further, in most cases, an inventor (or a firm) will approach a patent attorney in order to file a patent application in accordance with the requirements of the legislation; and patent lawyers may be asked to prosecute, or defend, a patent infringement action in the courts (again, in accordance with the requirements of the legislation).

One final point with respect to “choice” needs to be made. Any decision made by a party to the patent system will be constrained by a number of factors.²⁷ A patent attorney, for example, will make decisions about the content of a patent application based, in part, on the law; in part, on the wishes of her or his client; in part, on her or his understanding of the law; in part, on her or his understanding of the invention; in part, on the ethics of the profession; in part, on the interests of the patent attorney firm;

Development’, *Brookings Papers on Economic Activity*, 1987; J. Allison and M. Lemley, ‘Who’s Patenting What? An Empirical Exploration of Patent Prosecution’ (2000) 53 *Vanderbilt Law Review* 2099; and D. Burk and M. Lemley, ‘Policy Levers in Patent Law’ (2003) 89 *Virginia Law Review* 1575.

²⁶ O. Granstrand, *The Economics and Management of Intellectual Property: Towards Intellectual Capitalism*, Edward Elgar, Cheltenham, 1999, 78. Other reasons that have been cited include ‘to obtain financing and boost market valuation’; to use ‘as signalling mechanisms’; and ‘to deter others from suing’: M. Lemley and C. Shapiro, ‘Probabilistic Patents’ (2005) 19 *Journal of Economic Perspectives* 75, 81.

²⁷ This is a milder version of the Foucaultian position that individuals or ‘subjects are absolutely constituted discursively. For Foucault, there is no subject prior to discursive inscription’: C. Dent, “‘Journalists are the Confessors of the Public”, Says One Foucaultian’ (2008) 9 *Journalism* 200, 202. From such a Foucaultian perspective, discourses (or bodies of knowledge) ‘produce the object about which they speak’: H. Dreyfus and P. Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*, 2nd ed, University of Chicago Press, Chicago, 1983, 61 (emphasis in original).

and, in part, on understanding of what the examiners in the target patent office will accept. The acknowledgement of these constraints reinforce the common sense view that the patent system is not entirely controlled by the patent legislation; the recognition of constraints, however, does not counter the assertion that individual “choice” is a first order, and therefore necessary, principle of the patent system.

C. Knowledge is “Power”

The final first order principle of the patent system relates to the constitutive power of knowledge.²⁸ It is uncontroversial to assert that the system is founded on the principle that knowledge is a public good that should be disseminated freely.²⁹ This is evidenced by the *quid pro quo* of the system that sees the exchange of monopoly protection for the description of the invention.³⁰ Lord Parker held that a patent ‘could not be granted without consideration moving to the public ... In the case of new inventions the consideration [is] the disclosure made to the public of a new and useful article or process’.³¹ That is, a basic requirement for the grant of a patent is the complete specification of the invention.³² This specification is intended to allow a person skilled in the relevant art to reproduce the invention.³³ The patent system, then, is easily seen as an institution that encourages the development of knowledge and a repository of the innovation protected by patents.³⁴ In other words, the growth of knowledge, through each patent, is a key benefit to the state of the patent system.

²⁸ Asserting a connection between power and knowledge is foundational for any Foucaultian analysis; see, for example, M. Foucault, *Power/Knowledge: Selected Interviews and other Writings 1972 – 1977*, C. Gordon (ed), Pantheon, New York, 1980.

²⁹ For a discussion of knowledge as a public good, see J. Stiglitz, ‘Knowledge as a Global Public Good’ in I. Kaul, I. Grunberg and M. Stern (eds), *Global Public Goods: International Co-operation in the 21st Century*, Oxford University Press, New York, 1999.

³⁰ This, then, could found an argument that the patent system is for the benefit of the public because patent descriptions are an integral part of the process and, these descriptions directly contribute to the expansion of knowledge in the wider community. A counter example is the “Enigma” code of World War II. Much hype has surrounded the breaking of the code used by the Germans in WWII (see, for example, the movie *Enigma*). The work of the code-breakers may have been easier if they had looked at the drawings for the Enigma machine lodged, with the UK Patent Office, with the patent application for the invention: B. Fox, ‘Carry On Spooks’ (2005) 24/31 December, *New Scientist*, 70-71. If patent descriptions themselves were proof of the public benefit of the system, then, it seems to have failed in this instance.

³¹ *Attorney-General (Cth) v Adelaide Steamship Co* [1913] AC 781, 793.

³² *Patents Act 1977* s. 14(2). For a description of the rise in importance of the specification in the grant of patents, see D. Brennan, ‘The Evolution of English Patent Claims as Property Definers’ [2005] *Intellectual Property Quarterly* 361.

³³ McKeough, Stewart and Griffith, above n 7, 305.

³⁴ At a basic level, then, this principle suggests that the patent system is another aspect of the “enlightenment project”. For a recent debate on the project, see J. Schmidt, ‘What Enlightenment Project?’ (2000) 28 *Political Theory* 734; C. Delacampagne, ‘The Enlightenment Project: A Reply to

The knowledge principle, for the purposes of this article, is more fundamental, and more nuanced, than the suggestion that knowledge is the *quid pro quo* of the grant. The argument here is that knowledge constitutes the patent system. Knowledge, for example, constitutes expertise.³⁵ Expertise, in turn, is central to decisions of the major players in the system, including patent examiners and patent attorneys.³⁶ Knowledge is also central to the perpetuation of professions, such as patent attorneys and patent lawyers, that have institutional power in the patent system.³⁷ Knowledge, and the quest for knowledge, is often central to an inventor's sense of self and self-value. It has been highlighted, for example, that multiple factors are important to innovative workers including the autonomy of research and the ability to add to existing knowledge.³⁸ Knowledge, or more precisely differentials in knowledge, also constitutes the market behaviour of firms.³⁹ The knowledge a firm has about its patented product informs its marketing strategies and its decisions to enter into particular markets and compete with other firms – knowledge, therefore, may be seen to be constitutive of the relationships one firm has with its competitors.⁴⁰ More generally, and as noted above, knowledge is central to the principle of choice – options must be known before they may be weighed up.

D. Players and Principles of the Patent System

These principles appear fundamental to the operation of the patent system. The principles are linked with the players that take an active part in the system. As noted above, this article is based on an understanding that the system is best seen as the totality of decisions and actions made by those players. The decisions of the state, and

Schmidt' (2001) 29 *Political Theory* 80; and J. Schmidt, 'Projects and Projections: A Response to Christian Delacampagne' (2001) 29 *Political Theory* 86. For Foucault's take on Immanuel Kant's interpretation of Enlightenment, see M. Foucault, 'What is Enlightenment?' in P. Rabinow (ed), *The Foucault Reader*, Penguin, London, 1991.

³⁵ It is acknowledged here that 'knowledge is a complex concept': R. Casselman and D. Samson, 'Moving Beyond Tacit and Explicit: Four Dimensions of Knowledge', *Intellectual Property Research Institute of Australia Working Paper*, 06/04, 2004, 1. Expertise may be understood as "tacit" knowledge as opposed to "explicit" knowledge relating, for example, to particularised facts.

³⁶ Patent attorneys are, for example, trained in both a scientific discipline and patent law.

³⁷ For the role of knowledge in the perpetuation of professions, see Foucault, *Birth of the Clinic*, above n 3; to see the importance of knowledge in the conduct of the patent attorney profession, see E. Hall, C. Dent and A. Christie, *Patent Attorney Privilege in Australia: Rationale, Current Concerns and Avenues for Reform*, Intellectual Property Research Institute of Australia Report, 2007, 20-22.

³⁸ Productivity Commission, *Public Support for Science and Innovation* (Research Report, 2007), 263.

³⁹ The existence of knowledge differentials may be seen to justify laws such as the *Trade Practices Act 1974* (Cth) and other protections against unfair competition.

⁴⁰ Knowledge can also define industry sectors – pharmaceutical manufacture is an industry distinct from others because of the nature of the science (the knowledge) that underpins it.

its delegates the patent examiners, are possible because of the principle of state power; researchers invent, firms invest in research and patent attorneys act for firms on the basis that knowledge is power; and all actors can make decisions with respect to patenting because individual choice is of fundamental importance to the system. Separate from the connections between the principles and the players are the actors' motivations or objectives. That a firm chooses to invest in greater research is not, of itself, explained by the principles underlying the patent system.

The objectives of individual players are as numerous as the players themselves. Each firm, for example, that chooses to seek patent protection (or not) will do so with its own interests and objectives in mind – the principle of individual choice. There are, however, commonalities in the objectives of the multiple players. These commonalities may be considered in terms of the normative precepts that are supported by the principles. That is, these precepts align with the principles and accord with, at least some of, the objectives of the players in the patent system.⁴¹ The precepts, in turn, guide the details of procedures in the system, for example, the opposition process. These precepts are discussed next.

III. CONSEQUENTIAL PRECEPTS

In addition to the three first order principles, there are a number of consequential precepts that inform the operation of the patent system. These normative precepts “add flesh” to the above three principles. The importance of the precepts are different to the first order principles. The system could operate in a substantially similar manner as it does now if the precepts were not complied with; however, the system would not be the same if any of the first order principles were not part of the patent system. The precepts considered here are patents as incentive, accountability, accessibility and the acceptance of risk.

A. Patents as Incentive

The first precept, patents as incentive, accords with economic theory and with judicial assertions such as the ‘underlying purpose of the patent system is the encouragement of improvements and innovation’.⁴² The precept may be seen, from an economic

⁴¹ This point is expanded on in Part IV below.

⁴² *Asahi Kasei Kogyo* [1991] RPC 485, 523 per Lord Oliver.

perspective, to justify the patent system on the basis that the monopoly grants offer incentives for firms to invest in research and development (R&D).⁴³ According to one commentator, ‘economic theory tells us that more investment in R&D should lead to more innovation and more innovation should fuel GDP growth’⁴⁴ – and it is patents that are an incentive, but not the only incentive, for R&D.⁴⁵ The argument is that, if inventors and firms that employ them (whether they be small “backyard” operators or multi-national corporations) have an incentive to develop new products, then more innovation will occur and the economy, and society, will be better off. The patent system overall, then, should comply with the precept that patents are an incentive to innovate.

This precept accords with the first order principles of individual choice and knowledge as it is based on an assumption that firms and individuals have the capacity to choose to innovate – to generate new knowledge. Further, the precept acknowledges that individuals and firms may have good reasons to not innovate and, as a result, need an incentive to focus on innovation. One such reason, and a justification for the patent system,⁴⁶ is the capacity of a firm or individual to “free-ride”. Free-riding occurs when one firm copies the invention of another firm; thereby gaining the benefits of the innovation without incurring the costs of developing it. A

⁴³ See, for example, F. Scherer and D. Ross, *Industrial Market Structure and Economic Performance*, 3rd ed, Houghton Mifflin, 1990. Other theories include those of ‘prospect’ (E. Kitch, ‘The Nature and Function of the Patent System’ (1977) 20 *Journal of Law and Economics* 265); ‘race to invent’ (R. Merges and R. Nelson, ‘On the Complex Economics of Patent Scope’ (1990) 90 *Columbia Law Review* 839); and ‘rent dissipation’ (M. Grady and J. Alexander, ‘Patent Law and Rent Dissipation’ (1992) *Virginia Law Review* 305). See also S. Oddi, ‘Un-unified Economic Theories of Patents – the Not-Quite-Holy Grail’ (1996) 71 *Notre Dame Law Review* 267 for a general discussion of the theories.

⁴⁴ L. Stiroh, ‘Uncertainty in the Economics of Knowledge and Information’ in G. Leonard and L. Stiroh (eds), *Economic Approaches to Intellectual Property: Policy, Litigation and Management*, National Economic Research Associates, New York, 2005, 6. Schumpeter has been quoted as stating that the ‘fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers’ goods, the new methods of production or transportation, the new markets, the new forms of industrial organisation that capitalist enterprises create’: R. Caballero and A. Jaffe, ‘How High are the Giants’ Shoulders: An Empirical Assessment of Knowledge Spillovers and Creative Destruction in a Model of Economic Growth’ in A. Jaffe and M. Trajtenberg (eds), *Patents, Citations and Innovations: A Window on the Knowledge Economy*, MIT Press, Cambridge, Mass., 2002, 89.

⁴⁵ Patents act as an incentive as they provide a monopoly over the use of the patented invention. In Australia, a patentee has an exclusive right to ‘exploit’ the patent: *Patents Act 1990* s. 13. Schedule 1 to the Act defines ‘exploit’ to include, in relation to a product, to ‘make, hire, sell or otherwise to dispose of a product’. Article 64 of the European Patent Convention provides that the rights that attach to a patent granted by the European Patent Office are the same as the rights granted by a national patent office. In the United Kingdom, for example, infringement of a product is defined to include where a person makes or disposes of that product: *Patents Act 1977* (UK) s. 60. If an invention is commercially valuable, then such a monopoly would provide a financial incentive for its development.

⁴⁶ See, for example, the Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, Report, 2003, Chapter 1.

patent grants the patentee a degree of control over the use of the invention and, therefore, reduces the capacity for free-riding. The incentive precept, then, provides the basis for options for individuals and firms to choose between; a decision that can be made by the individual or firm with knowledge of their circumstances, needs and interests.

B. Accountability

The second precept also is founded on the principle of choice; additionally, it takes into account the principle of state power. Accountability, broadly speaking, supports and counters choice in the patent system through the utilisation of the knowledge and expertise of actors in the system.⁴⁷ For the purposes here, it has a wide definition:

Accountability refers to the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings and actions to others. Accountability also usually implies that people who do not provide a satisfactory justification for their actions will suffer negative consequences ... Conversely, people who do provide compelling justifications will experience positive consequences...⁴⁸

Accountability may be understood to operate in three distinct sectors of the patent system: (1) as a check on the decisions of patent examiners; (2) as a control on the actions of patentees; and (3) as norm of behaviour of patent attorneys.⁴⁹

The first mode of accountability arises from the fact that a patent is an exercise of state power based on a decision of a patent examiner. After all, a central plank of advanced liberal democracies is the rule of law, one aspect of which is the requirement for the accountability of decisions made by administrators.⁵⁰ The decisions of patent examiners, while constrained by the law, patent office procedures and the examiner's expertise, represent a weighing of options by the examiners (simplistically, to grant or not to grant) and are not always correct.⁵¹ This precept may

⁴⁷ There is also a growing field of psychology that focuses on accountability. For an overview, see J. Lerner and P. Tetlock, 'Accounting for the Effects of Accountability' (1999) 125 *Psychological Bulletin* 255.

⁴⁸ *Ibid*, 255 (citations omitted).

⁴⁹ As an historical aside, it is arguable that the introduction of the 1623 Act of Monopolies was the result of a lack of accountability over the actions of King James; see, for example, M. Davies, *The Enforcement of English Apprenticeship: A Study in Applied Mercantilism 1563-1642*, Harvard University Press, Cambridge Mass., 1956, 35.

⁵⁰ See generally, I. Thynne and J. Goldring, *Accountability and Control: Government Officials and the Exercise of Power*, Law Book, Sydney, 1987.

⁵¹ For an introductory discussion of decision making theory and the work of patent examiners, see C. Dent, 'Decision Making and Quality in Patents' (2006) 28 *European Intellectual Property Review* 381.

be seen to be particularly important in the patent system to ensure the proper granting of patents given the ‘anti-competitive effects of monopolies’.⁵² This mode of accountability, therefore, supports the procedures in place in patent systems to review such decisions.⁵³

The second mode relates to the actions of patent applicants and patentee firms in the system.⁵⁴ Firms, and individuals, may be held to account for their actions with respect to the patent system. There are, for example, penalties, in some jurisdictions, for patentees who make unjustifiable threats of infringement actions against others.⁵⁵ Patentees who sue for infringement where the alleged infringing behaviour is outside the scope of the patent may be counter-sued for revocation (which may result in the amendment or revocation of the patent).⁵⁶ Patentees, therefore, are held to account, through the court system,⁵⁷ if their behaviour over-reaches the norms of sound commercial behaviour through the overly aggressive use of infringement actions.⁵⁸

From the broader perspective, the need for this mode of accountability is a result of the costs associated with the grant of a monopoly for an invention. A competitor of a patentee cannot, without a licence, manufacture or sell a product covered by a patent – this reduces choice for the consumer and allows the patentee to charge a higher price for a patent-protected product. Further, restrictions on the use of patented inventions reduce the capacity of competitors to improve on the invention⁵⁹ thus restricting the flow of innovations available to society. Maintaining the capacity for competitors to

⁵² H. Sun, ‘Post-Grant Invalidation in China and in the United States, Europe and Japan: A Comparative Study’ (2004) 15 *Fordham Intellectual Property, Media and Entertainment Law Journal* 273, 329.

⁵³ Those procedures include opposition processes in Australia and Europe and the re-examination procedures in the United States: see, generally, Rotstein and Dent, above n 1. Decisions of examiners may also be challenged through the courts via revocation proceedings.

⁵⁴ Applicants in the US are, for example, required to swear an oath with respect to their application when applying for a patent at the United States Patent and Trademark Office: 35 USC 115.

⁵⁵ For example, in Australia: *Patents Act 1990* (Cth) Ch. 11 Pt 3.

⁵⁶ Counter-suits for revocation can also be instituted where the alleged infringing behaviour is within the scope of the patent.

⁵⁷ It is also arguable that informal processes of accountability exist. One example could be the naming (and shaming) of particular companies as “patent trolls” – a term of abuse aimed at firms that exploit the patent system for profit without contributing to the common wealth of knowledge in the world.

⁵⁸ State power also provides for the regulation of firms through consumer protection legislation (such as the *Trade Practices Act 1974* (Cth) in Australia). This form of legislation is aimed at protecting consumers from fraud and unfair competition in the market-place. This type of legislation is, however, likely to be considered by most to be outside the scope of the patent system.

⁵⁹ As research on an invention may constitute a use of the invention and, therefore, may represent infringing behaviour. This is perceived as a significant problem in some areas of science research. See, generally, C. Dent, P. Jensen, S. Waller and E. Webster, ‘Research Use of Patented Knowledge: A Review’ Organisation of Economic Co-operation and Development STI Working Paper 2006/2.

take action to ensure that the scope of the patent matches the extent of the invention allows for a balancing of the interests of the patentees, their competitors and the wider community.⁶⁰

The final mode of accountability in the patent system relates to the norms of behaviour that limit the actions of patent professionals, notably patent attorneys. This form of accountability acts as constraints on the choices made by the attorneys. Attorneys may be under an obligation to comply with the ethics of their professional body⁶¹ or they may be legally regulated under the patents legislation. For example, the Australian Patents Act provides for the deregistration of a patent attorney⁶² (another example of state power) with the *Patent Regulations 1991* (Cth) empowering the Disciplinary Tribunal to make findings of unsatisfactory conduct or unprofessional conduct against an attorney who has had a complaint made about them.⁶³ Accountability, then, is a key precept in the patent system as it is integral to the processes of maintaining the proper conduct of the parties to the system.

C. Accessibility

As with the precept of accountability, there are three areas of the patent system in which accessibility is important. They are: (1) accessibility to the system for inventors; (2) accessibility to the system for those who wish to challenge patents; and (3) accessibility to the products protected by the system. The precept is founded on the principles of state power, individual choice and knowledge.

Broadly speaking, wide access to the patent system for the general public may be seen to arise from the liberal democratic nature of advanced capitalist economies.⁶⁴ According to that nature, each member of society should have the right to participate in the economy and to take advantage of the incentives that form part of the

⁶⁰ See generally, R. Lampe and A. Niblett, 'The Economics of Patent Design: A Selective Survey' Intellectual Property Research Institute of Australia Working Paper 06/03, 2003 and A. Christie and F. Rotstein, 'Duration of Patent Protection: Does One Size Fit All?' (2008) 3 *Journal of Intellectual Property Law and Practice* 402.

⁶¹ In Australia, if a patent attorney is a member of the Institute of Patent and Trade Mark Attorneys of Australia then the attorney has to comply with the Institute's Code of Ethics. Membership of Institute, however, is voluntary.

⁶² *Patents Act 1990* (Cth) s. 199.

⁶³ *Patent Regulations 1991* (Cth) reg. 20.23.

⁶⁴ Not all nations with a patent system are advanced capitalist economies, however, the significant nations in the patent system are. This distinction is, in part, the explanation for accessibility being a precept rather than a principle – that is, while many actors see that accessibility should be part of the system it is not integral to the system operating as it does.

economy.⁶⁵ Each person is, further, understood to have the capacity to be educated in the technical arts in such a way as to be an inventor and, therefore, should have the right to benefit from the processes of invention. In the same manner that a Lockean view of the world indicates that a labourer is entitled to the fruits of her or his physical work,⁶⁶ the patent system may be seen to be based on the precept that all inventors are entitled to the fruits of their mental labour.⁶⁷ If knowledge is accessible to all, then access to the processes that provide benefits for the creation of knowledge should be available to all. From these foundations, the precept that all should have access to the system as an inventor flows.

The challenging of patents is an important aspect of the system and integral to the processes of accountability. If it is accepted that patent examiners do not always make the right decision with respect to patent applications, then there needs to be capacity for the decisions to be reviewed.⁶⁸ As one of the principles of the system emphasises the benefits to society offered by knowledge, it follows that challenges may, effectively, be based on the new knowledge, or lack of it, that is encapsulated in the patent or patent application. Therefore, any person with the appropriate knowledge to correct the decision of the examiner, whether the procedure be in the courts or before the patent office as in opposition, should be able to challenge the decision. Given the assumption that anybody could be educated in a technical art that supports an

⁶⁵ Further, each person is socialised in such a way as to “empower” her or himself to work within, and manage her or himself in terms of, the economy. One commentator argues, for example, that liberal governance is ‘overwhelmingly concerned with the establishment of those conditions – both negative and positive – which make the poor [and everyone else] responsible for what later generations would term their “standard of living”’: M. Dean, *The Constitution of Poverty: Toward a Genealogy of Liberal Governance*, Routledge, London, 1991, 218. See generally, N. Rose ‘Governing “Advanced” Liberal Democracies’ in A. Barry, T. Osborne and N. Rose (eds), *Foucault and Political Reason: Liberalism, Neo-liberalism and Rationalities of Government*, UCL Press, London, 1996; W. Walters, ‘Governing Unemployment: Transforming “the Social”’ in G. Wickham and G. Pavlich (eds), *Rethinking Law, Society and Governance*, Hart, Oxford, 2001 and M. Dean, *Governmentality: Power and Rule in Modern Society*, Sage, London, 1999.

⁶⁶ For a discussion, that pre-dates that of Locke, of the link between labour and property see D. Wood, *Medieval Economic Thought*, Cambridge University Press, Cambridge, 2002, 24-25 citing the work of John of Paris and Fortescue.

⁶⁷ For a discussion of the history of this point, see B. Sherman and L. Bently, *The Making of Modern Intellectual Property Law*, Cambridge University Press, Cambridge, 1999, 11ff. For a Lockean perspective of intellectual property protection, see Gordon, above n 20, and S. Horowitz, ‘Rethinking Lockean Copyright and Fair Use’ (2005) 10 *Deakin Law Review* 209.

⁶⁸ Some commentators have gone so far as to argue that, given the standard of examination in the United States Patent and Trademark Office, the focus of improving the quality of patents granted should be a greater reliance on post-grant challenge systems, in particular, the litigation system: M. Lemley, ‘Rational Ignorance at the Patent Office’ (2001) 95 *Northwestern University Law Review* 1495.

invention covered by a patent or a patent application, then the challenge systems, arguably, should be accessible to all.

The third aspect of accessibility, that of a “right” to access products protected by patents,⁶⁹ is the result of state power. This aspect is linked to the principle of choice that suggests all in society may choose to allocate their funds in accordance with their needs and interests – therefore, those who wish to buy products protected by patents are free to make such a purchase (as long as they have the requisite funds). The principle of state power also, however, supports the provision in the TRIPS Agreement that holds that states may ‘adopt measures necessary to protect public health and nutrition’.⁷⁰ This provision gives the signatories to the Agreement the power to grant compulsory licences for products protected by patents such as pharmaceuticals;⁷¹ with compulsory licences allowing the production of products covered by the licences without the consent of the patentee. An intention of the provision, then, is to provide access to certain pharmaceuticals to all in a society (even those who cannot afford to buy them) in the interests of the overall health of the public.

The use of compulsory licences may be seen to counter the principle of individual choice as the granting of a compulsory licence is, in most cases, against the wishes of the patentee.⁷² The use of such licences, however, accords with the principle of choice (through the choice of an organisation to choose to seek a licence and for the government to grant it); it accords with state power to act and the power of the state to “know” that the granting of the licence is correct in order to protect public health and nutrition. The processes of granting a licence also has to comply with the precept of

⁶⁹ Such a “right” does not have to be exercised by any party for it to be a recognised part of the patent system.

⁷⁰ Article 8 of the TRIPS Agreement.

⁷¹ Article 31 of the TRIPS Agreement. The Declaration on the TRIPS Agreement and Public Health (Doha Declaration) stated that ‘each member has the right to grant compulsory licences and the freedom to determine the grounds upon which licences are granted’: WTO Ministerial, WT/MIN(01)/DEC/2, adopted on 14 November 2001, para 5(b). See further, O. Brand, ‘The Dawn of Compulsory Licensing’ (2007) *Intellectual Property Quarterly* 216; S. Ford, ‘Compulsory Licensing Provisions Under the TRIPS Agreement: Balancing Pills and Patents’ (2000) 15 *American University International Law Review* 941; and S. Bartelt, ‘Compulsory Licences Pursuant to TRIPS Article 31 in the Light of the Doha Declaration on the TRIPS Agreement and Public Health’ (2003) 6 *Journal of World Intellectual Property* 283. I thank Stephanie Harms for her research in this area.

⁷² Governments may only authorise compulsory licences where unsuccessful attempts have been made to licence the patent from the patent-holder ‘on reasonable commercial terms’: TRIPS Agreement, Art. 31(b). This requirement does not apply in the ‘case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use’.

accountability; for example, in terms with the requirements set out in the TRIPS Agreement. Further, the requirement of ‘adequate remuneration’ in the Agreement⁷³ acknowledges the importance of the financial incentive to patentees.⁷⁴ A final aspect of the principle of choice in these circumstances is that patentees with patents over particular pharmaceuticals may also have been aware of the risk of compulsory licences at the time of development of the drug or the time of seeking patent protection and yet still pursued the pharmaceutical and its patent.

D. Acceptance of Risk

The fourth precept, acceptance of risk, is founded on the knowledge and individual choice principles.⁷⁵ Implicit in the process of actors in the patent system choosing between the options before them, is the notion that they have to accept a degree of risk in any path they pursue.⁷⁶ In terms of the key players of the system, the state has to accept the risk that patents may be abused by self-interested firms; patentees have to accept the risks that not all granted patents will be upheld by courts and not all patents will be respected by their competitors; and the competitors of patentees have to accept the risk that a product they provide, for example, may attract an action for infringement even if they are of the opinion that the product does not infringe a patent.⁷⁷

Risk exists in the patent system as it is not feasible (and perhaps not desirable) to have absolute certainty about every aspect of the patent system. The only way, for example,

⁷³ TRIPS Agreement, Art. 31(h).

⁷⁴ The fact that compulsory licences are supported by the principles and comply with the precepts does not mean that their use by national governments are always in the interest of the population or the patent system overall. The purposes to which features of the system are put may be conceived of differently to the principles and precepts. This point is made more fully below.

⁷⁵ As noted in Dent, *Patents as Devices of Uncertain Quality*, above n 2, 152n16: risk is a term that is used widely in contemporary debate. ‘In everyday parlance, the term “risk” is used as “a synonym for danger or peril, for some unhappy event which may happen to someone”’: G. Mythen, *Ulrich Beck: A Critical Introduction to the Risk Society*, Pluto Press, London, 2004, 13, quoting F. Ewald, ‘Insurance and Risk’. Risk is also used in a wider, yet more specific, sense in academic circles. Beck coined the term “risk society” to privilege the understanding that the production of risk accompanies the production of wealth in society: U. Beck, *Risk Society: Towards a New Modernity*, Sage, London, 1992, 19. The use of the term risk in this article reflects the former, more everyday, use of the term.

⁷⁶ I thank Andrew Christie for helping me clarify my thinking on this point.

⁷⁷ This precept is tied to the question of “certainty” and patents. This issue, in relation to patent scope at least, has already been raised in the literature. Bessen and Meurer, for example, assert that ‘most patent disputes arise because patent validity and infringement are uncertain’: J. Bessen and M. Meurer, ‘The Patent Litigation Explosion’ (2005) Boston University School of Law Working Paper 05-18, 1. See also J. Levin and R. Levin, ‘Patent Oppositions’ (2002) Stanford Institute for Economic Policy Research Discussion Paper 01-29; J. Anton, H. Greene and D. Yao, ‘Policy Implications of Weak Patent Rights’ in A. Jaffe, J. Lerner and S. Stern (eds), *Innovation Policy and the Economy*, Vol. 6, MIT Press, Cambridge MA, 2005; and Dent, ‘Patents as Devices of Uncertain Quality’, above n 2.

to have absolute certainty about the existence, or extent, of a patent right is to have a court rule on its validity.⁷⁸ As patents give rise to rights, they can only be affirmed, or restricted, by a court (in keeping with the principle of state power). Competitors cannot afford to challenge, in court, every patent that they cannot work around as patent litigation is an expensive process.⁷⁹ Competitors, therefore, have to accept a degree of risk when making decisions with respect to investing in a market where patent inventions operate.⁸⁰ It is important, however, that firms, when making such decisions, are sufficiently aware of the factors relevant to the decision.⁸¹

This precept raises the question: how much risk is acceptable? The best answer is: it depends. A number of factors are relevant, including the extent of the patents in question,⁸² the market a firm wishes to operate in,⁸³ the start-up costs for entry into

⁷⁸ Absolute certainty would further require that no appeals were possible from the ruling of the court, either because the period in which an appeal could be filed had lapsed or the ruling was from the highest appeal court in the jurisdiction. It may also be possible to achieve absolute certainty with respect to patent scope, for example, by legislating that there is no challenge possible to the scope of a patent granted by a patent office. Such certainty would directly impact on the principle of choice and the precepts of incentive and accountability and, therefore, would not be feasible in the patent system as it exists currently.

⁷⁹ To have every granted patent the subject of litigation would also place an unnecessarily onerous burden on the justice system of any country.

⁸⁰ For a discussion of decision making and risk, see D. Kahneman and A. Tversky, 'Prospect Theory: An Analysis of Decision under Risk' (1979) 47 *Econometrica* 263; and D. Soman, 'Framing, Loss Aversion and Mental Accounting' in D. Koehler and N. Harvey (eds), *Blackwell Handbook of Judgment and Decision Making*, Blackwell, Malden MA, 2004.

⁸¹ Some empirical research has been carried out with respect to the role lawyers and advisers have in advising firms on the prospects of litigation. That work suggests that in such advice, the 'threat of lawsuits is often overestimated': T. Wayte et al, 'Psychological Issues in Civil Law' in J. Ogloff (ed), *Taking Psychology and Law into the Twenty-First Century*, Kluwer, New York, 2002, 351. Wayte et al cited the work of L. Edelman, S. Abraham and H. Erlanger, 'Professional Construction of Law: The Inflated Threat of Wrongful Dismissal' (1992) 26 *Law and Society Review* 47 for this finding and that of M. Saks, 'Do We Really Know Anything about the Behaviour of the Tort System – And Why Not?' (1992) 140 *University of Pennsylvania Law Review* 1147 for their discussion more generally.

⁸² The extent, for example, is important in order to gauge the risk that a given product will infringe another patent. One of the purposes of the claims in patents is to alert others to the 'extent of the patentee's monopoly': *Populin v HB Nominees* (1982) 41 ALR 471, 475. That is, a claim is 'something delimiting the area of ... monopoly, as area which [the inventor] asserts is novel, and from which the public is therefore to be excluded': *Ballantyne v Aktiebolaget Separator* (1915) 19 CLR 620, 628, Isaacs J. As a result, claims 'must be reasonably free from ambiguity': *Décor Corporation v Dart Industries* (1988) 13 IPR 385, Lockhart J. This, therefore, does not require absolute specificity. A 'lack of precise definition in claims is not fatal to their validity so long as they provide a workable standard suitable to the intended use': *Minnesota Mining and Manufacturing v Beiersdorf* (1980) 144 CLR 253, 274, Aickin J. The lack of precise definition, therefore, contributes to the risks inherent in the patent system.

⁸³ If a firm wishes to operate in a market replete with patents, a greater level of certainty about the scope of the patents may be required before the firm enters the market than if the market had few patents the scopes of which had already been clarified through litigation. An example of the former market would be one where "patent thickets" exist, such thickets are 'dense webs of overlapping intellectual property rights that a company must hack its way through' when bringing a new product to market: C. Shapiro, 'Navigating the Patent Thicket: Cross Licences, Patent Pools and Standard Setting'

the market⁸⁴ and even the personal characteristics of the decision-maker.⁸⁵ The patent system, of course, cannot be tailored to the needs of every individual who wishes to participate;⁸⁶ indeed, the principle of individual choice holds that it is up to the individual concerned to decide the degree of risk she or he is prepared to accept before embarking on a given course of action. The individual interests of actors in the patent system are, therefore, linked to, yet separate from the patent system precepts.

IV. DISCUSSION

The balance of this article will draw on the above insights and discuss two related matters. The first of these is the relationship between the interests of categories of players in the patent system and the normative precepts. The second draws attention to a notable lack in the description of the principles and precepts – there is little reference to any constitutive role for patent law. The Foucaultian sub-text referred to above will be relied upon more obviously in order to provide a framework for the discussion.

A. Distinction between Patent Players' Purposes and Consequential Precepts

The first matter to be discussed here is the relationship between the objectives of the players in the patent system, the normative precepts and the underlying principles of the system. The three categories are, necessarily, related; however, teasing out the differences provides greater clarity with regards to the structure of the patent system. Two examples will be used: the precept of incentive and the objectives of the state and of patentee firms; and the opposition procedures and the objectives of the state

in A. Jaffe, J. Lerner and S. Stern (eds), *Innovation Policy and the Economy*, Vol. 1, MIT Press, Cambridge MA, 2001, 120.

⁸⁴ The greater the start-up costs for entry, the greater the financial risk is for entry and, therefore, the greater the certainty required by the firm in order to make an informed decision to enter the market.

⁸⁵ Affect and emotion can influence the decisions made by an individual. The better a person feels about a given prospect, or the more confident a person is with respect to an option (irrespective of any "objective" certainty about it) the more likely a person is to pursue that avenue. See, for example, M. Finucane, E. Peters and P. Slovic, 'Judgment and Decision Making: The Dance of Affect and Reason'; and A. Isen and A. Labroo, 'Some Ways in Which Positive Affect Facilitates Decision Making and Judgment'. Both chapters are in S. Schneider and J. Shanteau (eds), *Emerging Perspectives on Judgment and Decision Research*, Cambridge University Press, Cambridge, 2003.

⁸⁶ To date, the system has not been tailored to the needs of particular industries, despite evidence that suggests the relevance of patent protection depends on the nature of the industry – in particular, the level of codification of knowledge within the industry. See, for example, A. Arundel and I. Kabala, 'What Percentage of Innovations are Patented? Empirical Estimates for European Firms' (1998) 27 *Research Policy* 127.

and of the competitors of patentee firms. Both examples demonstrate that multiple purposes accord with the principles and precepts as described here.

The precept of incentive appears fundamental to the patent system. The precept, as described above, reflects economic theory and judicial precedent. It also accords with the interests of the state (separate from the institutions that carry out the adjudicative function of the state) and the interests of patentees. These interests are not, however, always the same. The interests of the state may be taken from the TRIPS Agreement:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.⁸⁷

This statement, the result of the exercise of state power,⁸⁸ reflects an objective of the signatories to the Agreement;⁸⁹ with that objective acknowledging that the interests of the state are furthered through the normative role of patents as incentive for research and development.⁹⁰

The interests of patentee firms are not, however, limited to patents as an incentive to invest in R&D – though that may still be a significant factor in the choices of patentee firms. The list of different motivations that firms have for seeking a patent⁹¹ indicate that patents are not necessarily an incentive for *research*. The motivations equally go to patents as an incentive for the rights that attach to the patents. That is, firms may seek patents – including through the purchase of other patentee firms or patent portfolios⁹² – to gain market share or as a means of strengthening their asset base;

⁸⁷ Article 7 of the TRIPS Agreement.

⁸⁸ The focus on “technological innovation” and the “transfer and dissemination of technology” supports the assertion that knowledge is a first order principle of the patent system.

⁸⁹ Correa argues that if the negotiating parties had intended that the content of the Article be a ‘mere hortatory provision’ it would have been included in the Preamble to the Agreement: C. Correa, *Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPS Agreement*, Oxford University Press, Oxford, 2007, 93.

⁹⁰ The incentive role of patents may not be the only interest of the state. Research has shown that there is a nationalist bias in the granting of patents in a number of patent offices: A. Palangkaraya, P. Jensen and E. Webster, ‘Determinants of International Patent Examination’, *Intellectual Property Research Institute of Australia Working Paper*, 09/05. This suggests that the state has an interest in protecting the research interests of firms within its jurisdiction over and above the interests of foreign firms.

⁹¹ See n 26 above and surrounding text.

⁹² In other words, a firm may seek and acquire patents without conducting any research and development. Firms that approach the patent system from this perspective are sometimes referred to as ‘patent trolls’: L. Grab, ‘Equitable Concerns of *eBay v Mercexchange*: Did the Supreme Court

with these benefits accruing from the *rights* that attach to the patents and are not necessarily tied to R&D. These motivations reflect a different purpose and a perception of patents as a different form of incentive than the purpose, and incentive, of the state.

With respect to the opposition procedures (the processes by which third parties may challenge the grant, or application, of a patent), the processes reflect the precepts of accountability and accessibility.⁹³ The procedures also accommodate the purposes of the state, the competitors of the patentee/patent applicant and the patentee/applicant. Oppositions suit the purposes of the state in that the process acts as a form of quality control on the decision of the original patent examiner. Further, oppositions potentially fulfil the purposes of a patentee's competitors in two ways. First, the patent may be narrowed as a result of the opposition (and, therefore, possibly providing a greater freedom to operate for the competitor); and second, filing an opposition may be a cheaper alternative to challenging a patent in the courts.⁹⁴ Finally, oppositions may also fulfil a function for the patentee/applicant – a patent that has already survived an opposition challenge may be viewed as a stronger grant in the market-place.⁹⁵ Oppositions, therefore, are supported by the principles of state power and individual choice; comply with the precepts of accountability and accessibility; and yet fulfil different purposes for different players in the patent system.

The links between precepts and purposes are a result of the relationship between the two categories. That relationship between the broad objectives of key groups of players and the precepts is focused on the characterisation of precepts as normative

Successfully Balance Patent Protection against Patent Trolls?' (2006) 8 *North Carolina Journal of Law and Technology* 81, 85; though, as Grab notes, the definition of "patent troll" is far from settled.

⁹³ See, for example, Australian *Patents Act 1990* (Cth) s. 59. With respect to the precept of accessibility, the Australian patent opposition procedure previously only allowed parties with an interest in the patent application to oppose the application: *Patents Act 1952* (Cth) s. 59. Now, however, any person can oppose a patent application. The expansion of the category of who may oppose did not necessarily lead to a difference, in practice, of the range of parties who chose to oppose patent applications.

⁹⁴ This is particularly the case before the EPO as an opponent only has to oppose once before the Office (and may only use the services of patent attorneys); whereas, if the competitor resorted to litigation, actions would have to be filed in all the jurisdictions in which the patent was in force and a number of lawyers (solicitors and barristers) may have to be involved in the court action.

⁹⁵ The differences in the opposition procedures in the EPO and in Australia demonstrate the presumption that precepts are normative guides. In terms of accountability, for example, the appeal of an Opposition Division's decision in the EPO (to the Technical Board of Appeal: European Patent Convention, Article 107) is different to the appeal processes in place in Australia (a decision of a hearings officer may appeal to the Federal Court: *Patents Act 1990* (Cth) s. 60). These differences do not invalidate the procedures in place in the two jurisdictions; they do, however, indicate an acceptance of the precepts in each jurisdiction.

and the (Foucaultian) understanding that actors are constituted through the internalisation of norms.⁹⁶ The agglomeration of internalised norms, or practices, both constitute, and flow from, specific bodies of knowledge and general characteristics of functioning in society.⁹⁷ The precept of incentive, for example, is linked to the discipline of economics. The foundations of the precept are the same as those for economics – individual actors (or firms) act in their own self-interest after rationally weighing up the options.⁹⁸ The understanding, internalised by those who function as economic actors,⁹⁹ that incentives are a useful tool is sufficiently widespread that it is foundational to economic theory and to economic policy.¹⁰⁰ This policy, in turn, informs patent law (both legislation and case law) and the actions of the actors in the patent system.

The precepts of accountability and acceptance of risk, on the other hand, may be more closely tied to practices that are inculcated in all who function as members of modern Western society.¹⁰¹ If the broad sense of accountability is considered – the ‘duty to

⁹⁶ A Foucaultian perspective on governance emphasises the diverse range of practices internalised by a given individual in order for them to know how to conduct themselves appropriately. Some of these practices, with respect to the patent system, will relate to law and others to business ethics, few would relate to economic theory. See, generally, M. Foucault, ‘Governmentality’, in G. Burchell, C. Gordon and P. Miller (eds), *The Foucault Effect - Studies in Governmentality*, Harvester Wheatsheaf, London, 1990; N. Rose, *Governing the Soul: The Shaping of the Private Self*, 2nd ed., Free Association Books, London, 1999; and M. Dean, *Governing Societies*, Open University Press, Maidenhead, Berks, 2007.

⁹⁷ Recent research in psychology has found that ‘we do not really operate as free agents in the world. We are all entangled in complex patterns of collective behaviour, many spontaneously organised and most entirely outside our understanding or awareness’: W. Herbert, ‘Got an Original Idea? Not Likely’ (2008) *Scientific American Mind* June/July, 80, 80 citing R. Goldstone, M. Roberts and T. Gureckis, ‘Emergent Processes in Group Behaviour’ (2008) 17 *Current Directions in Psychological Science* 10.

⁹⁸ One ‘assumption, integral to many formulations of neoclassical theory, [is] that firms are purposive agents, whose decisions are based on rationally formed estimates of the relative advantages associated with alternative courses of action open to them’: E. Nagel, ‘Assumptions in Economic Theory’ (1963) 53 *American Economic Review Papers and Proceedings* 211, 218 n9 citing Knight and Samuelson.

⁹⁹ For Foucault, neo-liberalism is the fount of *homo oeconomicus*; with *homo oeconomicus* being an ‘entrepreneur ... being for himself his own capital, being for himself his own producer, being for himself the source of his earnings’: *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*, Palgrave Macmillan, Basingstoke, 2008, 226. “Economic Man”, then, is constituted as being responsible for “his” own financial well-being and as being endowed with the capacity to fulfil that responsibility. This individualism is, however, constituted as functioning within the broader practices of governance that include policy strategies and techniques of those in power.

¹⁰⁰ The “collective” aspect of behaviour is also evident in the rational actions of stock traders. Recent work has suggested that, in times of significant stock market movements (for example, bubbles and crashes), traders focus, not on profit/loss announcements, but on the actions of other traders: G. HARRAS and D. SORNETTE, ‘Endogenous versus Exogenous Origins of Financial Rallies and Crashes in an Agent-based Model with Bayesian Learning and Imitation’, *Swiss Finance Institute Research Paper*, 08-16, 2008; and O. Guedj and J-P. Bouchaud, ‘Experts’ Earning Forecasts: Bias, Herding and Gossamer Information’, <http://arxiv.org/abs/cond-mat/0410079>, (2008).

¹⁰¹ The governance foundations of the precept of accessibility were considered above: fns 62-63 and surrounding text.

give account for one's actions to some other person or body'¹⁰² – then there are strong similarities with general mode of governance that Foucault has traced to the Christian “confession”. This “pastoral” form of governance centres on the existence, and actions, of an ‘authority who requires the confession, prescribes and appreciates it, and intervenes in order to judge, punish, forgive, console and reconcile’;¹⁰³ that is, systems of governance today may be seen to have formalise this process into ongoing procedures for administrative and judicial review.¹⁰⁴ Further, the precept of acceptance of risk may be seen to relate to the ‘actuarial’ self;¹⁰⁵ a self that functions within technologies of governance that include risk calculation and management, in short, a regime of ‘calculative rationality’.¹⁰⁶ Both precepts reflect norms of behaviour that, in part, constitute modern citizens; the agglomeration of these key norms have meant that the norms are widely enough accepted and practised to play a significant role in the structure and operation of the community. The precepts, then, are part of the patent system (reflecting the differing purposes of the state and the players in the system) while also functioning as ‘technologies’ of governance¹⁰⁷ in wider society.¹⁰⁸

B. Where is Patent Law?

It may be surprising to some that the principles and precepts described above do not rely on the detail of patent law as it exists today. Indeed, patent law, as an exercise of state power, can only, in this understanding, be derivative of the principles. At best, the law is a tool for implementing, and maintaining, the precepts that guide the patent system. The law, for example, provides a mechanism for maintaining the monopolies that are at the heart of the incentive role of patents and the law provides a framework that operationalises the precept of accountability. In other words, and in keeping with

¹⁰² C. Scott, quoted in B. Morgan and K. Yeung, *An Introduction to Law and Regulation*, Cambridge University Press, Cambridge, 2007, 221.

¹⁰³ M. Foucault, *The History of Sexuality: Volume One*, Penguin, London, 1990, 61-2.

¹⁰⁴ Such formal processes are not the only incarnation of this form of governance. It has been argued elsewhere that journalists may be understood to act as “confessors” in today’s society: Dent, ‘Journalists’, above n 27.

¹⁰⁵ S. Murray, ‘Care and the Self: Biotechnology, Reproduction and the Good Life’ (2007) 2 *Philosophy, Ethics and Humanities in Medicine*. See also, P. O’Malley, ‘Risk and Responsibility’ in A. Barry, T. Osborne and N. Rose (eds), *Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Governance*, UCL Press, London, 1996.

¹⁰⁶ Dean, *Governmentality*, above n 65, 184.

¹⁰⁷ See, generally, Foucault, ‘Governmentality’, above n 96.

¹⁰⁸ It is acknowledged that the links between the precepts and the technologies of governances are not discussed to the depth that is possible. There is not the space, here, to explore the connections more deeply – this will be the focus of future research.

the ideas of Foucault, *law* is not fundamental to the regulation of patents, instead, the patent practices patent internalised by patent players regulate behaviour in this sphere.¹⁰⁹

This is not surprising as, in the end, as Foucault contends, ‘law is not what is important’ in understanding modern government.¹¹⁰ The conclusion drawn here, then, goes beyond that of Inlow who said ‘one of the great fictions in modern legal theory is that the determination of a patentable invention is a question of law’.¹¹¹ From the perspective adopted here, there is little the law has to do with the *foundations* of the patent system. It does, however, have much to do with the *practice* of the system. The legal tests, for example, are an important form of the regulation of patents and patent players. A consequence of this understanding, then, is that the legal requirements are best seen as instruments rather than goals in their own right.

V. CONCLUDING REMARKS

This think-piece provides a scheme of principles and precepts that underpin and guide this form of regulation – not all will agree with the scheme, however, any debate that follows will inform a better understanding of the patent system overall.¹¹² In sum, it may be understood that the four precepts operate to ensure that the patent system works for the overall benefit of both those who are part of the system and those who take advantage of the inventions protected by the system. Given the three underlying principles of the system, the form that the system should take (and supported by the precepts and the self-interested purposes of the players) is that of regulated competition. That is, participants in the system should be able to pursue their interests

¹⁰⁹ One set of those practices is the recourse to the courts to adjudicate patent disputes.

¹¹⁰ As quoted in A. Hunt, ‘Foucault’s Expulsion of Law: Toward a Retrieval’ (1992) 17 *Law & Social Inquiry* 1, 7. At the very least, ‘law is more marginal to actions within the regulatory space than lawyers might assume’: C. Scott, ‘Analysing Regulatory Space: Fragmented Resources and Institutional Design’ [2001] *Public Law* 329, 334.

¹¹¹ Inlow (1950) quoted in P. Loughlan, ‘Patents: Breaking Into the Loop’ (1998) 20 *Sydney Law Review* 553, 556.

¹¹² Other analyses could see the effects detailed here as principles or precepts, particularly if other definitions of principles and precepts are adopted. The labels that attach to specific norms or rules may not matter significantly in practice. The categorisation used here reflects a reasoning informed by the author’s Foucaultian perspective; and, as noted above, its purpose is to generate discussion rather than to persuade conclusively.

with respect to patents (either as, for example a patentee or a competitor of a patentee) based on knowledge and expertise and under the protection of state power.¹¹³

The goal of the article has been to offer an internally consistent framework that provides greater clarity about the structure of the system and about concepts, and the relationship between those concepts, that are associated with the system. Further, the distinctions drawn between fundamental principles and normative precepts separates the immutable from the mutable in the system; and, the distinction between specific precepts and individualised purposes separates aspects that are changeable by government policy from aspects that may be too deeply embedded within specific bodies of knowledge to be directed by administrative or legislative reform. The scheme, allows for a more directed approach to reform than is possible with a less clear picture of the structure, and relationships within the structure, of the patent system.

¹¹³ More fully, if there is an incentive that is equally accessible by all, and there is accountability both of parties who seek and who grant patents, competition will follow as individuals can choose to participate in the system based on knowledge of their interests and the manner in which they may be furthered – some will choose to seek patents and others will choose to compete in the same market.