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ARTICLE 69 AND EUROPEAN PATENT INTEGRATION

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I. INTRODUCTION

Suppose that you are a small time inventor who notices that women shave their legs an awful lot. You also notice that for most women electrolysis is too painful and slow and waxing too inconvenient, and you hit on the brilliant idea of pulling out women's unwanted hair at the root by having a helical spring rotate in a figure-eight motion inside a hand-held machine.

To protect yourself, you get a United States patent, a European Patent under the European Patent Convention (EPC), and a host of other national patents. You then license your rights to a small start-up company to manufacture and sell your product worldwide. Luckily, your judgment of market needs is correct: the company quickly establishes an international presence and your device becomes a household name. As practical as your device is, however, it has one small but important flaw: it hurts.

Now suppose another inventor creates a machine that serves the same purpose as your device, but is designed to minimize the pain. Instead of using a helical spring, your competitor's machine uses a rubber rod with slits. This inventor has approached your major competitor, a company that has been in the depilating business much longer than your little start-up, and that can quite easily destroy your market share. Upset and worried, you sue your competitor for infringement of your patent rights and demand an injunction prohibiting the sale of its device.

Considering that you are now involved in dozens of suits worldwide, you are particularly pleased that your lawyer suggested that you get a European patent, because you figured that owning such a patent would save you time and money by insuring uniform conclusions in all EPC signatory countries. Imagine your surprise, however, when you discover that the courts within those signatory countries of the EPC could come to different conclusions. You thought that the law on patents would be the same in all European countries, but now in essentially the same case you have two different rulings for which there is no appeals court.

This situation is not simply hypothetical; it is exactly what happened to Improver Corporation, the manufacturer of *Epilady*, when it sued Remington Products Limited for patent infringement. When Improver discovered

that Remington was selling the *Lady Remington*, and decided to sue for patent infringement, its managers did not imagine that their patent infringement suit would shake the foundations of the European Union (EU).

In the late 1980s and early 1990s, optimism about the EU was at a record high. The Cold War was over, the world anticipated a single currency, and the nations of Europe seemed intent on greater political, economic, and even military cooperation. The European Commission was busy creating laws that would help member states harmonize their laws and regulations. One potential barrier to closer trade might have been differences over patent law. Luckily, the European Patent Commission had been established in the 1970s to harmonize European patent law. The European Patent Commission's efforts in the early 1970s made possible a European-wide system of patent protection that provides for uniform protection of patents. The path toward an integrated patent law in late 1997 nonetheless remains littered with obstacles.

The delegates to the European Patent Commission understood¹ there to be two extreme positions in interpreting the scope of patent protection in the EU, typified by German and English patent law. The English method viewed the claims made by the inventor as "fence posts;" "[w]hat is not claimed is disclaimed."² The Germans, by contrast, used a "guidepost" approach. The German method viewed the patent as a central teaching that had to be protected, even if the teaching's scope was wider than the literal reading of the patent claims.³ As a result, the delegates attempted to create a compromise and provided for a *via media* between these two extremes. The compromise resulted in Article 69⁴ and its Protocol of Interpretation.⁵ Article 69 states that the scope of the patent protection "shall be determined by the terms of the claims."⁶ The Protocol interprets Article 69. According to the Protocol, the terms should not be read literally or treated as "only a guideline," but rather should be interpreted as a position between the two extremes.⁷ As the holder of a European patent, Improver probably did not imagine the difficulty the national appeals courts would have in interpreting

¹ Their belief that the German and English positions on the scope of patent protection were on the opposite sides of the same continuum was wrong. It turned out to be much more complicated than that. See *infra* section III.A.4.

² *Electric & Musical Indus. v. Lissen, Ltd.*, [1939] 56 R.P.D. & T.M. 23, 39 (H.L. 1939) (Lord Russell).

³ See, e.g., Bundesgerichtshof [BGH] [Supreme Court], GEWERBLICHER RECHTSSCHUTZ UND URHEBERRECHT INTERNATIONALER TEIL [GRUR INT.] 1955, 29.

⁴ Convention on the Grant of European Patents (European Patent Convention), Oct. 5, 1973, art. 69, reprinted as amended in OFFICIAL JOURNAL OF THE EUROPEAN PATENT OFFICE 1979, at 3, in PATENT LAW AND EUROPEAN PATENT CONVENTION 99 (Oguz Akalin ed., 1991) [hereinafter EPC].

⁵ Protocol on the Interpretation of Article 69 of the European Patent Convention, in MATERIALS ON INTELLECTUAL PROPERTY 86 (W.R. Cornish ed., 1990) [hereinafter Protocol].

⁶ EPC, *supra* note 4.

⁷ Protocol, *supra* note 5.

this protocol. Rather, Improver's managers remained confident that their patent infringement suit would reach a uniform conclusion throughout the EU.

Although the result was not what Improver had anticipated, it is exactly what several of the delegates to the EPC had prophesied.⁸ After a lengthy appeal process, the German courts held that Remington had infringed the *Epilady* patent,⁹ while the English courts held that Remington had not.¹⁰ Furthermore, both courts claimed not only that they had followed Article 69 of the EPC and the Protocol, but also that the other country's court had not.¹¹ The confusion was further compounded by the fact that no pan-European patent court exists to rule definitively on the case. As a result, both countries' courts dug in their heels and refused to change their positions.¹²

In the heady days before Maastricht, many assumed that legal unification could be achieved by legislative fiat.¹³ It was assumed that legal traditions could be molded and shaped by political compromise.¹⁴ This Comment takes issue with that assumption; it proposes that legal integration by legislation without some wider cultural¹⁵ unification is meaningless. In response to those who would ignore legal traditions, this Comment argues that law is not a set of neatly organized rules that can be imposed by a su-

⁸ M. VAN EMPEL, THE GRANTING OF EUROPEAN PATENTS, INTRODUCTION TO THE CONVENTION ON THE GRANT OF EUROPEAN PATENTS, MUNICH, OCTOBER 5, 1973, at 306-08 (1975).

⁹ Oberlandesgericht [OLG] [Düsseldorf Court of Appeals] Düsseldorf, GEWERBLICHER RECHTSSCHUTZ UND URHEBERRECHT INTERNATIONALER TEIL [GRUR INT.] 1993, 242, translated in 24 INTERNATIONAL REVIEW OF INDUSTRIAL PROPERTY AND COPYRIGHT LAW [hereinafter IIC] 838 (1993) [hereinafter *Epilady Germany II*].

¹⁰ Improver Corp. v. Remington Consumer Prods. Ltd., [1990] 17 F.S.R. 181 (Pat. Ct. 1989). In order to simplify matters this Comment will use the term "Improver Cases" to refer to both the English and German Cases, "Improver" or "Improver v. Remington" when referring to the English cases, and "Epilady Germany I" or "Epilady Germany II" when referring to the German cases.

¹¹ See 24 IIC at 843; [1990] 17 F.S.R. at 197-98.

¹² See, e.g., Kastner v. Rizla Ltd., [1995] R.P.D. & T.M. 585, 593-95 (C.A. 1995); Entscheidungen des Bundesgerichtshofes in Zivilsachen [BGHZ] [Supreme Court] 125, 303, translated in 26 IIC 261 (1995) [hereinafter *Segmentation Device*].

¹³ This is implicit in Empel's history of Article 69 and the EPC. See EMPEL, *supra* note 8.

¹⁴ See *id.* See also Pierre Legrand, *European Legal Systems Are Not Converging*, 45 INT'L & COMP. L.Q. 52, 52-60 (1996) (arguing that the assumption is false); Brad Sherman, *Patent Claim Interpretation: The Impact of the Protocol on Interpretation*, 54 MOD. L. REV. 499, 499-507 (1991) (arguing the same for patents).

¹⁵ "Culture" in a legal context can mean both the community of lawyers, judges, and legal academics as well as the wider society around them. This Comment focuses on the community of legal professionals, but the mental models by which those professionals operate are ultimately shaped by the moral, aesthetic, and political choices made by the wider society. For an analysis of the role of community and culture in forming the mental models of judges and lawyers, see Lynn M. LoPucki, *Legal Culture, Legal Strategy, and the Law in Lawyers' Heads*, 90 NW. U. L. REV. 1498 (1996). For a brief essay on how economics and social policy have always been important to the development of patent law, see Thomas M. Meshbesh, *The Role of History in Comparative Patent Law*, 78 J. PAT. & TRADEMARK OFF. SOC'Y 594 (1996).

pranational power. Rather, the law is an integral part of the culture of the country in which it developed. Any attempt at legal integration¹⁶ must, therefore, consider the differences between legal systems. Thus, although it seems simple to devise one law that governs all, it is more difficult, and perhaps impossible, to develop one law that will be interpreted the same way by a host of different legal jurisdictions.

This Comment argues that to understand the interpretation of law in a particular society one must first come to grips with that society's culture and history. The histories of England and Germany have resulted in conflicting legal mentalities that bias each country's respective patent law. Transcending those legal mentalities or paradigms is not an easy task. Article 69 is one example of a legislative fiat that has failed as a vehicle for patent law integration.

Relating the scope of patent protection to wider jurisprudential trends requires more than a casual elaboration. Part II of this Comment explores the many jurisprudential issues raised in interpreting patent claims. After an initial foray into patent theory, Part II will examine how and why the drafters of the EPC tried to synthesize the various solutions to the problems mentioned in the first section of this Part.

Part III undertakes an in-depth analysis of the history of English and German patent law and the justifications used for patents. Subpart A focuses on England and shows, from the Middle Ages through modern times, how the weight of English tradition viewed patents as an economic incentive for growth. To prevent that from happening, English patent law adopted a strict literalist method for reading patent claims in infringement actions. Recently, English jurisprudence has moved toward a broader method of reading patent claims that has removed many of the inequities of strict literalism. Nevertheless, the new approach has preserved the ancient prejudice for bright lines demarcating the patent monopoly.

Subpart B illustrates that German patent law was founded on different principles from those underlying English patent law. This subpart describes how German principles altered the manner in which judges in Germany interpret claims of scope. The subpart traces the origins of patents in Germany to the "personality theories" of Hegel, which found fertile ground in turn-of-the-century Germany where judge-made law was celebrated. The guiding principle of patent law was justice or fairness to the inventor, and economic issues were, for historical reasons, of secondary importance. Patent scope interpretation fluctuated between broad interpretations that were not based on the language of the claims, to more restricted approaches.

¹⁶ By "legal integration" this Comment includes both legal harmonization and legal unification. The purpose of legal harmonization is to facilitate cross-border dealings in a framework that allows the retention of national laws. Unification requires the substantive law to be the same in all jurisdictions. See Benjamin Geva, *Uniformity in Commercial Law: Is the UCC Exportable?*, 29 LOY. L.A. L. REV. 1035, 1037 (1996).

Nevertheless, in all periods the interpretation of patents was abstract: broad interpretations were permitted and much judicial discretion was tolerated. As one of the few primarily case-driven areas of German law, patent law conflicts with the general civil-law tendency toward formal and narrow legal rulings.

Finally, this subpart examines how the German courts have adapted to the change in patent law mandated by the EPC. It demonstrates that, despite a novel interest in promoting certainty for third parties, German jurisprudence, like English jurisprudence, is still strongly rooted in its historical practice.

Part IV examines how the two distinct approaches to patent law in Germany and England collided in the *Improver* cases. Subpart A provides an overview of the procedural history and the basic arguments in both England and Germany and highlights how their different jurisprudences influenced the different outcomes. Subpart B examines the case law in Germany after *Epilady Germany II*. It concludes that the German courts are still divided over how to comply with the EPC. Lastly, subpart C examines current English case law and finds that, with the exception of one instance in which a judge found the German approach more attractive, English judges have also maintained their historical position.

Finally, Part V examines the broader issues of legal integration. It argues that English and German methods of patent scope interpretation embody two different approaches to patents, albeit ones that both can be justified under the language of Article 69 of the EPC. The two approaches cannot be reconciled, because they differ over a patent's definition and purpose. Thus, while legal integration is possible, it requires a level of mutual cultural adaptation. The case law after the *Improver* cases illustrates that convergence can be achieved on some level, but will succeed only when the cultural assumptions underlying the legal concept at issue are adapted as well.

II. PATENT CLAIM JURISPRUDENCE

A. A Theoretical Framework for Patents

The basis for determining a patent infringement, like whether Lady Remington violated *Epilady*, has been answered differently across jurisdictions and history. Because the scope or range of patent protection in any jurisdiction is directly related to the jurisprudential history of patents in that country, this subpart sets out a sociological framework through which patent law will be analyzed in this Comment.

In any jurisdiction, the patent application and specification for the device (in this case *Epilady*) will play a role in deciding whether another device (in this case the *Lady Remington*) infringes on the patent for the first one. This seemingly obvious proposition is not as simple as it first appears.

Patents are abstract monopolies that depend on a text to define the limits of the monopoly. Trying to capture the whole of an idea in a single text raises a host of problems. If the text is the monopoly and functions like a property deed, then the patent must be construed narrowly and alleged infringements must be compared word by word with the text. If the text is merely representative of an idea to be protected, then the patent must be read broadly and the idea of the alleged infringement must be compared to the idea behind the protected invention. This latter approach, however, ignores the problem that people other than the inventor know the idea only through the text of the patent. As the text of the patent is merely a *representation* of the idea, it is possible that the protected idea will be broader in scope than the patent text implies. In such cases, people will be deprived of an "adequate notice" mechanism because they will assume that the scope of protection given to the idea is based on patent text.

A standard patent application usually includes a brief written description of the device, a graphical illustration of the device, and an outline of the principles central to the development of the device. In even the most standard application, important questions arise: for example, which section of the application should be emphasized most and how literally should the claims be read? As a result, most countries now require a section in which the patentee makes a series of claims as to how far the patentee wishes the patent to extend.

Sociology understands that a legal rule is not a mere accumulation of "dos and don'ts" that occurred over the centuries and became a formulaic phrasing of a legal problem or solution. Rather, rules of law encode experience and are "but the outward manifestation of an implicit structure of attitude and reference."¹⁷ When lawyers and judges apply law they do so through the agency of the human mind. Because the written law is permeated with exceptions, ambiguities, and authorizations for the use of discretion, the mind will tend to simplify the law and smooth over the difficulties in order to produce a rule or mental model that can be applied in a broad range of situations. How the mind creates this mental model is prejudiced by the implicit structure of attitude and reference of the community in which the legal professional practices.¹⁸ Thus, rules in England and Germany regarding claims of scope and their interpretation reflect the cognitive structures of the two countries. The patent rules in both countries reflect how England and Germany justify patents and how they approach legal problems in general. These justifications and approaches are in turn rooted in those countries' respective histories. Although the past is not determina-

¹⁷ Legrand, *supra* note 14, at 57.

¹⁸ Professor LoPucki documents how, even under the same written debtor-creditor law, different sub-communities in America interpret how to apply the law differently. See LoPucki, *supra* note 15, at 1504-08.

tive of the future, this Comment argues that it can affect how one approaches the future, especially in traditionalist countries like England.

The law's approach to each part of the patent application reflects greater societal concerns. For example, to require a section in which Improver must make claims about the scope of the *Epilady* patent implies that patent protection is a privilege given by the state and must be clearly demarcated. If, on the other hand, Improver had exclusive ownership of its invention by natural imprescriptible right, the state would have no right to demand that Improver limit its claim to its property because those rights exist independently of, and prior to, the state. In the latter case, the *Epilady* patent would merely be a register of property claims.¹⁹

If, however, the *Epilady* patent is not Improver's natural property, the further question of why the state should want to limit Improver's claim arises. If the patent is viewed as a monopoly privilege granted to Improver in order to further commerce and trade, the state would have an adequate reason to want to limit and delineate that monopoly. Two reasons support this conclusion. First, it is generally acknowledged that monopolies restrain trade. Second, legal uncertainty does not allow commerce and trade to function smoothly. Therefore, clearly defining the scope of any restraint on trade would help minimize the restraint's harmful effects. This approach to patents is the one taken by English jurisprudence.

If, on the other hand, a patent monopoly is viewed as a just reward for the labors of the inventor (in this case the Improver Corporation), who, in an effort of national service, imparted an important "teaching" to her countrymen, then the motives for requiring a narrow monopoly are most likely to be overruled in the name of a fair and just reward for Improver. Furthermore, in such a scenario, the *Epilady* patent claims would be viewed broadly. This is the approach to patents taken by German law.

B. European Patent Law

The founders of the European Economic Community (now the European Union, or EU) realized early on that patent law integration is an important part of their goal of a common market.²⁰ Since the Treaty of Rome does not affect industrial or commercial property, European legislators had to devise some independent means to achieve that goal.²¹ The legislators had two objectives. First, they wanted to create a patent designed to suit the Common Market and include the possibility of association of non-members. Second, they wanted to create an international patent system for an unspeci-

¹⁹ France, which for many years maintained that patents were merely registers of natural rights, did not require the patentee to make claims of scope until 1968. See Georges Vianes, *The New French Patent Law*, 11 IIC 131, 134 (1980).

²⁰ Otto Bossung, *The Return of European Patent Law to the European Union*, 27 IIC 287, 289 (1996).

²¹ See *id.*

fied number of countries. The legislators found that they could not combine these two objectives in a single treaty, because the former goal required more patent law unification than the potential signatories to the latter goal were willing to undertake.²² As a result, European patent law was divided into the Community Patent Convention (CPC), reflecting the former objective and which has not yet entered into force, and the EPC, reflecting the latter objective.²³ The goal behind both conventions was twofold: first, to make it easier for patentees to deal with multiple jurisdictions, and second, to make it easier to determine the scope and validity of patents in the signatory countries. Ideally, a truly European-wide patent system would have one court system and a unified method of patent interpretation. In fact, the CPC envisioned a common appeals court with exclusive jurisdiction over both validity and infringement issues.²⁴ However, because the CPC required ratification by all member states to have effect²⁵ and because patent applicants under the treaty must obtain and pay for translation of the entire patent application into all nine official European languages,²⁶ most signatory countries refused to ratify it.²⁷ Currently little hope exists that the signatory countries will ratify the CPC.²⁸

The EPC, unlike the CPC, has no central appeals system, and is written in such a way that modification of its terms is next to impossible.²⁹ According to Article II of the EPC, the European patent will "have the effect of and be subject to the same conditions as a national patent granted by that State, unless otherwise provided in this Convention."³⁰ Despite the stated goal of an EU-wide patent system, national rivalries kept national patent systems in place alongside the new EU patent system.³¹ Unable to generate the political will to create a separate court and enforcement mechanism for EU patents, the drafters grafted the new EU patent system onto national law. In order to prevent the various national courts, which were now entrusted with interpreting and enforcing EU patent law, from arriving at divergent interpretations of EU law, the drafters realized that the national

²² See *id.*

²³ See *id.*

²⁴ See Council Convention 76/76 of December 15, 1975, for the European Patent for the Common Market (Community Patent Convention), pt. I, ch. II, 1976 O.J. (L 17) 1, 3-5, convention not yet entered into force.

²⁵ See *EC: Community Patent Government Conference*, 21 IIC 123 (1990).

²⁶ See Jeffery L. Thompson, Note, *The North American Patent Office? A Comparative Look at the NAFTA, The European Community, and the Community Patent Convention*, 27 GEO. WASH. J. INT'L L. & ECON. 501, 513 (1993-94).

²⁷ See *id.* at 512 n.90.

²⁸ Cf. *id.*

²⁹ Revision is politically impossible because it requires acceptance by all signatory countries and there is a general lack of consensus about what needs to be revised. See Bossung, *supra* note 20, at 291-92.

³⁰ EPC art. II, *supra* note 4, at 90.

³¹ See EMPEL, *supra* note 8, § 23, at 12.

patent laws of the signatory countries would have to be harmonized to some extent. Thus, the drafters were forced to compromise their goal of unification by allowing harmonization. Therefore, the convention included an article on the proper method of interpreting the scope of EU patent protection, and all signatories subsequently harmonized national law with the requirements of that article.³²

Consequently, the EPC has a strange mix of national and transnational law. Under the EPC, the European Patent Office (EPO) is involved until a patent is granted. The EPO allows applicants to apply simultaneously for national patent rights in any of the signatory countries and for an "European Patent." A patent decision can be appealed to the EPO Board of Appeal within nine months of the decision.³³ All infringement actions are dealt with by the national courts. Article 69 of the EPC, which was subsequently adopted by all signatories, states that

[t]he extent of the protection conferred by a European patent or a European patent application shall be determined by the terms of the claims. Nevertheless, the description and drawings shall be used to interpret the claims.³⁴

The committee that drafted the convention decided that this formulation was too vague and required a protocol of explanation.³⁵ The Protocol, in keeping with the non-confrontational approach of the convention, tried to steer a middle course between what it perceived as the two extremes in European patent scope interpretation, the German and English approaches.³⁶ The Protocol of Interpretation of Article 69 offers the following approach:

³² See Protocol, *supra* note 5, at 86-87.

³³ See RALPH H. FOLSOM & MICHAEL W. GORDON, INTERNATIONAL BUSINESS TRANSACTIONS 460 (1995).

³⁴ EPC art. 69(1), *supra* note 4, at 99.

³⁵ See MINUTES OF THE MUNICH DIPLOMATIC CONFERENCE FOR THE SETTING UP OF A EUROPEAN SYSTEM FOR THE GRANT OF PATENTS, Munich, 10 September to 5 October, 1973, 31-32 (1973) (F.R.G.). The drafters intended the Protocol to be a legally binding explanation of the rule proclaimed in the treaty, not unlike when a U.S. court adopts as law an explanatory comment in a Restatement.

³⁶ The drafters misunderstood current English law, ignoring the "purposive interpretation" doctrine then developing. See *supra* section II.A.4. It is unclear what the drafters were trying to do. Were they (1) throwing up their hands, (2) trying to set up a dialogue between the courts that would eventually create a settled rule of law, (3) attempting to create an arbitrary compromise, or (4) extending an olive branch to the English, whose law was the only law to differ substantially from the German model of interpretation?

Whatever their intent, the delegates chose poor means to effectuate it. Article 69 exacerbated the problems between the national courts. Any attempted dialogue or compromise between courts requires a common language through which the law can be translated as well as an independent body, such as a central appeals court, to decide when a compromise has been reached. The delegates did not provide this and instead created a free-for-all amongst the various national courts with no mechanism to decide which court's understanding was correct. As for the English, as later events were to show, they were not placated. See *infra* part IV.

Article 69 should not be interpreted in the sense that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claim, the description and drawings being employed for the purpose of resolving an ambiguity found in the claims. Neither should it be interpreted in the sense that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patentee has contemplated. "On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties."³⁷

As soon as the Protocol was written, the drafters anticipated problems.³⁸ Although aware on some level of the different cultural and philosophical purposes behind patent law in Germany and England, the drafters badly underestimated the power of legal cultures to incorporate new ideas within their own patent system framework.³⁹ Both sociology and poor drafting confounded the goal of legal unification. Not only is the language ambiguous, but the phrase used in the English version of Article 69, "the terms of the claims," is slightly different in the French version and in the German version. Both the French word "*teneur*" and the German word "*inhalt*" suggest a more liberal approach. Some German jurists have even reconciled their pre-EPC approach, which goes beyond the wording of the claim, with that of the Protocol, which seems to argue for a more literal interpretation.⁴⁰

The various *Improver* cases illustrate the results of this dichotomy. In the absence of any substantial European traditions on patent law, the national courts soon fell back to their own traditions of interpreting patent scope, which they managed to reconcile creatively with the language of Article 69. This Comment argues that interpretations of patent law, if left to individual nations to define, will ultimately depend on the justifications for patents favored by that country.

³⁷ Protocol, *supra* note 5, at 86.

³⁸ Martjin van Empel, the author of the official introduction to the EPC, noted in 1973 that the wording would cause trouble. He argued that the wording was so vague that any court could find justification for its national practice within the Protocol. EMPEL, *supra* note 8, at 306-07; see also Edward Armitage, *Interpretation of European Patents (Art. 69 EPC and the Protocol of Interpretation)*, 14 IIC 811, 814 (1983).

³⁹ Thus, a law imposed by a transnational body will be interpreted by country A within the context of its own laws and by country B within the context of its laws. The result will not be a uniform law in countries A and B, but one law in country A and another law in country B, perhaps with the same wording but with different effects in the two countries.

⁴⁰ See Jochen Pagenberg, *The Scope of Art. 69 European Patent Convention: Should Sub-Combinations Be Protected?—A Comparative Analysis on the Basis of French and German Law*, 24 IIC 314, 324 (1993).

III. PATENT LAW HISTORY AND CULTURE

This Comment argues that culture creates meaning behind legal rules, and it is that meaning that causes different cultures to interpret the same law, applied in the same circumstances, differently. Consequently, how a country's jurisprudential culture formed is of paramount interest to any student of comparative law. To that end, this Part examines the history of patents in England and Germany and shows how wider societal concerns and historical forces shaped patent law in those jurisdictions. Subpart A examines English patent law and section III.A.1 begins by tracking the birth of English patents in the late Middle Ages. Section III.A.2 examines the effect of the Industrial Revolution. Finally, sections III.A.3 and III.A.4 examine the origins of modern English patent law and show how it arrived at its pre-EPC synthesis. Subpart B canvasses the development of German patent laws and highlights the importance of Hegelian theory in their development. It traces the three different stages in German patent law and examines how the courts have reconciled their traditional practice with the new requirements imposed by the EPC.

A. *The History of English Patents*

The history of patents in England⁴¹ reflects the wider legal trends that occurred in England from the Middle Ages to modern times. It is the oldest system of patents still in use,⁴² and, as a common-law jurisdiction, it consciously looks to its history to validate and justify its current practice. Consequently, the cultural factors reflected in English history achieve an even greater importance than they otherwise would.⁴³ The common law's abhorrence of monopoly⁴⁴ and desire to limit royal privilege have been mirrored in the desire to limit patents narrowly to their terms. The ancient, strong, and durable consensus that economic growth requires invention, and that patents are a powerful incentive to invent was combined with the belief that monopoly is bad. The result was the doctrine that a patent is a *quid pro quo* exchange of monopoly for disclosure. Despite the many problems patent laws would pose over the years, the English have unfailingly favored patents and consistently kept the same justification for them.

⁴¹ England and Wales comprise a single jurisdiction operating within the United Kingdom of Britain and Northern Ireland. Scotland and Northern Ireland are the two other jurisdictions. All treaties signed by the United Kingdom, such as the EPC and the CPC, are binding on all three jurisdictions. Furthermore, the House of Lords is the highest court in the United Kingdom and its decisions are binding on England, Wales, Scotland, and Northern Ireland. Nearly all of the cases discussed in this Comment, however, originated under English law, and the dominant tradition and the majority of cases used by the House of Lords are English, this Comment will discuss only the history of English patent law.

⁴² See NEIL DAVENPORT, *THE UNITED KINGDOM PATENT SYSTEM: A BRIEF HISTORY* 13 (1979).

⁴³ See *infra* section III.A.2.

⁴⁴ Monopolies which prevent people from earning their living through honest labor are against "the law of God and man" and are void (even an act of Parliament can be voided). *Darcy v. Allin* 74 Eng. Rep. 1130, 1137, Noy 173, Moore K.B. 671 (1602).

1. *Early Patents.*—In the famous 1602 “Case of Monopolies,” *Darcy v. Allin*,⁴⁵ the courts for the first time overturned a patent granted by the Crown. The court ruled that a patent monopoly of limited duration is permissible if and only if the monopoly is for the good of the realm and the inventor discloses his invention to the commonwealth.⁴⁶ This introduced the dominant theme of English patent jurisprudence: a balance must be struck between the incentive granted to the inventor and the needs of society as a whole. In England, a patent is a contract between society and the inventor to disclose his secret, and thereby further trade, in exchange for monopoly.

England was far behind the rest of Europe in trade and industry in the late Middle Ages; patents were used extensively to lure industry to English shores.⁴⁷ Furthermore, the Tudor monarchy (1485-1603) allowed the granting of monopoly to be a true and enforceable privilege and not a meaningless one.⁴⁸ The prime motive for granting patents was the encouragement of invention, but invention at that time meant not only the creation of new art but also the importation of new art from elsewhere into England.⁴⁹ Typical granting language in this period announced that the patent was granted as a reward for “diligent travail” and to “give encouragement to others.”⁵⁰

Soon, the Crown saw patents as a convenient way to raise capital. Queen Elizabeth I (1558-1603) granted patent monopolies in such basic goods such as coal, fruit, iron, leather, salt, soap, and starch.⁵¹ Indeed, the first successful court challenge to royal authority over patents occurred in Elizabeth’s reign.⁵² Patents continued to multiply. Although James I (1603-1625) issued numerous proclamations against monopolies, he never diligently tried to eliminate them because they were good business for the Crown.

⁴⁵ *Id.*

⁴⁶ The court reasoned:

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 [a patent cannot be granted].

Id. at 1139.

⁴⁷ See E. Wyndham Hulme, *The History of the Patent System under the Prerogative and at Common Law*, 12 LAW Q. REV. 141, 141-43 (1896).

⁴⁸ See WILLIAM HYDE PRICE, *THE ENGLISH PATENTS OF MONOPOLY* 4-5 (1906).

⁴⁹ See *id.* at 14.

⁵⁰ *Id.* at 7.

⁵¹ See Hulme, *supra* note 47, at 152-53.

⁵² See *supra* notes 44-46.

Despite James I's indifference, in 1624 Parliament passed the Statute of Monopolies.⁵³ The first section rendered all monopolies illegal, but later sections made exceptions. Section 6, *which is still in force*,⁵⁴ allowed monopolies

for the term of fourteen years or under, hereafter to be made, of the sole working or making of any manner of new manufactures within this realm to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law nor mischievous to the state by raising prices of commodities at home or hurt of trade or generally inconvenient. . . .⁵⁵

Most commentators see this act as an attempt by the Crown in Parliament to circumvent the criticism made by Parliament about making money from granting monopolies.⁵⁶ Once the taint of monopoly was removed and replaced by the honorable purpose of increasing trade, however, the Crown circumvented Parliament by using patents as a new form of tax.⁵⁷ As a result of this Act, therefore, the Crown was able to continue to grant what many in Parliament saw as "objectionable" monopolies. After the Glorious Revolution of 1689, Parliament became much less deferential to the Crown, and patents were much more stringently examined to see if they "hurt trade" or "were generally inconvenient" before they were granted.

The granting of patents was a complicated process and proceeded mostly unchanged until the nineteenth century.⁵⁸ However, during the reign of Queen Anne (1665-1714), the law officer inserted into the letters patent

⁵³ 21 Jam. 1, ch. 3.

⁵⁴ See An Act to Amend and Consolidate the Law Relating to Patents for Inventions, Registration of Designs, and of Trade Marks (The Patents, Designs, and Trade Marks Act) (1883), 46 & 47 Vict., ch.57 § 46 (Section 6 of the Statute of Monopoly Still Valid); *Beecham Group Ltd. v. Bristol Laboratories Ltd.*, [1978] R.P.D. & T.M. 153, 198 (H.L. 1978) (Lord Diplock laments the fact that the definition of "invention" in section 6 of the Statute of Monopolies, which he considers "archaic," is still good law under the fourth Schedule to the Patent Rules 1958).

⁵⁵ 21 Jam. 1, ch. 3 § 6.

⁵⁶ Indeed, popular mythology had it that monopoly was the primary cause of the first English Civil War (1642-1646). See CHRISTINE MACLEOD, *INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM, 1660-1800*, 16 (1988). Indeed, the language used in *Darcy v. Allin*, 74 Eng. Rep. 1130, 1137 (1602), that monopoly was against the law of man and God, sounds very much like the language used by Sir Edward Coke in his battles with James I that were later used by English revolutionaries in 1688 and by American revolutionaries in 1776 to justify their actions. See generally STEPHEN B. PRESSER & JAMIL S. ZAINALDIN, *LAW AND JURISPRUDENCE IN AMERICAN HISTORY 1-10* (3d ed. 1995). Coke reflected this new understanding of patents when he stressed that patents must be beneficial to the commonweal. For a patent to be granted there must be "*urgens necessitas, et evidens utilitas*" (an urgent necessity and a useful purpose). MACLEOD, *supra*, at 18.

⁵⁷ See HAROLD G. FOX, *MONOPOLIES AND PATENTS: A STUDY OF THE HISTORY AND FUTURE OF THE PATENT MONOPOLY 135* (University of Toronto Press 1947); PRICE, *supra* note 48, at 132.

⁵⁸ Despite numerous calls for patent law reform, dating back to the Glorious Revolution, there was no organized reform movement until the nineteenth century. See *infra* subparts III.B & III.C.

the option of filing a detailed description of the invention. This procedure became standard in 1734, although it was not required until 1850.⁵⁹

2. *The Industrial Revolution.*—The rapid changes that occurred during the Industrial Revolution exposed many of the deficiencies of patent law as an economic instrument. These flaws generated many calls for reform of the patent system and its unwieldy procedure. The Patent system continued to be rife with abuses and poor organization.⁶⁰ In 1795, Chief Justice Baron Eyre complained privately that “patent rights are nowhere that I can find accurately discussed in our books.”⁶¹ Jeremy Bentham thought that the “enormous expense of patents” was one of the three great burdens on industry in his time.⁶² Most protests claimed that the patent system was inefficient, rather than that it was corrupt. By this time the majority of Englishmen agreed that patents were a good thing because they promoted economic growth.⁶³

⁵⁹ See DAVENPORT, *supra* note 42, at 29-30.

⁶⁰ See HAROLD IRVIN DUTTON, *THE PATENT SYSTEM AND INVENTIVE ACTIVITY DURING THE INDUSTRIAL REVOLUTION, 1750-1852*, at 34-51 (1984).

⁶¹ *Id.* at 71.

⁶² *Id.* at 65.

⁶³ In 1788, in *Liardet v. Johnson*, 62 Eng. Rep. 1000, 1003 (Ch. 1780), the idea that patents were incentives for disclosure became enshrined in law. Baron Eyre ruled that if the “fulness [sic] and clearness of the specification” was in doubt, the jury was obligated to determine as a matter of fact whether the patent was valid, because a full and clear disclosure was required for a patent monopoly to be granted. *Id.* at 1003. This reasoning held strong nearly a hundred years later in *Harrison v. The Anderson Foundry Co.*, 1 App. Cas. 574, 576 (H.L. 1876), when the Lord Chancellor wrote that “the absolute and indispensable condition of the patent and monopoly claimed by the patentees is that they must disclose the nature of their invention and the manner in which it is to be performed.”

Indeed, most people agreed with Adam Smith’s assessment that while monopoly was pernicious, a temporary monopoly granted to the inventor of a new machine could be justified as a way to reward risk and expense. 2 ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* 754 (R. H. Campbell & A. S. Skinner eds., Clarendon Press 1976) (1776). Jeremy Bentham declared that “of all the methods of exciting and rewarding industry, this [patents] is the least burthen-some[sic],” and that patents “have nothing in common with monopolies, which are so justly decried.” Jeremy Bentham, *Sieyes’ Declaration of Rights*, in 2 *THE WORKS OF JEREMY BENTHAM* 533 (Bowring ed., 1843). Edmund Burke, writing in his private papers, summed up the common attitude of the time: “Monopoly is an odious term . . . [but patent] is not making a monopoly of what was common. It is the direct reverse, for the condition of the patent, compelling a discovery, makes that common which was private before.” MMS 5923 National Library of Ireland, *quoted in* DUTTON, *supra* note 60, at 23.

The most common complaint against patents was that due to the confused state of the law, the patentee might gain at the expense of the public. The tension between positive effect of patents and their negative effect can be seen in Chief Justice Kenyon’s opinion in *Hornblower v. Boulton*, 101 Eng. Rep. 1285 (C.P. 1799) in which he wrote (in a claim that is still valid today):

I confess I am not one of those who greatly favour patents; for though, in many instances, and particularly in this, the public are benefited by them, yet on striking the balance upon this subject, I think that great oppression is practised on inferior mechanics by those who are more opulent.

Id. at 1287-88.

In general judges were quite hostile toward patents until the 1830s. By then, judges began to feel the influence of economic and utilitarian ideas and looked back to the original statute of monopolies, the explicit purpose of which was to increase trade and industry.⁶⁴ Despite the judges' increasingly generous attitude toward patents, patent procedure was still confused, difficult, and expensive.⁶⁵ Abortive patent reform bills surfaced in 1819 and 1820. Finally in 1829, Parliament established the first committee to investigate the patent system.⁶⁶ By 1851, there were at least eleven committees and associations working for the reform of patent law.⁶⁷

The growing free-trade movement produced a powerful and influential, but ultimately unsuccessful, patent abolition movement from the 1860s to 1875. In May 1869, the movement persuaded the House of Commons to debate a motion to abolish patents.⁶⁸ This motion failed because the general English sentiment at this time was that the condemnation of monopolies should not extend to patent law.⁶⁹ Patent abolitionists never were able to convince the business and "inventive" communities that they had an alternative to patents that was better than mere reform.⁷⁰ Without an alternative the abolitionists failed miserably.⁷¹ Nevertheless, the abolitionists solidified

The absence of a clear idea of what kind of invention could be the subject of a patent caused much of the confusion in early patent law. Slowly the consensus, inspired by the statute of James I, emerged that patents were an incentive for the "making of new manufactures." Kenyon in *Hornblower*, defined manufacture as "something made by the hands of man." *Id.* at 1288. Patents could not be granted for abstract or "philosophical principles only." *Id.* Only when a principle was reduced in practice to an actual invention was it patentable. Thus, patents protected concrete knowledge.

⁶⁴ See DAVENPORT, *supra* note 42, at 13.

⁶⁵ See *id.* at 17-18.

⁶⁶ See *id.* at 20.

⁶⁷ See *id.* at 20.

⁶⁸ See Victor M. Batzel, *Legal Monopoly in Liberal England: The Patent Controversy in the Mid-Nineteenth Century*, 22 BUS. HIST. 189, 190 (1980).

⁶⁹ Most English people agreed with John Stuart Mill that "the condemnation of monopolies ought not to extend to patent, by which the originator of an improved process is allowed to enjoy for a limited period, the exclusive privilege of using his own improvement." JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY WITH SOME OF THEIR APPLICATIONS TO SOCIAL PHILOSOPHY* 928 (Routledge Keegan Paul, 1965) (1848).

⁷⁰ The abolitionists argued that patents represented a monopoly and therefore were evil. See Robert Andrew Macfie, *Introduction to RECENT DISCUSSIONS ON THE ABOLITION OF PATENTS FOR INVENTIONS IN THE UNITED KINGDOM, FRANCE, GERMANY, AND THE NETHERLANDS* v (Robert Andrew Macfie ed., 1869). Yet most economists of the period disagreed. See Fritz Machlup & Edith Penrose, *The Patent Controversy in the Nineteenth Century*, 10 J. ECON. HIST. 1 (1950). Furthermore, the abolitionists could not come up with any credible alternatives. Macfie and *The Economist* proposed a government reward system but it never caught on. See *id.* at 20.

⁷¹ The abolitionists failed so miserably that the 1872 Select Committee of which Macfie was an extremely vocal member concluded that "the privilege conferred by letters patent promotes the progress of manufactures." REPORTS FROM COMMITTEES, REPORT FROM THE SELECT COMMITTEE ON LETTERS PATENT TOGETHER WITH THE PROCEEDINGS OF THE COMMITTEE, MINUTES OF EVIDENCE, APPENDIX AND INDEX, 9 Parl. Deb., H.C. (5th ser.) 395, iii (1872). The full conclusion reads:

the transformation of English patent law discourse so that henceforth the English would think of patents as a pure economic instrument as opposed to a natural right or a just reward for one's labors.

3. *Modern Patent Law.*—The 1883 Patents, Designs & Trade Marks Act⁷² (1883 Act) marks the genesis of modern British patent law. The 1883 Act greatly reduced the application and renewal fees. Copying American practice, it required that the filer make at least one claim about the scope of the patent monopoly.⁷³ The provisions of the 1883 Act that provide that the patent owner is compelled either to exploit his invention properly or to grant licenses for others to do so express the traditional English fear of monopoly.⁷⁴ Under the 1883 Act both patent infringement and validity suits continued to be tried in the same court and often at the same time.⁷⁵ As a result, patent applicants faced a dilemma: a wide claim of scope in the patent would grant protection from competition, but could also endanger the granting of the patent by making it seem "obvious" and lacking in "novelty."⁷⁶ The 1883 Act, and all subsequent acts, placed a great emphasis on the self-regulating role of the patentee in determining the breadth of patent applications.⁷⁷

Parliament also introduced acts that established a Register of Patent Agents,⁷⁸ required patents to be examined for novelty,⁷⁹ and extended the

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- 1) That the privilege conferred by letters patent promotes the progress of manufactures, by causing many important inventions to be introduced and developed more rapidly than would otherwise be the case.
 - 2) That the same privilege leads to the introduction and publication of numerous improvements, each of a minor character, but the sum of which contributes greatly to the progress of industry.
 - 3) That in the absence of the protection of letters patent, the competition of the manufactures among themselves would, doubtless, lead to the introduction of improved processes and machinery, but that it would probably be less rapid than under the stimulus of a patent law.
 - 4) That it does not appear that the granting of pecuniary awards could be substituted, with advantage to the public interest, for the temporary privilege conferred by letters patent.

Id.

Divided and without any widely agreed upon alternative, the abolitionists failed. Their failure was reinforced by the fact that the reformers were just as critical of the patent system, stealing the abolitionist's best arguments about efficiency and proposing ways of reforming the current system to incorporate these criticisms. See Batzel, *supra* note 68, at 199.

⁷² An Act to Amend, *supra* note 54.

⁷³ See *id.* § 5(2) and Sched. 1, form C "Forms of Application." The 1949 Patent Act refined this requirement to require that every complete specification end with "a distinct statement of the invention claimed." Patents and Designs Act, 1949, 12 & 13 Geo. 6, ch. 62, § 4(3).

⁷⁴ See 1883 Patent Act § 22.

⁷⁵ See *id.* at § 31.

⁷⁶ See *id.*

⁷⁷ See Sherman, *supra* note 14, at 507.

⁷⁸ See An Act to amend the Patents, Designs, and Trade Marks Act, 1883, 1888, 51 & 52 Vict., ch. 50, § 1(1).

patent protection from fourteen to sixteen years.⁸⁰ In 1932 the grounds on which a patent could be revoked were established. In addition, in 1932 Parliament created a Patents Appeal Tribunal with a specifically chosen High Court Judge.⁸¹ Finally, by 1977, legislation was enacted that required the examination of patents for obviousness,⁸² extended the patent term to twenty years⁸³ and made all necessary provisions to harmonize British patent laws with those established under the EPC.⁸⁴

The concern for certainty, the belief that the patent was a *quid pro quo* exchange of monopoly for disclosure, and that the patent must ultimately encourage trade and not or be "generally inconvenient" dominated British case law until 1977 when the EPC took effect.⁸⁵

4. *The Two Traditions of Patent Interpretation.*—Two traditions of legal thinking exist on patent scope in England. One tradition, elaborated in detail in *Harrison v. The Anderson Foundry Co.*,⁸⁶ interprets the scope as strictly bound by the claims of the patent: "[E]verything which is not claimed is disclaimed." Another tradition, first extensively described in *Clark v. Adie*,⁸⁷ is somewhat more liberal. In that case, Lord Cairns claimed that all inventions had a certain number of "integer[s]" or steps and an "infringer" who took a substantial majority "of those steps might be held by the tribunal judging the patent to have taken in substance the pith and marrow of the invention."⁸⁸ Thus, under the *Clark* approach, even if one does not copy the entire invention, one could be liable for infringement.⁸⁹

This approach favored the objective certainty of literal interpretation to substantive reasoning. The purpose of patent claims, Lord Chelmsford claimed in *Harrison*, was to "define and limit with precision what it is

⁷⁹ See An Act to Amend the Law with Reference to Applications for Patents and Compulsory Licenses, and other matters connected therewith, 1902, 2 Edw. 7, ch. 34, § 1(1).

⁸⁰ See An Act to amend the Patent and Designs Acts, 1919, 9 & 10 Geo. 5, ch. 80, § 6(1).

⁸¹ See An Act to Amend the Patent and Design Acts, 1907 to 1928, 1932, 22 & 23 Geo. 5, ch. 32, § 12.

⁸² Previously obviousness was an issue that could only be brought by outside parties in opposition proceedings. See W. R. CORNISH, *INTELLECTUAL PROPERTY: PATENTS, COPYRIGHT, TRADEMARK AND ALLIED RIGHTS* 99 (2d ed. 1989).

⁸³ Patents Act 1977, 1977 ch. 37, §25(1)

⁸⁴ See *id.* at §§ 125(1)-(3).

⁸⁵ For example, in *Elias v. Grovesend*, 7 R.P.D. & T.M. 455, 467 (Q.B.D. 1890), Lord Lindley ruled that trifling inventions were not patent worthy because they harmed the commonweal. Lord Justice Vaughan Williams affirmed this notion when he remarked that "specifications are not for the purpose of providing material for subsequent historians as to the genesis of ideas; they are for the purpose of informing the public as to what is the monopoly." *British United Shoe Mach. v. A. Fussell & Sons*, 25 R.P.D. & T.M. 631, 651-52 (C.A. 1908).

⁸⁶ 1 App. Cas. 574, 580 (P.C. 1876) (appeal taken from Scot).

⁸⁷ 2 App. Cas. 315 (P.C. 1877) (appeal taken from Ch. D.).

⁸⁸ *Id.* at 320, 321.

⁸⁹ *Id.* at 320.

which is claimed to have been invented."⁹⁰ When trying to interpret a claim the court must use the ordinary meaning of words.⁹¹ This is because the technical meaning of a patent can be understood only by specialists, and patent claims must be understandable by the general educated public.⁹² Lord Russell echoed this sentiment in *Electric & Musical Indus. v. Lissen Ltd.*,⁹³ when he argued that claims exist in order to "define clearly and with precision the monopoly claimed."⁹⁴ Precision is important "so that others may know the exact boundaries of the area within which they will be trespassers."⁹⁵ The patentee, therefore, should not be able to refer to other parts of the patent application in his claims.⁹⁶ "A patentee who describes an invention in the body of a specification obtains no monopoly unless it is claimed in the claims."⁹⁷ There exists no "canon or principle which will justify one in departing from the unambiguous and grammatical meaning of a claim" or taking parts from the specification and reading them into the claims.⁹⁸ Indeed, the claim alone defines the monopoly, and the patentee is under statutory obligation to "state in the claims clearly and distinctly what is the invention he desires to protect."⁹⁹

The second, broader approach to interpreting patent claims, which had its origins in *Clark*, was echoed by Justice Parker in *Marconi v. British Radio Tel. & Tel. Co.*¹⁰⁰ He wrote that the "merit of [an] invention lies in the idea, rather than in the particular means by which [one] carries it out." Lord Parker argued that it was a well-established common-law rule that someone who steals the "substance" of a patented invention cannot escape liability by making a number of "immaterial variations" that therefore make it different from the protected invention.¹⁰¹ Anyone achieving the same results by using essentially the same process is infringing on the patent, even if the process or part is somehow altered by omitting or changing some "unessential part or step" or substituting a part or step "equivalent to the part or step he has omitted."¹⁰² The court must always look to see whether the essential features of the invention have been infringed.¹⁰³ A protected invention represented therefore something more than a literal description of its parts.

⁹⁰ *Harrison*, 1 App. Cas. at 581.

⁹¹ *See id.*

⁹² *See id.*

⁹³ 56 R.P.D. & T.M. 23 (H.L. 1939).

⁹⁴ *Id.* at 39.

⁹⁵ *See id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.* at 41.

⁹⁹ *Id.*

¹⁰⁰ 28 R.P.D. & T.M. 181, 217 (Ch. 1911).

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

The need for certainty competed with this wider, policy-oriented construction of patent claims. The court had to understand the patent claims as if they were written in plain and ordinary English. The court was not to bend the common meanings of words or use irregular constructions in order to achieve a wider scope of protection.¹⁰⁴ Indeed, the tradition of English formalism often made it very difficult for many judges to accept even a small deviation from the literal meaning of words.¹⁰⁵ Thus, the more common approach became that of literalism.

Commentators disagree over whether the literalist tradition dominated or whether the pith and marrow tradition started in *Clark* represented a deviation from the norm or whether the two traditions co-existed. One set of commentators has argued that although the pith and marrow doctrine allowed courts to give broader construction to the claims at issue, the courts generally searched for reasons not to do so.¹⁰⁶ A number of other prominent commentators have argued that neither doctrine achieved suprem-

¹⁰⁴ *Clark v. Adie*, 2 App. Cas. 315, 321 (P.C. 1877).

¹⁰⁵ For a discussion of English formalism (as opposed to American substantivism), see P.S. ATIYAH & ROBERT S. SUMMERS, *FORM AND SUBSTANCE IN ANGLO-AMERICAN LAW* (1987). The authors argue that in the nineteenth-century English judges began to believe that law was a system of rules that were authoritatively laid down from the legislator and that had to be followed literally. It was not the judge's task to evaluate the law for substantive content; rather he must apply it literally even if such an interpretation would in no way advance the aim of the statute. Whether this was a result of Austinian positivism, or whether positivism merely reflected the attitude of an already hierarchical and deferential judiciary is impossible to determine. *See id.* at 240-66. Nevertheless, the English judiciary absorbed these norms and produced a formal and deferential legal culture where gentility and saving face prevented radical departures from accepted hierarchical norms and fostered trust in the law as a just procedure for solving disputes.

Atiyah argues that the rules were not questioned; indeed, "good law" in England came to mean law authoritatively laid down. This cultural trust in the legal system and its processes allowed for the formations of a very formal system of statutory and precedential interpretation that viewed any deviation or attempt to evade the plain meaning of a statute and formal rules of procedure as "quite irrational and subversive of the rule of law." *Chokolingo v. Attorney General of Trinidad and Tobago*, [1981] All E.R. 244, 249 (P.C. 1980) (House of Lords acting as Privy Council denounced the plaintiff in a wrongful imprisonment case's attempt to forum shop and find a jurisdiction that would interpret the relevant statute favorably).

For an amusing modern example of where this formal attitude might lead see *Smedleys Ltd. v. Breed*, [1974] App. Cas. 839 (H.L. 1974). A cannery, which canned 3.5 million tons of peas during a six-week season, supplied a tin which contained a caterpillar that was similar in color, size, density, and weight to the peas in the tin. The cannery had taken all possible reasonable care to ensure that no foreign objects were to be found in the tins. There were only four similar complaints that entire season. Nevertheless, all five Law Lords found the cannery in violation of the Food and Drugs Act of 1955, despite acknowledging the triviality of the charge. *See id.* at 856. For a comparative analysis of the role of legal education in molding the English legal outlook, see David L. Cohen, *Legal Education and Certification in the Common Law*, 8 COMMONWEALTH LAWYER 94 (1996).

¹⁰⁶ *See, e.g., Assidoman Multipack Ltd. v. The Mead Corp.*, [1995] R.P.C. 321, 329 (Ch. 1994) (Aldous, J.) (noting that the literalist approach, while not the only approach used, was by far the dominant one); Edward Armitage, *Interpretation of European Patents*, 14 IIC 811, 813 (1983); Allan M. Soobert, *Analyzing Infringement by Equivalents: A Proposal to Focus the Scope of International Patent Protection*, 22 RUTGERS COMPUTER & TECH. L.J. 189, 204 (1996).

acy.¹⁰⁷ Lord Diplock in *Beecham Group Ltd. v. Bristol Lab. Ltd.*,¹⁰⁸ argued that both approaches are and have been essential components in English patent law.

A turning point in the evolution of the two doctrines occurred in *C. Van Der Lely N.V. v. Bamfords Ltd.*,¹⁰⁹ when Viscount Radcliffe argued that while the pith and marrow principle does indeed have a place in patent law it is "from first to last directed to the prevention of abuse of patent rights by colourable evasion: it is not a special or 'benevolent' method of construing an uncertain claim." The purpose of a broader *Clark* construction was merely to prevent the abuse that a strict literalist reading of patents claims created in the past.¹¹⁰ Under this theory, the court is not supposed to speculate why a patentee narrowly confined a claim: "[I]t is not open to them [the patentees] to complain if others are found to have occupied the ground that they so deliberately refrained from enclosing."¹¹¹ Lord Reid dissented, arguing that although the majority were now open to the "pith and marrow doctrine" they wrongly construed what was an essential integer. He reasoned that

[i]f the specification makes it clear that the patentee regards a particular integer as essential, then it must be treated as essential, but otherwise even if the question is one of construction of the specification I cannot see why one should shut one's eyes to facts of which the patentee must have been aware when framing the specification.¹¹²

As a result, after *Van der Lely* an invention can infringe a patent even if it is not an exact duplicate.

A new controversy arose over how to determine the essential integers of an invention. This new controversy was similar to the first because it centered around how broadly a court should read essential integers in the patent claims. One option was to read the claims literally; the other was to determine whether a reasonable patentee would have intended his claims to

¹⁰⁷ See Karl Bruchhausen, *The Scope of Patent Protection in Different European Countries—An Outline of Recent Case Law*, 4 IIC 306, 314 (1973); see also W.R. CORNISH, *INTELLECTUAL PROPERTY: PATENTS, COPYRIGHT, TRADE MARKS AND ALLIED RIGHTS* 208 (3d ed. 1996). Bruchhausen was a justice of the German Federal Supreme Court, and Cornish's text, first published in 1981, is considered the leading English text on intellectual property. Cornish, Karl-Friedrich Beier, and Gerhard Schrickler are the editors of IIC, the leading international intellectual property journal.

¹⁰⁸ [1978] R.P.C. 153, 200 (H.L. 1977).

¹⁰⁹ [1963] R.P.C. 61, 78 (H.L. 1962) (location of rake on hindmost wheels of a patented mechanical hayrake is an essential integer; therefore a hayrake, similar in all other respects with patented hayrake but with rake on frontmost wheels, does not infringe).

¹¹⁰ See *id.*

¹¹¹ *Id.*

¹¹² *Id.* at 76 (Lord Reid, dissenting).

be read broadly. *Rodi & Wienerberger A.G. v. Henry Showell Ltd.*,¹¹³ considered the copying of essential integers. In this case, the majority and the dissent disagreed over whether the alleged infringement was "materially different"¹¹⁴ from the patented invention, or whether the alleged infringement copied an "essential part[]" of the essential integer" of the patented invention.¹¹⁵ Lord Reid in dissent argued for a broader reading of the essential integers of an invention: judges should look to whether the patentee intended the claim to be read broadly and should not be blindly literal.¹¹⁶ Lord Upjohn, who concurred, argued that both the majority's and the dissent's constructions were permissible, but the key issue was whether "the ordinary reader" would understand one or the other.¹¹⁷

By 1969, the courts had widely accepted Lord Upjohn's ordinary person standard. For example, in *Beecham*, Lord Diplock argued for a unanimous majority that while greater specificity of claims made the application of the pith and marrow doctrine less necessary, it was not obsolete. He argued that when the essential features of the two products in contention are the same, the pith and marrow arguments are still quite relevant.¹¹⁸

In *Catnic Components Ltd. v. Hill & Smith Ltd.*,¹¹⁹ Lord Diplock argued that "textual infringement" and "infringing the pith and marrow" were but a single cause of action. In *Catnic*, the EPC-mandated changes in English law were not yet applicable and the case was in many ways a codification of previous English jurisprudence. Diplock argued that a literal examination of the claims of the patentee does not exhaust the investigation of whether there is an infringement. A further question must be asked in each case: whether people skilled in the art "would understand that strict compliance with a particular descriptive word or phrase appearing in a claim was intended by the patentee to be an essential requirement of the invention."¹²⁰ If the answer to this question was yes, then a literal examination of the claims would suffice. If the answer was no, then a "purposive construction" of the word or phrase must commence.¹²¹ In other words, the

¹¹³ [1969] R.P.C. 367 (H.L. 1968) (a patent relating to expanding metal bracelets for wrist watches that had "U"-shaped members on the sleeve was not infringed by substantially the same device that used "C"-shaped members).

¹¹⁴ *Id.* at 381 (Lord Morris of Borth-y-Gest).

¹¹⁵ *Id.* at 389 (Lord Pearce, dissenting) (emphasis added).

¹¹⁶ *See id.* at 378 (Lord Reid, dissenting).

¹¹⁷ *Id.* at 393 (Lord Upjohn, concurring). Lord Upjohn provided the majority with its crucial third vote and therefore his understanding is controlling.

¹¹⁸ [1978] R.P.C. at 200 (the doctrine of pith and marrow was applicable in this case, and despite the wording of the claim only specifying Ampicillin, an object that substitutes Hectacillin for Ampicillin infringed the patent because Hectacillin was merely a reproduction of the substance Ampicillin, albeit temporarily masked).

¹¹⁹ [1982] R.P.C. 183, 242 (H.L. 1980).

¹²⁰ *Id.* at 243.

¹²¹ *Id.*

court must decide what a person "skilled in the art" would have seen as being equivalent to the word or phrases being purposively constructed and whether the defendant's device embodies this and therefore infringes. Under all circumstances, the text of the claims should have central importance.¹²²

As a signatory to the EPC, England was required to bring its municipal law into harmony with Article 69 and the Protocol. Section 125 of the 1977 Patents Act accomplishes this purpose.¹²³ Article 69 clearly had the strict literalist tradition of *Harrison* in mind when it characterized the fence post approach to patent scope as one of the two extremes to be avoided. By 1969 this tradition was all but defunct and the pith and marrow doctrine had become dominant. Indeed, by 1977 it was clear that England no longer followed the strict literalist approach when reading patent claims. Instead, the dominant approach allowed for a "purposive construction" of the claims if the texts of the claims supported such a reading. As a result, after 1977 judges could interpret the *Catnic* approach of Lord Diplock to be perfectly acceptable under the EPC. In fact, this is exactly what happened in *Improver*.¹²⁴

B. German Patent Law History

German patent law developed in a very different tradition from that of British patent law. This subpart tracks the history of German patents and the first German patent laws. Section one discusses the importance of Hegelian "personality" theory and judge-made law to the interpretation of German patent law. Section two traces the three different stages of interpretation of German patent law. Finally, section three examines how the German courts have reconciled their traditional practices, which placed fairness to the inventors as the guiding principle of patent law, with the EPC's requirement that fairness be balanced with legal certainty.

1. *Patents & Personality*.—Historically, economic issues were of secondary importance in German patent theory; rather, concern about the "personality" of the inventor was paramount.¹²⁵ One reason for this difference is the relative newness of German patent law. Patent laws were not estab-

¹²² See *id.*

¹²³ The Patents Act 1977, 1977 ch. 37, §§ 125(1)-(3).

¹²⁴ See *infra* subpart IV.A.

¹²⁵ Concern for the "personhood" of the inventor was the impetus behind patent law in Germany. See *infra* section III.B.2. Margaret Radin describes this approach as the "personhood perspective." Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957 (1982). The central tenet of this approach is that "to achieve proper self-development—to be a *person*—an individual needs some control over resources in the external environment." *Id.* The kind of control needed is best fulfilled by the set of rights commonly called property.

lished in Germany until 1877,¹²⁶ in part because there was no single German state. Perhaps more importantly, free-market economists campaigned heavily against such laws. For example, both Prussia and Bavaria¹²⁷ established patent laws in 1825, which they subsequently repealed because of condemnation by economists. In December of 1868, the government of Prussia opposed the adoption of a patent law for the North German Federation for economic reasons. Furthermore, the Prussian Chancellor Bismarck announced his objection to the principle of patents for similar reasons.¹²⁸ In Germany, then, advocates of patents had to find non-economic arguments to justify patents.¹²⁹

In 1877, Karl Gareis offered an alternative justification for patent by rejuvenating the concept of personal human rights. He proposed that the

¹²⁶ By contrast, England has had the same patent system since the 15th century. See Machlup & Penrose, *supra* note 70, at 3.

¹²⁷ See *id.*

¹²⁸ See *id.* at 4.

¹²⁹ German patent law would continue to reflect strongly the non-economic philosophies that underlay German patent law. See Legrand, *supra* note 14, at 508. But see HANNS ULLRICH, STANDARDS OF PATENTABILITY FOR EUROPEAN INVENTIONS: SHOULD AN INVENTIVE STEP ADVANCE THE ART? 28 (1977) (arguing that while non-economic rationales may have been behind the creation of patent laws, subsequent developments in German patent law were influenced, primarily, by economic factors). Despite Ullrich's assertion to the contrary, this Comment argues that the weight of historical and contemporary evidence point to the continued and central importance of non-economic factors in German patent law.

The central question then becomes what non-economic theory of property is central to German patent law theory. Natural law theory (which, a hundred years previously, had been widely used to justify patents) had been discredited. See Edward J. Darnich, *The Right of Personality: A Common-Law Basis for the Protection of the Moral Rights of Authors*, 22 INTELL. PROP. L.R. 547, 572 (1990). In France, on the other hand, natural law theory was central to patent law. The French viewed patents as a natural right. The preamble to the French Patent Law of 1791 stated that:

Every novel idea whose realization or development can become useful to society belongs primarily to him who conceived it, and that it would be a violation of the rights of man in their very essence if an industrial invention were not regarded as the property of its creator.

Machlup, *supra* note 70, at 11 (quoting Patent Law of 1791).

Jean Francois Eudes's (1759-1841) SECOND REPORT TO THE COUNCIL OF THE FIVE HUNDRED, dated 29 August 1798, stated that:

The true key to good patent legislation is the endeavour to protect artisans. . . . Patents are nothing else than an official declaration of the inventor that the invention which he intends to utilise is his own. Whether good or bad, whether new or old, the chief point will always be not to stifle it at its birth, and to suspend judgement till its full development. It is but fair that an inventor should reap the first fruit of his labor. . . .

REPORT FROM THE SELECT COMMITTEE ON THE LETTERS PATENT, *supra* note 71, at 144.

Patents in Revolutionary France were seen as formal declarations of the inventor's natural property. For most of French history either there was no examination of patents or the examination was very lenient. Indeed, neither examinations of patent specifications nor claims of scope were required until 1968. See Karl Bruchhausen, *The Extent of the European Patent*, 5 IIC 253, 254 n.4 (1974); Georges Vianes, *The New French Patent Law*, 11 IIC 131, 132 (1980). The language of natural rights was so powerful that the patent abolitionist movement never really took hold in France. See Machlup & Penrose, *supra* note 70, at 13.

"right of personality" was a category of rights that included the right to one's name, the right to organize one's life freely, and the right to literary and artistic works as well as invention.¹³⁰ Gareis grounded this theory in Hegelian concepts, arguing that invention and artistic creations were manifestations of the personality.¹³¹ The creator of an invention, according to this theory, can sell the manifestation, but he can never alienate the idea upon which the invention is based, because it is a part of himself. To sell the idea upon which an invention is based, then, would be analogous to slavery.¹³² Thus, the payments the inventor receives for his copies of the manifestation of his idea (his invention) are merely acts of recognition. The fees acknowledge the creator's claim on his inalienable property; that is, the creator has certain moral rights over his idea.¹³³

The emphasis in this understanding of patents is on the *idea* of the invention; the actual invention is merely a reflection of the idea. Consequently, the idea is what must be protected rather than the manifestation of the idea. The inventor is characterized as the *Lehrer der Nation* (Teacher of the Nation) and is entitled to a reasonable and fair reward for his services in recognition of his superior personality.¹³⁴

Gareis's Hegelian ideas spread in Germany's legal system, aided by judge-made law that, in Germany, unlike in England, was never vilified; rather, it was glorified.¹³⁵ Liberals saw judge-made law as a defense against

¹³⁰ Damich, *supra* note 129, at 573.

¹³¹ Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 337-38 (1988).

¹³² *See id.* at 338.

¹³³ *Id.* at 348-49.

¹³⁴ Friedrich-Karl Beier, *Traditional and Socialist Concepts of Protecting Inventions*, 1 IIC 328, 332, 333 (1970). Gareis' approach is the basis for the "just reward" approach mentioned *supra* subpart II.A.

¹³⁵ It is perhaps odd that in England, a common law jurisdiction, judge-made law at this time should have been vilified, while in Germany a civil law jurisdiction, judge-made law should have been glorified. In many ways, both attitudes reflect a backlash against previous excesses. The common law grants enormous discretion to judges, whereas civil law grants judges little power; they are merely mouthpieces of the state. *See generally*, Olivier Moreteau, *Codes as Straight-Jackets, Safeguards, and Alibis: The Experience of the French Civil Code*, 20 N.C. J. INT'L L. & COM. REG. 273, 279 (1995). The common law is very fact centered, whereas civil law is necessarily codified. Thus, the operative question under the common law is "What are the facts?," while in the civil law it is "What is the law?" The common law reasons by analogy, while the civil law reasons deductively. The civil code contains all the law, whereas under the common law the whole law can never be known, as it is extremely fact-dependent. And yet, civil law judges are not bound by precedent. Indeed, in many codes judges are forbidden to make law beyond the case immediately before them. *See, e.g.*, C. CIV. art. 5 (Fr.) ("Judges are forbidden to decide by way of a general and rule-making decision the cases submitted to them."). This gives courts tremendous leeway to apply the law to individual cases as they see fit, whereas the closed fraternity of English judges heightens the feeling that individual judges dare not depart from precedent; otherwise they will lose tremendous face. ATIYAH & SUMMERS, *supra* note 105, at 336-58. For the difference between civil and common law generally see, for example, Nicolas Marie Kublicki, *An Overview of the French Legal System from an American Perspective*, 12 B.U. INT'L L.J. 58, 83-90 (1994); Legrand, *supra* note 14. Germany did not have a unified civil code until the twentieth century. *See* INTRODUCTION TO GERMAN LAW 7 (Werner F. Ebke & Matthew W. Finkin eds., 1996).

the intrusive state and conservatives saw it as the manifestation of the will of the state.¹³⁶ Moreover, the Germanists, after Napoleon's expulsion from Germany, began to view Roman law and its perceived successor, the *Code Civil*, as an affront to the German *Volk*; proper law grew out of the slow accretion of customary practices of the German people.¹³⁷ To preserve the *Volk*, the Germanists mounted an extensive jurisprudential attack on systematic legal thinking and treatises that exemplified Roman law.¹³⁸ "The Germanists maintained that the law of any given case should be decided according to the '*Natur der Sache*'—the nature of the matter."¹³⁹ Many Germanists, including the Hegelians, viewed judge- and jury-made law as fundamentally more than just the application of formal legal rules because, unlike formal rules, the former jurisprudence rose from the soul of the common people, who have an innate feel for the law.¹⁴⁰

For example, one prominent Germanist, the liberal Anton Friedrich Justus Thibaut (1772-1840), in his *Theorie der logischen Auslegung des römischen Rechts* (1806), argued for the "logical interpretation of the law."¹⁴¹ The judge was not to be a mechanical applier of the law, but rather to delve into the spirit of the law and discover the legislators' intent and the reasons behind the statutes. Thibaut asserted that under specific conditions the judge should "improve on the mistakes in the statute."¹⁴² George Friedrich Puchta (1798-1846), also a liberal, argued for something similar when he called for "scientific juridical law." Such law would be result oriented. Law was not to be solely a matter for government, but jurists and academics were to participate in making the law.¹⁴³ They did so by recognizing national convictions concerning law and justice and formulating them as customary law, as well as by deriving new legal principles from old ones.¹⁴⁴ If done rigorously, judge-made law would have "scientific" validation.¹⁴⁵ Puchta's theories found widespread, if qualified, acceptance in late nineteenth-century Germany, on all sides of the political spectrum. Even conservatives, like Johann Friedrich Martin Kierulff (1806-1894), ad-

¹³⁶ See Regina Ogorek, *Inconsistencies and Consistencies in 19th Century Legal Theory*, in CRITICAL LEGAL THOUGHT: AN AMERICAN—GERMAN DEBATE 13 (Christian Joergen & David M. Trubek eds., 1989).

¹³⁷ See James Whitman, *Commercial Law and the American Volk: A Note on Llewellyn's German Sources for the Uniform Commercial Code*, 97 YALE L.J. 156, 159 (1987).

¹³⁸ See *id.* at 160.

¹³⁹ *Id.*

¹⁴⁰ See *id.* at 160-61. The Germanists received much inspiration from English law, especially the Law Merchant as elucidated by Lord Mansfield in England. Ironically, at this time, English law was going in the opposite direction and became much more formal and procedural, with much less room for equitable maneuver by individual judges. *Id.* at 162.

¹⁴¹ Ogorek, *supra* note 136, at 24.

¹⁴² *Id.* at 25.

¹⁴³ See *id.* at 29.

¹⁴⁴ See *id.*

¹⁴⁵ See *id.*

vocated judge-made law because they saw it as the institutionalized realization of the state's will to generate law. Kierulff saw law as the "satisfaction of a felt need" by the state and jurists as the actors predestined to fulfill that need.¹⁴⁶

In many respects the "free-law" school of the late nineteenth century was an outcome of this thinking. The school was a reaction to the rigidity of the civil code and claimed that a judge may disregard statutory provisions if the provision would lead to injustice.¹⁴⁷ In the twentieth century the *Interessenjurisprudenz* movement, which claimed that judges should not obey the law literally but ought to follow it in accordance with the interests involved, continued this position.¹⁴⁸

Law, especially patent law, in Germany was much more fluid, much more abstract, and more open to subjective interpretation than law in Britain. The German Civil Code was very dry and abstract—it was the product of legal academics—and consequently harder to apply mechanically to specific facts. Patent law was especially fluid because more than other fields, it reflected the traditionally open approach of German jurisprudence toward the interpretation of legal terms.¹⁴⁹ Justice for the parties involved was of greater importance than statutory limitation. German judges were far more willing to disregard precedent if it went against the demands of justice.¹⁵⁰ The patent judge, therefore, saw himself not as a literal interpreter of patent claims but as a mediator whose role was to interpret the patent claims with the "best interests of the parties in mind."¹⁵¹ The wider economic effects of his judgments were less important than fairness.

2. *The Three Stages of Patent Law Development.*—After 1877, German patent law developed in three periods. During this time, and despite various shifts in the law, the fundamental policy underlying patent law never changed: German patents protect the inventive idea, not only the device invented by the patentee but also the teaching that underlies it.¹⁵²

The first period of German patent law began in 1877 and is marked by the lack of patentability requirements.¹⁵³ Under the 1877 law, German courts interpreted claims about the scope of protection to be declarations of

¹⁴⁶ *Id.* at 31.

¹⁴⁷ ANNA BREDIMAS, *METHODS OF INTERPRETATION AND COMMUNITY LAW* 6 (1978). For a critical analysis of the *Interessenjurisprudenz*'s role in German jurisprudential history, see Ogoreck, *supra* note 136.

¹⁴⁸ BREDIMAS, *supra* note 147, at 6-7.

¹⁴⁹ Legrand, *supra* note 14, at 508.

¹⁵⁰ *See id.*

¹⁵¹ Sherman, *supra* note 14, at 508.

¹⁵² *See* TOSHIKO TAKENAKA, *INTERPRETING PATENT CLAIMS: THE UNITED STATES, GERMANY AND JAPAN* 26 (1995).

¹⁵³ *See* Friedrich-Karl Beier, *The Inventive Step in Its Historical Development*, 17 *IIC* 301, 317 (1986).

intent.¹⁵⁴ The Patent Office granted patents for new inventions capable of industrial application.¹⁵⁵ As a result of the new legislation, the patent office was soon inundated because of a backlog of applications.¹⁵⁶ Slowly the patent office devised new patentability criteria: patents had to display a certain level of invention.¹⁵⁷ However, what would be considered invention remained unclear.¹⁵⁸ This development allowed the patent office to divert less profound inventions to Utility Models and to allow patent protection for those patents that were really worthwhile. On December 12, 1889, the *Reichsgericht*, the German Supreme Court, held that, in addition to novelty and industrial application, the invention must have a "technical effect" that would bring about an "advance in art."¹⁵⁹ The court reasoned that patents should not be denied merely because the invention was "very simple and obvious."¹⁶⁰ Nonetheless, standards of patentability were quite high: advance in the art was much stricter than British "non-obviousness." There had to be a significant teaching to merit protection.¹⁶¹ In 1935, this standard lessened to an "enrichment of the useful arts" test.¹⁶²

Originally the prosecution history, including the correspondence between the patent office and the applicant, determined the scope of the claim. The patent protected only what the inventor specified and the patent office approved; what the inventor disclosed to the public was irrelevant.¹⁶³ This "English-like" approach was soon abandoned. The court began to extend patent protection against minor modifications made by an alleged infringer in order to reward the inventor properly.¹⁶⁴ The court was no longer bound by the claim language, and, therefore, began to assume that the applicant intended to cover all possible variations of his invention that could have been foreseen at the time of the invention.¹⁶⁵ The court claimed that the inventor and the Patent Office did not see the true essence of the original invention when they filed their limited claims of scope. Only the court was able to see the true breadth of the intended monopoly. Thus, the court in-

¹⁵⁴ See Heinz Winkler, *The Scope of Patent Protection: Past, Present and Future*, 10 IIC 296, 296-97 (1979).

¹⁵⁵ The preparatory documents did not describe the "invention" and, aside from "novelty" and "industrial applicability," it was unclear if there were any other requirements. Beier, *supra* note 153, at 317.

¹⁵⁶ *See id.*

¹⁵⁷ *See id.* at 318.

¹⁵⁸ *See id.*

¹⁵⁹ *Id.* at 319.

¹⁶⁰ *Id.* at 320.

¹⁶¹ *See* ULLRICH, *supra* note 129, at 12-18.

¹⁶² *See id.* at 20.

¹⁶³ *See* TAKENAKA, *supra* note 152, at 28.

¹⁶⁴ *See* Judgment of the Reichsgericht, May 15, 1889, *discussed in* TAKENAKA, *supra* note 152, at 28.

¹⁶⁵ *See* Judgment of the Reichsgericht, May 4, 1889, *discussed in* TAKENAKA, *supra* note 152, at 28.

independently examined the patentability of the accused embodiments and extended protection to embodiments that were patentable.¹⁶⁶ The patent office understandably resisted the idea that the language of the claims of scope was no longer binding on the courts.¹⁶⁷

The second stage of German patent law began in 1910 and is notable for the courts' focus on the invention as a whole. Just as contract theory moved toward interpreting the terms and condition of a contract in light of the good faith of the parties, claim interpretation theory moved toward interpreting claims in light of the knowledge possessed by the average person skilled in the field of the invention.¹⁶⁸ The landmark judgment of February 9, 1910,¹⁶⁹ which ushered in the second and broadest period of German patent law jurisprudence, emphasized the difficulty of examining the patentability of each element or possible subcombinations. The patent office, the court ruled, considers only the invention as a whole. It never considers modifications or all possible prior art.

Hermann Isay argued and the Supreme Court adopted the "two parts" theory. According to that theory, the patent office defines the invention and its patentability on the basis of its definition and the courts independently decide the scope of protection in relation to the state of the art.¹⁷⁰ In infringement cases, the court must determine the scope of patent protection in light of prior art. In other words, the *Reichsgericht* decided that the intent of the patentee and the patent office should be ignored and the scope of protection should be determined solely on the basis of the objective enrichment of the art.¹⁷¹ This holding stood in contrast to English law that held that the patentee's claims were the exclusive determinants of scope.

During this second period of patent law, the *Reichsgericht* established the principles of "central definition theory." Adopting Isay's criticisms made in the first period of patent law, the court argued that in order to reward an inventor properly the courts must extend the scope of patent protection without inhibition whenever they found the accused embodiment was merely a minor modification of the patented invention. In 1914, the court argued that even the object of the invention could not limit the scope

¹⁶⁶ See Judgment of the Reichsgericht, April 24, 1889, discussed in TAKENAKA, *supra* note 152, at 29.

¹⁶⁷ See TAKENAKA, *supra* note 152, at 29. As Takenaka suggests, a number of commentators, such as E. Hartig and Hermann Isay, were sympathetic to the patent office. They argued that it is all the claim elements *actually claimed* as a whole that constitute an invention, not the universe of all embodiments conceivable under the state of the art at the time of the patent application. See *id.* However, the policy of just regard for the inventor and the concomitant disregard for its economic consequences led to the court ignoring this criticism, even when their understanding of patents claims of scope went against the explicit intentions of the inventor and the patent office. See *id.*

¹⁶⁸ See *id.*

¹⁶⁹ ENTSCHEIDUNGEN DES REICHSGERICHTS IN ZIVILSACHEN [RGZ] 80, 54, 57.

¹⁷⁰ See TAKENAKA, *supra* note 152, at 30.

¹⁷¹ See WINKLER, *supra* note 154, at 297.

of patent protection. The scope of the patent monopoly may cover embodiments that were used in an object different from the invention stated in the specification.¹⁷² The court established that "minor inventions" deserved only narrow protection while "major inventions" merited broader protection. In a "pioneering" invention, the "solution principle" of the invention is applied to various forms of embodiments without limitation by the prior art.¹⁷³

The third stage of German patent law developed in response to specific criticisms of the two-part test during the years 1940-1979. Generally, during this final stage, the courts focused on the patent claim as the basis of the scope of patent protection. Because the "two part" theory offered unlimited expansion of protection scope, it came under attack. No objective standard existed that the courts could limit the scope of patent protection. In response to opposition by industry and patent attorneys, the Supreme Court developed the "three parts doctrine" of patent interpretation which ushered in the third and final period of German patent law jurisprudence.¹⁷⁴ The patent claim once again became the basis of protection.

The doctrine establishes a three-stage process to determine whether infringement occurred. The first stage requires the judge to determine whether the allegedly infringing device corresponds to a literal interpretation of the patent claims. If it does, then the device infringes the patent claim. The second stage requires the judge to determine, with the help of expert witnesses, whether the allegedly infringing device shares "obviously equivalent" features with the protected device. Again, if it shares obviously equivalent features it infringes the patent. The third and final stage requires the judge to ask an expert witness if he can derive a "general inventive idea" or teaching from the patent claims of the protected device. If the expert can make such a derivation, the judge must then ask the expert if he can derive the same general inventive idea or teaching from the allegedly infringing device. If the expert can do this, the device infringes the patent.¹⁷⁵

The general inventive idea must have been obvious to those skilled in the art at the application date; it must not entail any inventive effort to deduce; and it must satisfy all patentability requirements.¹⁷⁶ Thus, competitors may still design around an invention so long as the invention being created also involved a new and different inventive step from the invention that was being designed around.¹⁷⁷ This approach is different from English "purposive construction" in that it looks to the greater idea behind the

¹⁷² See RGZ 85, 95, 98.

¹⁷³ RGZ 79, 186, 187; see Bruchhausen, *supra* note 107, at 322.

¹⁷⁴ TAKENAKA, *supra* note 152, at 33.

¹⁷⁵ This procedure is clearly outlined in a decision of the Federal Supreme Court, *BGH*, GEWERBLICHER RECHTSSCHUTZ UND URHEBERRECHT [GRUR] 1953, 112.

¹⁷⁶ See, e.g., *BGH*, GRUR 1972, 538, 539.

¹⁷⁷ TAKENAKA, *supra* note 152, at 35.

claims, not merely the purpose of a limited set of words within the claims. Under German law, patented inventions and allegedly infringing devices are compared by looking at the ideas behind them; whereas, in England, they are compared by looking at the specific words and purposes of the words in their respective patent applications.

The revised Patent Act of 1936, codifying the three parts doctrine during this third period of patent law jurisprudence, emphasized the inventor and his creative achievement. During the Nazi era, increasing emphasis was placed upon the creative achievement and creative mental activity of the inventor. Commentators in this period denigrated the significant technical advance accomplished by the invention as being of secondary importance.¹⁷⁸

The three parts doctrine prevailed until 1981, when Germany harmonized its national law with the EPC.¹⁷⁹ Yet, even after harmonization with the EPC, the general principle of German law on the scope of patent protection remained: "*the scope of protection of a patent is determined by the scope of the inventive idea.*"¹⁸⁰ To determine infringement, one must first look to the inventive idea. If the allegedly infringing device is based upon a different idea, then there is no equivalence.¹⁸¹

3. *German Patent Law After the EPC.*—In 1981, to harmonize national law with the requirements of the EPC, the German Patent Act of 1980 was enacted. Section 14 of that act provided that Article 69 of the EPC and its Protocol would be followed.¹⁸² In response, the German Fed-

¹⁷⁸ Beier, *supra* note 153, at 322. Beier argues that this increasing emphasis on the creativity of the inventor was probably caused by two factors: the Nazi's neo-romantic notions of creative genius, and the fact that the jurist most prominently opposed to the emerging three-parts doctrine, Herman Isay was Jewish. See *id.* at 321-22. Chief Justice Lindenmaier of the Reichsgerichts claimed to have derived the notion that creative achievement was the prerequisite for granting a patent directly from *Mein Kampf*. GRUR 1939, 153, *quoted in* Beier, *supra* note 153, at 322. In one of the sad, but constant, ironies of modern Jewish history, Isay was one of the most powerful proponents of German legal neo-romanticism. Isay's two part theory was even less bound than Lindenmaier's. In the early 1930s, Isay bemoaned the poor *Volk*, which was the most important thing but did not have the power to master its own fate. He opined for the return of an ancient *Fuhrer*, but saw this as unrealistic and instead saw the legal profession as taking the place of such a *Fuhrer* and ruling for the *Volk*. See H. ISAY, RECHTSNORM UND ENTSCHEIDUNG 5, 115, 116 (1929), *as quoted and translated in* Whitman, *supra* note 137, at 168.

¹⁷⁹ See Winkler, *supra* note 154, at 299. In general, the practical difference between the subject matter (obvious equivalents) of the invention and the general inventive ideas is not that great. In most cases general inventive ideas have been claimed using the concrete characteristics of the subject matter of the invention or by exchanging some concrete characteristics for other ones. *Id.* It is rare that the use of the general inventive ideas that are complained of do not rely on any concrete meaning implied in the patent application. See *id.* at 300.

¹⁸⁰ *Id.* (emphasis added).

¹⁸¹ See *id.*

¹⁸² "The extent of protection conferred by a patent or a patent application shall be determined by the terms of the claims. Nevertheless, the description and drawings shall be used to interpret the claims."

eral Supreme Court ruled that the extent of patent protection must be decided in reference to what one skilled in the art would have understood on the basis of the patent claim.¹⁸³ The court, apparently overturning previous historical practice, also ruled that the parts of an invention not claimed are not protected.¹⁸⁴

The German Federal Supreme Court found it difficult to ignore longstanding legal traditions in this case. After 1981, the courts began to wrestle with three different approaches to interpreting claims of patent scope: the "solution principle test," the "legal certainty test," and the "obviousness test." The solution principle test examines whether the accused embodiment and the patent invention share the same solution principle.¹⁸⁵ In the legal certainty test, courts determine scope by whether the patent provides certainty to third parties. In the obviousness test the court asks whether someone skilled in the art could have conceived of the accused device from the claim language in light of the disclosure in the specification and an average knowledge of prior art.¹⁸⁶ The landmark cases, *Moulded Curbstone*,¹⁸⁷ *Handle Cord Case*,¹⁸⁸ and *Epilady Germany*¹⁸⁹ illustrate these three approaches.

In the leading post-1981 case, *Moulded Curbstone*, the court made several concessions to the EPC model, but, in the end, still applied the same method. Using the solution principle test, the court gave the impression of a willingness to depart from previous practice regarding the scope of patent protection.

In contrast to the legal situation until 1978, patent claims now are not merely the starting point but rather the essential basis for the determination of scope. . . . [T]he contents of the claim have to be determined by interpretation, taking the specifications and drawings into consideration. . . . [T]he interpretation does not serve only the purpose of correcting uncertainties in claims but also of clarifying the technical terms used in the claims as well as the limits and bounds of the invention described therein.¹⁹⁰

The essential question the court must answer under the solution principle test is whether a person skilled in the art based on the patented in-

Patent Act, December 16, 1980, art. 14, in GERMAN INDUSTRIAL PROPERTY, COPYRIGHT AND ANTITRUST LAWS 23 (Friedrich-Karl Beier & Gerhard Schrickel eds., 2d ed. 1984).

¹⁸³ See BGHZ 98, 12, translated in 18 IIC 795 (1987) [hereinafter *Moulded Curbstone*].

¹⁸⁴ See BGHZ 100, 249, translated in 19 IIC 811 (1988) [hereinafter *Radio Broadcasting System*].

¹⁸⁵ The solution principle test is effectively equivalent to the three parts test.

¹⁸⁶ See TAKENAKA, *supra* note 152, at 169-73.

¹⁸⁷ *Moulded Curbstone*, 18 IIC at 798.

¹⁸⁸ BGH, GRUR 1989, 903, translated in 22 IIC 104 (1991) [hereinafter *Handle Cord*].

¹⁸⁹ OLG Düsseldorf, Case no. 2 U181/88, translated in 21 IIC 572 (1990) [hereinafter *Epilady Germany*].

¹⁹⁰ *Moulded Curbstone*, 18 IIC at 798.

vention, as it is described *in the claims*, finds that the allegedly infringing invention solves the same problem solved by the protected invention. So long as the average person skilled in the art based on his professional knowledge determines that the other means is equally effective at solving the problem solved by the protected invention, whether the allegedly infringing invention employs other means to get to the same result is irrelevant. The goal of this law is "adequate remuneration" for the inventor under consideration of the aspect of legal certainty.¹⁹¹

Despite this effort to depart from previous practice and conform to the new EPC standard, the court still appeared to follow the old methods of determining patent scope. The *Moulded Curbstone* patent was for a molded stone with a longitudinal trough characterized by a cross groove branching off from the trough and opening into the side of the stone facing from the center of the street.¹⁹² No limitations existed in the claims as to the height of the stone relative to the street.¹⁹³ The purpose of the trough and groove was to guide water and debris away from the street to allow drainage and prevent overflow.¹⁹⁴ The defendant, the city, built roads with commercially available curbstones leaving gaps for water to drain between them.¹⁹⁵ The lower courts found no infringement, but the Supreme Court held that a product patent, in this case molded stone, could be infringed by a construction process, as long as the object made in the construction is equivalent to the product patented.¹⁹⁶ The court reasoned that the infringing object was made by solving the same technical problem that the patented invention solved. According to the court, equivalents are included within the claim as well as those elements literally covered by the claim language.¹⁹⁷ In other words, the court searched for the solution principle of the patent and determined infringement by whether the defendant's device used that same principle. This is nearly identical to the methods the courts used prior to the EPC.

In *Radio Broadcasting System*,¹⁹⁸ the court, still using the solution principle test, seemed to move in the direction of an English literalist method of interpreting the scope of patent protection.¹⁹⁹ The plaintiff had a patent for a "VHF stereophonic radio transmission system" and the defen-

¹⁹¹ *Id.* at 799.

¹⁹² *See id.* at 795.

¹⁹³ *See id.*

¹⁹⁴ *See id.* at 797.

¹⁹⁵ *See id.* at 796.

¹⁹⁶ *See id.* at 800-01.

¹⁹⁷ *See id.* at 800.

¹⁹⁸ *Radio Broadcasting System*, 19 IIC at 811.

¹⁹⁹ For a somewhat premature, wistful lamentation of this state of affairs, see Jochen Pagenberg, *New Trends in Patent Claim Interpretation in Germany—Good-bye to the "General Inventive Idea,"* 19 IIC 788 (1988).

dants manufactured VHF receivers.²⁰⁰ The question was whether "transmission system" also covered receivers. The court found no infringement.²⁰¹ Less than a year after *Moulded Curbstone*, the German Federal Supreme Court argued for a strict literal analysis of patent claims because "[i]t is up to the applicant to phrase the patent claim appropriately to ensure comprehensive protection for the invention he is disclosing in the application process."²⁰² Despite the seeming Englishness of this approach, the court was resolutely German in searching for the "essence of th[e] invention (teaching)."²⁰³ In so doing they are still, in essence, following the solution principle test.²⁰⁴

The *Handle Cord Case*²⁰⁵ tried to provide a limit on the judicial discretion available under pre-EPC law. In lieu of the solution principle test, the court proposed the legal certainty test, first proposed in *Ion Analysis*.²⁰⁶ In *Ion Analysis*, the court held that "merely establish[ing] that the two types of apparatus and the equivalent effects they achieve share the same 'fundamental idea'"²⁰⁷ is not sufficient. The decisive factor is if a skilled person using his expertise could, by studying the invention as described in the claims, arrive at the alternate means of achieving the end of the patented invention that were used in the allegedly infringing invention. If this is possible, there *is* infringement.²⁰⁸ In other words, the fact that two apparatuses share the same fundamental idea is not a sufficient basis to find infringement, because to find infringement on such basis would be "incompatible with the principle of legal certainty."²⁰⁹ Thus the court in *Handle Cord* wrote that

²⁰⁰ *Radio Broadcasting System*, 19 IIC at 811.

²⁰¹ *See id.* at 813.

²⁰² *Id.*

²⁰³ *Id.* at 814.

²⁰⁴ Indeed, some commentators have concluded that the facts of this case are unique and the strict literal holding was meant as a "severe warning against loose claim drafting" and holds little precedential value in other respects. Pagenberg, *supra* note 199, at 793.

²⁰⁵ *Handle Cord*, 22 IIC at 104. The plaintiff had a patent for a handle cord for a battery case with a fastener secured against accidental release. The fastener was made from two members attached to the ends of the cord and could be made into a round carrying handle. The defendant's device was very similar in design but the members fastened in a somewhat different fashion. The court observed that "the fact that the challenged embodiment deviates from the wording of Claim 1 concerning the partial feature of the 'crosswise arrangement to the passage' does not preclude the inclusion of the challenged embodiment into the scope of protection of the patent at issue from the point of view of equivalency." *Id.* at 108. However, what the Supreme Court found missing from the lower court's decision was "the observation that the average person skilled in the art would have been able to discover the embodiment deviating from the wording and literal sense of the patent claim by proceeding from the invention as it is defined in the patent claim." *Id.*

²⁰⁶ BGHZ 105,1, translated in 22 IIC 249 (1991) [hereinafter *Ion Analysis*].

²⁰⁷ *Id.* at 254-55.

²⁰⁸ *See id.*

²⁰⁹ *Id.* at 255.

the determination of the scope of protection of a patent under the new Act requires that the meaning of the content of the patent claims, to be determined by interpretation, constitutes not only a point of departure, but the *decisive basis for the determination of the scope of protection*. This must be based on the patent claims.²¹⁰

The guiding principle of patent scope interpretation is to “give[] equal consideration” to granting “reasonable reward for the inventor” and “some degree of legal certainty [for] outside parties.”²¹¹ Because the lower court failed to determine whether a person skilled in the art could discover the alleged infringing device from the “wording and literal sense of the patent claim” and because it did not pay the “necessary attention to the requirement of legal certainty,” the Supreme Court overturned the finding of infringement.²¹² The final approach taken by the German courts after 1981 was the obviousness test.²¹³ This approach seeks to determine whether someone skilled in the art could have conceived of the alleged infringing device or process from the claim language of the patented invention and an average knowledge of prior art. If the answer was affirmative then the invention infringes. This approach was more bound by the terms of the patent claims and would limit the discretion of the judges who would be forced to deal with expert testimony. However, as in the case of the legal certainty test, there are no mechanical procedures for judges to follow. The comparison is still idea to idea and judges still have tremendous discretion.²¹⁴

In summary, the court believes first and foremost that the scope of patent protection in Germany depends on the concept of a teaching that fairness requires be protected. The inventor, in a gift to the nation, exhibits a part of himself in the form of the general inventive idea, the solution principle. Indeed, the other two tests both incorporate the solution principle test. In its various post-EPC rulings, the court attempted to limit loopholes and provide warnings to drafters against loose language in the hope of increasing legal certainty, which is required under the EPC. *Moulded Curbstone* limited the ability of patentees to abuse the system that required separate forums for determining infringement and validity.²¹⁵ The legal certainty and obviousness tests are normative concerns that the court grafted onto pre-

²¹⁰ *Handle Cord*, 22 IIC at 107 [emphasis in original].

²¹¹ *Id.* at 108.

²¹² *Id.*

²¹³ See *Epilady Germany*, 21 IIC at 572, discussed *infra* Part IV.

²¹⁴ As a civil law jurisdiction German courts are not bound by precedent. There is no doctrine of *stare decisis* in German law. Decisions of the German Federal Supreme Court are only persuasive, not binding. See INTRODUCTION TO GERMAN LAW, *supra* note 135, at 21. Thus, the court has had great latitude in its various attempts to reconcile German patent law jurisprudence with the requirements of the EPC, because every attempt at reconciliation does not have to be consistent with other attempts.

²¹⁵ See TAKENAKA, *supra* note 152, at 27.

EPC jurisprudence with the aim of limiting the discretion of judges. The idea was to provide a principle to balance against the solution principle test, not to replace the test. The current trend is to assimilate all these tests into a smorgasbord of concerns that the court must have in mind when performing the solution principle test. The court now has so many issues to worry about in each individual case that, ironically, any hope for legal certainty is less and less likely. Instead, it seems as though "each set of facts seems to create a new independent rule."²¹⁶

IV. THE IMPROVER CASES AND BEYOND

This Part shows how the jurisprudential traditions of England and Germany collided in the *Improver* cases when both courts read Article 69 of the EPC and arrived at different conclusions about its meaning. The Part, after first examining the two cases in detail, argues that the divergent legal traditions of England and Germany explain the courts' conflicting conclusions. The Part then discusses how courts in England and Germany reacted to each others' interpretation.

Subpart A examines in detail the facts of the *Improver* cases and examines how the different legal traditions in England and Germany caused the courts to arrive at different conclusions. Subpart B surveys the post-*Epilady Germany II* case law, and subpart C examines the post-*Improver* case law in England. This Part concludes that while the courts in Germany might be unsure of the precise method of implementing Article 69, both the courts in England and in Germany are convinced that their brother judges in England or Germany have misunderstood the meaning and goal of Article 69. Post-*Improver* case law shows little convergence between the two jurisdictions' understanding of the law. The courts, however, are aware that other jurisdictions interpret Article 69 differently. The courts first became aware of this in the initial *Improver* cases, and this awareness perhaps provided an added reason for the two courts to clarify their positions and distinguish their approach from what they perceived as the misguided approach of a foreign jurisdiction.

A. The Improver Cases

Improver sued Remington for patent infringement in many countries, including England and Germany.²¹⁷ No court denied that Remington's de-

²¹⁶ Jochen Pagenberg, *More Refined Rules of Claim Interpretation in Germany—Are They Necessary?*, 26 IIC 228, 232 (1995).

²¹⁷ For a case history including the unpublished court papers, see Stanford T. Colb, *The Epilady Hair Remover Litigation*, 366 PLI/PAT 107 (1993). For an analysis of the cases from an American perspective and a translation of the issues into American legal usage, see John P. Hatter, Jr., *The Doctrine of Equivalents in Patent Litigation: An Analysis of the Epilady Controversy*, 5 IND. INT'L & COMP. L. REV. 461 (1995). Finally, for a comparative analysis of the issues from a Japanese perspective, see To-

vice achieved the same effect as Improver's device. Furthermore, all courts found Improver's patent to be valid. Yet, they came to distinctly different results. Justice Falconer of England's Patent Court, Chancery Division, issued the first judgment on July 14, 1988.²¹⁸ He found for the defendant and revoked the injunction against Remington. The German District Court issued the second judgment on July 19, 1988.²¹⁹ The German court found for the plaintiff and issued an injunction against the sale of the defendant's product.²²⁰

The German decision prompted an appeal of the British one. Lord Justice Dillon of the English Court of Appeal, on August 12, 1988²²¹ ruled that although the lower court's approach was correct (*i.e.*, the *Catnic* approach of Lord Diplock),²²² a new trial was required because more evidence was needed. Lord Justice Dillon held that in the new trial the court had to do two things: first, in light of the German court's contrary ruling, the English court had to determine whether the purposive construction doctrine was the appropriate method of interpreting claims of scope; second, if the purposive construction doctrine was appropriate, the court must determine, under the doctrine, whether the rubber rod with slits was an obvious equivalent to a helical spring to someone skilled in the art.²²³

The English Patents Court convened a new trial and issued the final judgment in 1989.²²⁴ Justice Hoffman declared that Lord Diplock's approach for determining infringement²²⁵ was binding and equivalent to the approach of Article 69. Thus, the court found that Remington did not infringe on the Improver patent.²²⁶

In 1988, the German appeals court found that the English ruling cast doubt over the obviousness of the Improver patent and ordered a new trial.²²⁷ The trial court heard additional evidence and ruled against the defendant, who then appealed a second time.²²⁸ The Düsseldorf court of appeals issued its final decision on November 21, 1991. Dismissing the

shiko Takenaka, *The Doctrine of Equivalents after Hilton Davis: A Comparative Law Analysis*, 22 RUTGERS COMPUTER & TECH. L.J. 479 (1996).

²¹⁸ *Improver Corp. v. Remington Consumer Prods. Ltd.*, (Ch. 14 July 1988) (LEXIS, U.K. Library, Allcas file), quoted in *Improver Corp. v. Remington Consumer Prods. Ltd.*, [1989] R.P.C. 69, 71 (C.A. 1989).

²¹⁹ See *Epilady Germany*, 21 IIC at 573.

²²⁰ See *id.*

²²¹ See *Improver*, [1989] R.P.C. 69.

²²² See *supra* notes 119-23 and accompanying text.

²²³ See *Improver*, [1989] R.P.C. 69.

²²⁴ See *Improver*, [1990] F.S.R. 181 (1989).

²²⁵ See *supra* notes 113-16 and accompanying text.

²²⁶ See *Improver*, [1990] 17 F.S.R. at 190.

²²⁷ See *Epilady Germany*, 21 IIC at 578.

²²⁸ See *Epilady Germany II*, 24 IIC at 839.

English court's opinion as bound up in pre-EPC law, the German court held that Remington had infringed Improver's patent.²²⁹

The British decisions consistently followed Lord Diplock's approach. Justice Falconer argued that courts must consider the terms of the patent and divine the device's essential integers. In the patent specification, Falconer stated, the draftsman contemplated that there might be alternatives to the specific integers in the patent but made no such suggestion regarding the helical spring.²³⁰ Furthermore, "on a fair reading of the specification it seems to me, *looking at it as a matter of language*, quite impossible to say that the helical spring is not an essential integer of the claim device."²³¹ Therefore, the rubber rod in Remington's device must be an obvious equivalent of the helical spring for infringement to occur.²³² Falconer concluded that the two were obviously not equivalent.²³³

Justice Hoffman in the final appeal clarified Diplock's approach and reformulated it into the three question format that now appears in English textbooks.²³⁴ In cases in which the allegedly infringing device does not violate the "primary, literal or acontextual meaning of a descriptive word or phrase in the claim ('a variant')"²³⁵ the court must ask the following three questions:

- (1) Does the variant have a material effect upon the way the invention works? If yes, the variant is outside the claim. If no-
- (2) Would this (i.e., that the variant had no material effect) have been obvious at the date of publication of the patent to a reader skilled in the art? If no, the variant is outside the claim. If yes-
- (3) Would the reader skilled in the art nevertheless have understood from the language of the claim that the patentee intended that strict compliance with the primary meaning was an essential requirement of the invention? If yes, the variant is outside the claim.²³⁶

Hoffman found that the variant had no material effect on the working of the invention and that this would have been obvious at the date of publication to a reader skilled in the art.²³⁷ Hoffman further found, however, that the reader skilled in the art *would* have understood from the language of the

²²⁹ See *id.* at 843.

²³⁰ See *Improver* (Ch. 14 July 1988), quoted in *Improver*, [1989] R.P.C. at 75.

²³¹ *Id.* (emphasis added).

²³² *Id.*

²³³ See *id.* Falconer does not make his reasoning clear, but he implies that because the patentee suggests some possible equivalents he wishes to protect against and because that list does not include rubber rods, he obviously meant to exclude rubber rods from the monopoly.

²³⁴ See, e.g., DAVID I. BAINBRIDGE, *INTELLECTUAL PROPERTY* 306-07 (2d ed. 1994).

²³⁵ *Improver*, [1990] 17 F.S.R. at 189.

²³⁶ *Id.*

²³⁷ See *id.*

claim that the patentee intended strict compliance with the primary meaning to be an essential requirement of the invention.²³⁸ Therefore, according to Hoffman, Remington's device did not infringe.

The central issue in the new trial was the meaning of the phrase in the patent application (called by Hoffman "the equivalents clause"), "all the variations which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein."²³⁹ Hoffman held that this claim was not sufficient to invoke the purposive construction doctrine. Rather, the words indicated that "the variation must still come within the *meaning* of the claims and the reference to 'range of equivalency' means in my judgment no more than 'don't forget that the claims must be interpreted in accordance with *Catnic* and the Protocol."²⁴⁰ Hoffman found that the rubber rod was not an approximation of a helical spring: "It is a different thing which can in limited circumstances work in the same way."²⁴¹ To derive a more expansive meaning for helical spring because of the so called equivalent clause would "be denying third parties *that reasonable degree of certainty* to which they are entitled under the Protocol."²⁴²

The German district court, in which the first German trial took place, approached the problem differently. It looked first for the teaching of Improver's invention and then whether this teaching was obvious to someone skilled in the art.²⁴³ If the person skilled in the art, using the same teaching, is able to arrive at the defendant's invention, then infringement has occurred. This is called the obviousness test. The court found that this was so in this case.²⁴⁴

On appeal, the Düsseldorf Court of Appeals also ruled that the obviousness test applied; "identity of effect" is not enough.²⁴⁵ The Court of Appeals held that it is not enough to conclude that the allegedly infringing invention necessarily infringes because it accomplishes the same effect as the patented invention. Rather, it must have been "possible for the average person skilled in the art exactly due to the teaching of the patent in suit to solve the problem underlying the invention by means of the rod-shaped hair engaging portion of the attached embodiment."²⁴⁶ The second and final Court of Appeals decision held that a person skilled in the art was indeed capable of arriving from the teaching of the Improver patent at the conclu-

²³⁸ See *id.* at 197.

²³⁹ *Id.* at 186.

²⁴⁰ *Id.* at 197 (emphasis added).

²⁴¹ *Id.*

²⁴² *Id.* (emphasis added).

²⁴³ See West German Federal District Court in Düsseldorf, *quoted in Improver*, [1989] R.P.C. at 75.

²⁴⁴ See *id.*

²⁴⁵ *Epilady Germany*, 21 IIC at 578.

²⁴⁶ *Id.*

sion that the rubber rod and the helical spring were equivalent.²⁴⁷ The final German Appeals Court, contrary to Hoffman's ruling in the final English trial, held that the first claim (about the helical spring) *must* be read in a functional manner, thus "a person skilled in the art will not interpret the coil spring as a spring, but as an elastic body with gaps."²⁴⁸ This broader reading of the claim was necessary because the purpose of Article 69 was to "fairly delimit[] the actual improvement of the field of technical knowledge achieved by an inventor."²⁴⁹ Justice or fairness for the parties involved, particularly the inventor, therefore, is of primary importance to the final German Appeals Court.

There are four possible reasons why the two jurisdictions arrived at different conclusions with what seemed to be the same evidence and under the same EU law. Either (1) the evidence was different, (2) one of the two jurisdictions did not follow the law, (3) one court poorly applied the law, or (4) both courts correctly applied the law but because of their differing legal traditions were able to arrive at different conclusions under the same law.²⁵⁰ Both courts believe that substantially the same evidence was before them,²⁵¹ and given the broad language of the Protocol and the lack of guiding precedent, both methods of interpretation, the German and the English, use a fair interpretation of the Protocol.²⁵² English judges, probably out of enthusiasm for legal unification, tended to see the German court as reaching a different conclusion using the same method. Lord Justice Dillon seemed to think that the German court extended broader protection because of its mistaken belief that a person skilled in the art would have read the claims broadly.²⁵³ Indeed, Justice Aldous in *Assidoman* quotes Dr. K. Bruchhausen, perhaps the most eminent patent judge in Germany in recent times, as saying that the *Catnic*²⁵⁴ case would have been decided the same way as in Germany, and that purposive construction is substantially similar to the method used in Germany.²⁵⁵

This view is misguided. All the German methods of interpretation share a fundamental attribute: they compare idea to idea. The English approach is fundamentally different because it compares words in one specification to words in another specification. Furthermore, even when English

²⁴⁷ See *Epilady Germany II*, 24 IIC at 842.

²⁴⁸ *Id.* at 843.

²⁴⁹ *Id.* at 842 (emphasis added).

²⁵⁰ See, e.g., *Assidoman Multipack Ltd. v. The Mead Corp.*, 1995 R.P.C. 321, 325 (Ch. 1994).

²⁵¹ See *Improver*, 1990 17 F.S.R. at 190. The English court asserts that the evidence available to both the German and English courts was the same. The German courts are silent on this matter.

²⁵² Both approaches are fair interpretations of Article 69 because they both use as their basis the patent claims and neither is instinctively literalist.

²⁵³ See *Improver*, 1989 R.P.C. at 76.

²⁵⁴ See *supra* notes 119-22 and accompanying text.

²⁵⁵ See *Assidoman*, 1995 R.P.C. at 336; see also *Beloit Techs. Inc. v. Valmet Paper Mach. Inc.*, 1995 R.P.C. 705, 721 (Ch. 1995).

courts read claims broadly, they read only one specific claim at a time broadly. The English purposive construction doctrine atomizes the invention into small components that are protected with narrower or broader fields. English law does not protect a general inventive idea that the invention embodies. Rather, English law protects the many smaller components that make up the invention. The scope of protection in England is determined by words, and whether those words should be taken literally or somewhat more figuratively is determined by the words chosen by the patentee.²⁵⁶ English courts are bound by the plain meaning of the words of the claims and can go no further. The patentee alone determines his monopoly. He still must worry about the consequences of making an over-broad claim—the court will find lack of novelty—and making too narrow a claim. Lastly, the tradition of literal claim comparison puts English courts on notice that they must be wary of their discretion when they engage in purposive construction.

On the other hand, German courts have enormous discretion in determining equivalency. Even the limiting factors that German courts use allow for great discretion. The obviousness test looks for the obviousness of the whole idea of the protected invention compared to the whole idea of the allegedly infringing invention,²⁵⁷ and in the legal certainty test certainty is not an end in itself, but must be balanced with the needs of fairness and just reward. There is no such concern for just reward in England, where a much more utilitarian outlook on patents exists—the reward should be the minimum required to function as an incentive to invent. The *Improver* cases highlight the continued importance of traditions of interpretation when national courts examine patent claims.

B. Post-Epilady Germany II Case Law

Subsequent developments also illuminate the strength of national traditions. The German court has struggled to assimilate the requirements of the EPC within its jurisprudential traditions. German courts alternate between returning whole heartedly to the solution principle tradition and imposing a laundry list of concerns that must be answered before the court can apply the solution principle test.

²⁵⁶ “[A] patent specification is a unilateral statement by the patentee, in words of his own choosing.” *Catnic*, 1982 R.P.C. at 242.

²⁵⁷ It is amusing that Justice Aldous who in *Assidoman*, 1995 R.P.C. at 336, doubted any difference between the German and English approaches was oblivious to the difference mentioned in the text. In *Kastner*, 1995 R.P.C. 585, a few months later (and after a promotion to Lord Justice), Aldous reminded the court of his opinions in *Assidoman*, yet was careful to note that “[it] is important to remember that I have split that claim up into [distinct] features.” *Id.* at 596. Thus, without even realizing it, Aldous hit on the core difference between the two approaches.

For example, in *Fixing Device II*,²⁵⁸ the German Supreme court departed from the claim language and redefined the disputed features by referring to language not in the claim.²⁵⁹ The court further held that even if an invention builds, in a novel way, on an old patented invention,

it would therefore be unjustified if such an exploitation could escape from the scope of protection of the earlier patent and thus deprive the earlier inventor of his rightful reward for his fundamental achievements. The same is true if the more recent invention does not build upon a word-for-word embodiment of the earlier invention but instead upon an equivalent variant that also falls within the protective scope of the older patent. . . . In all these instances, the further development can be inventive, either of itself or in combination with the older teaching; nevertheless it depends on the teaching of the older patent, and falls within its protective scope as a dependent invention.²⁶⁰

The court further argued that just because the scope of protection is determined by the contents of the patent claims does not mean "that statements of purpose, effect and function of the patented device included in the patent claim restrict the use of the device to the specified purpose, in the specified function and with the specified effect."²⁶¹ The court thus seemed to ignore the bulk of post-EPC case law and return to a solution principle test unadorned by limiting concerns and animated by a desire to give the inventor his rightful reward.

The court in *Segmentation Device*,²⁶² once again, seemed to reverse its course, rejecting the pre-EPC days of broad interpretation in favor of legal certainty.²⁶³ The court reiterated the basic method of claim interpretation: using the context of meaning of someone skilled in the art, a court must determine the content of patent claims. A court must then determine whether that person could "by applying his specialized knowledge to solve the problem underlying the invention, consider the derived means used in

²⁵⁸ BGH, case no. X ZR 121/88, translated in 23 IIC 111 (1992) [hereinafter *Fixing Device II*] (finding that Hammerhead lock infringed a patented frame consisting of separable section bars for use in folding tables, even though the specified purpose of the protected device differed from that of the allegedly infringing device in how it locked the legs of the table in place).

²⁵⁹ For example, with respect to the claim on the casing of the device, the court combined two claim elements. It noted that the connecting element casing contained a wedge shaped deflecting surface along which the reverse pitch of the fixing element slid as it was inserted into the assembly position so as to grip into the longitudinal groove on the section bar. The court redefined the disputed elements by making reference to the specification and drawing and not to the claims, because no terms such as a wedge shaped deflecting surface. See TAKENAKA, *supra* note 152, at 179-84, for a detailed analysis of the technical aspects of this case.

²⁶⁰ *Fixing Device II*, 23 IIC at 117.

²⁶¹ *Id.* at 119-20.

²⁶² BGHZ 125, 303, translated in 26 IIC 261 (1995) [hereinafter *Segmentation Device*].

²⁶³ *Id.* at 267.

the contested embodiment to have the same effect.²⁶⁴ The court narrowed the holding of *Fixing Device II* to its facts.²⁶⁵ In *Segmentation Device*, the court stated that if a person skilled in the art must apply inventive effort to derive an embodiment equivalent to the teaching of a patent then that embodiment is not covered by the scope of the patent.²⁶⁶ Lastly, the court reiterated that "greater account must be taken of the aspect of legal certainty."²⁶⁷ Thus, while German courts are increasingly circumscribing justice for the inventor with the requirement of certainty for third parties, they still use an idea-to-idea comparison that is fundamentally different from the English word-to-word approach.

C. Post-Improver English Case Law

The judges in England are also struggling to reconcile their national traditions with the demands of European Law. A growing feeling exists among English judges that they must justify their decisions with reference not only to English law but also to European patent law based on EPO Patent Appeals Board grant proceedings.²⁶⁸ Indeed, EPO proceedings are published and considered of "great persuasive authority," although not binding, by English courts.²⁶⁹ Despite English judges' increasingly positive European orientation they still view European law through the prism of pre-EPC English law. Nevertheless, when the English judges disagree with the EPO board of appeals, they take great pains to show how their differences are merely ones of focus and fact, not of jurisprudence. For example, in *Biogen Inc. v. Medeva Plc.*,²⁷⁰ the Law Lords were at great pains to show how,

²⁶⁴ *Id.* at 265.

²⁶⁵ See Pagenburg, *supra* note 216, at 232. The court said that the rule of *Fixing Device II* only applies if the terms of claims supported a modification of the terms of the claims. It seems illogical that words can be read to imply that they are not the real words that the author meant to use; rather, he meant other words. It seems that the court meant to reduce the holding to an absurdity and thus an irrelevancy.

²⁶⁶ *Segmentation Device*, 26 IIC at 266. The court was concerned that the inventor should not benefit from an inventive achievement of third parties that would only later be read into the patent claim. Therefore, even if a dependent invention uses the same solution principle but contains an additional inventive step the dependent invention is not covered in the initial inventions patent. For an examination of the state of German patent law after *Segmentation Device*, see Pagenburg, *supra* note 216.

²⁶⁷ *Segmentation Device*, 26 IIC at 266.

²⁶⁸ See *Schering's Application*, 1971 R.P.C. 337, 342 (Patent Appeal Tribunal 1971), in which an English court accepted the EPO's ruling in *Esai's Application*, 1987 O.J. EPO 147, which found, in addition to the "first medical use" exception to the no patent for methods for treating humans or animals by treatment or surgery, Patents Act 1977, 1977 ch. 37, ss4(2), 3; EPC Art. 52(4), that it was legitimate to recognize patent claims to use a substance for making up into a medicament for pharmaceutical administration in pursuit of the discovered use, provided that a patent for the use itself would be debarred as a method of treatment. The English court reaffirmed this finding in *Consultant Supplier's Application*, 1996 R.P.C. 348 (P.O. 1995).

²⁶⁹ *Merrell Dow Pharm. Inc. v. H.N. Norton & Co.*, 1996 R.P.C. 76, 82 (H.L. 1995).

²⁷⁰ Transcript available on Lexis, (H.L. 31 October 1996) (LEXIS, U.K. Library, AllCas file).

while different results were reached, the EPO and the House of Lords share the same patent jurisprudence.²⁷¹

The judicial attitude that European and English patent law are the same also applies to the law on patent scope. Most English judges claim that the drafters of the EPC misunderstood English law when the drafters argued that English law enjoined the strict literal approach.²⁷² The English judges are convinced that the purposive construction approach of Lord Diplock is the one required under Article 69 of the EPC.²⁷³ However, there was one exception to the general acceptance of *Catnic* that caused a bit of a stir and was quickly overruled.

Two English judges began to question whether the German and English approaches were, in fact, different.²⁷⁴ Lord Justice Millett in *PLG Research Ltd. v. Ardon International Ltd.*,²⁷⁵ building on that sentiment, argued that Lord Diplock in *Catnic* merely summarized pre-EPC case law and thus *Catnic* was now irrelevant. Furthermore, he argued, even if the *Catnic* approach was comparable to the German approach, that approach was a much simpler statement of the rule.²⁷⁶ Therefore, the *Catnic* approach is potentially dangerous and the German approach should be adopted.²⁷⁷ Because Millett concluded that the allegedly infringing device violated PLG's patent on its face, he did not find it necessary to rule whether the German approach or *Catnic* is the correct understanding of Article 69.²⁷⁸ He was roundly criticized for this, and his view was quickly la-

²⁷¹ See *id.*

²⁷² See *Molnlycke AB v. Procter & Gamble Ltd.*, (C.A. 1993) available in 26 IIC 92, 98 (1995).

²⁷³ See, e.g., *Southco Inc. v. Dzus Fastner Europe Ltd.*, [1992] R.P.C. 299, 312-13 (C.A. 1991); *Beloit Techs. Inc. v. Valmet Paper Mach. Inc.*, [1995] R.P.C. 705, 720 (Ch. 1995); see also *Eli Lilly & Co. v. Novopharm Ltd.*, [1996] R.P.C. 1, 20 (Fed. Ct. 1995) (Can.) (Canada is bound by English law on the scope of patent protection that in turn is bound by the EPC; furthermore, the *Catnic* approach of Lord Diplock is the correct statement of the law).

²⁷⁴ See *supra* notes 255-56 and accompanying text.

²⁷⁵ [1995] R.P.C. 287 (C.A. 1994) (a patent monopoly for a "substantially uniplanar" oriented net includes a net that is not strictly uniplanar that has grooves cut on one side but not the other).

²⁷⁶ See *id.* at 309. Lord Justice Millett echoed the arguments of Ruth E. Annand, who argued in 1992 that *Catnic* was merely a restatement of old law and had limited usefulness as precedent. She further argued that the correct and best approach to interpreting Article 69 was the *Formstein* approach of the German courts. Ruth E. Annand, *Infringement of Patents—Is "Catnic" the Correct Approach for Determining the Scope of a Patent Monopoly under the Patents Act 1977?*, 21 ANGLO-AMERICAN L. REV. 39, 51-52 (1992). Millett also seems to have been bowing to the fatalism of Brian Turner: because the EPO consistently follows the German approach on all matters it is inevitable that England will adopt the *Formstein* approach (despite both approaches being valid interpretations of the EPC and the EPO's lack of jurisdiction on this matter) so England might as well cut her losses and adopt the German position sooner rather than later. Brian Turner, *The German Formstein Case: An Alternate Harmony*, 14 EUROPEAN INTELLECTUAL PROPERTY REV. 181, 183 (1992). For an analysis of the *PLG* and *Assidoman* cases, see Andrew Inglis et al., *Biogen is Overturned & Catnic is Questioned: An Update on Recent U.K. Patent Law Developments*, 7 No.2 JOURNAL PROPRIETARY RTS. 18 (1995).

²⁷⁷ See *PLG Research Ltd. v. Ardon Int'l Ltd.*, [1995] R.P.C. 287, 309 (C.A. 1994).

²⁷⁸ See *id.*

beled as obiter.²⁷⁹ Justice Aldous²⁸⁰ in *Assidoman* argued that he would be loath to disregard years of case law unless he were absolutely certain that they embodied the wrong approach.²⁸¹ Furthermore, even if judges ought to have recourse to the jurisprudence of other jurisdictions, Lord Justice Millett provided no reason why German jurisprudence was preferable to English, Dutch, French, or any other country's understanding of patent law.²⁸² Millett disqualified English jurisprudence only because the English rule had been codified prior to the EPC.²⁸³ This logic is not a valid reason for abandoning a legal tradition; therefore, Millett's opinion is obiter dictum.²⁸⁴ No court took up the challenge to follow *PLG* and it was roundly condemned.²⁸⁵ Interestingly, Lord Justice Millett, in his opinion favorable to the German approach, seems to adopt the language used by the German courts to describe the invention and talks of the general teaching of the patent.²⁸⁶

V. CONCLUSION

Patents are widely accepted in Western culture as a good legal device. Legal certainty and efficiency are also widely accepted as good. Germany and England, however, have different reasons why certainty, efficiency, and patents are considered worthwhile. The different justifications for patents in each country caused their different understandings of Article 69.²⁸⁷

²⁷⁹ See *Assidoman*, [1995] R.P.C. at 337. (The judgment in *Assidoman* was released less than a month after *PLG*!).

²⁸⁰ Aldous was the judge Millett overruled in *PLG*. *PLG Research v Ardon Int'l*, [1995] R.P.C. 287, 295 (C.A. 1994).

²⁸¹ *Assidoman Multipack Ltd. v. Mead Corp.*, [1995] R.P.C. 321, 337 (Ch. 1991).

²⁸² See *id.*

²⁸³ See *id.*

²⁸⁴ See *id.*

²⁸⁵ See *Kastner*, [1995] R.P.C. at 594; *Beloit*, [1995] R.P.C. at 720.

²⁸⁶ See *PLG*, [1995] R.P.C. at 299. The case law, however, unanimously supports the conclusion that Lord Diplock's approach is the correct one under the EPC. See the cases cited in *supra* notes 272-73, 281.

²⁸⁷ It is a matter of great controversy whether the laws of the various countries in Europe are converging under the force of the shared experience in the EU. One commentator argues that all Western legal systems have common goals when they try to solve legal problems. See B.S. Markesinis, *A Matter of Style*, 110 LAW Q.R. 607 (1994). The difference between systems is stylistic. The French are terse and gnomic; the Germans dry and academic; and the English (and Americans) discursive and poetic. However, Markesinis implies that if examined closely, all Western legal systems ask more or less the same questions in any given situation, have more or less the same requirements in their laws, and reach more or less the same conclusions in similar circumstances. Furthermore, Markesinis argues that the substantive differences that do exist are becoming less and less relevant under the force of shared experience. See also James Gordley, *Comparative Legal Research: Its Function in the Development of Harmonized Law*, 43 AM. J. COMP. L. 555 (1995). Other scholars argue that convergence is impossible and is merely the chimera of a select group of internationalist lawyers and doomed to fail. See Legrand, *supra* note 14.

English jurisprudence views patents as a means to an end. Consistently, from their inception in the late Middle Ages, patents were meant to give incentive to others to create useful manufacture. A careful calculus must be applied by the courts; the effectiveness of the incentive must be balanced against the monopoly's becoming generally inconvenient. Patents as a tool to create economic growth could therefore be judged objectively and reformed accordingly.²⁸⁸ In English law, any monopoly granted, no matter for how good a reason, needs bright lines surrounding it. In patent law this led to a heightened emphasis on the words of the patent claims and a disregard of the inventive concept behind the invention.²⁸⁹

German patent law jurisprudence, on the other hand, views the patent as an end in itself. Justice and fairness require that the inventor's idea be protected. Historically, economic concerns were of little importance in the formation of German patent law. Even post-EPC, legal certainty is only one factor to be balanced against the needs of justice for the inventor. This has led German jurists to use idea-to-idea comparisons to determine whether or not an invention infringed a patent. Even when the courts have tried to limit the scope of protection they find it very difficult to do so. This may well be because they never renounced the initial idea-to-idea, teaching-to-teaching comparison that provides no limiting mechanical framework. Rather, an abstract idea is limited by nebulous concepts such as obviousness or the "needs of certainty." The courts, therefore, essentially make an individualized moral decision in each case. The cases ask if the proposed breadth of protection is fair to the individual inventor and to society.

As a result of their understanding of the purpose of patents, the German courts have no limiting factor aside from the moral predilections of the various judges, which are in turn shaped by their culture.²⁹⁰ Thus the very idea of a middle ground between the English and German positions is non-

²⁸⁸ Most histories of patents in England and America have been written by economists with the goal of reforming patent law to facilitate economic growth. See, e.g., PRICE, *supra* note 48 at 14-15; JACOB SCHMOOKLER, *INVENTION AND ECONOMIC GROWTH* (1966).

²⁸⁹ This is not to say that judicial discretion is not a potential danger in England. In particular, when dealing with combination patents, English judges have great discretion to decide whether or not the combination is greater than the sum of its parts and consequently whether or not to invalidate the patent. See, e.g., *Windsurfing Int'l Inc. v. Tabur Marine Ltd.*, [1985] R.P.C. 59 (C.A. 1984); *Carroll v. Tomado Ltd.*, [1971] R.P.C. 401 (Ch. 1971). But see *GEC Marconi Ltd. v. Xylyx Viewdata Terminals Ltd.*, (C.A. 1995) (LEXIS, U.K. Library, AllCas file) (arguing that *Windsurfing* has provided a framework for judges to determine the inventive concept required for a combination patent to be valid that removes judicial discretion). Nevertheless, the English judge who embarks into the interpretation of patent claims has three limiting factors: first, the general English prejudice against judge-made law; second, the long-standing concern that the patent monopoly not become too broad; and third, the objective test of economic growth as a way to determine the wider utility of the patent monopoly.

²⁹⁰ It is much easier to measure economic growth objectively than it is to measure fairness. To be sure, if a patent hampers growth it is unfair to society in some sense, but not absolutely so. Perhaps it even is arguable that in the long run it is good for society, because the moral rights of inventor personalities are more important than economic growth. The inventor's gift to the nation deserves a fair reward, regardless of its wider cost.

sensical, because they are not positions on a singular continuum; rather they represent alternative views on what patents are for.²⁹¹

Patents are an imperfect means of signifying abstractions in words. This task of capturing ideas in words is made even more difficult by the question of whether the words that make up the patent should be read literally, as an absolute boundary of the idea, or figuratively, as a representation of the idea. The former approach, to some extent, will impoverish the protected idea by limiting it to mere words. The latter approach depends on each reader's subjective understanding of the text of the patent and consequently what the protected idea *is* is fungible, preventing certainty for third parties.

This Comment has asked whether different countries' complex patent rules can be meshed. It concludes that patent integration (both harmonization and unification) is possible only if the various lawmakers recognize that each patent rule signifies a choice, a choice in many ways determined by the wider legal culture and through its history, concerning why patents are important and whether there are any other concerns that ought to limit the patent monopoly. Attempts at legal convergence that ignore the choices behind rules will fail.

While concerned with broad sociological and historical explanations, this Comment has avoided an economic analysis of the situation in England and Germany in part out of a belief that economics cannot tell the whole story. Economic analysis can provide an interesting description of the costs of each of the respective countries' beliefs as well as help provide a normative answer as to which belief is better. Economics cannot, however, provide a coherent internal account of why a personality theorist thinks he is ruling on a case in a particular way. It is precisely this internal perspective that allows one to understand and predict how someone else will interpret a given piece of legislation.

²⁹¹ There is yet another method by which legal integration may be achieved. It is not inconceivable that in a few years the European Court of Justice will find that it has jurisdiction over patents after all. J.H.H. Weiler, *The Transformation of Europe*, 100 YALE L.J. 2403 (1991), talks of growing authority of the European Court. The court has established that its rulings trump national law, *see id.* at 2414, and that it has a certain number of implied powers. *See id.* at 2415-17. Thus, the court has been slowly finding more and more areas of law, previously thought to be free of its jurisdiction, to be under its jurisdiction. *See id.* at 2438.

Still another possible way legal integration might come about is through legal education. Basil Markesinis was correct when he predicted that the increasing internationalization of legal education would quicken European legal integration. *See Markesinis, supra* note 287, at 627. If lawyers from different jurisdictions are exposed to different world views in their formative legal years, they might be better able to internalize those views as their own. This will better enable lawyers to adopt the laws that embody those views. The fact that Lord Justice Millett in *PLG* adopted the German method of looking for the teaching of the invention, when he argued for the superiority of the German interpretation of Article 69, speaks volumes. If one adopts the view that inventions have a teaching that must be protected, then it follows that an idea-to-idea comparison is in order, as literal word-to-word comparison necessarily fails to capture the wider concept behind the invention and gets too caught up in the technical details.

It is impossible to deny that all Western legal systems share a host of common goals, assumptions, and traditions. Indeed, many of the differences between legal systems are merely "packaging."²⁹² Fundamental differences, however, do exist. It is these differences that will split different jurisdictions over the so called "hard cases." One of the great lessons of Montesquieu's *Spirit of the Laws* is that the law-maker must recognize the ultimate constraints posed by human experience and the human condition. Manners and custom cannot be changed by law but have to undergo change by themselves.²⁹³

In sum, it is the thesis of this paper that to insist on the importance of cultural context is to insist that Western culture is not monolithic.

²⁹² Markesinis, *supra* note 287, at 617.

²⁹³ See Legrand, *supra* note 14, at 62. Edmund Burke also taught this; he argued that manners and custom, not the economy and not abstract laws, shape society. See J.G.A. POCOCK, VIRTUE COMMERCE AND HISTORY 199 (1985). Burke argued that trying to change society by ignoring custom and manners will release the "wild gas" of revolution and lead to a nihilistic society where rule is possible only via the threat of the gallows. See EDMUND BURKE, REFLECTIONS ON THE REVOLUTION IN FRANCE 8, 68, 70 (J.G.A. Pocock ed., 1987) (1790).