

Occasional Papers in

Intellectual Property & Communications Law

*presented by Intellectual Property & Communications Law Program
Michigan State University-DCL College of Law*

Number 2

Rethinking the Development of Patents: An Intellectual History, 1550-1800

Adam Mossoff

Assistant Professor of Law
Michigan State University-DCL College of Law

*Reprinted from 52 HASTINGS LAW JOURNAL 1255 (2001). Reprinted by
Permission.*

ABSTRACT

This Paper challenges the prevailing interpretation of the development of patent rights at common law. In the sixteenth century, a patent represented a monopoly privilege granted to an industrialist by the British monarch, which was enforced by the royal prerogative courts. By the eighteenth century, a patent had evolved into a property right in a novel mechanical or scientific invention that was enforced in the common law courts. Commentators today maintain that this doctrinal shift occurred solely in response to economic or institutional changes in Britain at the time. While recognizing that economics, politics, and constitutional law all played a role in the development of patent rights, this Paper explains how English lawyers and jurists drew upon John Locke's theories concerning the social contract and the moral significance of labor and, in doing so, laid the foundation of modern Anglo-American patent law.

This Paper was originally published as an article in volume 52 of the *Hastings Law Journal*. The article was recently cited in an *amicus brief* filed in the U.S. Supreme Court case of *Eldred v. Ashcroft* and in the third edition of *Principles of Patent Law*, a leading casebook published by Foundation Press and edited by Donald Chisum and others. All the footnotes in the original article have been omitted in this version.

The Author would like to thank Peter Yu for his dedication and vision in creating the Intellectual Property and Communications Law Program at Michigan State University-DCL College of Law, and for inviting the Author to participate in the Occasional Paper series.

RETHINKING THE DEVELOPMENT OF PATENTS: AN INTELLECTUAL HISTORY, 1550-1800

Adam Mossoff

The history of patents does not begin with inventions, but rather with royal grants by Queen Elizabeth (1558-1603) for monopoly privileges that advanced her economic and industrial policies. Approximately 200 years after the end of Elizabeth's reign, however, a patent represents a legal right obtained by an inventor providing for exclusive control over the production and sale of his mechanical or scientific invention. What accounts for this radical shift from a grant by royal prerogative to common-law property right?

There is no dearth of proffered explanations. A common viewpoint is that the crown's grants of letters patent for manufacturing monopolies were simply part of the constitutional conflicts that plagued the English government during the seventeenth century. Others view the birth and evolution of patents through the conceptual framework of economics. Still others offer institutional and social explanations for the evolution of patents from royal prerogative to common-law doctrine.

Regardless of the theoretical schema scholars have used to explain the history of patents, everyone agrees that natural rights theories played no part whatsoever in this story. "Even in the heyday of natural rights [in] the late eighteenth century," writes Christine MacLeod, "it made little progress against the appeal to precedent and statute law." Edward Walterscheid writes that "care must be taken to avoid any misapprehension that the states issuing privileges under patents of monopoly characterized and identified those privileges as property rights *per se* . . . [because nowhere] was there any legal guarantee of a property right to or in a patent privilege." H.I. Dutton puts it bluntly when he says that "the natural-law theory of property in inventions was rarely advanced by supporters of patents. . . . Occasionally some writers would resort to the argument, but no worthwhile commentator took it seriously."

The broadly accepted view that patents developed *sans* intellectual support from the natural rights philosophers is not without evidentiary support. The (Benthamite) *Westminster Review* declared in 1829 that "to talk of the natural rights of an inventor is to talk nonsense." A leading nineteenth-century patent attorney wrote that "[t]hose who believe the inventor to have a natural right . . . must have an entire misconception as what it is the inventor really achieves." In 1769, Justice Yates appeared to deny at least a Lockean conception of a natural

right of inventors by arguing “that the *mere labour and study* of the inventor, how intense and ingenious soever it may be, will establish *no property* in the invention, will establish no right to *exclude others* from making the same instrument, when once the inventor shall have published it.” On the basis of this sort of evidence, it cannot be said that Walterscheid, MacLeod, et al. are fundamentally mistaken.

It is my intention, nonetheless, to offer a modest challenge to the prevailing view that the ideas of the natural rights philosophers did not influence the early development of patent law. The validity or significance of constitutional, social, economic or institutional analyses of legal history is not in doubt; intellectual history is not exclusive of these other approaches to historical analysis. Yet, an intellectual history of the early development of patents is glaringly absent from the substantial work already done in this field.

While recognizing that economics, politics and constitutional law all had a role in the development of patent rights, this Paper will explain how English lawyers and jurists drew upon natural-law conceptions of the social contract and the moral significance of labor, and, in this way, the natural-law philosophers shaped much of the initial common-law definition of patent rights. This is evident in the general insights of some modern commentators, such as Harold Fox, who states in one of the most cited works in the literature on the history of patents that “the origin of this type of property is in production and is based upon the theory that *every man is entitled to the fruits of his own labour.*” Furthermore, Walterscheid himself acknowledges that the development of patent law between 1600 and 1800 involved a fundamental change from “viewing a patent as a contract between the crown and the patentee to viewing it as a ‘*social contract*’ between the patentee and society.” This fundamental shift in the law occurred at approximately the same time as the natural-rights theories of Hugo Grotius, Samuel Pufendorf and John Locke became popular political and legal currency in England. Does this reflect historical happenstance or did these natural rights philosophers exert an intellectual influence over the development of the legal doctrine of patents?

This Paper will thus seek to inject some intellectual history into our understanding of the history of patents. The Paper is divided into three sections. Part I discusses the initial development of monopoly grants under the English crown’s prerogative to issue letters patent to industrialists, roughly spanning the periods between Queen Elizabeth’s reign and the passage of the Statute of Monopolies in 1626. Part II discusses the chaotic evolutionary period of patents in the seventeenth and early eighteenth centuries, showing how different political,

institutional and intellectual forces were at work in creating a period of flux and change in the issuance and enforcement of patents. Part III concludes the Paper with explaining how the common-law courts acquired jurisdiction over patents in the mid-eighteenth century, and how common-law jurists, such as Lord Mansfield, reconceptualized the definition of patents according to the moral and political framework set forth by the natural rights philosophy of John Locke. Although natural rights philosophy is not the only source for the evolution of patents from royal prerogative to legally recognized property right, this Paper will show how this intellectual influence nonetheless played a fundamental role in this legal and political sea change.

I. EARLY PATENT DOCTRINE: ROYAL PREROGATIVE AND MONOPOLY PRIVILEGES

A. *Birth of Patents: Letters Patent and Industrial Development*

The term “patent” reveals that the origin of this legal device rests in the royal prerogative of granting *letters patent*. Blackstone writes:

The king’s . . . grants, whether of land, honors, liberties, franchises, or aught besides, are contained in charters, or letters patent, that is, open letters, *literae patentes*: so called, because they are not sealed up, but exposed to open view, with the great seal pendant at the bottom; and are usually directed or addressed by the king to all his subjects at large.

The crown’s prerogative to issue letters patent was a central tool in bestowing privileges upon individuals in the furtherance of royal policies. When the crown thus wished to buttress the realm’s lagging industrial development at the end of the Middle Ages, the issuance of letters patent was central to enticing tradesmen and industrialists to come to England. This policy is the progenitor of the doctrine of patents for inventions.

Beginning in the fourteenth century, King Edward III began issuing letters patent of protection for foreigners willing to come to England to train his subjects in their respective trades. The first such instance of a grant was in 1331 to John Kempe of Flanders. In essence, these early letters patent functioned like passports for any foreigners willing to come and establish their trade within the realm. Professor Ramon Klitzke notes that the letter patent to Kempe represented “the beginning of a deliberate and vigorous policy to expand English industry which Edward III and his successors pursued with excellent results.”

Yet it was not until the sixteenth century that the crown began issuing letters patent to individuals for *manufacturing monopolies* within England. Edward VI granted the first such letter patent to Henry Smyth in 1552. The king's grant to Smyth states that he is supposed to introduce the

brode glasse of like fasshion and goodes to that which is commonly called Normandy glasse which shall not only be a great commoditie to our said realme and dominions but also bothe in the price of the glasse aforesaid and otherwise a benefite to our subjectes and besydes that dyvers of theym maye be sett to worke and get their lyvving and in tyme learne and be hable to make said glasse them selfe and so from tyme to tyme instructe the others in that science and feate.

In exchange, Smyth is granted a twenty-year monopoly in the production of Normandy glass, during which time:

No manner of person or persons not licensed, or auctorized by the said Henry Smyth as is afore mentioned shall attempte or presume to make any kynde of the said brode glasse commonly wount to be called Normandy glasse or any other fytt for wyndowes upon peyne or forfayture of all the same glasse by any of theym so to be made and as they and any of theym regarde our expresse comaundment and entende too avoyde that trouble and perell which shall earnestly and indelayedly insue in this behalfe.

The significance of Smyth's monopoly patent is that it unequivocally expresses the elements of the monopoly privilege that Queen Elizabeth would soon implement with vigor.

The grant to Smyth requires him: (i) to bring to England the foreign trade of manufacturing "Normandy glass," (ii) to benefit the overall realm by lowering prices and increasing the number of commodities, and (iii) to train Englishmen in the production of "Normandy glass." In exchange for these commitments, Edward III grants Smyth a twenty-year monopoly in which anyone who produces Normandy glass without his license shall do so under the threat of "pain or forfeiture."

In other words, under the early grant of letters patent, a patentee was supposed to: (i) work the patent, i.e., bring a foreign industry into the realm, (ii) not be inconvenient to other subjects, i.e., not interfere with established industries, and (iii) train apprentices, i.e., create a self-sufficient industry within the realm through which English subjects can make a living. Insofar as a patentee met all three of these conditions, the

crown would exercise its prerogative and issue a letter patent for a monopoly in the respective trade.

This is important because it indicates that letters patent had nothing to do with legal rights or even inventions per se, but rather they represented royal privileges that supported royal policies. In this case, the royal policy was the introduction of new industries and manufactures to the realm, and the royal privilege was a monopoly grant ascertained through a letter patent. The use—and abuse—of this royal privilege was exemplified in Queen Elizabeth’s monopoly grants, which proved to be the catalyst for the next two hundred years of evolving patent doctrine.

Queen Elizabeth engaged, according to Walterscheid, in “a concerted effort . . . to stimulate domestic production of both raw materials and a wide variety of manufactured goods previously imported from abroad.” In pursuing this national economic policy, Elizabeth would grant a total of fifty-five monopolies between 1561 and 1603—twenty-one of which went to foreigners. The initial grant to Henry Smyth was now an established power of the crown that was dispensed and adjudicated by the prerogative court of the Privy Council.

In fact, Queen Elizabeth’s *initial* use of her prerogative in issuing letters patent for monopolies followed the conditions and goals set out in Smyth’s grant. For instance, a monopoly patent in 1562 to “make ovens and furnaces” states that the grant would be voided if the patentees failed to put it into practice within two months. A monopoly patent in 1567 for the manufacture of window glass demanded as a condition for the validity of the grant that the French patentees train Englishmen in this trade. The consideration offered to the Queen in exchange for a monopoly privilege initially served the ultimate purpose of creating a self-sufficient economy in England.

Furthermore, the requirement that the patent monopoly cannot be “inconvenient” to subjects was articulated as a requirement that a monopoly cannot displace an existing trade within the realm. The logic of this rule is straightforward. If the crown’s use of monopoly patents serves the purpose of introducing new industries to the realm, then such patents cannot be granted when the industry already exists therein.

This limiting rule was central to a dispute before the Privy Council concerning Elizabeth’s twenty-fifth monopoly patent, granted in 1571, to “Rd. Mathewe to make “Turkye haftes’ for knives.” Viner’s *Abridgement* offers the following summary of what had become known as *Matthey’s* case:

So where a patent was granted to A. for the sole making of *knives with bone hafts, and plates of lattin*; because,

as the patents suggested, he brought the first use thereof from beyond seas; yet nevertheless, when the wardens of the company of cutlers shewed before some of the council, and some learned in the law, that they *used to make knives before, though not with such hafts*; and that such a *light difference* or invention should be no cause to restrain them; thereupon he could never have benefit of this patent, although he laboured very greatly therein.

Coke's *Institutes* reports that another monopoly patent was implicated in 1572

in Bircots case for a priviledge concerning the preparing and melting, &c. of lead ore: for there it was said, that that was to put but a new button to an old coat; and it is much easier to adde then to invent. And there it was also resolved, that . . . no old manufacture in use before can be prohibited.

These cases—especially *Bircot's* case, whose holding would remain good law within England for the next two centuries—further translated the rule against restraint of pre-existing trade into a rule that the king cannot grant patent monopolies for “mere improvements.” A patent monopoly could only issue for an entirely new trade, or at least a trade that had not existed within the realm for a reasonable time prior to the grant.

This limitation was generally accepted because “[e]mployment was largely sacrosanct,” writes Walterscheid, “and strong efforts were made to avoid the granting of patent[s] . . . perceived to infringe on the livelihoods of established workers.” This view is substantiated by Lord Coke's own argument against monopolies: “a mans trade is accounted his life, because it maintaineth his life; and therefore the monopolist that taketh away a mans trade, taketh away his life, and therefore is so much the more odious.” Thus, the two rules that derived from these arguments—no monopoly patents either for trades existing at the time of the grant or for mere improvements upon such existing trades—constituted the only real limitation imposed upon the early patent monopolies.

More important, contemporary readers should not misinterpret the references to “invention” in both *Bircot's* and *Matthey's* cases. The modern understanding of this term suggests that it is “an act or operation of finding out something new . . . something not previously known or existing, by the exercise of independent investigation and experiment.” On the other hand, in issuing the early patent monopolies

the Crown and Courts alike recognized two classes of individuals . . . as the proper recipients of royal favor, (1) the

bringer-in or importer, (2) the first finder or inventor—the latter grounding his title to favourable consideration on the fact that he possessed in common with the importer the qualification of introducing a new industry within the realm. In other words, the rights of the inventor are derived from those of the importer, and not vice versa as is commonly supposed.

The purpose of the early monopoly patents was to establish a new industry within the realm—with the principal focus on importation. This explains why the early patents were not automatically voided if it was known that the trade was in use during an earlier period of time but had then gone out of use in the realm: in these cases the grants served the similar purpose of reestablishing an industry within England. Thus, as long as the patentee was not infringing upon the customary right to work in one's trade, i.e., as long as a patentee was not attempting to "put a new button on an old coat" or to "taketh away a mans trade," then he was accorded the status of "inventor" insofar as he was the *first* to establish (or re-establish) his respective trade within the realm.

B. *Abuse of the Royal Prerogative in Issuing Patent Monopolies*

Queen Elizabeth, nonetheless, considered her power to dispense monopoly grants through letters patent to be an unfettered prerogative of the crown. When Parliament began agitating in 1571 over the royal policy of granting patent monopolies, Elizabeth's response to these "audacious, arrogant and presumptuous" officials was pointed: "We are to let you understand, her Majesty's pleasure in that behalf that her Prerogative Royall may not be called in question for the valliditie of the letters patents."

It was not long, however, before Elizabeth began to dispense monopoly patents as rewards for political patronage. Between 1581 and 1603, Queen Elizabeth granted twenty monopoly patents, but only two of these monopolies were issued to foreigners. Moreover, the Queen rejected the petitions of numerous subjects who had created *real* inventions under their own initiative, including, among others, a stocking frame, Harrington's water closet, and armor plate. Although Coke overstates the matter, he was not far from the mark when he declared that "monopolies in time past were ever without law, but never without friends."

During Queen Elizabeth's reign, the Privy Council's records are replete with patent monopolies issuing regardless of whether an industry was new to the realm or not, which was the original purpose and

justification for the issuance of such letters patent. In 1598, for example, the Privy Council issued an open warrant for Jerome Bowes' monopoly patent on the production and sale of drinking glasses. The declaration read in part:

Whereas yt pleased the Queen's Majestie to graunt by her letters patentes under the Great Seale of England unto Sir Jerome Bowes, knight, . . . lycence for the makinge of drincking glasses within her Highnes' realmes of England and Ireland, with awthority besides to restraine the makinge of any of the said glasses within her Majesty's said realmes to anie person or persons whatsoever other then to those which the said Sir Jerome Bowes shall appoint . . . and also that none of her Majesty's subjectes or other denyzon or straunger shall bringe or transport anie of the said drinckinge glasses . . . into either of bothe her Majesty's said realmes . . . [and none] shall trangresse or oppose them selves against the auuthoritie of her Highnes' letters patentes . . . in contempt of her Highnes' *Royall Prerogative* by sondry persons . . .

Another declaration by the Privy Council in 1600 extended a previous patent monopoly to the patentee's widow:

An open warraunt with generall direction to all her Majesty's publique officers. Whereas her Majestie gave unto Richard Matthew, deceased, a speciall licence for the sole making, buying and selling of traine oile within this realm in consideration of the longe and faithfull service by him donne unto her Highnes, which licence sithence his decease hath bin renewed by her Majestie unto Elizabeth Matthew, his wife, for the terme of [21] yeares.

These grants reflected important changes from earlier monopolies: first, the grants provide for monopolies over *both* manufacture and sales, and second, neither of the grants mentions the creation or establishment of new industries as consideration for the letters patent. Matthew's letter patent goes so far as to state that his consideration for the grant is his "long and faithful service" to the Queen—hardly the same thing as the introduction of new industries!

Queen Elizabeth's abuse of her royal prerogative went even further. Additional monopoly grants were issued for the production and sale of vinegar, of starch and of playing cards. Needless to say, all of these industries existed in the realm at the time of the grant. Thus, the standard justification for monopoly grants—the introduction of new industries and the creation of a self-sufficient economy—was not only lacking, but these monopolies also violated the liberty of the subjects to work in their respective trades.

The playing card monopoly granted to Edward Darcy in 1598 proved particularly egregious, providing for Darcy's complete monopolization over all manufacture, importation and sales of playing cards. Darcy felt no compunction in enforcing his privilege; he appealed to the Privy Council in 1600, for instance, to do something about violators of his monopoly grant. The Council responded by declaring that "dyverse obstinate and undutyfull persons, as in contempte of . . . *her Majesty's prerogative*, have of late willfully and publicly impugned it, . . . shalbe taken and commytted to pryson." Moreover, the Privy Council in 1601 stayed an action against Darcy in the Court of Common Pleas:

A letter to the Lord Cheefe Justice of the Common Pleas [A] citizen of London, hath commenced a suite before you in the Courte of Common Pleas wherin the valliditie of letters pattentes granted unto [Darcy] by her Majestie concerninge playing cardes is brought in question, wee are to let you understand her Majesty's pleasure in that behalfe that *her Prerogative Royall may not be called in question for the valliditie of the letters patentes*, and therefore wee praie you that you will take order that stay may be made of that suite untill you shall understand further of her Majesty's pleasure from us in that matter.

Queen Elizabeth's "pleasure" was blatantly clear in these declarations. Her issuance of a patent monopoly in the production and sale of playing cards was a matter of *royal prerogative* and thus was not to be checked or limited in any manner.

The nature of her monopoly patents, and the declarations and warrants issuing from the Privy Council, fanned the flames of discontent within Parliament. Elizabeth initially defended her royal prerogative in issuing letters patent as "the chiefest flower in her garden and principal and head pearl in her crown and diadem." The dispensation of a monopoly patent in playing cards to Edward Darcy the following year (1598), among many others over the ensuing years, did not do much to reassure Parliament that the Queen's "chiefest flower" should continue to grow unabated. The result was that the prerogative to issue such privileges was eventually circumscribed first by the common law and later by an act of Parliament itself.

C. *Legal Conflict: Prerogative vs. Common Law*

The case of *Darcy v. Allen*—identified as *The Case of Monopolies* in Coke's Reports—came directly on the heels of an earlier compromise reached between Parliament and Queen Elizabeth in 1601.

The details and outcome of this case have been thoroughly dissected and discussed in previous historical treatments of the subject, and thus I will not reiterate these well-known issues here. My interest in this case is the role that it plays in the evolution of patents away from being viewed as a monopoly grant under the royal prerogative to being viewed as grant of legal rights to inventors. This case is significant in this regard, because it lays the groundwork for moving toward this new perspective—one that will eventually find its fountainhead in the natural rights philosophy of John Locke.

Although Coke, in his role as Attorney General, argued on behalf of Darcy's playing card monopoly before the Bench, his later report on the case would state that the judges found "such [a] charter of a monopoly, against the freedom of trade and traffic . . . against divers Acts of Parliament . . . [and] is a monopoly against the common law." His report bristles with condemnations of Darcy's monopoly, claiming that "it is a dangerous innovation, as well without any precedent, or example, as without authority of law, or reason," that it "is utterly against law," and, in words that would reverberate throughout the next two hundred years of patent law, that it is an "*odious monopoly*." If one read only Coke's report of the case, one would be inclined to believe that the Bench had declared that all "monopolies are against the ancient and fundamentall laws of the realm."

The pleadings and arguments, however, were in fact far more complicated and not as dramatic in their conclusions as Coke reports. This is indicated in Noy's report of the case, in which defense counsel for Allen argued:

Now therefore I will shew you how the Judges have heretofore allowed of monopoly patents, which is, that where any man by his own charge and industry, or by his own wit or invention doth bring any new trade into the realm, or any engine tending to the furtherance of a trade that never was used before: and that for the good of the realm: that in such cases the King may grant to him a monopoly patent for some reasonable time, until the subjects may learn the same, in consideration of the good that he doth bring by his invention to the commonwealth: otherwise not.

Moore's report further indicates that great care was taken by defense counsel to tread lightly in arguing against the royal prerogative because, in the words of one barrister, "[h]e that hews above his head, chips will fall into his eyes." No one in *Darcy v. Allen* was out to repudiate the Queen's royal prerogative *in toto*, but rather the judges simply

enunciated the first common-law rule for adjudicating the *legitimacy* of a grant of monopoly privileges.

In this regard, it is notable that the arguments by Allen’s counselors reiterate the essential conditions laid down in the first monopoly grant to Smyth and followed by Queen Elizabeth during the first half of her reign. The argument by Allen’s counsel quoted above states that the crown may grant a patent “for a reasonable time” to a man who “brings a new trade into the realm” by “his own charge and industry” and through “his own wit or invention” “until the subjects may learn” how to practice the trade themselves. What then was the problem with Darcy’s patent? In accordance with the precedent of *Matthey’s* case and the customary right to practice one’s trade, Allen’s counsel argued that it “doth but take the trade of making and selling of cards from many persons, and giveth that trade to one, which is unlawful.” Thus, the first common-law proclamation on monopolies simply reiterated the original conditions governing the issuance of letters patent for inventions.

If there was any doubt as to the holding of *Darcy v. Allen*, they were alleviated by *The Clothworkers of Ipswich Case* in 1615. In this case, a group of tailors incorporated and chartered by King James to sell their services in Ipswich brought an action against an individual tailor who was not part of the corporation but nonetheless practiced his trade within the town. The case report reads:

[I]t was agreed by the Court, that the King might make corporations . . . but thereby they cannot make a monopoly for that is to take away free-trade, which is the birthright of every subject. . . . But if a man hath brought in a new invention and a new trade within the kingdom, in peril of his life, and consumption of his estate or stock, &c. or if a man hath made a new discovery of any thing, in such cases the King of his grace and favour, in recompence of his costs and travail, may grant by charter unto him, that he only shall use such a trade or trafique for a certain time, because at first the people of the kingdom are ignorant, and have not the knowledge or skill to use it: but when that patent is expired, the King cannot make a new grant thereof: for when the trade is become common, and others have been bound apprentices in the same trade, there is no reason that such should be forbidden to use it.

This judgment lays out all of the doctrinal conditions for a valid grant of a letter patent circa mid-sixteenth century: the justification for the monopoly patent is introducing new industries into the realm, the monopoly patent rewards the labor and costs of the inventor, the patentee should train Englishmen in the practice of the trade, and finally, no monopoly patent can issue for pre-existing industries. Equally important

is that the court still views patents as *royal privileges* obtained through something akin to a contract between the patentee and the crown, i.e., “the King of his grace and favour” extends letters patent to inventors as a reward for their past labor and for their future work to introduce a new industry to the realm. Although the common-law courts had assumed the responsibility of adjudicating disputes over patents for inventions, they were still working within the initial conception of such devices—royal grants of royal privileges for the achievement of royal policy goals.

D. *Statute of Monopolies: A Step Toward a New Beginning*

Although *Darcy v. Allen* declared a common-law limitation on the use of letters patent, King James (1603-1625) continued to abuse the royal prerogative in issuing letters patent for monopolies. Several petitions from Parliament on this point eventually lead to King James’ publication of the *Book of Bounty* in 1610. Coke concluded at the end of his report on *The Case of Monopolies* that James published the *Book of Bounty* “in zeal to the law and justice,” wherein the king declared “that monopolies are things against the laws of this realm; and therefore expressly commands, that no suitor presume to move him to grant any of them, &c.” Moreover, Coke claims in his *Institutes* that “the judgement in the said case of monopolies . . . was the principall motive of the publishing of the kings [*Book of Bounty*].” On this point, Coke is very likely correct. The *Book of Bounty* does list “[m]onopolies” under the heading of “things contrary to our lawes.” Furthermore, King James declares that he will continue to reward such things as “[p]rojects of new invention, so they be not contrary to the Law, nor mischievous to the State, by raising prices of commodities at home, or hurt of trade, or otherwise inconvenient.” In sum, the *Book of Bounty* contains the essence of the judgment in *The Case of Monopolies* and thus it appears to reflect the crown’s willingness to refrain from abusing its royal prerogative on this matter.

Despite King James’ verbal commitment to limitations on the royal power to grant monopolies, the de facto abuse of the royal prerogative continued unabated. Parliament and the crown thus came to loggerheads over monopoly patents again in the early 1620s, but this time the king lacked the adroit political skills of his predecessor. The result was that Parliament passed the Statute of Monopolies in 1623, to which King James begrudgingly assented. In his message to Parliament, King James noted his displeasure with the statute:

Touching my Patents in general, I am grieved that
you have called them in and condemned them upon so short

examination. I confess I might have passed some upon false suggestion and wrong information, but you are not to recall them before they be examined by the judges. . . . Therefore I advise you to be careful, that you have a good ground before you call for your patents, that you do not defraud patentees. . . . I say to you when you judge of patents, hear patiently, say not presently, it is against the law, for patents are not to be judged unlawful by you.

King James' displeasure with this statute was not entirely unjustified. Hulme's first article on patents in 1896 states that "the Statute of Monopolies has been regarded as the first and final source of authority" on the subject of patents. Thus, the Statute of Monopolies represents the first definitive step toward the shift away from royal prerogative and privileges to common law and legal rights.

From a constitutional perspective, the Statute of Monopolies represents an incredible assertion of parliamentary order and rule by common law—as opposed to rule by royal prerogative. The Statute limits all future monopoly patents to a term of fourteen years. It also declares for the first time that all disputes concerning monopoly patents will be tried at common law, and it provides for treble damages and double costs for any person "hindred grieved or disquieted . . . by occasion or pretext of any Monopolie."

Beyond these alterations to the existing practice of granting monopoly patents, however, the Statute simply pronounces the original doctrinal conditions that animated the grant to Henry Smyth under the royal prerogative. Section 6 of the Statute declares:

Provided alsoe and be it declared and enacted, That any Declaracion before mencioned shall not extend to any tres Patente and Graunte for the tearme of fowerteene yeares or under, hereafter to be made of the sole working or makinge of any manner of new Manufactures within this Realme, to the true and first Inventor and Inventors of such Manufactures, which others at the tyme of makinge such tres Patente and Graunte shall not use, soe as alsoe they be not contrary to the Laws nor mischievous to the State, by raisinge prices of Comodities at home, or hurt of Trade, or generallie inconvenient; the said fourteene yeares to be from the date of the first tres Patente or Grant of such privileged hereafter to be made

Coke—the undisputed authority on the Statute of Monopolies—would later write that section 6 laid down seven conditions for a valid monopoly patent: (i) it must be for less than twenty-one years, (ii) "it must be granted to the first and true inventor," (iii) it must be for

manufactures not in use at the time of the grant, (iv) it must not be contrary to law, (v) it must not result in the raising of prices, (vi) it must not hurt trade, and (vii) it must not be “generally inconvenient.” Except for the time limitation, these conditions express much of the function and purpose of the first monopoly patents, i.e., the introduction of new industries and manufactures into the realm. Even the added limitations, such as the prohibition against price increases, are necessarily implied in a patent that should be limited to only new manufactures, i.e., there could be no increase in prices in the product when there were *no* products manufactured before the grant.

It is in this regard that the Statute of Monopolies does not represent a radical break with past policies, but merely lays down the foundation for the eventual evolution of patent doctrine (and its influence by natural rights theories).

E. *Conclusion for Part One: The Early Era of Monopoly Patents*

It is conceded that much of the preceding discussion constituted an historical survey, but it was necessary to impress upon the reader the extent to which patent doctrine evolved from its origins in early royal grants of monopoly privileges. In sum, the patents issued for inventions at the end of the eighteenth century, and adjudicated by Lord Mansfield and Justice Buller in the law courts, are not the same patents that were issued during the reign of Queen Elizabeth. In order to understand this difference and how it came about, one must first understand the nature of patent grants under Queen Elizabeth and the subsequent passage of the Statute of Monopolies.

What was the nature of these early patent monopolies? They were semi-contractual agreements between the crown and the patentee: the patentee promised to introduce a new industry and to help create a self-sufficient economy within the realm in exchange for the crown’s grant of a monopoly privilege for a term of years. In essence, patents originally represented royal privileges issued under the royal prerogative to achieve royal policy goals.

This is a ground that would not be receptive to the seeds of thought planted by the natural rights philosophers. Yet there were during these years hints of ideas that would come to fruition as the intellectual climate changed over the ensuing two centuries. In 1559, a naturalized, Italian-born subject, Jacobus Acontius, explicitly invoked *both* rights and labor as a basis for granting patents to inventors. In the first recorded statement of such an argument, Acontius’ letter to Queen Elizabeth declares:

Jacobus Acontius to the Queen. Nothing is more honest than that those who, by searching, have found out things useful to the public *should have some fruits of their rights and labours*, as meanwhile they abandon all other modes of gain, are at much expense in experiments, and often sustain much loss, as has happened to me. I have discovered most useful things, new kinds of wheel machines, and of furnaces for dyers and brewers, which when known, will be used without my consent, except there be a penalty, and I, poor with expenses and labour, shall have no returns. Therefore I beg a prohibition against using any wheel machines, either for grinding or bruising, or any furnaces like mine, without my consent.

Of course, it would be more than a hundred years after this letter before English subjects (and American colonists) learned that they did not have to *beg* a monarch for protection of the “fruits of their rights and labors.” In the eighteenth century, John Locke’s labor theory of property would serve to justify the belief that patents reflect a right to property that *should* be protected by the courts. By the nineteenth century, the “odious monopoly” aspect of patents would be gone—only property in inventions would remain.

Acontius’ letter also suggests that the crown should reward those inventors who labor and incur expenses in the creation of new machines. There is circumstantial evidence that Acontius’ view of patents as rewards for past labor reached its mark. In a patent grant in 1562 for the importation of more efficient foreign dredging machines, Queen Elizabeth notes that she hopes such a patent “will give courage to others to study and seke for the knowledge of like good engines and devyses.” Moreover, Acontius himself eventually prevailed and he was granted a patent for his machines in 1565, albeit six years *after* his plea for protection.

Over the ensuing years, the argument that patent monopolies should be issued as a *reward for past labor* began to become more commonplace among discussions of patents. This idea appears in *The Clothworkers of Ipswich Case* in its discussion of the justification for the issuance of letters patent for monopolies:

But if a man hath brought in a new invention and a new trade within the kingdom, *in peril of his life, and consumption of his estate or stock, &c.* or if a man hath made a new discovery of any thing, in such cases the King of his grace and favour, *in recompence of his costs and travail*, may grant by charter unto him

It also appears in Coke's discussion of the Statute of Monopolies, in which he claims that a large part of the justification for grants to inventors is that

the reason wherefore such a priviledge is good in law is, because the inventor bringeth to and for the common wealth a new manufacture by *his invention, cost and charges*, and therefore it is reason, that he *should have a priviledge for his reward*.

Although the talk is still in terms of privileges—royal privileges, to be precise—such comments would prove fertile soil for the social contract doctrines of the natural rights philosophers, and would thus serve as the launching point for the evolution of patents as contracts between inventors and society.

The first phase of the development of patents concludes with the Statute of Monopolies because this statute represents the climax of the crown's policy of granting patent monopolies. Never again will crown and Parliament battle over patent monopolies—although the resolution of the story will take another 150 years to complete. As I indicated above, the Statute of Monopolies, with a few revisions, simply codified the original function and purpose of granting letters patent for monopoly privileges. During the subsequent years, patent doctrine will enter a wild state of flux; new conditions will emerge, old requirements will die and it will not be until the late eighteenth century that a legal doctrine of patents for inventions will come into its own. All the while, the ideas of John Locke and the other natural rights philosophers will slowly assert their relevance to this process.

II. THE DEVELOPMENT OF MODERN PATENT DOCTRINE

Despite the fundamental role that the Statute of Monopolies plays in patent law, it would be more than a century after its passage in 1623 that a coherent legal doctrine concerning patents would develop. This is evidenced by the numerous complaints in the late eighteenth century concerning the lack of precedent on this increasingly important area of law. Lord Chief Justice Eyre would lament in a significant case in 1795 that “[p]atent rights are nowhere, that I can find, accurately discussed in our books.” In a very illuminating comment, Justice Eyre complains that Coke's *Institutes* say “little or nothing of *patent rights*, as opposed to monopolies.” In another patent case of import ten years earlier, a solicitor remarks that

the general questions of law on the subject [of patents] have never been brought forward on any important trial [and] it

may with truth be said that the books are silent on the subject and furnish no clue to go by, in agitating the question, “what is the law of patents?”

Of course, the cases in which these complaints are voiced soon became the precedents upon which the “law of patents” was created, defined and applied by later courts. What explains the paucity of common-law jurisprudence on patents, and how does this support the thesis that natural rights philosophy influenced the development of patent law doctrine in the late eighteenth century?

The cursory explanation for the lack of any common-law jurisprudence on this subject between the Statute of Monopolies and the late eighteenth century is straightforward: the Privy Council refused to accede jurisdiction over patent grants of monopoly. In 1626, shortly after passage of the Statute of Monopolies, the Privy Council cut short litigation over a disputed patent monopoly, proclaiming:

The Lords declare that the patent shall stand. . . . They think it of dangerous consequence and far trenching upon the *prerogative* that patents granted on just grounds and of long continuance should be referred to the strict trial of common law, wherefore they order that all proceedings at law be stayed.

The Privy Council’s obstinate refusal to concede jurisdiction reflected the more fundamental issue that patents were still conceived as a *royal prerogative*. Despite the earlier constitutional battles over the use of the prerogative to grant monopoly patents, the framing of this issue in terms of royal monopoly privileges was never challenged. The resulting implication was that patent monopolies should be adjudicated by the prerogative courts, which is exactly what the Privy Council was asserting in 1626, despite the injunction of the Statute of Monopolies to the contrary. Until the adjudication of patents shifts to common-law judges, learned men steeped in the traditional rights of Englishmen and the doctrine of natural rights, patents would remain wedded to the royal prerogative.

Given the Privy Council’s reassertion of the royal prerogative shortly after the passage of the Statute of Monopolies, it continued to adjudicate disputes over patent grants throughout the seventeenth and early eighteenth centuries. The Statute of Monopolies was not dead; only its jurisdictional section remained unenforced. What the ensuing years reflect is the obstinacy of the old concept of patents—and the slow evolution and willy-nilly appearance of new conditions and requirements. This state of chaos in patent grants—whether conceived of as monopolies or as inventions—constitutes an evolutionary period in the doctrine of patents. It is this gradual evolution between the passage of

the Statute of Monopolies in 1626 and the mid-eighteenth century that creates the conditions necessary for the reception of natural rights ideas and their promulgation by common-law judges in the late eighteenth century.

Sometime in the late 1670s, for instance, an inventor, Yarranton, would challenge the earlier issuance of a patent for the “plateing of steele, iron, brasse and copper and of the tynning of the same plates.” Yarranton’s petition to the Council asks:

Whether this patent for making tinn plates is in force, the *patentee having made none since the granting thereof?* And whether this patent be in force if renewed since tinn plates were made by others?

. . . .

And so I may make queries of most patents . . . because the statute that gives the king power to grant patents for fourteen years limited it wholly to a new invention; for it must not be putting a new piece unto an old cap that must serve turn . . . , but the question with us will be whether it be new, and all and every part of the invention new in this nation? and if so, questionless it is within the meaning of the statute.

Although the records are unclear as to whether Yarranton’s challenge was successful or not, his petition is significant regardless of the outcome. The reason is that his petition reflects *old* patent monopoly doctrine: he first asks whether the patent is still valid since the patentees had not worked it since their grant many years earlier, and he then asks if the grant is valid given similar work by other people within the realm. The former explicitly refers to the early requirement that the patentee must work the patent in order to maintain its validity, and the latter explicitly refers to *Bircot’s* case. Yet the fact that Yarranton spends much of his petition focusing upon the “first inventor” requirement of the Statute portends the future requirement that a patented invention be *novel*.

The dispute over Garill’s application for a patent foretells the future development of the requirement of a *specification* for a valid patent grant. In 1663, Garill applied for a patent “for the sole casting of gold and silver Ingots for Lace, after his new Invention.” His petition was challenged by the Officers of the Mint and the Goldsmiths and Wire drawers of London, who contended that “[i]t not appearing what his Invention is, he may apply it to any way that any wyre drawer shall hereafter practise, And by that way ingrosse the whole trade of Wyre-drawing, w^{ch} will be hurtful to trade, and deprive many hundreds of their Labour and lyvelyhood.” The challenge to Garill’s patent petition is straight out of section 6 of the Statute of Monopolies, alleging that his

patent is essentially not new, hurts the industry and will violate the right to free trade. What was new was that the King responded to the challenge by ordering the Privy Council to obtain a *disclosure* from Garill of his new method for casting precious metals as wire. The reasoning was that such a disclosure would either prove or disprove the contentions by the Officers of the Mint and the Goldsmiths and Wire drawers of London. Garill refused to disclose his invention to the Privy Council, and the proceedings were thus concluded. Garill did not obtain a patent, and Hulme writes that “the secret died with the inventor.” The significance of the hotly contested battle over Garill’s petition for a patent is that it was the first time the Council demanded a *specification* of the patentee’s invention as a precondition for the issuance of the patent. Again, new patent doctrine conditions were evolving out of the old policy of patent monopolies granted under the royal prerogative.

Despite these small steps forward, additional patent grants and disputes during the latter decades of the seventeenth century centered on elements of the old conception of patent monopolies. On May 12, 1679, the King voided a patent grant for “smelting malleable lead and other metals with coals” because, according to Hulme, “during the first ten years of his grant the patentee had “made no manner of use of it.” In 1693, a patent for the manufacture of pitch and tar, originally granted in 1685, was voided because the patentee was not working the patent and had in fact returned to his native France.

During the same period, however, there are also numerous cases that reflect a growing momentum toward the development of a patent doctrine for inventors (in the modern sense of the term), i.e., those people who create novel machines or procedures. In 1669, the Company of Painter Stainers of London petitioned the King to void a 1667 patent grant to Howard and Watson for the engraving, varnishing and painting of ships; the King affirmed the original grant, noting that their invention was a “new manufacture, and the patentees the true and first inventors thereof, and that it was profitable to the Kingdom, and that the privilege granted was a just and legal privilege fit to be cherished and preserved.” The reason for the King’s reaffirmation of the original patent? Howard and Watson had in fact invented a *new* process using English materials, whereas the petitioners imported materials and used a process from abroad. This is one of the first hints at the patent grant being extended to a true inventor against an importer of the same manufacture. With different effect, the requirement of some nascent notion of novelty was invoked in 1673, when the Company of Perruque-makers successfully challenged a patent grant for the bleaching and curling of hair. Hulme

writes that they proved that “the process was not invented by the petitioners.” In 1689, the Privy Council voided a patent for “napping, i.e., raising the nap, of cloth by an engine, &c.” following a challenge by two subjects who contended that they were in fact the true inventors.

A 1686 patent for the manufacture of imitation marble was voided in 1689 when two challengers “proved that the invention was found out and used . . . a long time before the passing of this patent.” In 1687, the King refused to grant a patent for a “repeating mechanism for clocks and watches” after the Clockmakers’ Company proved that this mechanism was already being constructed at the time of the patent petition. A patent granted in 1702 for a metallurgical process was voided in 1706 on the grounds that it was substantially similar to an earlier patent grant—the determination being that the second patent did not go to the first inventor. Finally, a 1719 case revealed the growing importance of the implicit concept of novelty when the Company of Silk Throwsters was *unsuccessful* in their petition to revoke a patent for “spinning organzine silk” because the Company was “not able to prove that any of the three sorts of engines used by the [patentee] were ever before made or used in the kingdom.”

However, Lord Coke’s condemnation of “odious monopolies” is still a dominant line of thought at this time concerning any letters patent grant for manufacture or trade. As Coke declared: “Generally all monopolies are against *magna charta*, because they are against the *liberty and freedom of the subject* and the law of the land.” Such words would continue to resonate throughout discussions of patent grants. In a 1648 dispute over a grant by letter patent of a trade monopoly to The East India Company, Lord Chief Justice Jefferies notes the truism of the time that “Monopoly, or Engrossing, generally spoken of is odious in the eye of the law.” Yet this case also reveals the difficulties that judges and royal councilors were beginning to have with Coke’s general condemnation; Lord Jefferies later qualifies his initial claim when he states that “though monopolies are forbidden, yet that cannot be understood to be so universally true, (as no general law can ever be) that it should in no respect, and upon no occasion or emergency whatsoever, admit of any exception or limitation.” The justices concluded that the monopoly grant to The East India Company was valid.

This case also represents the first time in the context of patent monopolies that a natural rights philosopher is used in legal arguments by both a party to the dispute and by the judge in his decision. The East India Company defended itself, in part, by claiming that it “hath been in possession of this trade near one hundred years, and that possession will in time give a right,” citing Hugo Grotius’ *De Jure Belli ac Pacis*. Lord

Jefferies agreed with the Company that its monopoly patent was valid, but did so without saying that the Company had a natural right to its trade monopoly. He agreed, rather, on the ground acknowledged by Grotius himself that “not every kind of monopoly . . . amounts to a direct violation of the laws of nature,” and cited with approval to Grotius’ own examples of trading monopolies established in the classical age that were, according to Grotius, entirely just and appropriate.

Although the *East India Company* case did not pertain to a monopoly patent for invention, the discussion of Grotius in this 1648 case is momentous in the development of patents. First, it evidences that the courts considered the natural rights philosophers as reputable authorities on the topics of monopolies and patent grants by a sovereign. Second, it indicates that Grotius’ theories would not provide the theoretical underpinnings for eighteenth-century arguments concerning a property right in an invention. This is chiefly due to the fact that Grotius’ theory of property necessarily requires *use* and *occupation* as the standard for a moral claim to possession, and thus his theory of property is limited to pre-existing tangible goods. Note that occupation is the exact sense of the East India Company’s claim for why they have a natural right to the trade route, i.e., they have monopolized and used it for 100 years. Also, Grotius’ views on this subject support the early royal policy of granting *monopoly privileges*, rather than the later legal doctrine of protecting inventions.

The same must be said about Samuel Pufendorf’s position on monopoly grants. In his famous 1672 treatise, *De Jure Naturae et Gentium*, Pufendorf begins a discussion of monopolies by asking: “*Monopolies, Whether any, or all of them be against the Law of Nature, or no?*” For “tis an *odious* Name, and the Laws of many States brand it grievously.” It is doubtful that Pufendorf read either Coke’s report on *Darcy v. Allen* or his *Institutes*, and thus the congruent use of “odious” to refer to monopolies is quite remarkable. Moreover, Pufendorf’s argument against monopolies is similar to Coke’s; Pufendorf maintains that “hindering some by force . . . and by that means lay a Necessity upon all others to buy of him, it is plain that he offends against the Law of Humanity, and impudently breaks in upon the Liberty of the rest.” In sum, monopolies are odious because they violate the natural law and the natural liberty of those subjugated to the monopolist’s whims.

Yet monopolies are not universally condemned by Pufendorf. He writes that “the Magistrate may give one Man, or one Company . . . the sole Power of Importing certain Commodities from certain Places, exclusive of all others. And there may be severael [sic] good reasons for the granting such a Priviledge.” The conditions that justify government

monopoly grants are: (i) guaranteeing that companies may recover great expenses incurred in establishing remote trade routes and (ii) a monopolist may better help the country in times of emergency.

As with Grotius, Pufendorf's political philosophy better justifies the past royal policies of granting patent monopolies than the modern legal doctrine of patents for inventions. Pufendorf believes that monopolies violate natural law and natural rights because he views monopolies in terms of coercion and the violation of the natural liberty to contract and to freely trade. This conclusion is most likely the result of his failure to articulate an account of property rights independent of his social contract theory. In this respect, he never explicitly describes the mechanism by which an *individual* claims ownership in a particular object in the world. This is important because invention is an individual act of creation—of individual labor—and thus the moral and political theory that would eventually justify patents for inventions must both explain and legitimize this act of individual creation.

My discussion of Grotius and Pufendorf explains why natural rights arguments for a property right to an invention, or even for a social contract interpretation of patent grants, would not come about until the eighteenth century—after John Locke publishes his own theories on the social contract and on labor as the source of property. Surprisingly, Locke never specifically addresses the subject of patent monopolies in any of his published philosophical tracts or political writings. Nonetheless, of all the natural rights philosophers, it is his theories that ultimately provide the substantive justification for creating a patent doctrine for inventors—not monopolists.

Until this could occur, however, a final institutional element of the old patent doctrine had to be removed from the enforcement of patents: the Privy Council's jurisdiction over patent disputes. The Privy Council refused to acquiesce jurisdiction over patents to the common-law courts, despite the injunction of the Statute of Monopolies to the contrary. Holdsworth writes:

All through this period, cases which involved the making, the regulation, and the revocation of these patents, generally came before the [Privy] Council. The Council decided such questions as, Who of two claimants was the first inventor, Whether a patentee was working his patent, Whether the invention was really new, Whether it was in the public interest to grant a patent.

The questions that Holdsworth lists as guiding the Council's deliberations on this subject follow the Statute of Monopolies, but the conditions of "first inventor" and of a "new" invention were slowly

increasing in importance and changing in meaning, whereas public utility was slowly decreasing in significance. In sum, patent grants were slowly evolving, but it would not be a uniform or complete evolution until the Privy Council completely relinquished jurisdiction. When that occurred, the doctrine would finally change *in toto* from royal industrial policy to inventor's legal right.

The watershed moment for the Privy Council's jurisdiction over patents began with the issuance of a patent to Dr. James in 1747 for his invention of a fever powder. In 1752, Walker Baker, a chemist, challenged the validity of Dr. James' patent; he claimed that Dr. James was not the inventor. The Privy Council rejected Baker's petition, and Hulme summarized its report as follows:

[U]pon perusing the Letters Patent granted to Dr. James and also the specification of his medicine inrolled in Chancery, they found that the new invention, [to] which the said Letters Patent relate, is compounded of a powder and in pill, whereas the Petition and Affidavits laid before them in support of it, concern the Powder which is one of the ingredients, only, so that supposing what the Petitioner says to be true, it is quite immaterial and don't effect [sic] the medicine . . . therefore they are humbly of opinion that the said Petition [by Baker] is not pertinent and ought to be dismissed.

Baker, however, would not be let down so easily; he subsequently brought an action early in 1753 against Dr. James in the law courts, accusing him of perjury. Baker then petitioned the Privy Council to order its clerk, William Sharpe, Esq., to testify at trial as to the affidavit filed by Dr. James in support of his letter patent. The Privy Council balked at this request, replying that "we are humbly of opinion that it is not a matter which the Petitioner can demand in point of strict legal right." Baker's efforts at voiding Dr. James' patent were thus effectively thwarted and the patent remained in force.

With respect to this dispute, Hulme reports that "in 1753 Lord Mansfield [apparently] formed an unfavourable opinion of the validity of James's patent." More than twenty years later, Lord Mansfield would in fact refer to Dr. James' specification as an example of a specification lacking in merit. Thus, Baker would have very likely prevailed if his action at law had continued.

Baker's challenge to the validity of Dr. James' patent thus came to represent the final conflict between the Privy Council and the law courts concerning patents. Although both institutions considered Dr. James' specification to be the reference point for determining the validity

of his patent, they came to decidedly separate conclusions as to the legal effect of the specification. Hulme writes:

We are probably justified, therefore, in assuming that the quarrel between the Council and Lord Mansfield led to a reconsideration, from a constitutional standpoint, of the Council's jurisdiction, and that as a result the Council decided, under the advice of the Law Officers, to divest itself of its functions.

In 1753, the Privy Council relinquished to the law courts jurisdiction over determining the validity of patents for inventions; thus putting into effect, albeit 130 years late, section 2 of the Statute of Monopolies.

The dispute over Dr. James' patent between 1752-1753 is important for two reasons. First, patents thereafter would be adjudicated solely by the law courts, as opposed to the prerogative courts. This is not, strictly speaking, a shift in particular doctrinal conditions for patents inasmuch as it simply constitutes a shift in jurisdiction between two courts of the realm. Early patent doctrine evolved out of the royal prerogative serving royal industrial policies and as long as the adjudication of the validity of letters patent for monopolies was left to the Privy Council, this perception of patent grants would permeate their issuance and enforcement. Even when the Privy Council hinted at things to come, such as its affirmation of a patent grant in 1669 to the first inventor, the Council would still speak in terms of the royal prerogative, i.e., declaring that "the *privilege* granted was a just and legal *privilege*." When a patent grant was disputed at the Privy Council, it was not the right of the inventor that was at stake, but rather the royal power to confer privileges upon its subjects. When the petitioners lost their challenge in 1669, for instance, the king warned them to "presume not to . . . do anything which might violate, or infringe the *privilege*." It was not a right, legal or natural, but rather a royal privilege that was violated by patent infringers. This perspective could only change if the law courts—with their judges steeped in the customary rights of Englishmen and in the theories of the natural rights philosophers—took over the responsibility for enforcing, and thus defining, valid patent grants.

Second, the dispute in Dr. James' case focused upon the validity of his specification in his original petition for a patent. Even the Privy Council reviewed Dr. James' specification when Baker filed his petition to void the grant. Although it would be another twenty-five years before the specification would be officially enshrined by the law courts as a requirement for a valid patent, the fact that it was a dispute over a specification that ultimately led the Privy Council to concede jurisdiction to the law courts is telling. This case foreshadows the central place that

the specification will take in patent law doctrine, and also highlights its development up to this point.

The specification was unheard of as a requirement for a patent grant prior to the late seventeenth century, i.e., Garill's patent petition. This is hardly surprising; patent monopolies were granted to promote industrial development and a self-sufficient economy, not to protect an inventor's product upon which he labored for years. A specification, in essence a disclosure by the inventor of the process or machine that he has alone created, would have been, and was in fact, moot in the early years of patent grants of monopolies. Yet when patent grants—under the Statute of Monopolies' injunction that only the "true and first inventor" should be awarded a patent—became a tool for true inventors (and original importers) then the specification moved into the forefront of patent doctrine. Why? It is my thesis that the disclosure of the patentee's invention came to be viewed as a form of a social contract within the framework of Locke's political philosophy. The consideration for the grant was no longer the importation of industry, but rather the inventor's disclosure of his new creation, which he offered to society in exchange for a limited monopoly in which he could fully exploit his innovation.

The development of the novelty requirement in modern patent doctrine constitutes the second element of the shift away from the early patent doctrine. Hulme writes that in the eighteenth century, "the novelty of the invention was subjected to a new and more searching test." Although Hulme believes that the original requirement of introduction of a new industry, expressed in *Matthey's* and *Bircot's* cases, represented an early version of the novelty requirement, I would contend that this early requirement was an entirely different beast. *Bircot's* and *Matthey's* cases held that patent monopoly grants could only be issued for entirely new industries or trades given the English subject's right to free trade and his right to work in his chosen profession. If the industry had once existed in the realm, but did not at the time of the grant, then the patent monopoly would be valid because it was re-introducing the trade to the realm and thus advancing England's overall industrial and economic development. This reflects an entirely different purpose than the eighteenth-century requirement of novelty, i.e., that the patented invention be entirely new and novel. Following the judicial adoption of the novelty requirement in the eighteenth century, if *any* prior use of the patented invention was discovered, then the patent was void on its face. Thus, the modern legal requirement of novelty reflects none of the concerns of the earlier condition placed on the royal privilege. The earlier letters patent cases did not even use the term "novelty" when

discussing the requirements of *Bircot's* or *Matthey's* cases. It is my thesis that this change in requirements arose, in part, because Locke's labor theory of value provided a moral framework with which to protect the inventor's labors. Once this became the central focus of patents, an inventor's creation had to be novel or it would fail to comply with the underlying moral premise of a patent grant.

A. *Specification: Proof of Original Invention and Social Contract*

“Neither specification nor written disclosure,” writes Klitzke, “was required in the vast majority of the Elizabethan grants.” This follows logically from the purpose and function of the original letters patent grants of monopoly privileges. If importation or re-establishment of domestic industry was the goal of the royal grants of monopoly privileges, then the consideration offered for this privilege was the patentee's promise to work the industry and to train English apprentices. This is in fact explicitly stated in both *Darcy v. Allen* and *The Clothworkers of Ipswich Case*. For instance, Allen's counsel argued in *Darcy v. Allen* that

where any man by his own charge and industry . . . doth bring any new trade into the realm . . . the King may grant to him a monopoly patent for some reasonable time, until the subjects may learn the same, in *consideration* of the good that he doth bring by his invention to the commonwealth.

As the reader may recall from Part One, there was no need or concern about disclosure of the inventions. In early patent grants, the fundamental concern was only furthering the royal economic policy that the realm progress in its industries and trades.

MacLeod confirms this fact in her acknowledgment that the “[s]pecification—the enrolment of a separate, more detailed description of the invention within a certain time of the patent's issue—was at first exceptional.” Within the extant historical record, the first two specifications were voluntarily provided by *true* inventors, i.e., discoverers of a new process rather than a mere importer of a trade or process from abroad. The first was Sturtevant, who applied for a patent in 1611 for, in Hulme's words, “certain inventions in connexion with the application of coal for smelting iron, and generally for the application of coal as fuel in industries in which wood was the solely employed.” With his petition, Sturtevant also filed a “treatise of Metallica” in which he specified some of the processes of his invention and further promised to deliver a complete treatise upon securing his patent grant. His reasoning

for filing the treatise along with his patent application was to illustrate that:

1. his inventions were new, were not stolen, and were his own;
2. precisely what were his inventions so as not to hinder other men in their trades or inventive activities;
3. no one after this will gain a patent for the inventions listed therein; and
4. this disclosure pre-empts any requirement for working the patent as a condition for its validity.

Sturtevant proved quite prescient with his application because these four reasons reflect the later justification for the requirement of a specification. Of particular interest is his first condition and his fourth condition: the specification proves he is the inventor and the specification removes the necessity of having to work the patent. These two functions naturally complement each other. Thus the first steps were taken toward protecting true inventors who contracted for a patent monopoly in exchange for disclosure of their invention; in other words, Sturtevant foresaw modern patent doctrine.

It would be exactly 100 years before the next filing of a specification in an application for a patent for invention. (The reader may recall that Garill refused to comply with the request for a specification, and thus his patent application was rejected.) In 1711, Queen Anne granted a patent to John Nasmith, in which his patent grant states:

Anne, &c., Whereas John Nasmith of Hamelton in North Britain, apothecary, has by his petition represented to us that he has at great expense found out a new Invention for preparing and fermenting wash from sugar “Molosses” and all sorts of grain to be distilled which will greatly increase our revenues when put in practice *which he alleges he is ready to do* “but that he thinks it not safe to mencon in what the New Invention consists untill he shall have obtained our Letters Patents for the same. But *has proposed* to ascertain the same in writing under his hand and seale to be Inrolled in our high Court of Chancery within a reasonable time after the passing of these our Letters Patents,” &c.

Nasmith feared that others would steal his invention—his “new invention for preparing and fermenting wash from sugar”—if he disclosed it prior to the issuance of the letters patent, and thus he promised to file an appropriate description thereof once he was accorded the protection of the crown. Following in Sturtevant’s footsteps, Nasmith sought to file a

specification in order to ensure that it was *his* invention, that it was a *new* invention, and that he would have the proper protection for *his work*.

Subsequent to Nasmith's patent, the filing of a specification in addition to the patentee's application for a grant became more commonplace. On average, twenty percent of filings between 1711-1734 included specifications and they became a routine part of the patent system after 1734. The reader may recall that the central contention over Dr. James' patent in 1752 was whether his specification properly disclosed the novel aspects of his patented invention.

Although Lord Mansfield was not afforded the opportunity to lambaste Dr. James' specification in 1752, he was able to enshrine in the law his own views on the specification in *Liardet v. Johnson* (1778). In this case, Liardet filed suit against Johnson, alleging infringement of Liardet's patent for a certain composition of cement (similar to stucco). Johnson defended himself by attacking both the validity of the specification and the novelty of the invention itself. The February 23, 1778, edition of the *Morning Post's* report on the trial concluded: "The legality and justness of the patent and specification being also proved to the satisfaction of the jury, a verdict, with costs, was given for the plaintiffs, by which the validity of the patent is fully established"

The aspect of the case that created its import within patent law was Mansfield's famous jury instructions. After instructing the jury that they should avoid two false extremes in their deliberations—"to deprive the inventor of the benefit of his invention for sake of the public" and to permit "monopolies of what is in use and in the trade, at the time they apply for the letters patent"—Mansfield instructed the jury that a plaintiff-patentee must meet three conditions in order to prevail. Mansfield asked of the jury:

1. whether "the defendant did use that which the plaintiff claims to be his invention";
2. "whether the invention was new or old"; and
3. "whether the specification is such as instructs others to make it."

With respect to the third condition—the validity of the specification—Mansfield elaborated (as if speaking to the inventor) that "you must specify upon record your invention in such a way as shall teach an artist, when your term is out, to make it—and to make it as well as you by your directions: for then at the end of the term, the public have the benefit of it." With these instructions, Mansfield established the rule in patent law that a valid specification serves as the consideration for a

patent grant. “For the first time,” writes MacLeod, “the recognized *quid pro quo* for the award of a patent was the disclosure of the invention.”

MacLeod is actually overstating the case somewhat. As I indicated above, the specification had been around for more than 150 years, appearing in Sturtevant’s patent, in Garill’s aborted patent application, in Nasmith’s patent, and in the dispute over Dr. James’ patent. Moreover, Mansfield had been adjudicating patent cases for several decades by the time of *Liardet v. Johnson*, and he had been referring to the specification as a standard for determining a legitimate patent throughout these earlier cases. For example, in *Yerbury v. Wallace* (1768), in *Taylor v. Lockett* (1770), and in *Horton v. Harvey* (1781), Mansfield had overseen trials in which plaintiff-patentees lost their cases due to various deficiencies in their specifications. The difference with *Liardet* was that it was the first case in which Mansfield’s jury instructions—explaining the significance of the specification—were published in newspapers and pamphlets and thus widely distributed among jurists and laity alike.

This, however, simply raises the question: why would Mansfield be drawn to the specification as the consideration for a patent grant? MacLeod believes the specification arose in the early to mid-eighteenth century due to the division of responsibilities for patent issuance and enforcement between different institutional actors. This may very well be true, but it does not explain why Mansfield reinterpreted patent doctrine so that the specification became the consideration offered by the patentee in exchange for his monopoly. A potential insight is offered by a contemporary commentator who remarks that the “few precursors of the patent specification [in the seventeenth century] were seeds that fell on rocky ground.” I agree, and posit that the ground was rocky because it lacked the rich soil of the *proper theory* that would nourish the seeds and help them grow.

The underlying theory for Mansfield’s view on the role of the specification in patent law was enunciated even further in subsequent patent cases. In *Turner v. Winter* (1787), counsel for plaintiff, responding to an inquiry made by Justice Buller, argued that “[t]he consideration which the patentee gives for his monopoly is, the benefit which the public are to derive from his invention, after his patent is expired; and that benefit is secured to them by means of a specification of the invention.” In his jury instruction, Justice Buller commented that “[w]henver it appears that the patentee has made a fair disclosure, I have always had a strong bias in his favour; because in that case he is *entitled* to the protection which the law gives him.”

Justice Buller had the opportunity to oversee another path-breaking patent case eight years later in *Boulton & Watt v. Bull* (1795). With the precedents of *Liardet* and *Turner* firmly established at this point, Justice Buller could safely declare that “[t]he specification is the price which the patentee is to pay for the monopoly.” Lord Chief Justice Eyre would also state in this case that “[t]he modern cases have chiefly turned upon the specifications, whether there was a fair disclosure.” By 1795, the common-law courts had formulated the rule that the specification must disclose the invention in order for there to be a valid patent. Walterschied writes: “*Liardet v. Johnson* led the way, but by the end of the [eighteenth] century it had become settled law that the consideration for the patent was not the working of the invention per se but rather the disclosure of how to make and use it in the specification.”

The shift in the consideration for the patent grant from working the monopoly grant to disclosure of the invention is well-known historical fact. Moreover, the fact that this shift occurred over the span of time that patents themselves shifted from *bona fide* royal prerogative to common-law right is also historical fact. I believe that the shift to the common-law courts facilitated the shift to the specification requirement *because* common-law judges in the eighteenth century were more likely to approach this issue from a theoretical framework of natural rights, including social contract notions and John Locke’s labor theory of property.

The influence of the ideas of natural rights philosophy upon British political and legal culture is not indirect or dubious. In the eighteenth century, there is ample evidence that politicians, jurists and the hoi polloi were either reading the relevant philosophical tracts or were exposed to the ideas through the general culture. Regardless of how they acquired the ideas of the natural rights philosophers, these people were applying these new theories to the political and legal issues of their day. Patents were no exception.

Beginning in the early eighteenth century, various people began to argue that inventors had a *right* to the property substantiated in their inventions. Even commentators would cast the claims of inventors as a right to their property (secured by their patent). For instance, an author in the early nineteenth century explained an early eighteenth-century patent dispute in the following terms: “[Ralph] Shaw . . . was constantly objecting to every trifling improvement, as an infringement on his patent, and threatening his neighbours with suits in equity, *to protect his sole rights*” Patent-holders in the eighteenth century were also wont to speak in such terms. In 1784, James Watt mentioned the difficulty of suing infringers of his patents at the risk of having his

patents voided through a judicial scrutiny of his specifications: “we had better bear with some inconvenience than lose all [in a law suit], yet if we do not *vindicate our rights* we run a risk of losing all that way.” A year later, Watt wrote in a letter that “if our *right to our patent* should be taken away, or rendered illusive, we must drop any further pursuits of that scheme and apply ourselves to other businesses where our *property* can be more effectually [sic] guarded.” Such sentiments are a radical departure from the petitions for privileges and the decrees of royal privileges issued from the Privy Council in the prior century.

Although she agrees with the common view that natural rights did not influence the development of patent doctrine, MacLeod identifies numerous references to the (natural) property rights of inventors throughout the eighteenth century. The earliest such reference she finds is in a 1712 pamphlet, entitled “Reasons for the bill entituled, A bill for securing to Mr John Hutchinson the property of a movement invented by him for the more exact measuring of time.” In 1722, a subscription society sought to sponsor inventors with monetary rewards; the rewards would be issued “where the property cannot be secured to the inventor by a patent.” An inventor’s application for a patent in 1724 stated that he sought a patent “for securing to him the property in the practice of the said method.” Adam Smith would write in 1762 that “the property one has in a book he has written or a machine he has invented, which continues by patent in this country for fourteen years, is actually a *real right*.” In 1774, W. Kenrick—MacLeod refers to him as a “Doctor of Laws”—maintained that inventors have an “equal claim to the *natural rights* of genius” and a “superior right to public encouragement [based] on principles of political expediency.” In 1791, a publication on the subject defined a patent as “a grant of the crown substantiating private property.” Finally, Joseph Bramah wrote in 1797 in response to Chief Justice Eyre’s views on patents expressed in *Millar v. Taylor* that “invention . . . those efforts of the mind and understanding . . . may justly be denominated the right of every individual, . . . unconnected with any political regulation.”

From these statements, MacLeod concludes that “it remained unclear what [these claims of a right to property] might mean, since the inventor’s property was unprotected in law until he bought its certification from the crown in a patent. This was not directly tested in the courts.” MacLeod is certainly correct that there is no judicial proclamation in the eighteenth century in the exact linguistic terms: “patents are a property right.” Yet this hardly means that there was an absolute intellectual cleavage between the eighteenth-century judge-

made rules concerning specification and novelty and natural rights theories.

Patent disputes that reached the bench at this time were extremely fact intensive and as a matter of course accentuated technical issues touching upon mechanical designs or upon distinctions between prior inventions or practices and the patentee's improvement thereto. Thus such issues as the details of the specification, the testimony of experts and the question of novelty predominated. As such, these cases did not lend themselves very easily to a disquisition on the nature of an inventor's property right in his invention or to the articulation of the philosophical framework for this legal device. Even the discussions of the contractual role of the specification by Buller and Mansfield consist of short statements sandwiched between their discussion of the technical facts of the case.

The question thus remains: What might motivate Mansfield and Buller to reinterpret the specification as the inventor's consideration for his patent? What would serve as the soil that would allow the seeds of the early inventors filing specifications to grow into a revolution in patent doctrine? The reader should recall Justice Buller's comment in *Turner v. Winter* that "[w]henver it appears that the patentee has made a fair disclosure, I have always had a strong bias in his favour, because in that case he is entitled to the protection which the law gives him." What gives the patentee *entitlement*—a moral claim—to the protection of the law?

The answer is: a Lockean conception of a social contract.

Locke's political theory, especially his concept of the social contract, permeated English political and legal thought in the eighteenth century. Plucknett notes that "in the eighteenth century it was . . . John Locke's influence which was paramount, for it was he who discovered a reasonable philosophical basis for the whole of the seventeenth-century history, and more particularly for the Revolution of 1688." Holdsworth also comments that "Locke's views . . . have had an enormous influence both in England and abroad." In providing the principal justification for the Glorious Revolution and the following rise of parliamentary rule, Locke's political philosophy was an ubiquitous fact of British political and legal culture in the eighteenth century.

This moral and political backdrop to the legal adjudication of patent rights is revealed explicitly in a 1774 debate in the House of Lords over the nature of an author's property right to his written work. In a telling admission, two lords acknowledged during the debates that they were willing to consider that "previous to the monopoly statute, there

existed a common-law right, equally to an inventor of a machine and an author of a book.” MacLeod concludes from this that

the opinion which prevailed was that the author’s natural right in his literary property ceased on publication of his manuscript, in the same way that an inventor’s did when he revealed his secret. Their only subsequent property was the temporary one secured to the author under the Copyright Act and to the inventor by a patent granted under the Statute of Monopolies.

The claim that an inventor’s natural right terminates in the legal arrangement of disclosing his invention in exchange for a legal right, i.e., a patent, conforms perfectly with the Lockean conception of the original social contract.

Locke’s “strange doctrine” that each individual possessed in the state of nature the executive power to enforce his natural rights to life, liberty and property was no longer thought so strange in the years following his death in 1703. His unique conception of the state of nature meant that the essence of crossing over into civil society required each person “to quit his Executive Power of the Law of Nature, and to resign it to the publick,” upon which “he authorizes the Society, or which is all one, the Legislative thereof to make Laws for him as the publick good of the Society shall require.” Thus, the creation of civil society necessarily implicates the exchange of man’s natural rights for civil rights because this is the only way to resolve the inherent inefficiencies and problems of the state of nature.

This exchange of natural rights for civil rights is not a sacrifice of a man’s rights per se because the ultimate goal of civil society is “the mutual *Preservation* of their Lives, Liberties and Estates, which I call by the general Name, *Property*.” However, one of the two powers that man has in the state of nature—“to do whatsoever he thinks fit for the preservation of himself and others within the permission of the *Law of Nature*”—he expressly “gives up, when he joyns in a . . . Political Society, and incorporates into any Commonwealth.” Locke explains further:

The first *Power, viz. of doing whatsoever he thought fit for the Preservation of himself*, and the rest of Mankind, he *gives up* to be regulated by Laws made by the Society, so far forth as the preservation of himself, and the rest of that Society shall require; which Laws of the Society in many things confine the liberty he had by the Law of Nature.

This is certainly not an invitation, however, for allegedly valid violations of man’s rights by civil government. Later in the *Second Treatise*, Locke explicitly limits the power of government such that it “cannot take from

any Man any part of his *Property* without his own consent. For the preservation of Property [is] the end of Government.”

Yet Locke still recognizes a circumscribed range of governmental activities that could delimit its citizens’ property rights without their *literal* consent. As long as the legislature works according to “promulgated establish’d Laws” and does not act arbitrarily, it may tax with the consent of the citizens, “i.e., the *Consent of the Majority*, giving it either by themselves, or their Representatives chosen by them.” This implies that the government may regulate property insofar as the legislature acts without caprice and by laws enacted through the consent of the majority, or in the alternative, through the consent of the majority of representatives.

This moral and political schema, albeit quite abbreviated in my presentation, easily justifies the Statute of Monopolies as a valid regulation of property for the “publick good.” Not only was the Statute enacted by the subjects’ representatives in Parliament, but it was also enacted to serve as an explicit limitation on the past abuse of the royal prerogative. The Statute defined the legal conditions under which a patent for an invention would be issued and further authorized that this patent would henceforth be adjudicated by the common-law courts; in essence, it created a civil right of patents for inventions. *This* is why the Lords were willing to concede in 1774 that an inventor had a (natural) right to his invention before the Statute of Monopolies, but not subsequent to its passage in 1623. The Statute of Monopolies transformed this natural right into a legal right, i.e., a civil right adjudicated in civil society.

Moreover, the conception of patent grants in the sixteenth and seventeenth centuries—a *monopoly privilege* granted under the *royal prerogative* in exchange for the establishment of an industry in the realm—does not fit into the Lockean conception of a social contract. As plaintiff’s counsel argued in a patent case in 1807:

[C]onsidering the case of a patent not in the light of monopoly, as it had before been put by the judges, but as a bargain with the public; the specification, therefore, to be construed upon the same principle of good faith that regulates all of other contracts; and if the disclosure is such that the invention can be communicated to the public, the statute is satisfied.

The barristers explicitly distinguished between a monopoly grant and a bargain with the public. By 1807, the view of patent grants as comprising royal monopoly privileges was hoary, and the reigning viewpoint was that a patent represented a social contract implemented by way of the specification.

This is why Justice Buller is strongly biased in favor of inventors who have properly exchanged their specification for a right to their invention—a validly obtained patent. In another patent case in 1785, Lord Loughborough would explain the normative force of the social contract at work in the legal interpretation of patents:

The law has established the right of patents for new inventions; that law is extremely wise and just. One of the requirements is, that a specification shall be enrolled, stating the nature of the invention, the object of which is, that after the terms is expired the public shall have the benefit of the invention; but without that consideration is complied with, the patentee forfeits all the benefit he derives from the Great Seal.

An inventor who discloses his invention via a specification has entered into a social contract, and thus the inventor is *morally entitled* to the benefits of this contract, i.e., legal protection of his patent right.

The Lockean influence underlying Mansfield’s requirement that a specification be exchanged for the patent right is further revealed by Hulme’s own “economic objections” to this requirement. Hulme writes that Mansfield’s requirement “attaches an undue importance to the patent specification, the value of which is mainly contingent upon successful working.” Yet this criticism only makes sense insofar as one is approaching patents from the old perspective of a royal prerogative as opposed to the modern perspective of a legal right. The working of the patent was a principal justification for patents only when the crown issued them to industrialists in order to establish (monopolized) industries within the realm. Under the royal prerogative of the crown, the natural rights of the inventors were moot. By the late eighteenth century, however, inventors could claim a natural property right to their invention and a moral entitlement to the legal protection of this right under the Statute of Monopolies. The alleged “undue importance” of the patent specification is no more than the judge’s concern that the contract that beget the inventor’s civil rights represents a valid exchange between the two parties—society and the inventor.

None of the foregoing analysis, of course, is intended to suggest that common-law judges were *explicitly* applying a Lockean notion of a social contract to their understanding of patents. The law reports are filled with comments that indicate precisely the opposite. Inventors also intermingled references to “property rights” along with references to “privilege.” Moreover, I do not wish to imply that other views and theories on the development of the specification as consideration of a patent are wrong. To the contrary, economic and institutional

explanations elucidate many facets of the development of this legal doctrine.

I would like to suggest, however, that natural rights philosophy revolutionized English legal thinking in many ways, some more nuanced than others. As the earlier quotes indicated, natural rights were both explicitly and implicitly in people's minds with respect to patents in the eighteenth century. Many judges, members of Parliament, inventors and commentators were advocating or arguing from the general philosophic framework created by the natural rights philosophers. Although these ideas may not have taken hold explicitly in patent doctrine, I would argue that it provided a background for easily justifying and understanding the development of the specification requirement as consideration for patents.

B. *Novelty: Applying a Labor Theory of Property to Legal Doctrine*

Hulme's second economic criticism of Mansfield's work in patent law serves as a natural segue into the second issue that evidences the influence of natural rights philosophy upon the development of patent doctrine at law. Hulme writes that under Mansfield's "systems of Examination for Novelty . . . , the inventor is debarred from incorporating in his claims unused public knowledge." Again, this criticism only makes sense if one maintains the old perspective of patent monopolies as serving the purpose of establishing or re-establishing industries within the realm. In this context, any unused public knowledge should be fair game for a patent monopoly because it furthers the re-introduction of manufactures. By the eighteenth century, however, patents were no longer the handmaidens of the importer or of the restorer of manufactures from the days of yore. To the contrary, "the view became accepted," writes Walterschied, "that inventors . . . were perceived to be creative in their own right as individuals." In the eighteenth century, patents rewarded the *past* labor of the inventor, not the *future* introduction of an industry. It is the second part of my thesis that the background theory that helped motivate this shift in patent doctrine was Locke's labor theory of property.

The concept of novelty—that the patent go to only the "true and first inventor"—had been slowly developing since the Statute of Monopolies made this an official, legal requirement of patent grants. The reader may recall the discussion of the patent grants either voided or upheld in the late seventeenth and early eighteenth centuries on the grounds of evidence, or the lack thereof, of prior use of the patented

invention. These actions portended what would come to pass by the end of the eighteenth century.

I should also note that this requirement of novelty is not the same requirement that was enforced under Queen Elizabeth's initial patent grants. Under the royal prerogative, the requirement was only that there was no *current* use of the trade; the argument for this requirement resting principally on the customary restraint that the crown cannot impinge on a subject's right to work in his respective trade. The requirement of novelty as it develops in the late seventeenth and early eighteenth century maintains that *any* prior use—regardless of whether the use had gone out of existence—would void a patent grant. The argument for this new requirement rests principally on the idea that patents should go to only the first inventor qua inventor. By the end of the eighteenth century, the limitation on prior use had been transformed into a requirement of true innovation, i.e., novelty.

At the beginning of the eighteenth century, however, the picture was slightly different. At this time, there were two requirements of the early patent grants that remained in use: first, in accordance with *Bircot's* and *Matthey's* cases, an inventor could not patent a “mere improvement,” and second, the importer was on the exact same footing as the true inventor or discoverer because both were responsible for bringing a new industry to the realm. Still, the cases from the late seventeenth century were slowly pushing patent law in the direction of a new novelty requirement. This admixture of old and new elements of patent doctrine is captured in Holdsworth's description of how the Privy Council applied the “first and true inventor” requirement of section 6 of the Statute of Monopolies:

The question whether an invention was sufficiently novel was made to depend, not on prior publication, but wholly on the question whether or not there had been a prior user in England; and the invention must be wholly new—not merely a small improvement upon an older invention.

Holdsworth's statement succinctly summarizes the limitation of *Bircot's* case, the conflation of inventors and importers under “inventor,” and the (new) emphasis on true innovation. Yet by the late eighteenth century, it is the prohibition on patenting anything in which there “had been a prior user” that comes to take center stage in patent doctrine. Novelty joins the specification as one of the two principal elements used by the courts to determine whether a patent grant was valid or not.

An unreported case from the late seventeenth century reaffirmed that importers were equal recipients of patents because they introduced

new industries into the realm. The case was *Edgeberry v. Stephens* (1691). *Carpmael's Report* summarizes the holding of the case:

A grant of a monopoly may be to the first inventor . . . and if the invention be new in England, a patent may be granted though the thing was practised beyond the sea before; for the statute speaks of new manufactures within this realm, so that, if they be new here, it is within the statute: for the Act intended to encourage new devices useful to the kingdom, and whether learned by travel or by study, it is the same thing.

This case reaffirms the purpose of the old patent doctrine and of the Statute of Monopolies, i.e., to encourage industry or trade useful to the kingdom obtained through either travel or study.

The inclusion of importers within the meaning of the term “inventor” was not new; it is in fact the modern definition of “inventor” that is unique in its narrow sense of creation. I would argue that the implicit premise underlying the holding of *Edgeberry v. Stephens* is that patents *reward* the inventor’s work, and it is for this reason that patents for new manufacture in the realm can be extended to either a true inventor (in the modern sense) or an importer. Both types of people *labor* to bring their respective manufacture or trade to England. I noted earlier that the idea that patents should, in part, reward past labor was an idea introduced to Queen Elizabeth by Jacob Acontius. This idea was repeated in some of Elizabeth’s patent grants, it was repeated in the decision in *Clothworkers of Ipswich* and Coke reiterated this as one of the justifications for monopolies in his *Institutes*. Thus, the idea that inventors should have their labor rewarded was well established by the time *Edgeberry v. Stephens* was decided.

What was new was that this case was decided around the time that Locke published his *Two Treaties of Government* (1690), and it is within these books that England is introduced to a new conception of the source of one’s moral entitlement to property: labor. The reward of labor that brings new manufacture to the realm, or results in innovative creations, will thus take on new emphasis and importance. If this is the case, then one should expect to find increasing emphasis on innovation—novelty—as the source of one’s claim to a patent. This is in fact what one finds.

During the first half of the eighteenth century, there are increasing numbers of patents either defended or revoked on the basis of the requirement of novelty. In *Mitchell v. Shaw* (1736), Hulme reports that a patent was challenged and in a jury trial “[p]rior use was proved and a verdict was passed for the plaintiff,” i.e., the patent was revoked. In 1745, an employee obtained a patent for a powered tape loom that he

had invented, stating that the patent was “got in my name because [my employer] could not make oath that he invented it.” In 1743, the precedent of *Bircot’s* case most likely served as the basis for the court’s revocation of a patent for a plough design; the court noted that the plough “was not substantially and absolutely a new invention but barely and only a small additional improvement on an old invention, such as was frequently made on many other utensils in husbandry.”

Despite the increasing judicial cognizance of novelty, it would not be until the work of both Mansfield and Buller that this issue took on the character of a complete legal requirement—repeating the same pattern we saw with respect to the specification. It was apparently standard practice for patentees to argue before Mansfield that their invention was completely novel. In *Morris v. Oldham* (1776), for example, the patentee quickly established at the beginning of arguments that “[there] never had [been] an idea of it before,” and that “[n]o such [machine was] ever used or known before.” Still, the impediments of the early patent doctrine remained, and Mansfield would eventually have to deal with them.

This occurred in 1776, when Lord Mansfield conducted a jury trial in which the plaintiff had sued the defendant for infringing his patent. The arguments at trial centered on the sole issue of novelty. Defendant’s counsel argued straight from Coke’s analysis of the Statute of Monopolies in the *Institutes*: “[For this] patent [to be] good, it must be substantially and essentially newly invented.” Defendant’s counsel was also adept at the case law, and with his knowledge of *Bircot’s* case he also argued from the alternative: “Suppose this [invention is] new—[it] is an addition to an old invention, ergo not the subject of a patent.” Mansfield’s notes conclude with the comment: “A very good Special Jury gave, and rightly: Verdict: Plaintiff, £500.”

What Mansfield’s notes do not explain is *why* the jury gave a verdict for the plaintiff. Fortunately, this explanation is provided by Justice Buller’s reference to *Morris* in a later case:

Lord Mansfield said, after the former trial on this patent, “I have received a very sensible letter from one of the gentlemen who was upon the jury, on the subject whether on principles of public policy there can be a patent for an addition only. I paid great attention to it. . . . If the general point of law, viz., that there can be no patent for an addition be with the defendant, that is open upon the record, and he may move in arrest of judgment. *But that objection would go to repeal almost every patent that ever was granted.*” . . . Since that time it has been the generally received opinion in Westminster Hall, that a

patent for an addition is good, but then it must be for the addition only, and not for the old machine too.

With Mansfield's reply to a question from a jury member, the precedent of *Bircot's* and *Matthey's* cases were overruled. Mansfield admittedly rejected these earlier cases on the grounds of public policy and he did not invoke any natural rights ideas in making this argument—noting only the slippery slope that such rules would repeal almost every patent grant. Regardless, this was a significant step toward a true requirement of novelty.

The reason is that *Bircot's* case carried with it the baggage of the early patent doctrine, i.e., the mandate that the crown cannot infringe a subject's right to work in his chosen trade. This was the justification for these early cases, which is explicitly stated in *Matthey's* case. The alleged infringement of the subjects' right to work, however, was becoming much less of an issue in the eighteenth century. An example of this trend is the defeat of a proposed bill in the Commons in 1738; the Act, if passed, would have prevented the introduction of machine looms in explicit protectionist zeal for those who wove by hand. During the debate, the argument for the right to work was actually carried in favor of those who wove silk and mohair by machines:

[W]e make an encroachment, Sir, upon the *private property* of our fellow subjects. We deprive them of the *natural right* which every man in a land of liberty ought to enjoy, of gaining bread in an honest and lawful way. Nay more, Sir, we give a total discouragement to any future improvement of arts and manufacture.

Once again, the natural right to property is invoked to defend those who invent and introduce new manufactures in the land. This is a decidedly different approach to inventive and manufacturing activity than in the prior centuries. The difference was natural rights philosophy, and with the overturning of *Bircot's* rule, a true inventor—regardless of whether his labors produced an entirely new machine or merely an improvement to an old approach—could claim an entitlement to a patent given the novelty of his innovation.

In *Liardet v. Johnson*, the implication of overruling *Bircot's* case are seen in Mansfield's jury instructions. With respect to novelty, Mansfield instructed the jury as follows:

Is it a new invention? Is it new? For if it is new and good for nothing, nobody will make use of it. The great point is, is it a new thing in the trade, or was it used before and known by them? . . . And it is material . . . that in all patents for new inventions, if not really new discoveries, the trade must be

against them; for if it is an old thing it is a prejudice to every man in the trade; it is a monopoly.

The standard for novelty is no longer whether the invention violates the practice of a trade at the time of the grant, but rather novelty is now tested solely in terms of whether the invention was “used before and known by” those in the trade. This means: is the patented product the result of the inventor’s own labor? The test of whether this is the case is whether there was anyone at any time in the past that knew about or used the patented invention within the realm. If yes, the invention is *not* the result of the inventor’s own labors and thus he failed to rightfully earn his patent. This requirement easily fits into the Lockean moral and political schema that maintains that an individual’s right to his property is grounded in the labor that begets property itself.

In what sense does Locke’s labor theory of property underlie this reasoning? The oft-quoted passage from the *Second Treatise* reads as follows:

Though the Earth, and all inferior Creatures be comon to all Men, yet every Man has a *Property* in his own *Person*. This no Body has any Right to but himself. The *Labour* of his Body, and the *Work* of his Hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his *Labour* with, and joyned to it something that is his own, and thereby makes it his *Property*. It being by him removed from the common state Nature placed it in, it hath by this *labour* something annexed to it, that excludes the common right of other Men. For this *Labour* being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to, at least where there is enough, and as good left in common for others.

The argument for “mixing labor” is often derided by commentators as nonsensical, but this is an inordinately literal reading of Locke that fails to take into account the historical and philosophical context of his argument. Stephen Buckle correctly observes that “[t]he doctrine of the origin of property through labor will not be properly understood if it is not recognized that Locke thinks of *labour as a rational (or purposeful), value-creating activity.*”

In fact, all of the references to labor in the *Second Treatise* exemplify productive activities, e.g., hunting animals for food and clothing, gathering vegetables and plants for food, cultivating land, etc. In other words, “mixing labor” is Locke’s metaphor for production or productive activities. Or as Justice Erle wrote in 1854: “The origin of

the property is in production.” It is for this reason that Buckle refers to Locke’s theory of property as the “workmanship model.”

It is this emphasis on production in the labor theory of property that gives property its normative force within Locke’s moral philosophy. When man labors in the world to create products for his *use*, he is in fact laboring to create products necessary to *live*. Labor is thus a moral activity because production is necessary for the preservation of man’s life—the fundamental moral duty of natural law.

Additionally, the “mixing labor” argument integrates with Locke’s labor theory of value and thus explains *why* he is so interested in making the case “that of the *Products* of the Earth useful to the Life of Man 9/10 are the *effects* of *labour*.” Locke believes that labor creates value because “labor” means “production,” i.e., the creation of *new* materials for maintaining human life and happiness. Tully writes that

it does not seem to be Locke’s view that a person mixes his labour with a preexisting object which persists through the activity of labouring. Rather, he sees the labourer as making an object out of the material provided by God . . . in a manner similar to the way in which God makes the world out of the prior material He created.

Thus labor creates new products that expand man’s ability to successfully live, and this creates *new values* in the world, such as buildings, central heat, automobiles, markets, and all of the accouterments of modern life. This is also why Locke believes that in the late seventeenth-century America, “whom Nature having furnished as liberally as any other people, with the materials of Plenty, . . . a King of a large and fruitful Territory there feeds, lodges and is clad worse than a day Labourer in *England*.” In comparing a English day laborer to an American-Indian “king,” Locke is explaining that the values created by labor in civil society made it possible to live more successfully than individuals still struggling in the state of nature. Labor creates value because this term means *productive activity*. The root of property is production, and production is a *creative activity* that fulfills the natural law injunction that man must preserve his life.

Insofar as this reasoning was the fountainhead of Mansfield’s and Buller’s development of the modern notion of novelty, then this requirement would have consisted of two prerequisites: first, that the inventor create through his own labor the patented item or improvement, and second, that the inventor can only patent the material expression of his labor, i.e., the product, machine, or actual mode of manufacture. The former requirement is established in Mansfield’s jury instructions in *Liardet* and in the other eighteenth-century cases that began to develop

the new requirement of novelty. The latter is expressed in a variety of other cases beginning in the middle of the eighteenth century, including, as early as 1758, *Dollond's* case. In citing to this case in his decision in *Boulton & Watt*, Justice Buller remarked that:

As Dollond first made public, he was held to be considered as the first inventor. Dollond's telescopes are certainly a manufacture within the statute 21st James I [i.e., the Statute of Monopolies]. They consist of principles reduced into form and practice, and the patent is for glasses completely formed, not for mere principles.

Buller may have chosen to speak in the specific terms of the Statute of Monopolies, but he is explicitly using the Lockean argument that production is the result of purposeful action to create new products, and that it is only the products of this action that are an entitlement of the creator.

This interpretation is confirmed in Buller's lengthy opinion in *Boulton & Watt*. The dispute among the judges in this case was whether the patent was invalid because its specification described a method as opposed to a particular product. From a Lockean perspective, this is a simple but important distinction; in essence, it is the distinction between the idea in an individual's mind that guides his productive action and the results of that action. The former is not property, but the latter is. This philosophic perspective supports Justice Buller's argument that

[t]he very statement of what a principle is proves it not to be a ground for a patent: it is the first ground and rule for arts and sciences, or in other words, the elements and rudiments of them. A patent must be for some new production from those elements, and not for the elements themselves.

Buller concludes this line of thought: "the true foundation of all patents . . . must be the manufacture itself." As Locke writes in the *Second Treatise*: "From all which is evident, . . . Man (by being Master of himself, and *Proprietor of his own Person*, and the Actions or *Labour* of it) had still in himself *the great foundation of Property*." Man has within him the foundation of property—his mind and the ideas that guide his labor—but these are not property themselves. The product—the manufacture—is the property that an inventor may patent.

In advancing this distinction, Justice Buller is in fact responding to Chief Justice Eyre's own stated position in *Boulton & Watt* that "Dollond's patent was perhaps objectionable, being for the method of producing a new object-glass instead of being for the new object-glass produced." Dollond's patent was in fact sustained at trial, but regardless of what happened almost fifty years earlier, both Buller and Eyre reveal

their Lockean premise that inventors can only have the *products* of their labor patented, not the processes or ideas that lead to that product or manufacture. Eyre even acknowledged that the court in the present case is engaging in a “narrow construction of the word “manufacture’ in this statute,” referring, of course, to the Statute of Monopolies; this statement reveals that Buller and the court are not engaging in an obvious interpretation of the Statute’s use of the term “manufacture.” What would motivate them to narrowly construe the Statute of Monopolies to validate patent grants for only products and manufactures? The Lockean view that labor begets property by creating a new existing product in the world—a product that the creator is entitled to claim as his own.

Some judges went even further in explicitly invoking the idea that an inventor has a right to his patent. In the case of *Arkwright v. Nightingale*, Lord Loughborough proclaimed: “The law has established the right of patents for new inventions; that law is extremely wise and just.” Moreover, he specifically instructed the jury that “[w]e must never decide private rights upon any idea of public benefit. I must tell the jury that they must shut out that part of the argument.” Later in his instructions, he reiterated that “nothing could be more essentially mischievous than that questions of *property* between A and B should ever be permitted to be decided upon considerations of public convenience or expediency.”

Lord Loughborough’s strong words in favor of property rights in patents shed light upon Chief Justice Eyre’s complaint in *Boulton & Watt* that Coke’s *Institutes* “say[] little or nothing of *patent rights* as opposed to monopolies.” The reader should also remember that Lord Mansfield explicitly distinguished between a patent right and a monopoly grant in his jury instructions in *Liardet*. The patent monopolies of Queen Elizabeth and King James were now explicitly distinguished from the patents for inventions being adjudicated in the common-law courts at the end of the eighteenth century. Although past commentators have explained this break between early patent doctrine and modern patent doctrine in constitutional, economic and institutional terms, the arguments and terminology of the judges easily fit within a framework of Locke’s natural law thought.

C. *Conclusion: The Emergence of Patent Law Doctrine Under the Influence of Natural Rights Philosophy*

By the end of the eighteenth century and the beginning of the nineteenth century, numerous judges, including Mansfield and Buller, either subconsciously or deliberately used the terminology and

arguments of Locke's natural rights philosophy to develop their two requirements for patents: specification and novelty. The natural rights influence in the development of modern patent doctrine is in fact encapsulated in a portion of Lord Ellenborough's decision in the case of *Huddart v. Grimshaw* (1803). In this dispute over a patent for a new form of manufacturing cables, Lord Ellenborough states:

In inventions of this sort, and every other, through the medium of mechanism, there are some materials which are common, and cannot be supposed to be appropriated in the terms of any patent. There are common elementary materials to work with in machinery, but it is the adoption of those materials, to the execution of any particular purpose, that constitutes the invention, and if the application of them be new; *if the combination in its nature be essentially new; if it be productive of a new end*, and beneficial to the public, it is that species of invention, which, protected by the King's patent, *ought to continue to the person the sole right of vending it*, but if prior to the time of his obtaining a patent, any part of that which is of the substance of the invention has been communicated to the public in the shape of a specification of any other patent, or is a part of the service of the country, so as to be a known thing, in that case he cannot claim the benefit of his patent; . . . and if in stating the means necessary to the production of that end [in the specification], he *oversteps the right, and appropriates more than is his own*, he cannot avail himself of the benefit of it.

If the patented invention is “essentially new” and “productive,” then the inventor has engaged in the appropriate labor that justifies his moral claim to his patent right, i.e., he *ought* to have his fourteen-year patent. The structure of Lord Ellenborough's argument—his premises—reflect the normative framework of Locke's labor theory for property.

Beyond this simple argumentative structure, however, Lord Ellenborough explicitly reveals his Lockean commitments at the end of this passage by the words “oversteps the right, and appropriates more than is his own,” which paraphrase Locke's “enough and as good” proviso on the appropriation and creation of property in the state of nature. In the *Second Treatise*, Locke explains that original labor and appropriation in the state of nature is bounded by the injunction of the Law of Nature prohibiting waste. He writes:

The same Law of Nature, that does by this means [i.e., labor] give us Property, does also *bound* that *Property* too. *God has given us all things richly* But how far has he given it to us? *To enjoy*. As much as an one can make use of to any advantage of life before it spoils; so much he may by his

labour fix a Property in. Whatever is beyond this, is more than his share, and belongs to others.

Locke explains a few sections later that in the early stages of the state of nature, man properly acquired property in objects through labor, “[b]ut if they perished, in his Possession, without their due use . . . he offended against the common Law of Nature, and was liable to be punished; he invaded his Neighbour’s share, for he had *no Right, farther than his Use* called for any of them.” That is, in the early stages of the state of nature, any appropriation through labor beyond man’s needs—thus leading to waste—infringed other men’s right to use those objects for their own lives. In other words, a man acts contrary to the natural law if he appropriates more than is his own. Even the expression “his own” betrays Ellenborough’s reading of the natural rights philosophers, who believe that *dominion* (property) is the result of extending *suum* (one’s own) over material products.

The ideas of Locke permeated both the arguments and the terminology of the judges adjudicating patent cases at the end of the eighteenth century. Locke’s ideas are expressed in the way the judges conceived of the role of specification in terms of a social contract between the patentee and the public. Moreover, Locke’s unique theory that property is created through “mixing labor” manifests itself in the ways the judges speak of the novelty requirement, i.e., insofar as the patentee must prove that his product *never* existed in past use or knowledge, he must then earn his patent by proving that it truly is the result of his *own* labor.

D. *The Arguments Against Natural Rights: The Limits of Intellectual History*

Nonetheless, the evidence for the positivist position that natural rights philosophy did not contribute to the growth or development of patents as a legal doctrine is strong and I do not wish to indicate otherwise.

One common interpretation of eighteenth-century patent doctrine is that patents evolved according to a utilitarian framework with the inventor being granted a reward in exchange for the benefit that accrued to the public. There is evidence that supports this contention within the cases. For example, Justice Ashhurst, in a companion case to *Boulton & Watt*, began his remarks with the observation that “[e]very new invention is of importance to the wealth and convenience of the public; and when they are enjoying the fruits of an useful discovery, it would be hard on

the inventor to deprive him of his reward.” Moreover, Jeremy Bentham gave his imprimatur to this justification for patents.

Even more damaging to the claim that natural rights influenced patent doctrine are the arguments proffered by judges in the eighteenth century that explicitly argued to the contrary. In the famous copyright case of *Millar v. Taylor* (1769), counsel for plaintiff argued for the proposition “that there is a *real property* remaining in authors, *after publication* of their works.” This claim was defended, in part, by arguing “from the case of MECHANICAL INVENTIONS; where it is admitted, “that the rule does not hold.’ Yet the *same* rule ought to hold . . . and a great deal of *mental labour* is often bestowed upon mechanical inventions, as well as upon *literary* productions.” The plaintiff’s appeal to a natural right to property both in written works and in inventions was explicitly based upon Lockean grounds, i.e., on the fact that these things are *products* of mental labor. Thus this argument forced the judges to consider whether inventors had a claim of property in their inventions.

Although Justice Willes, Justice Aston, and Lord Mansfield agreed with the plaintiff that there was, at a minimum, a common-law right to an author’s work, Justice Yates was unconvinced and argued forcefully in dissent against the plaintiff. He remarked: “All property has its proper limit, extent, and bounds. *Invention* or *labour* (be they ever so great) cannot change the *nature* of things; or establishe a right, where no private right can possibly exist.” He then highlighted a central weakness in the claim that there exists a natural right in invented or authored works: it cannot be property because it is incapable of exclusivity—the alleged right lacks “corporeal substance.” Notably, Justice Yates cites Pufendorf on property, but he does not refer to Locke. His concluding remarks are pointed: “The whole claim that an *author* can *really* make, is on the *public benevolence*, by way of encouragement; but *not* as an absolute coercive right. His case is exactly similar to that of an *inventor of a new mechanical machine*.” Thus, Yates concludes that any rights given to inventors or authors are simply statutory rights predicated upon considerations of utility or public benevolence.

These arguments cannot be ignored because they are part of the historical record that constitutes the development of patents. Nonetheless, the significance of such sentiments should not be overstated. Just as Mansfield admonished the jury in *Liardet* to avoid two false extremes in adjudicating a patent dispute, a student of intellectual history should avoid the false dichotomy of either ignoring contrary sentiments or over-emphasizing the impact of such contrary sentiments. Such statements need to be placed in their proper context.

While it is true that no judge declared in a single sentence that inventors have a natural right to their patented inventions, this does not mean that explicit references to privilege or utilitarianism win by default as the ultimate justifications for the development of a legal doctrine for patents. Ideas often work in interesting and subtle ways, and statements by philosophers do not always filter through society in exactly their original form. A judge does not need to explicitly invoke Locke or the phrase “natural rights” in order to be thinking in such terms.

A comment by Holdsworth indicates why there is a glaring absence of direct citation to or quotation of Locke in judicial opinions in the eighteenth century. He writes that Locke “makes no attempt to determine how disputes as to the limits of the natural rights of the subject are to be settled.” In this respect, Locke is a *political* theorist and not a legal philosopher. This means that he provides a theoretical justification for the original definition of natural rights, particularly property rights, and of the civil society based thereon, but he does not go into any lengthy exegeses on the nature of contractual promises, marriage, prices of commodities or other legal issues that are rife in Pufendorf’s treatises. Thus when an eighteenth-century judge was faced with a generic legal issue, requiring adjudication based upon pre-existing legal standards, then citations to Pufendorf or even sometimes to Grotius were in order. However, when a judge was faced with an original question of defining a legal right—such as the situation in the late eighteenth-century concerning the legal enforcement of patent rights—he will first reason from the *political principles* that serve as the foundation for his understanding of legal requirements. It is in this respect that Locke played a greater supporting role in the development of the modern law of patents than any of the other natural rights philosophers.

I believe that I have shown that a substantial portion of the defining statements in modern patent doctrine—Mansfield’s jury instructions in *Liardet* and Buller’s decision in *Boulton & Watt*, to name a few—were in fact predicated upon underlying premises of natural rights and social contract theory. These judicial statements represent principles best exemplified in Locke’s seminal work in 1690. Similar claims were made by inventors and jurists in the prior two centuries (Jacobus Acontius is one shining example), but without Locke’s original explanation for *how* labor creates property rights, these arguments lacked the theoretical support to convince their opponents and thus fell upon deaf ears. Most important, as long as patents were viewed as monopoly privileges bestowed by the Crown at pleasure, even if this pleasure was limited somewhat by the customary rights of Englishmen, patents would never have developed into the legal doctrine of protecting invention that

it had become by the end of the eighteenth century. Once patents were taken up by the common-law courts *in toto*, the eighteenth-century judges were free to apply their assumptions about society and rights to this new and untested common-law doctrine. The result was the specification and novelty requirements—seeds planted in the seventeenth century that eventually sprouted in a soil enriched with Lockean theories about natural property rights and civil society.

So how to explain the sentiments of Justice Eyre and the nineteenth-century commentators quoted in the introduction to my paper? At any time there will always be dissenters to a prevailing intellectual approach, e.g., Marx and Engels were writing at the heyday of the Industrial Revolution and “freedom of contract” in both England and America. Since the theoretical foundations of patent law were largely unstated and untested in the eighteenth century, dissenting views were probably more common and notable. But the definition of a dissenter is one who is speaking against the prevailing doctrines of his day. The fact that Justice Erye was speaking in dissent of his brethren perhaps reflects the proper status of his views. From an historical perspective, it is not to Justice Eyre but to Lord Mansfield and Justice Buller that we look today for the *first* and *influential* statements of modern patent doctrine.

With respect to the nineteenth-century commentators, they were writing at the beginning of the period (continuing to this day) in which positivist theories waxed and natural law and natural rights theories waned. If later nineteenth-century jurists and lawyers turned against the doctrine of natural rights and its accompanying social contract theory as the justification for patents, this does not change the fact that such ideas still played a role in the pivotal eighteenth-century cases that created this doctrine. It would be anachronistic to superimpose an utilitarian thesis upon a development couched in the terms of natural rights theories. If one properly traces the development of patents from the sixteenth century through the eighteenth century, then the momentous changes that took place over these years can be sufficiently explained by the role of the natural rights philosophers within this period of English history.

CONCLUSION

This Paper began with a well-known historical fact: patents were transformed between 1550 and 1800 from royal grants of privilege into legal contracts between inventors and society. Despite the fact that this transformation occurred over the same period as the natural rights revolution in English law (1600-1800), twentieth-century commentators

have universally denied any relationship between these coeval events. Thus in writing this Paper, I have not sought to displace the prior work in the history of patents as much as I have sought to fill what I perceive as a glaring gap in scholarship.

The historical record for patents, especially the early patent doctrine of Queen Elizabeth and King James, has been extensively surveyed since Hulme's first essays on the subject at the end of the nineteenth century. Yet the later historical record, although well mined by MacLeod, Dutton and others, fails to consider the work of any of the natural rights philosophers. None of either Grotius' or Pufendorf's remarks on monopolies appear in any twentieth-century writings on the history of patents, and Locke is represented by a single quote in the third to last page in MacLeod's otherwise excellent survey of the history of patents. These philosophers appear nowhere within the pages of Dutton's book, nowhere within the recent four-part series of articles by Walterschied, and surprisingly, nowhere within the pages of Fox's treatise despite his own oblique reference to the natural rights foundation of patents in his first chapter. Yet everyone appears to be satisfied with repeating the oft-stated claim that natural rights had no influence on the development of modern patent doctrine. Drawing heavily upon the historical record already established by historians, and adding some additional research of the relevant philosophers and the relevant patent cases, I believe I have uncovered evidence, at a minimum, of a prima facie case for the proposition that there very well may have been a link between the two.

Although the first patents were grants of royal monopoly privileges to individuals who promised to establish a hitherto foreign or unknown trade within the realm, the eighteenth century is the period in which patent doctrine is burned pure of its function as a tool of royal prerogative. Two-hundred years after the first letters patent for invention, patents became explicit legal tools for promoting and protecting an inventor's property right in his creation. This distinction is evident in Mansfield's own words, distinguishing a legally valid patent for invention from a patent for monopoly deserving of being voided as illegal and unjust.

In investigating *why* this was the case, I found evidence of striking similarities between the arguments proffered by judges for the new common-law requirements of novelty and specification and the theories of Locke. Lord Mansfield's explicit legal formulation of the specification as consideration for a social contract between patentee and society mapped very well upon the social contract theory propounded by Locke in the *Second Treatise*. The development of the requirement of

novelty by Mansfield and Buller was stated in terms that reverberated with the ideas, and sometimes the words, of Locke's labor theory of property.

Outside of the judiciary, inventors in the eighteenth century were invoking Lockean arguments in the justification of their activities and their claim to a right thereto. Joseph Bramah, an inventor in the late eighteenth century, writes in 1797 that "[i]nvention [are] those efforts of the mind and understanding which are calculated to produce new effects from the varied applications of the same cause," and the cause was man's mind. Bramah then asked: "At what point of creation do the works of men begin?" His answer:

Just where the independent works of God end, who by his own secret *principles* and *methods* . . . established the elements and their properties, and stocked the universal storehouse already mentioned; out of which the same creating will directs every man to go and take materials, fit in kind and quality, for the execution of his design.

More than a century before Bramah penned these words, Locke wrote that God had created the universe in which natural law mandated that man labor (as a purposeful, rational activity) and thereby produce the products necessary for sustaining human life. In a culture steeped, at least since the Glorious Revolution, in Lockean ideals, the argument for legal protection of a property right in inventions received its normative force from the notion that productive labor is the fountainhead of innovation.

As noted in the introduction to this Paper, this identification comprises an historical truth, and is distinct from the proposition that there is in fact a natural right to one's inventions, mechanical or otherwise. In other words, recognizing that natural rights philosophy *influenced* the historical development of patents is separate from recognizing that natural rights is a valid *justification* for issuing patents to protect property rights in inventions. The former is a factual determination made on the basis of the historical record, and the latter is a philosophical determination that can only be made on the basis of normative principles. This Paper has addressed the historical truth and has left the normative issue for other papers to investigate.

The recognition of this historical truth, however, has import beyond its significance for historians and their academic kin. If natural rights ideals influenced the development of modern patent doctrine, which I believe I have shown, then this suggests that the inventor's *property right* in an invention deserves a place in the ongoing debate over the definition and reformation of patent rights. Thus far,

constitutional, institutional and economic arguments have dominated the field, but the provenance of patents indicates that the argument for an inventor's moral right to the property substantiated in his invention should complement these analyses. Thus, in the recent debates over business method patents and computer patents in the Internet age, for instance, the moral claim to the product of one's labors should not be ignored. The intellectual contributions of Lord Mansfield and Justice Buller to this field of law deserve no less.

ABOUT THE PROGRAM

The Intellectual Property & Communications Law Program (IPCLP) at Michigan State University-DCL College of Law was established to promote global, interdisciplinary understanding of intellectual property and communications law. The Program provides students with a solid foundation in the theoretical and practical aspects of these specialized, yet interrelated, fields. Aligned closely with the various internationally recognized colleges and research centers at Michigan State University and the distinguished intellectual property and technology law faculty at the University of Ottawa, IPCLP offers an innovative curriculum, an intellectual property and communications law externship program, joint J.D./LL.B. and other multi-degree options, and study abroad opportunities in Canada and Mexico. The Program also sponsors ground-breaking symposia, lectures, and career panels; hosts distinguished speakers and internationally recognized experts; and publishes an *Occasional Papers* series. Written by MSU-DCL faculty, IPCLP visitors, special guests, and symposium participants, these *Occasional Papers* are offered to stimulate innovative thinking about critical issues in intellectual property and communications law.

**Occasional Papers in Intellectual Property & Communications Law
Michigan State University-DCL College of Law**

#1 “The Escalating Copyright Wars”
August 2003
Peter K. Yu

#2 “Rethinking the Development of Patents: An Intellectual History,
1550-1800”
October 2003
Adam Mossoff

For additional copies of this paper or further information about the Intellectual Property and Communications Law Program, contact:

Prof. Peter K. Yu
Director, Intellectual Property and Communications Law Program
Michigan State University-DCL College of Law
461 Law College Building
East Lansing, MI 48824-1300