Introduction

A. The Requirement for an Invention and the Concept of Inherent Patentability

Under the European Patent Convention[1] (EPC), a patent may only be granted for an 'invention'.[2] This immediately raises the question, '*what is an invention?*' The answer, I suggest, is something the constitutive properties of which make it suitable for a patent; hence my use of the expression 'inherent patentability'[3] to denote the legal requirement for an invention.

Establishing the existence of an invention does not guarantee an entitlement to a patent. Rather, such an entitlement requires that the invention be 'patentable' in the sense of involving an 'inventive step', and being 'new' and 'susceptible of industrial application'.[4] An applicant must also satisfy certain other conditions, including that the subject matter for which a patent is sought is defined in claims that are 'clear and concise and . . . supported by the description' in the specification.[5]

It follows that the existence of an invention by itself is a necessary but not a sufficient condition for entitlement to a patent. It is nevertheless an important condition;[6] the threshold requirement for monopoly protection against which the 'relative'[7] criteria of novelty, inventive step and industrial applicability are assessed,[8] and the resulting patent property defined.[9] This is critical, for it underlines the two aspects of inherent patentability properly construed, namely, the determination of the subject matter to which the patent system is capable of applying, and the restriction of protection to such subject matter when specifically conceived *qua* invention.

[1] Convention on the Grant of European Patents (European Patent Convention, as amended) (Munich, 5 October 1973, 13 ILM 268).

[2] EPC, Art 52(1). The corresponding UK provision is PA, s 1(1).

[3] For an instance of judicial use of this term, see *Halliburton Energy Services Inc v Smith International Inc* [2005] EWHC 1623, Pat per Pumfrey J.

[4] See EPC, Art 52(1). See also PA, s 1(1).

[5] See EPC, Art 84. See also PA, ss 14(5)(b), 14(5)(c).

[6] cf *Biogen Inc v Medeva plc* [1997] RPC 1, HL, 41 per Lord Hoffmann, discussed below at pages 6, 296–299.

[7] T_154/04 (*DUNS LICENSING ASSOCIATES/Estimating Sales Activity*) [2007] EPOR 38, [10].

[8] See EPC, Arts 54, 46, 57; also PA, ss 2, 3, 4.

[9] See EPC, Arts 69, 84; also PA, ss 60, 14(5)(a), 125.

B. The Term 'Invention'

A natural place to begin thinking about inherent patentability is with the term 'invention' by which it is denoted. That term has a long association with patent law, reflected in its use in the earliest Patent Rolls and literature of England.[10] While not included in the first English patent legislation, the Statute of Monopolies 1623,[11] it did appear in all subsequent legislation prior to 1977.[12] According to one commentator, this long association reflects the early common language meaning of the verb 'to invent', which was sufficiently wide that use of the word 'invention' to denote patentable subject matter 'was of great utility, for it shortened expression and imported no theory'.[13] The early meaning of the verb 'to invent' was 'to come upon, to find, to reach', and only derivatively 'to think out, to *excogitare*';[14] a meaning that ignored modern distinctions between original conception, discovery, and the acquisition of knowledge by other means.[15] In so doing, it also explains the use of the term 'invention' in early English patent custom to mean first introduction including importation.[16]

Consistent with this, on the eve of the introduction of the Patents Act 1977 (PA) it was widely accepted that conceptions of the invention depended not on the meaning of the term 'invention', but rather on the meaning of section 6 of the Statute of Monopolies. This was consistent with the reference to that section in all statutory definitions of the 'invention' from 1852.[17] Further, those definitions evolved little beyond the original definition contained in section LV of the Patent Law Amendment Act 1852, as follows.

> The Expression 'Invention' shall mean any Manner of new Manufacture the Subject of Letters Patent and Grant of Privilege within the Meaning of the Act of the Twenty-first Year of the Reign of King *James* the First, Chapter Three [the Statute of Monopolies].

[10] See WH Price, *The English Patents of Monopoly* (Cambridge: Harvard University Press, 1913) 8. Compare the situation regarding the term 'technology', which had no currency in UK patent law prior to the EPC, and limited non-legal currency before the 1829 publication of the first edition of J Bigelow, *Elements of Technology* (2nd edn, Boston: Hilliard, Gray, Little and Wilkins, 1831). On the latter, see HA Meier, 'Technology and Democracy, 1800–1860' (1957) 43 Mississippi Valley Historical Rev 618.

[11] 21 Jac I c 3.

[12] See An Act to Amend the Law Touching Letters Patent for Inventions 1835 (5 & 6 Wm IV c 83), s II; Patent Law Amendment Act 1852 (15 & 16 Vict c 83) s LV; Patents, Designs, and Trade Marks Act 1883 (46 & 47 Vict c 57) s 46; Patents and Designs Act 1907, s 93; Patents Act 1949, s 101. Section 6 of the Statute of Monopolies did include the terms 'inventor' and 'inventors'.

[13] A Daniell, 'Inventions and Invention' (1899) 11 Juridical Rev 151, 151.

[14] ibid; see also the Oxford English Dictionary definition of 'invention'.

[15] EW Hulme, 'The History of the Patent System under the Prerogative and at Common Law. A Sequel' (1900) LQR 44, 52.

[16] Price, *The English Patents of Monopoly*, 8.

[17] See Patent Law Amendment Act 1852, s LV; Patents, Designs, and Trade Marks Act 1883, s 46; Patents and Designs Act 1907, s 93; Patents Act 1949, s 101.

In interpreting such definitions, the UK courts tended often to focus on the language of section 6 of the Statute of Monopolies, and the requirement for a 'manner of new manufacture'.[18] Implicit in that phrase was a concern with advancing the manufacturing arts by rewarding ingenious methods for producing mechanical and chemical artefacts.[19] That concern was tested in the nineteenth century by the grant of patents for uses of such artefacts, resulting in the recognition of a threshold exclusion for manifestly non-inventive categories of subject matter. It was further tested in the twentieth century by the grant of patents for a range of non-mechanical and non-chemical subject matter, resulting in a conception of the invention as a human action of mechanical or chemical utility directed to advancing the manufacturing arts, and requiring to that end the production of a physical (and vendible) product. Finally, the concern was tested in the nineteenth and twentieth centuries by the grant of patents for products as such, resulting in expressions of judicial doubt regarding the inherent patentability of those products, independent of the methods by which they were made.

Two notable pre-modern exceptions to the focus of the courts on the statutory language were Eyre and Rooke CJJ in *Boulton v Bull*,[20] for whom the meaning of the requirement for an invention derived from the history and 'spirit' of the legislation.[21] Still, and despite the terms of the statutory definition above, that did not become the accepted view in modern UK law until the 1960s, following the High Court of Australia's decision in *National Research Development Corp v Commissioner of Patents*.[22] In that case, the Court held the Statute of Monopolies-based definition of 'invention' to depend on neither the meaning of the term 'invention', nor the existence of a 'manner of new manufacture', but rather the principles developed by the courts 'for the application of s. 6 of the Statute of Monopolies'.[23] The effect, on its face, was two-fold. First, it suggested a philosophical and policy-based conception of the invention, focused on what had previously been regarded as suitable for a patent.[24] And second, it confirmed the importance of judicial law-making in the area, notwithstanding the system's longstanding

[18] This is in the cases in which they construed the Statute, rather than merely assuming the issue and focusing (for example) on the sufficiency of the specification.

[19] For a discussion of conceptions of *techne* as 'purposive action' (a means to an end) and 'artefacts' (nuts and bolts) and the tension between them, see R Laudan, 'Natural Alliance or Forced Marriage? Changing Relations Between the Histories of Science and Technology' (1995) 36 Technology and Culture S17–S28.

[20] (1795) 126 ER 651, CP.

[21] ibid, per Rooke J, 666 per Eyre CJ.

[22] (1959) 102 CLR 252, HCA.

[23] ibid, 269.

[24] These conceptions are informed by the definitions of technology formulated by Misa in TJ Misa, 'Theories of Technological Change: Parameters and Purposes' (1992) 17 Science, Technology, & Human Values 3, 4–7.

statutory basis. That importance was recently noted by Lord Walker in *Synthon BV v SmithKline Beecham plc*, as follows:[25]

> The law of patents is wholly statutory, and has a surprisingly long history. It has been wholly statutory since the Statute of Monopolies 1623, an important landmark in constitutional history because of its effect in curbing the royal prerogative. It is a field of law in which statutory change (although important in its cumulative effect, especially in reflecting international treaty obligations) has been a process, not of revolution, but of slow evolution. Bankruptcy law and, until recently, the law of rating are comparable in this respect. In these fields the courts have shown an inclination to enrich the bare simplicity of the statutory text with their own explanatory commentary. But from time to time this process is interrupted by periods of reappraisal. . . . This sort of judicial exposition is more than what the old cases called glossing the statute. In the interpretation and application of patent statutes judge-made doctrine has over the years done much to clarify the abstract generalities of the statutes and to secure uniformity in their application.

With the introduction of the current Patents Act, the 1949 version of the 1852 definition above has been repealed, and the definition of the 'invention' contained in Article 52(2) and (3) of the EPC transposed in its place.[26] The result is a substantially different provision. For a start, the definition does not refer to any prior legislation, suggesting that history is no longer its interpretive base. And second, it is not expressed in positive or purposive terms, but rather as a formal, albeit inclusive list of subject matter not capable of constituting an 'invention'.[27] That list is contained in section 1(2) of the PA, which reads as follows:

> It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of –
> (a) a discovery, scientific theory or mathematical method;
> (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;
> (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;
> (d) the presentation of information;
> but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such.

[25] [2005] UKHL 59, [56]–[57]. cf *Genentech Inc's Patent* [1989] RPC 147, CA, 258–259 per Mustill LJ.

[26] On the purpose of PA, s 1(2) in transposing EPC, Art 52(2), (3), see Hansard HL (series 5) vol 379, cols 1402–1411 (15 February 1977).

[27] On the tension between the definition's inclusiveness and expression as a formal list or 'code'. see ibid, col 1407 per Lord Lloyd.

C. The Origins of the Contemporary (EPC) Definition of the 'Invention'

The difference between section 1(2) of the PA and pre-1977 definitions of the 'invention' raises the question as to the origins and reasons for Article 52(2) and (3) of the EPC: where did they come from and why were they adopted? Their origins lie in a comparative study of national European laws that was undertaken in 1953 by the Secretariat-General of the Council of Europe's Committee of Experts on Patents, in the course of considering a 1949 proposal for the creation of a European patent office. In 1956, certain headings from that study were proposed by Germany as the basis for a possible definition of the 'invention' for inclusion in (what became) the Strasbourg Convention (SPC).[28] That proposal was rejected. In 1964, however, it was the basis for a further proposal by Germany and the Netherlands to a Working Party of the European Economic Community that was formed to create a Common Market patent. While that Party was subsequently disbanded, the proposal itself survived to influence the drafting of Rules 67.1 and 39.1 of the Patent Cooperation Treaty[29] (PCT), which Rules subsequently became the basis for the drafting of Article 52(2) and (3) of the EPC themselves.

Less complex is the reason for the Articles' adoption. The primary reason was to facilitate harmonization, including by ensuring the literal identity of the Articles with the text of Rules 39.1 and 67.1 of the PCT, notwithstanding the different purpose of those provisions.

D. The Uncertainty and Controversy Surrounding the Requirement for an Invention

Since the introduction of section 1(2) of the PA, the law of inherent patentability has been mired in legal and political controversy. Legally, the UK courts and EPO Boards of Appeal have each been 'rather deprecatory about the approach of the other', as the Court of Appeal in *Symbian v Comptroller-General*[30] expressed it.[31] Indeed, in *Aerotel Ltd v Telco Holdings Ltd*[32] the Court of Appeal described the approaches of the Boards as 'mutually contradictory',[33] and one of their approaches as 'not intellectually honest'.[34] Similarly in *DUNS LICENSING ASSOCIATES/Estimating*

[28] Convention on the Unification of Certain Points of Substantive Law on Patents for Inventions (Strasbourg Convention) (Strasbourg, 27 November 1963, ETS 47).
[29] Patent Cooperation Treaty (Washington, 19 June 1970, 9 ILM 978).
[30] [2008] EWCA Civ 1066.
[31] See ibid, [10].
[32] [2006] EWCA Civ 1371.
[33] ibid, [25].
[34] ibid, [27].

Sales Activity,[35] the EPO Technical Board described the UK approach as *mala fides*: not 'consistent with a good faith interpretation of the EPC'.[36] Following a request by the *Aerotel* Court,[37] the matter has now been referred by the EPO President to the Enlarged Board of Appeal for clarification.[38] At the time of writing that decision is yet to be published.

The controversy over the EPC requirement for an invention has not been confined to the courts. Indeed, even the European Community institutions have conflicted over the proper approach to Article 52(2) and (3), amid their concern to regulate the law of patentability, and rectify their exclusion from the EPC system.[39]

Underlying the legal uncertainty which such conflicts have generated remains a further issue and object of disagreement: the importance of the requirement for an invention at all. According to Lord Hoffmann in *Biogen Inc v Medeva plc*,[40] for example, the requirement will invariably be an 'academic' one, which is why (he suggested) the EPC drafters failed to reach agreement on the meaning of 'invention'.[41] By contrast, Lord Mustill believed that it might sometimes require 'close conceptual analysis', particularly in the context of new technologies, 'far distant from the mechanical and chemical inventions on which so much of traditional patent law relates.'[42] As a member of the Patents Court, Pumfrey LJ took a similar view,[43] as has Mr Prescott QC:[44]

> What is an 'invention' . . . is a topic bedevilled by verbal formulae – and by the sweeping of problems under the carpet. So, before I go any further I want to bring some of those problems out into the light of day. But first, does it really matter? Is it merely a sterile argument about the meaning of words? To which I answer that whoever controls the meaning of 'invention' controls what can be patented and hence an important aspect of industrial policy. There can be but one justification for having a patent system, and that is that it is good for the people of the country. If the patenting of certain things does more

[35] [2007] EPOR 38.

[36] ibid, [41].

[37] [2006] EWCA Civ 1371, [25].

[38] G_3/08 (*PRESIDENT'S REFERENCE/Computer Program Exclusion*) [2009] EPOR 9. This case will be the first of an Enlarged Board on the meaning of Art 52(2) and (3).

[39] See, eg *Opinion of the Economic and Social Committee on the Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions* COM(2002) 92 final—2002/0047(COD) (19 September 2002) (criticizing the EPO's interpretation of EPC, Art 52(2) and (3) and *Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions* COM(2002) 92 final (20 February 2002), both discussed in J Pila, 'Dispute Over the Meaning of "Invention" in Article 52(2) EPC: The Patentability of Computer-Implemented Inventions in Europe' (2005) 36 IIC 173–191.

[40] [1997] RPC 1, HL.

[41] ibid, 41.

[42] ibid, 31–32.

[43] *Shopalotto.com Ltd's Application* [2005] EWHC 2416, Pat, [6]–[7]; see also *Research in Motion UK Ltd v Inpro Licensing SARL* [2006] EWHC 70, Pat, [185] per Pumfrey J.

[44] *CFPH's Application* [2005] EWHC 1623, [9]–[10] per Mr Prescott QC.

harm than good, it matters. Patents that are wrongly granted can be very expensive to challenge and may deter small and medium enterprises.

E. The Need for a Conception and Ontology of the Invention . . .

As the last two sentences of Mr Prescott QC's statement above suggest, beyond the uncertainty regarding the importance of the requirement for invention lies one matter on which contemporary courts seem to agree: that the key to understanding that requirement does not depend on any exhaustive, positive definition of the 'invention', but rather on a list of things that are not 'inventions'. And yet, despite a large number of cases and extensive judicial discussion of the list that exists in Article 52(2) of the EPC, the law is still in a 'depressingly' uncertain state.[45] Further, in focusing on what the requirement for an invention excludes from the system, the courts have all but ignored what I suggest to be the second aspect of that requirement, namely, the restriction of patentability to subject matter *qua* invention. Consequently, they have all but ignored the fundamental question, '*what does it mean for a subject matter to be patentable* qua *invention?*' It is also in respect of this particular question that 'close conceptual analysis' is required. Hence my suggestion, that the resolution of the uncertainty that exists in this area depends on two things. The first is successfully articulating a positive conception of the invention. And the second is determining an ontology of the invention, and what it means to conceive a subject matter *qua* invention.

The need for a positive conception of the invention is underlined by the failure, since 1977, of negative definitions to offer a method by which to resolve the morass of hard cases that lie on the periphery of the current patent system.[46] While the existence of such cases is not of itself a cause for alarm, the absence of any coherent underlying theory of inherent patentability means that they assume a significance beyond that of cases in the usual penumbra of uncertainty common to most substantive legal concepts.[47] In particular, they illustrate the difficulty not only in identifying what makes a subject matter (for example) technical, but also in stating with confidence that inventions *are* technical, and *why* the properties constitutive of a technical process or artefact establish a subject matter's inherent suitability for a patent. In other words, the uncertainty relates to both the normative basis of the requirement for inherent patentability and the nature of the requirement itself. In this way, the hard cases demonstrate that the uncertainty lies at the heart of the law, and not merely at its boundaries.

The same applies with respect to the conception of subject matter *qua* invention, the importance of which has only recently been alluded to by the courts,

[45] See *AT&T Knowledge Ventures LP* [2009] EWHC 343, Pat, [15] per Lewison J.
[46] See HLA Hart, *The Rule of Law* (Oxford: OUP Clarendon, 1961) 14–15.
[47] ibid, 12.

along with its essentially philosophical nature. In *CFPH's Application*, for example, Mr Prescott QC emphasized the need for a subject matter to be novel and non-obvious '*under the description* "invention"'.[48] Similarly in *Merrell Dow Pharmaceuticals Inc v H N Norton & Co Ltd*,[49] Lord Hoffmann acknowledged that legal definitions of novelty depend on the law's answer to the question, '*what does it mean to know something, so that it can be part of the state of the art?*', and that the question is an epistemological one.[50] Consistent with this, my suggestion is that it is only by understanding what it means for something to exist *qua* invention, and ensuring that legal conceptions of individual subject matter reflect that understanding, that protection can be properly restricted to '*patentable inventions*', and the requirement for inherent patentability fulfilled.[51]

F. . . . Formulated in Light of the Purpose of the System, the Meaning of Europeanization, and Insights from the History and Philosophy of Science and Technology

The basis of the existing legal uncertainty regarding the requirement for an invention is philosophical and policy-based, and pertains in part at least to the role of the patent system, and the implications of that role for the requirement itself. Historically, the function of the patent system was to advance the industrial arts by granting exceptional and discretionary Crown monopolies for the first introduction of trades and devices capable of supporting a new industry. Central was the notion of industrial progress, or rather social progress through the advancement of the industrial arts. Given this, it is not surprising that the century in which the Statute of Monopolies was enacted was also the century of Francis Bacon, René Descartes, and Isaac Newton. This is because it was their connection of applied science with utilitarian ends, as well as their ideas regarding physical laws and the need for an *arts mechanic* supported by a history of individual trades,[52] that were the basis for Western ideas of social progress, along with the Western project of industrial technology itself.[53] That connection is important, among other things,

[48] [2005] EWHC 1589, Pat, [93], emphasis in original.

[49] [1996] RPC 76, HL.

[50] ibid, 88, emphasis added.

[51] The requirement for a 'patentable invention' is contained in EPC, Art 52(1) and PA, s1(1); see also PA, ss 21(1), 72(1)(a), 74A(1)(b).

[52] cf, eg E Zilsel, 'The Sociological Roots of Science' (1942) 47 Am J of Sociology 544–562 (locating the origins of technology in the separation of the liberal and mechanical arts in around 1550); L Edelstein, 'Review: Recent Trends in the Interpretation of Ancient Science' (1952) 13 J History of Ideas 573–604 (discussing technological applications of ancient science).

[53] See generally J Bury, *The Idea of Progress: An Inquiry into its Growth and Origin* (New York: Dover Publications, 1932), especially ch 2; WE Houghton, 'The History of Trades: Its Relation to Seventeenth-Century Thought as Seen in Bacon, Petty, Evelyn, and Boyle' (1941) 2 J History of

for implying a non-legal conception of the invention as including a progressive and sociological component.

The reference here to technology is apposite, for in today's jurisprudence it is this concept which plays the central role in delimiting the threshold limits of the patent system, displacing, one might say, the role previously played by the concept of industry.[54] In particular, it pervades the decisions of the European Patent Office (EPO), and since the 2000 revision of the EPC, has been expressly reflected in the text of the EPC itself.[55] As revised, Article 52(1) of the EPC requires that patents be available for inventions 'in all fields of technology', consistent with Article 27.1 of the TRIPS Agreement.[56] In combination with the TRIPS requirement that patents 'be available and patent rights enjoyable without discrimination as to . . . the field of technology', and its definition of the aim of the patent system as being to 'encourage and reward technological innovation', this provision of Article 27.1 puts technology at the heart of the international patent system. Since the revision of Article 52(1) of the EPC above, and the EC's adoption of the TRIPS Agreement in 1994,[57] the concept of 'technology' is also at the heart of the European system.

However, and as the UK courts have all but recognized, the focus on 'technology' as informing and delimiting the requirement for an invention begs more questions than it has so far answered.[58] One reason is alluded to in Lord Walker's description of patent law above, as a history of 'judge-made doctrine . . . clarify[ing] the abstract generalities of the statutes . . . to secure uniformity in their application'. That reason is the normative vacuum in which patent doctrine has tended to be made. Indeed, and with some important exceptions, the contemporary law of inherent patentability has lacked principled theoretical analysis, either of the purpose of the

Ideas 33–60; KH Ochs, 'The Royal Society of London's History of Trades Programme: An Early Episode in Applied Science' (1985) 39 Notes and Records of the Royal Society of London 129–158.

[54] See, eg Paris Convention for the Protection of Industrial Property (Paris Convention, as amended) (Paris, 20 March 1883, 13 UST 1) Art 1 (defining patents as 'industrial property'), discussed at page 115; chs 1–3.

[55] Though note that r 43(1) of the EPC Implementing Regulations (requiring that the claims define the matter for which protection is sought in terms of the technical features of the invention) predates (as r 29) the 2000 EPC Revision, and that the UK patent system was described on the eve of the PA as 'an instrument for making known new technology' (see Hansard HL (series 5) vol 379, cols 234–235 (24 January 1977) per Lord-Elwyn Jones (LC)).

[56] Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, vol 31 (15 April 1994, 33 ILM 81).

[57] See Council Decision (of 22 December 1994) concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the agreements reached in the Uruguay Round multilateral negotiations (1986–1994) [1994] OJ L336/1.

[58] See, eg *Symbian v Comptroller-General* [2008] EWCA Civ 1066, [13], [21]; *AT&T Knowledge Ventures LP* [2009] EWHC 343, [15] per Lewison J. See also *Re Bilski* 545 F 3d 943 (Fed Cir, 2008) (rejecting a 'technological arts' test of inherent patentability on the grounds, among others, of the ambiguity surrounding 'technology' and related concepts), in relation to which a decision of the US Supreme Court is currently pending.

patent system and the role of inherent patentability in furthering that purpose,[59] the implications for that purpose of harmonization,[60] or the substantial non-legal learning on the history and philosophy of science and technology. Instead, it has reflected the same pragmatic, legalistic, and casuistic preoccupations that characterized aspects of the development of UK law in this area prior to 1977, and that have been described as having characterized the development of other regimes at common law as well, including other intangible property regimes.[61]

The purpose of this book is to consider these issues through a study of the UK requirement for an invention in its historical and international statutory context. My interest in doing so is with what might loosely be described as the law's intellectual history: the way in which legal ideas are constructed. In the context of inherent patentability, legal ideas have been constructed primarily by the courts, the Boards of the EPO, and the drafters of the Strasbourg and European Patent Conventions. It is therefore primarily with these sources that my study is concerned. While I do not suggest that complete understanding can come from this method, and my study does not purport to be exhaustive, I do believe that reading the judgments of the courts and the records of the discussions and decisions of the other makers of our laws is essential to attaining that understanding. In particular, I believe that it is only by close analysis of the documentary record of the decisions and discussions in which the ideas of the law are expressed that we can begin to understand the intellectual history of our system—the way in which its central ideas have been created—as an essential part of contemplating its future.

[59] See PA David, 'Reflections on the Patent System and IPR Protection in the Past, Present and Future' in *Interviews for the Future* (Munich: European Patent Office, 2006) 115–140 (criticizing the patent system for having acquired a life of its own, independent of its original purpose).

[60] See S Weatherill, 'Why Object to the Harmonization of Private Law by the EC?' (2004) 12 Eur Rev Private L 633–660 (regarding the importance of considering the meaning of Europeanization in different legal contexts).

[61] See, eg J Getzler, *A History of Water Rights at Common Law* (Oxford: OUP, 2005) 7.