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Patents as Genre: A Prospectus

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Abstract Like other forms of intellectual property, patents have increasingly been the subject of controversy regarding their successes and failures in promoting and channeling innovation. But unlike other forms of intellectual property, patents are constituted and defined in terms of officially sanctioned texts. As a consequence, patents are deeply embedded in communities of composition, interpretation, and practice. This paper outlines how genre analysis can be applied to interrogate the “typified rhetorical action” of the patent system and its constituent communities. It argues and demonstrates that understanding the rhetorical work of patents is key to addressing current criticisms of the patent system.

Keywords Patent, intellectual property, genre, composition studies, rhetoric

INTRODUCTION

Patents are typically understood by lawyers as governmentally certified documents, defining a set of exclusive rights that are granted by the state to an inventor. Despite their long history in modern societies, the provenance of such exclusive grants remains contested. The usual argument justifying patent rights is that they are intended as an incentive to innovations, allowing investors to recoup the costs of developing inventions that might otherwise be freely appropriated once on the market.¹ But there remains substantial doubt, and relatively little empirical evidence, as to whether patents in fact serve as such an incentive, and whether the incentive may be more costly than its purported benefit.²

As a consequence, there is ongoing debate regarding the economic effects of patents, and various commentators have proposed multiple alternative justifications.³ Patents have at various times been postulated as prompting disclosure of technical information, assisting the codification of otherwise tacit knowledge, coordinating the development of new innovation, facilitating exchanges in the marketplace, shaping the size and structure of firms that hold them, attracting investment or signaling business acumen, or constituting bargaining tokens in business strategies.⁴

Most of these conjectures also continue to be subject to considerable doubt and debate, and remain unverified due to the persistent lack of empirical proof that might substantiate their predictions. The very notions of whether the current patent system supports innovation or provides the right kind and level of incentives to engage in creative processes have been called into question. Critics argue that the backlog of patents, poor quality patents, and lack of resources for patent review all threaten innovation and technological process.⁵ Moreover, the patent system has been described as “broken,” as creating legal uncertainty and market monopolies, as fostering technological imperialism, and as perpetuating social injustice, rather than furthering their purported incentives to create.⁶

Recent public attention to patents, attempts to reform patent law, and resistance to such reform efforts suggest that these legal constructs play a role beyond that explained by economic incentive theories. Whatever else one might say about the effect patents have on technological innovation, it seems beyond dispute that patents play an important *social* role in industrialized societies.

The growing social prominence of patents suggests that these documents deserve increased attention from a range of scholarly perspectives. In an effort to examine the patent system and its role beyond the usual tropes of technological innovation, we believe it is useful to look at the situation from a rhetorical perspective. This approach rests on an understanding that the patent system is largely text-based and that patents are fundamentally rhetorical. By this we mean to engage the formal study of discourse. When we say rhetorical we do not mean “rhetorical” in the colloquial sense; we are not looking to highlight the unscrupulous or unattractive ways legal processes might be manipulative. Instead, we want to consider how the language of patent documents shapes meaning, not simply in the process of technological innovation, but as an artifact of a society that values technological innovation.

What might the rhetorical features of patent documents reveal about the workings of the patent system and the underlying ideologies of the patent community?⁷ One method for further exploring the role of rhetoric in the patent system is *genre theory methodology*. In this paper, we argue that the modern patent is a compelling subject for such genre analysis and that genre analysis points the way to a better understanding of the social role played by patents. We begin by sketching the general outline of the patent as a document, its distinctive characteristics, the unique community that drafts and processes the document, the agencies and institutions that have developed around the document, and the other features relevant to genre analysis. We discuss both linguistic characteristics of the patent document as well as its social character as the product of a community of patent practitioners. In doing so, we trace the connections between the production of patents and the development of the patent community, concluding that this interaction is key to understanding the unique role of patents.

In doing so we are mindful of both the influence of the document on its associated communities, and the concomitant influence of the communities on the document. These communities of course overlap and intercalate to varying degrees. But here we focus on the community most responsible for determining the structure and composition of the patent document: the community of patent practitioners registered to practice before the Patent Office. We expect that examining both the text and context of the patent genre will help shed light on the norms, ideologies, and values circulating among patent practitioners, as well as upon those embedded in the patent document itself. We begin with an overview of our primary set of analytical tools.

GENRE ANALYSIS

Since at least the time of Aristotle, genre studies have been employed to examine the rhetorical role of certain texts, where “text” is considered broadly to encompass a wide range of documents and communicative acts.⁸ Historically, genre studies have involved the development of taxonomies for classifying literary works, on the theory that the distinctive features of previous texts serve as templates for the creation of new works adhering to the particular genre. Thus genre could be employed as a categorical rubric, in some cases focusing on distinctive textual form, such as that found in epics, sonnets, or novels; and in other cases focusing on distinctive content, such as that found in romances, comedies, or tragedies. Conventional rhetorical analysis added audience or situational classifications, recognizing that communicative forms – such as sermons, obituaries, closing arguments, and business letters – are structured to effect situational information transfers between author and reader.

Contemporary rhetorical studies have focused on genre as collections of social artifacts, produced by and for discursive communities. Such modern rhetorical studies of genre have resolved into two broad approaches, one favoring structural and linguistic analysis, and another favoring social and contextual analysis.⁹ On one level, genre analysis examines the formal features of texts, including the structure, purpose, rhetorical strategies, content, and use of specialized language that are common to texts belonging to a particular genre. The emphasis on commonality of form arises out of one aspect of the traditional categorization approach; the documents or communicative acts comprising a genre share similar content, similar textual characteristics, and similar structure. These common attributes are oriented toward a specific purpose. It is understood that those who compose and read a particular genre understand the features of that genre and use them to successfully interact. For example, in a manual for assembling a product, writers and readers know to communicate through sequential, numbered steps in a process and labeled photographs,

rather than through dense paragraphs of text and vague representational drawings.

A more recent approach to genre theory adopts a social perspective in addition to close textual analysis. In addition to studying textual features, contemporary genre study also considers the social actions performed by genres – the actions that the texts are used to accomplish.¹⁰ Rhetorical theorist Carolyn Miller's seminal article *Genre as Social Action* posits that:

a rhetorically sound definition of genre must be centered not on the substance or the form of discourse but on the action it is used to accomplish [...] the connection between genre and recurrent situation and the way in which genre can be said to represent typified rhetorical action.¹¹

Genres have been defined as a “typified rhetorical response” to a recurring social situation. To be viewed as a genre, text types must be recurring, used over and over again, in ways recognizable by members of a community. Thinking about genre from this social perspective highlights the role of community in genres. Norms for particular genres are dependent on norms of a particular discourse community.¹²

These two approaches are not sharply bifurcated, and indeed one leads fairly naturally into the other. At the most operational level, genre is defined by linguistic features and format found in common among its constituent texts. Recognition that regularized linguistic features of texts are determined by rhetorical purpose leads to an examination of how such regularities are infused with meaning. Genre scholars have observed that successful communication is dependent on shared social context. Genres arise out of responses to recurrent rhetorical needs or situations. The common attributes of the genre mediate interactions with texts within given rhetorical situations. The genre embodies shared understandings that are entailed in personal and professional communication. The distinctive features of the genre define the accepted terms of engagement with the text. The familiar forms and content of the text signal the proper construction and use of meaning, the proper roles of author and reader, and the proper actions and reactions regarding the text.

Consequently, the constituent texts within a genre share not only textual regularities, but *contextual* regularities. The structural features of the genre lend coherence and meaning to recurring social experiences. Within the situational category associated with a given genre, particular compositional practices are expected – e.g., particular forms of collection, analysis, and instantiation of textual content. Similarly, certain interpretive and responsive practices are expected. The genre performs a mediating role; it is given an expected form and structure by recurring social situations, and in turn perpetuates and replicates its associated social

experiences. Instantiation of communicative acts within the genre also serves as a form of codification; genre legitimates certain types of information, placing it into a canon of accepted or certified knowledge, while excluding or rejecting other types of knowledge.

In turn, the shared social context of genre, and the performances it evokes from both authors and audience, implicates the presence of a community. Genres with different purposes deploy their own distinctive features to affect the goals of their authors, who work within particular communities. As such, genre is linked to communities of practice that generate the text in question for a given purpose. The distinctive aspects of such a community include its discursive practices, and the communicative features of a genre are intended to negotiate meaning within the community. Genre might therefore be defined as a category of communicative events characterized by shared purposes familiar to a community associated with those events. By employing recognized textual features for shared communication, genres reflect the cultural, social, ideological, and organizational characteristics belonging to such communities of practice. Indeed, the deployment of genre often serves to divide insiders from outsiders; the former use known genres for shared communication, while the latter lack the context to understand the actions performed via the genre.

The contemporary definition of genre – as recurrent communicative community practices structured to accomplish a socially recognized purpose – leads inevitably to a certain degree of tension between the degree of stability and the degree of dynamism in a genre.¹³ This has been a question of some controversy in genre studies. It seems axiomatic that genres must display a requisite degree of stability: if they are to be recognized within a discursive community, some features must be familiar to both author and audience. At the same time, it seems clear that as the community, its purposes, and its practices evolve, the features of a genre will change as well.

Thus, many commentators have noted that genres are not static, and to the contrary are typically quite dynamic, even mercurial in their characteristics. Genres are frequently restructured in order to meet the needs of their generative communities, changing with perceived need, and indeed may be appropriated for similar or differing uses by other communities. Genres may even recombine with one another, generating new genres that better address the purposes of their community. Genre studies therefore endeavor to distinguish between genre conventions that must remain stable within the generative community and those that those that can be altered; as well as identifying the conditions under which each circumstance will apply.

Such genre dynamics suggest that it is important to look not only for interconnection between texts within a genre, but also between genres. Genres seldom stand in isolation; rather they are connected to and supported by related genres. Documents in contiguous, related genres are often sequentially generated and

determined in accomplishing the desired action of the compositional community. Several commentators have therefore extended the concept of genre to genre *sets*, that is, to clusters of related documents directed toward a common or similar purpose.¹⁴ Thus, the work of accountants has been studied in terms of production of several related types of documents, directed toward a specific end, comprising a genre set;¹⁵ similarly, business organizations generate distinct types of interrelated documents oriented to a common purpose.¹⁶

Others have further expanded this concept to more complex notions of genre systems and even genre ecologies.¹⁷ The emphasis in such studies is on the overlapping and interactive nature of related documentary forms as well as the communities of practice that produce them. In such analyses, genre is seen as a mediating device facilitating the interaction between document and composer. The role of the genre is seen as active rather than passive. On this view genre is not merely performed by composers; composers are also formed by the genre.

PATENTS

Having the features of genre methodology firmly in mind, we now review certain details regarding patents and their construction, with an eye toward those features that may be important to genre analysis. Such features are inextricably connected to the specialized institutional origin of patents. Unlike most forms of intellectual property, which typically attach to creative works via use or at creation, patents require a formal act of government to come into existence.¹⁸ Patents are obtained via an administrative review conducted by a governmental agency; in the United States these procedures are situated in the US Patent and Trademark Office (USPTO or even PTO). Since patent rights are limited to their jurisdiction of origin, each nation typically has its own patents through its own patent office. We will focus here on the American system and its associated community, recognizing that the situation in other countries will be similar, although with some local variation.

The corollary to the administrative origin of the patent document is a second peculiarity of patents as intellectual property: patent rights are defined by a text that describes those rights.¹⁹ In copyright, trademark, and other forms of intellectual property, rights are defined by reference to the protected subject matter itself; but exclusive rights in a patented invention are defined not by reference to the invention but by reference to the patent document that describes the invention.²⁰ It is this peculiarity of patents that lends itself to genre analysis. On the most basic level, we know that patents are textual constructs. Ownership over a particular invention is granted based on textual representations of an idea, not the actual object or product itself.²¹ Neither a completed product nor even a physical model of an invention is needed for a patent application. Therefore, the patent application functions rhetorically to shape meaning by turning ideas, as represented through writing, into an invention to be owned.

THE PATENT DOCUMENT

Because patent rights require certification by an administrative agency, which in turn requires some type of review process, patents begin their life as an application, which essentially constitutes a draft of the final published patent. The text of the application may change between the time of initial application and that of the final published document, generally in response to suggestions or demands by the examining authority. The application and final patent are similar in substance, but the application may lack features, or may have draft place-holding elements that differ from the final patent. Indeed, the examination process may be said to generate a series of application documents, as the applicant amends the initial submission in response to concerns or directions from the patent examiner.

These documents display their own particular structure and vocabulary. The modern patent document is composed of discrete units, some of which are dictated by statute or regulation, and others of which are dictated by custom or practice. Such distinctive features are apparent from the first page of the document. The patent begins with indexing several standardized features, including an abstract, classification numbers, and a list of references cited.²² The names of inventors, any assignees, and a serial number also appear on the initial page.

By statute, patents are required to describe how to make and use the claimed invention, in sufficient detail that one of ordinary skill in the pertinent technology could do so. The various sections of the patent document make up the patent specification or disclosure of the invention. Patents typically have one or more drawings within the document, with numbered pointers corresponding to a numbered list of labels indicating components or features of the invention. The text of the document is divided into sections and subsections, with designations such as “Background,” “Description of the Invention,” and so on. Frequently, specific examples of how to make or use versions of the invention are given. If these examples sometimes follow the standardized format for a scientific paper – such as a section on materials and methods, a section on results, and so on – it is often because they may be copied verbatim from scientific papers in which the research behind the invention has been published.

The textual disclosure of patents commonly displays a “problem–solution” structure. After an introduction indicating the technological field to which the invention belongs, the patent offers a background section that ostensibly orients the reader to the context of the invention, reviewing the technologies disclosed in prior art references. This background section is often couched in language highlighting the shortcomings or deficiencies of the prior technology. This is done both to distinguish the claimed invention from that which is already available, and to eventually draw the reader’s attention to the meritorious features of the claimed invention – features that can be expected to remedy the deficiencies described in the prior technology.

Thus the form of the background section essentially poses a question, to which the claimed invention is the answer. The description of the invention that follows the background reflects this structure, highlighting the novel features of the invention that were portrayed as absent or deficient in the prior art. The structure of the successive sections of the document is aimed at persuading a reader – in particular, the patent examiner who reviews the application – that the invention meets the statutory criteria of novelty and non-obviousness over the prior art. The patent therefore follows a strategy of differentiation, using what Anne Freadman calls “not-statements”²³ to distinguish itself from the prior art. What is critical to understand about such differentiation is that although this discourse is couched in terms of distinguishing the disclosed technology, this is a rhetorical move to set up the distinctiveness of the statements called “the claims,” which are at base a set of textual limitations that operationalize legal rights.

At the end of the document are one or more numbered sentences, called claims. These are intended to describe the outermost bounds of technology covered by the exclusive rights attending the issued patent. The claims define the relationships between components of the invention in run-on sentences that, to the eye (or ear) of the uninitiated, seem to torture any sensible construction of English grammar. But the syntax and structure of these sentences, however impenetrable to the outsider, represent meaningful conventions worked out among patent drafters over time. Similarly, the claims contain unusual vocabulary that is recognized by insiders as carrying specific meaning. For example, use of the term “comprising” signals that the claim is intended to cover all devices that have at least the elements following the term – in other words, devices with additional elements would still infringe the claim. But use of the alternative term “consisting of” signals that the claim is limited to devices having the exact elements following the claim – in other words, devices with additional elements would fall outside the scope of the claim.²⁴

Patent text in general is a technical hybrid, lying between and combining the linguistic conventions of technological and legal documents. Patents inevitably include scientific or technical language drawn from the field of the invention. They similarly include references to, and language drawn from, the statutes, regulations, and judicial opinions defining the legal requirements for a patent. But the document also includes its own unique jargon, which can often be heard spilling over into non-technical conversational use among patent attorneys. Some such terms are simply legal terms of art, referencing particular doctrines or standards, such as “prior art” or “person having ordinary skill.” Terminology sometimes signals specific legal or categorical designations that have syntactic meaning when interpreting the document; e.g., when claims use the term “means” as a noun, it signals a very particular type of claim with special statutory authorization and an accompanying body of case law.²⁵ But in other instances, distinctive patent language seems more a matter of community convention without particular legal effect: claims are said to “read

on” the devices they describe; applications are rejected “under” a particular statutory provision, but “over”-specified references in the prior art.

Another characteristic of the patent genre is their highly “intertextual” quality,²⁶ and the ways in which individual texts operate within a larger genre system,²⁷ rather than as single, isolated texts. Intertextuality is a concept frequently explored by genre theorists; it highlights the fact that each text draws on previous texts written in response to similar situations. Intertextuality was first addressed by Bakhtin in “The Problem of Speech Genres.” Bakhtin asserts that a primary characteristic of acts of discourse is their dialogic nature. Describing documents as “inseparable links,” Bakhtin asserts that each use of a particular genre is shaped and developed in continuous and constant interaction with others’ individual uses of a genre. In other words, uses of genres are filled with assimilations of others’ words and utterances; they “assimilate, rework, and re-accentuate” them.

The patent genre is particularly intertextual in this sense. Perhaps the most notable example of intertextuality in patents is the reference to “prior art” in a patent application. In order to assess a patent application’s merit as defined by statutory criteria for patentability, the Patent Office compares the application to prior art references, which for the most part constitute previously published documents. Patent applicants have a duty of candor to the Patent Office to disclose any relevant prior art of which they are aware. Additionally, patent examiners will undertake their own search of the prior art to determine what references may be relevant to assessing the novelty, non-obviousness, and timeliness of the application. Since patent examiners are most familiar with their own literature, prior art searches tend to turn up previously issued patents, but journal articles and other technical documents may also figure into this corpus. Prior art references will also be cited against the patent if it is later challenged in court, or in an administrative proceeding. These may be the references reviewed by the Patent Office, or more likely, they may be references unconsidered or overlooked in the Patent Office’s review.

The drafting of a patent is therefore premised upon known or discovered prior art. In a patent application it is not enough for an inventor to represent herself as having invented or conceived of the object she describes; she must also represent that the object is new, it is useful, and that it is novel. To do so, the patent writer must show that the invention being claimed is an improvement on previous inventions. Thus, the patent drafter calls up references to other documents within the genre system of patent law, especially previous patents. Such references are physically listed on the first page of the patent, but are referenced throughout the disclosure. Patents assimilate these other texts by adhering to particular guidelines established by the system to make these references, but they also rework previous patent documents in the genre system to establish their own novelty and non-obviousness.

Consequently, patents are largely defined by the documents they cite, from which each must distinguish itself. These other documents are effectively

“enrolled”²⁸ to support and enhance the portrayal of the technology in the patent. The prior art publication references both place the claimed invention in context, and serve as a backdrop against which the patentability of the claimed invention is to be assessed. In some cases prior art is cited to verify or substantiate an assertion in the patent disclosure, but more often prior art is cited in order to distinguish the claimed invention as being novel or non-obvious. Each patent application must make a connection with a previous innovation in order to establish relevance and need for improvement, but at the same time must make distinctions to show how it is different.

THE PATENT SYSTEM

Patents are the product of an administrative proceeding before a specialized agency. The applicant is required to explain, either in the patent specification itself, or in correspondence with a government official called an examiner, how her invention differs from and improves upon the prior art disclosed in the references. Applications are routed to members of the examining corps who are divided up into organizational units by technical subject classification. Patent examiners must hold technical degrees but have only minimal legal training, primarily in the form of continuing education seminars conducted within the Patent Office, meaning that patent examination, although certainly governed by legal standards, tends to be technically oriented.

The Patent Office primarily handles the review of applications, and some disputes over the patent which arise at the beginning of the patent’s life. Patent enforcement occurs elsewhere, in the court system. Patent enforcement originates by statute in federal district court, in a geographic location that has some legal connection to the plaintiff, or to the defendant, or to the activity complained of in the law suit. Federal district courts are courts of general jurisdiction that may hear cases ranging from criminal prosecutions to private civil disputes. Proceedings are presided over by a trial judge, who under current law is responsible for interpretation of the patent claims. Although a few federal district court judges will have undergraduate training in a scientific discipline, the vast majority of judges have no scientific or technical training outside of high school or college general education requirements. Consequently, these judges often have little familiarity with the logic or language of patents and patent prior art, and may be ill at ease reviewing the highly technical documents generated in a patent enforcement suit.

One palpable result of these differing institutional milieus is that patent drafters are keenly aware that they are addressing multiple audiences over time. The primary, compelling goal of the patent application is to initially persuade a patent examiner that the invention described in the document is worthy of a patent. However, if the examiner is not persuaded, even after amendment of the claims, the decision to deny a patent may be appealed, first to a board within the Patent Office,

and ultimately to the US Court of Appeals for the Federal Circuit. In rare cases, a denied patent might be appealed to the US Supreme Court. Additionally, if the published patent is challenged in the future, it will be scrutinized by a trial court judges, and possibly by a jury. So drafters are aware not only of the examiner's initial administrative scrutiny of the application document, but of the possibility of judicial review of the final patent and its attendant documents.

Because these potential audiences have different responsibilities, different goals, and different methods of approaching the document, appealing to all of them may be a delicate and difficult task. At times, rhetorical strategies aimed at persuading one audience may interfere with persuading another. For example, the Patent Office examining corps is made up of personnel with substantial technical training, but little or no legal training. Federal courts, on the other hand, are staffed by judges who typically have little technical expertise, but have a high degree of legal expertise. Technical arguments that persuade an examiner are likely to be opaque to a later reviewing judge; legal arguments that persuade an examiner are likely to be subjected to heightened skeptical scrutiny by a later reviewing judge.

At the appellate level, however, patents are reviewed by what amounts to a specialty court.²⁹ Both administrative appeals from the US Patent Office and judicial appeals from geographic district courts are heard before the US Court of Appeals for the Federal Circuit. Federal Circuit judges are not necessarily technically trained – although a few are – but typically have clerks and staff attorneys with technical and patent law training. The Federal Circuit provides a point of distinction for patent practice, with a specialized body of case law that includes precedential opinions on patent interpretation. Patent practitioners are aware of this unusual judicial audience in their drafting practices.

A second result of these institutional procedures is that each patent is situated within, and arises out of, a matrix of related documents: office actions from the PTO, as well as responses, affidavits, declarations, and standardized forms that are submitted to the PTO in the course of patent prosecution. This complex web of supporting documents is referred to as the “file wrapper” (due to the historical practice of filing the documents together). The file wrapper is often examined by courts in subsequent patent litigation, sometimes to help determine the meaning of claims from clues in the discussion between the applicant and the patent examiner, and sometimes to see if the applicant made representations to the Patent Office about the scope of the patent that he should be held to later. Consequently, the practitioner's awareness of audience extends beyond the primary document – patent practitioners are well aware that the supporting or liminal paratext³⁰ found in the file wrapper must not only persuade the examiner of the initial patentability of the claimed invention, but must perhaps be additionally persuasive to future courts.

Here again the patent demonstrates a high degree of intertextuality. We have already said something regarding intertextuality vis-à-vis the prior art. The file

wrapper adds additional layers to this characteristic, as much of the correspondence surrounding the gestating patent will concern its comparison, contrast, and connection to prior art documents. But the documents generated in patent prosecution also constitute their own interdependent genres. Office actions prompted by the application critique the initial document; responses to these missives will both relay their critiques and amend the patent document. Exchanges of correspondence continue sequentially, referencing their antecedents and creating new, amended versions of the application, until the patent is either finally denied or issued. A denial may prompt an appeal to the PTO's internal appeals board, generating a brief, and further denial may prompt even more documents: pleadings, motions, and briefs, discussing and referencing the patent application.

But assuming that patent prosecution cannot and does not generate additional genres outside the expected correspondence between inventor and examiner misses the forest by focusing too closely on a particular grove. Patent prosecution generates a constellation of documents in genres outside the formal record, such as legal memoranda prepared by the inventor's (or invention assignee's) counsel, notes taken by the patent drafter from inventor interviews, formulaic invention disclosures filed by researchers in university tech transfer offices, or in corporate patent departments.

The universe of permissible documents that may be submitted during the examination of a patent is at least somewhat constrained by the formal regulations governing Patent Office procedure. On a very broad definition of genre, these might even include communicative media that are not documentary, such as telephonic or face to face interviews with the examiner, portions of which may be reduced to notation or writings in the patent's prosecution history, but much of which goes unrecorded. Submissions that vary wildly, either in form or substance, from those expected during the examination procedure would likely not be accepted by the examiner.

Many of the rules and requirements regarding the patent document, its submission to the Patent Office, and review of the application are formally published administrative regulations, collected with other Federal regulations in the Code of Federal Regulation (CFR). Central to the examination process is the Manual of Patent Examining Procedure (MPEP), a reference work which compiles the procedural and substantive standards for patent prosecution and is heavily relied upon by patent examiners in conducting their review of patent applications. Thus the ecology of genres generated in an application is tied to a set of "master texts" or "meta-texts" that could be said to govern generation or the drafting of a patent.³¹

THE PRACTITIONER COMMUNITY

Our consideration of the patent document and its institutional situation leads naturally to consideration of the discursive community that produces, receives, and

interprets the text — we have already of necessity made some reference to this in the previous sections. No matter how disputed their other effects, patents have unquestionably fostered a community of professionals that drafts and obtains patents, who play a prominent role in all the debates we have catalogued above.

Indeed, the patent document seems clearly to have engendered and supported a series of communities: a community of federal bureaucrats who examine and certify patent applications, a community of technology transfer officers who specialize in licensing patents, a community of visual artists who specialize in providing drawings for patents, a community of judges who specialize in adjudicating patent disputes, a community of lawyers who specialize in litigating patent disputes, a community of so-called “patent trolls” who specialize in acquiring and licensing portfolios of patents and, of course, a community of scholars who specialize in studying the patent system, to name only a few.

It is clear that historically, textual innovation on the part of the patent drafting community has over time shaped the document into its current form. Elements of the document that were developed as matters of custom or writing craft became formalized into statutorily or administratively required components. For example, the claims that now form the core of the modern patent document were absent from patents in the early 19th century, and were developed as a rhetorical tool by patent practitioners attempting to prevent their clients' patents from being invalidated.³² Efforts by patent practitioners to clearly distinguish novel aspects of the invention led to the section we now know as the claims.

Early 19th-century patents consisted only of what we would now term the disclosure portion of the document.³³ Inventors were expected to describe their invention; the rights associated with the patent grant encompassed the described invention and obvious substitutions or equivalents of its components. The documents did not include a section of formal claims. Then, in response to court decisions invalidating patents that seemed to encompass old technology, patent drafters began to break out as a separate sentence a statement regarding the novel portion of the invention.³⁴ This was not a substitute for the description, nor was it formally required; it was merely a textual device intended to highlight and distinctly state what was novel. Such statements were the forerunners of today's patent claims. The separate sentences became common practice, then became an expected feature of the patent, and then in the mid-19th century became formally required by statute as part of the patent document.³⁵ Patent Office regulations further ensconce past practice by now insisting that the claim consist of a single (usually run-on) sentence.³⁶

Other features of the patent developed similarly. Rankin has traced the development of the drawings encompassed within the patent document, noting the manner in which they reflect the audience and legal purposes of the documents.³⁷ He identifies the differences that have existed for much of the history of the patent system between patent drawings and other types of technical drawings. Patent drawings have tended to adopt a form unique to patents, often prompted by both community

practice and by administrative rules preferring or requiring certain uniform conventions. The perspective, shading, and structure of such drawings reflect the tension between the statutory requirement of technical disclosure and the strategic desire to claim as broadly as possible. Thus the drawings found within the patent document are both defined by and in turn define the legal standard to which they are directed, that of the person having ordinary skill in the art.

As genre studies predicts, the community does not merely generate a communicative action in the form of a published patent. The interaction runs both ways; the document in turn, rather than merely reflecting actions, attitudes, and customs of the community, recursively shapes the community itself. Swanson has documented the manner in which the patent, initially touted in the United States as a relatively loose “do it yourself” application, became increasingly formalized and institutionalized through the late 19th and 20th centuries, as the Patent Office developed procedures for administrative examination, rules for such examination, and a professional cadre of bureaucrats specialized to perform examinations.³⁸ This prompted the rise of patent practitioners, familiar with the increasingly complex expectations of the administrative agency that reviewed applications. This has led to the coalescence of a distinctive modern practitioner community with characteristic, membership, norms, and discourse built around the patent.

This modern community is in part delineated by the formalities of practice before the Patent Office. First, admission to practice before the Patent Office requires special examination regarding the rules and procedures of the agency. At various times in its history, the test has also covered certain aspects of patent drafting. Successful completion of the test entitles the individual to a registration number that identifies them to the Patent Office.

Second, the technical dimension of patent work – interviewing inventors, reading scientific and technological literature, and infusing patents with the resulting knowledge – has occasioned the limitation of practice before the Patent Office to those with a bachelor’s degree or equivalent training in a technical subject.³⁹ Interestingly, a law degree is not required. Consequently, the ranks of individuals practicing before the Patent Office include many who hold a technical degree, but have no legal training. They are designated patent agents.⁴⁰ Patent practitioners having both a law degree and a technical degree are designated patent attorneys. Patent attorneys tend to command larger salaries and greater prominence, as they can practice patent law both before the Patent Office, and before other bodies such as the Federal Courts.⁴¹

The PTO requirement for technical training gives the community of patent lawyers and agents something of a common background, although their training may range from biology to computer science, such as familiarity with mathematics and statistics and with the methodologies of science. This also tends to set patent practitioners apart from other legal practitioners; attorneys with technical training remain relatively scarce.⁴² In the case of patent attorneys, the Patent Office

examination constitutes a credential in addition to the state bar examination that is required in most states to practice law. Attorneys are in general segregated into a discrete professional community by the legal requirement, in most US jurisdictions, for a specialized professional degree as well as the requirement of a mandatory competency examination. The legal community is also distinguished by a distinctive code of professional ethics and governing professional organizations. Legal practice entails its own particular vocabulary. Patent attorneys share these social markers, but further a layer of markers unique to the patent community. Patent attorneys are therefore doubly set apart in the character of their profession.

The distinction of patent practice is to a greater or lesser extent reflected in the work arrangements of members of the “patent bar.” Prior to the late 1980s, Patent Office work was largely confined to small boutique firms that specialized in patent drafting and prosecution. Such firms seldom engaged in patent litigation work, instead handing such work off to larger firms possessing the personnel and resources to support litigation. However, with the renaissance of patent value that followed the creation of the US Court of Appeals for the Federal Circuit, holding and enforcing patents became a more important business strategy, and larger law firms perceived new opportunities for client service and profit.⁴³ Patent lawyers became routinely incorporated into larger, full-service firms, either as part of a new department built from scratch, or by acquisition of a boutique firm that was merged into the larger firm.⁴⁴ Such large firms then faced the practical problems of integrating into their firm culture new members who were often seen (and sometimes fit) stereotypes associated with engineers and other technically-oriented “geeks.”⁴⁵ Over time, patent practitioners have become more integrated into full-service firms, but the voluntary segregation of patent practitioners into separate working groups remains a feature of patent practice in larger law firms.⁴⁶

INDICIA OF GENRE

As our genre-oriented review of patents, their characteristics, their associated community and institutions demonstrates, the patent genre mediates a variety of social actions. The patent application must contain the appropriate textual features to be considered by the Patent Office (references to prior art, problem–solution format, sufficient detail explaining the invention, outlining of the claims) and withstand the review process. In addition, the writer of the patent application must transform his or her ideas, through writing, from abstractions to patentable ideas with descriptive boundaries of ownership.⁴⁷ If the writer/inventor successfully makes this transformation and yields the approval of the reader/examiner, the textual representation becomes an invention. This status as an invention gives the textual representation special legal status in a marketplace regulated by intellectual property laws.

To be fully effective, genres must be flexible and dynamic, capable of modification according to the exigencies of the situation. At the same time, as we have noted, they must be stable enough to capture those aspects of the situation that tend to recur. This tension between stability and change lies at the heart of genre study. Looking at patents, we can discern those rhetorical features that are stable, like intertextuality, and those that are dynamic, like specific methods for establishing novelty and non-obviousness within the patent community. These fit readily into the rubric for examining genre. As Yates and Orlikowski note, the criteria for a given genre are often circumscribed in terms of expected purpose, content, participants, form, time, and place; or in other words by answering the why, what, who, how, when, and where questions that define the communication of the genre.⁴⁸ Drawing on our *précis* of patent practice above, we can make a first estimate of patents' "typified rhetorical action" along these dimensions:

- *Purpose* – a primary feature of genre is the set of socially recognized functions it is intended to accomplish. Patents come with multiple stated purposes. In a very broad sense, patents serve as the codification of legal rights, and so serve to translate innovative concepts into exclusive legal rights. Thus courts reviewing patents speak of them as serving a boundary function; they are intended to serve as notice to the public as to the boundaries of the rights granted, warning them off of certain technical activities that would infringe the patent holder's rights. Concomitantly, the document's boundary description operates as a constraint on the patent owner, to keep more than is defined by the patent text. Courts also speak of patents as vehicles for technical disclosure; in exchange for the grant of rights, the document must be drafted so as to inform technicians in the field of the invention how to make and use the invention.
- *Content* – genre entails particular expectations about the substance of a communication. In the case of patents, much of this is specified by statute or administrative regulation: the patent must describe the invention, it must specify the extent of the technology that will be covered by the legal rights associated with the patent, it must differentiate the claimed invention from the prior art. But we have seen that much of the patent content results from the expectations of its associated discursive community; the patent tends to take a particular argumentative structure, and the language is highly formal, incorporating distinctive legal and technical terminology and characteristic phrasing.
- *Participants* – a genre often entails criteria for the class of persons expected to generate documents within the genre, and to whom those documents are addressed. In the case of patents, this expectation is raised to the level of a formal legal requirement (inscribed in other, related documents, formally enacted and published statutes and federal regulations). Patent applications

can only be submitted by an inventor, or by patent agents or attorneys representing the inventor, who have been admitted to practice before the Patent Office. Amendments or changes to the document may be suggested by the examiner at the Patent Office, who is also the primary initial audience to whom the application is addressed. Judges and technicians in the field of the invention are additional prospective audiences to whom the document is addressed.

- *Form* – genre typically entails expectations as to the format, appropriate medium, structure, and language of constituent documents. Historically, patents have been printed paper publications, and the size of paper for applications, although it varies somewhat between jurisdictions, is specified by regulation. The final publication of patents, like all print material, is gravitating toward digitization, particularly as they are stored in electronic repositories. Applications may increasingly become paperless as well. The layout and subsections of the application and published patent are also standardized, somewhat by convention but somewhat as a matter of formal regulation. We have seen that particular sections of the document, such as the claims and the drawings, have evolved over time in response to the developing conventions of the patent community.
- *Time* – genres often entails particularized temporal expectations. Patents are in fact rife with such chronological and sequential features. The date the patent application is filed, and the date the patent is issued are both displayed prominently on the published document; one or both of the dates can determine the rights associated with the patent. Patents expire 20 years after an application is filed. The patentability of the invention disclosed in the document is determined by comparison with other documents extant as of the date of filing, or before. Under the US system, entitlement to a patent as between multiple claimants has been heavily dependent, and is becoming increasingly dependent, on which claimant files an application first.
- *Place* – genres frequently entail particularized expectations regarding location. In the case of patents, the application must be filed with the Patent Office located in Washington, DC. Additionally, the legal force of a patent is geographically circumscribed; the exclusive rights attached to the patent are enforceable only within the territory of the nation that issues the patent. American patents end at the US border; for patent protection in France, one must obtain an additional French patent.

These features intersect in the midst of a peculiar, perhaps unique discursive community. Specialized lawyers practicing before a subject matter specific agency is of course not a unique phenomenon, although somewhat unusual within the larger corpus of legal practitioners. Federal agencies administer environmental law, or tax law, or food and drug law; specialties in these fields create

communities of practice, some of which may have specialized admissions requirements to practice before the agency. But typically this is not a subject matter requirement; attorneys do not need to possess an accounting degree to argue before the IRS or Tax Court; they need not have biological or ecological credentials to interact with the EPA, nor a business degree to practice before the SEC or courts of bankruptcy. Moreover, the Patent Office and the community that practices before it are distinguished by the degree to which the community and its discourse revolve around the production of a particular document. All of these agencies generate genres of documents, but the examination process for patents is unique in its formalization and devotion of resources to the apparatus for dialog between patent author and patent examiner.

As the patent community is unusual among lawyers, so too is the patent document unusual among legal genres. Certainly other legal documents articulate legal entitlements, including intangible property, by definitional description. Contracts define particular rights as between the parties, sometimes specifying the qualities of particular goods or items to be exchanged. Corporate charters and related documents define the rights of shareholders in particular classes of intangible securities. But we are unaware of any other legal document that articulates rights by means of a technical formulation, nor of one that warrants its own federal agency, employing thousands of technicians, to formulate and certify such descriptions.

We have already mentioned the parallel to the social action associated with real property, and a standard comparative trope in describing the operation of patents is to compare the claims to deeds in real property that define the metes and bounds of land. Deeds are also to some degree intertextual, resting upon a chain of title that enrolls previous ownership documents to support their legitimacy. But this chain is relatively sparse and linear, depending upon a small set or even single type of successive supporting documents. And, unlike the patent, the deed is intended to describe a physical entity whose boundaries are largely coterminous with the rights in the property; at the end of the day the owner can walk the borders of the parcel described. Not so in the case of the patent, where the entitlement is conceptual, and not limited to a particular embodiment of the invention, or for that matter to any physical embodiment of the invention at all. It is rather the range of potential and actual embodiments entailed by the claims that define the valence of the legal entitlement.

Finally, given the technical indicia of the patent genre, it is worth a brief consideration of the features we have noted and their echoes in scientific literature.⁴⁹ Similarities certainly exist; scientific articles also rest upon a network of citations that are recruited to shore up the status of a new article in much the same way. Previous scientific publications are cited both to support the assertions of the new article, but also to differentiate the new article from previous references, as the new addition is only considered legitimate if it can convince the reader of a degree of novelty above what has previously been published. Scientific publication entails a sort of

distributed examination by means of peer review.⁵⁰ And one might say that scientific publication certainly a certain type of “intellectual property” in the form of reputational priority of discovery.⁵¹

Patent law, too is obsessed with establishing priority, either as priority of invention under the past American system, or as priority of application, under the current patent granting system. But unlike scientific papers the patent concerns itself with priority not as an addition to a community’s canon of certified knowledge, but to establish exclusivity to certain types of economic activity. We consider it no accident that the community that has adopted these mechanisms for patents is a technically trained and oriented community. Thus patents and scientific publications may sometimes employ similar means, but to decidedly differing ends.

PATENTS RECONSIDERED

Our review of the patent system demonstrates that patents constitute a distinct genre, not only in the more traditional rhetorical sense of displaying uniquely characteristic documentary features, but in the more modern sense of association with a discrete and identifiable community that has shaped and has been shaped by the document. Genre has been referred to as a type of cultural artifact, a construct that mediates between individual action and broader cultural norms.⁵² This implies that genre is infused with information about its creators, origin, and purposes, as are more tangible artifacts.⁵³

Patents are commonly understood to be imbued with information about technologies, but we argue that they collectively and simultaneously carry information about the community in which they arise. The patent genre is characterized by its interdependence with a particular, even idiosyncratic community of textually initiated “insiders” who are considered qualified to draft and to interpret the document. Much of the character of this initiated community is bound up in their technical training, and, even in the case of a non-technically trained litigator or district court judge, characterized at a minimum by their willingness to adopt the technically based discourse of the community.

Thus, patent meaning and disposition is almost entirely handled by specialists, with only occasional intrusions by non-specialist litigators and trial court judges. Even the latter intrusion is becoming rarer under a recent judicial pilot project in which certain volunteer district court judges will opt in to specialize in patent trials, effectively converting them over time into specialized patent adjudicators. And while lay juries in theory play a role in adjudicating patent disputes, their role in interpreting the patent document has been sharply curtailed by the Supreme Court’s ruling in *Markman v. Westview Instruments*,⁵⁴ which gives claim interpretation as a matter of law into the hands of judges. Indeed, since claim interpretation is styled as a matter of law, the meaning of claims is very frequently determined de

novo on appellate review by the specialized Federal Circuit, rather than left to the generalist trial judges.⁵⁵

We have said that genre analysis considers the particular social action achieved by a discourse community through the characteristic features of a type of document. Given the technical language found in a patent, the technical references incorporated into the patent, and the technical community of examiners and practitioners that generates the document, it might reasonably be supposed that the patent has a technical purpose, such as conveying technical information to the reader. Indeed, as we have noted, the primacy of disclosure of technical information is an oft repeated trope in patent adjudication. The Supreme Court in particular in various patent opinions lauds patents as a vehicle to convey know-how to future innovators.⁵⁶

But genre analysis looks not only to the features of the text; it invites us to follow the action occasioned by a given text, tracing the interactions of authors and readers, to see whose writing or reading is sanctioned, and when, and in what ways. And in the case of patents, it turns out that in practice the documents are generally of very little use to engineers and other technical workers. Key operational information is often left out of the patent specification, and the language in claims is enormously difficult for the uninitiated to parse.⁵⁷ Usefulness to scientists and engineers is very clearly not the point of the patent.⁵⁸ It is black letter patent law that a patent is not a production document,⁵⁹ and is not intended to necessarily be put to practical use. In fact, professionally employed researchers and engineers are often instructed by their supervisors, sometimes on the advice of counsel, not to search the patent literature in the course of their inventive activity, as knowledge of existing patents could trigger legal liability for willful infringement in a later lawsuit.⁶⁰

Admittedly, patent doctrine dictates that the patent specification must instruct the “person having ordinary skill in the art,” or “PHOSITA,” and the claims must be comprehensible to the PHOSITA.⁶¹ But this is a legal standard, not a technical one. The PHOSITA does not correspond to any actual technician; it is rather a legal construct intended to calibrate the level of protection and scope accorded to the patent.⁶² Thus there is no necessary connection between the statutory requirement and technical practicality; disclosure sufficient to allow the imaginary PHOSITA to “make and use” the claimed invention is often insufficient to allow an actual engineer to do so.

In a similar fashion, black letter patent law speaks of the claims as being addressed to those of skill in the art.⁶³ But as we have described, the claims, although expressed in technical language, are structured in a very peculiar syntax and intermixed with a healthy dose of idiosyncratic patent community jargon. Some technical terminology is of course unavoidable if the rights claimed under the patent are mapped onto specific technologies terminology. And, at an operational level, use of standardized terminology that is readily recognized for a particular purpose can be efficient when communicating within a knowledgeable community. But

neither of these considerations explains the peculiar structure and unique terminology of the claims; patent claims are couched in terms that are known and efficiently parsed by patent lawyers, not by engineers, investors, the lay public, or non-patent lawyers.

The central point here is that the patent claims do not describe the invention or the scope of the inventor's discovery. They are rather intended to describe the scope of the inventor's legal rights.⁶⁴ The patent as a document adopts the unusual and perhaps counterintuitive strategy of setting forth legal entitlements by means of technical language. In this sense the patent document is somewhat deceptive, as the uninitiated or casual observer might mistake it for a technical document. But the unusual form and terminology of the claims makes it, if not entirely impossible, at least highly improbable for an outsider to comprehend either the meaning or the legal force of the claims. As a general rule, neither trained lawyers nor trained engineers, however experienced at reading and writing other legal or technical documents, possess the necessary linguistic acumen to navigate claim interpretation, let alone the process of patent drafting and prosecution.⁶⁵

Thus, the casual commentator may wonder why patent claims are not couched in "plain language," or for that matter even in some more standardized technical parlance.⁶⁶ The cynical (and somewhat tautological) answer might be that the peculiarities of the patent document exist in order to perpetuate the community of practice that exists to perpetuate the patent system. No doubt there is an element of truth in viewing the more impenetrable features of the document as self-perpetuating boundary markers. But we believe this is only a partial answer, and there is a good deal more occurring in the interplay between patent text and patent community.

PATENTS AS SOCIAL ACTION

Other textual features that we have described above follow a similar pattern pointing away from technical disclosure. To take only one example of many, we have described the documentary features found on the first introductory page of the patent as infused with a variety of indexing information. If the patent were purely, or even largely, a technical document, one might imagine that such information is provided to facilitate accessibility and use of the patent literature for innovators hoping to build on the collected corpus of technical knowledge. No doubt it is occasionally used for this purpose, but since the document is not especially helpful to the technician, there is no compelling reason that the technician would desire special tools to locate the document.

Instead when we follow the action of those in the patent community who most often engage these features, we find that the indexing information of the introductory page serves a rather different function, indicating an entirely different purpose for the indexing information and for the document as a whole.

First, the indexing information allows patent examiners to locate the patent in prior art searches, to be cited against future patent applications. Despite the wealth of scientific literature that is increasingly accessible via data retrieval technologies, other patents are the prior art most likely to be cited against new patent applications – they are most familiar to the examining corps, and are the literature most likely to be searched and found in the Patent Office. This is as true today, in an age of automated prior art searches, as it was in the age of paper index searches through the examiners' personal accumulation of useful documents collected in "shoe drawers" or "shoes"⁶⁷ – another example of idiosyncratic insider patent jargon.

Additionally, the indexing features allow the document to be more easily located by potential infringers. We have noted that patent cases speak frequently of the "notice function" of patent claims, warning the public away from intruding on the technology covered by the patent. But if the patent is to serve as a "no trespassing" warning, it cannot be hung from a tree or a post at a physical border the way a trespass warning might be posted for land; there must instead be indexical means for potential infringers to locate the documents containing relevant notice. This is not to say that the presence of the indexing information makes locating a potentially relevant patent is simple, and entire business sectors exist in a continual state of anxiety over the possibly undiscovered patent that might impeded their freedom to operate. Such dire possibilities heighten the imperative to rely on patent community initiates who are familiar with the indexing, structure, and most importantly the interpretation of the document.

These uses of the indexing information – to enroll other documents in establishing the patent-worthiness of an inventor's claims, and warning off potential infringers once the claims' patent-worthiness have been established – point to a peculiar typified activity other than the communication of technical know-how. The patent does not describe the aspects of the invention that qualify it for exclusive rights; rather these legal qualifications are *created* in the drafting and interpretation of the patent document. It is tempting, and even customary, to speak of the patentability requirements of subject matter, novelty, non-obviousness, and utility as qualities of the invention, and the statutory requirements of disclosure and definiteness as qualities of the patent description. But it is critical to understand that these distinctions between the "document" and the "invention" are largely illusory; as we have said, unlike other forms of intellectual property, patents exist only in relation to a written text.

Thus, as we have observed, patents are intertextual, relying for validity on a web of references to other acts and documents. Qualities such as non-obviousness and novelty may be formalistically thought of as qualities of the invention, but in fact they exist only with reference to the prior art – that is, with reference to other texts. If such texts cannot be found, or prior knowledge has never been codified into a text, the invention becomes "novel" or "non-obvious" by default. These qualities

therefore are not of any particular physical object but rather arise from the interplay between texts, between the patent application and the body of prior art texts.

Similarly, exclusive rights inhere in the invention as described and claimed in an application that later becomes a published patent. If the invention, or aspects of the invention, cannot be described, it cannot be patented. That which cannot be codified as a text disappears from the patent.⁶⁸ This is perhaps illustrated most starkly in doctrinal and practical debates over “product by process” claims. Generally an invention is claimed with reference to characteristics of the device or process that is the subject of the invention. However, in some cases, it proves impossible to adequately describe the invention itself. Thus a practice arose of using so-called “product-by-process” claims, which claim the product of a particular process, describing in detail that process rather than describing its product. That is to say, such claims attempt to circumvent the impossibility of describing certain invention by claiming them with reference to how they are made, rather than with reference to their inherent features.⁶⁹ Without this definitional workaround, such uncodifiable inventions would be effectively unpatentable.

Consequently we see that the patent is not so much a legal document masquerading as a technical document, as it is in practice a social performative masquerading as a technical document. Commentators on physical property have for some time understood that property is a performative, defining what behaviors are appropriate within defined social conventions.⁷⁰ In the case of real property, certain artifacts are enrolled – maps, surveying equipment, global positioning satellites – in conjunction with geographic features to define how individuals should behave in particular situations that are defined in terms of the enrolled items. Thus in one sense it is not surprising to find that intellectual property constitutes a similar social performative.

But in the case of patents, the legal characteristic of exclusivity arises to an unprecedented degree out of the practices associated with the document. And in particular, those practices are mediated by an expert community that authors, defines, enforces, and executes the social meaning of the patent. Thus Bazerman, in the context of Edison’s 19th-century performance of invention, correctly characterizes patents as “speech acts” with the imperative character of exclusivity.⁷¹ This argument is undoubtedly correct so far as it goes, but constitutes only the beginning of the investigation rather than the end. The document does not carry any imperative in isolation, or simply by virtue of its text. Rather, the distinctive discursive, institutional, and communal features of the patent that we have described intersect to mediate a legally certified textual performative.

The implications of this view of the patent as genre are striking: the social action of patents is not so much about innovation as it is about communal understanding and rhetorical performance. This conclusion differs radically from the assumptions underlying current patent debates, which focus on the economics and technological acumen of firms that produce inventions. But the system we describe here is a

system for *producing certified texts*, rather than a system for *producing innovation*, which may be a different undertaking altogether.

CONCLUSION

Genres are the textual sites at which a discourse community's work is accomplished. We have in this preliminary study begun to sketch the contours of the patent genre and its associated community, showing the interplay between document and discursive community, and the social action that flows from that interplay. In doing so, we hope to have laid the foundation for future exploration of a rich field of rhetorical activity that has compelling currency for social policy. Such further studies might include analysis of additional features of the document, examination of the written interaction between Patent Office and reviewing courts, consideration of the structure of other types of patents besides the basic utility patent we have described here, or detailed investigation the intricate genre ecologies of the file wrapper.

Such topics are worthy of detailed study in their own right, but may also have broader implications. For example, we have mentioned the historical influence that the patent community has had on the development of the patent document and its standards for certification; this interaction is not merely a historical curiosity, but a contemporary reality. In addition to specialty groups within state bar associations, patent practitioners also have their own very active national professional organization, the American Intellectual Property Law Association, which has historically been dominated by patent lawyers. Through such organizations the community has been active in advocacy and lobbying activity, including vocal involvement in the recent package of statutory reforms constituting the America Invents Act. Thus the community of patent drafters has shaped the form of the patent document, not only directly through evolving compositional practice, but by formal lobbying and informal influence over the regulations and statutes governing the patent. Consequently, the evolution of a different text – the patent statute – becomes an important mediating node between the patent community and the shape of the patent document. Similarly, the shape and formation of institutions such as the Patent Office and the Federal Circuit, which certify and interpret patents, have been influenced by the practice community.

In each of these contexts, the community reflected in and shaped by the patent genre displays distinguishing characteristics which may be better understood by considering patents as genre. As the importance of patents and the need for closer examination of patents rises, it is worth investigating the interplay of documents used to establish patents and the methods used for writing and reading them. While we have not attempted to outline any sort of reform or recommendations for the patent system, we do conclude that genre study heightens our understanding of the patent community's norms, epistemology, and ideology; and such information tells

us a good deal about the meaning of patents and the social role that we have assigned to them. Understanding these dimensions of patenting lays a critical foundation for discussions of patent practice and patent reform.

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48. Yates and Orlikowski, "Genres of Organizational Communication," 16–18; JoAnne Yates and Wanda J. Orlikowski, "The PowerPoint Presentation and its Corollaries: How Genres Shape Communicative Action in Organizations," in *Communicative Practices in Workplaces and the Professions: Cultural Perspectives on the Regulation of Discourse and Organizations*, ed. Mark Zachry and Charlotte Thralls (Amityville, NY: Baywood, 2007), 67–91.
49. Charles Bazerman, *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science* (Madison, WI: University of Wisconsin Press, 1988).
50. Cf. Joshua R. Nightingale, "The Researcher Rat's Culture and Ease of Access to the Publication Lever: Implications for the Patentability of University Scientific Research," *West Virginia Law Review*, 113 (2011): 521–54, 541 (drawing a parallel between patent enablement and scientific peer review).
51. Rebecca Eisenberg, "Proprietary Rights and the Norms of Science in Biotechnology Research," *Yale Law Journal*, 97 (1987): 177–231.

52. Carolyn R. Miller, "Rhetorical Community: The Cultural Basis of Genre," in *Genre and the New Rhetoric*, ed. Aviva Freedman and Peter Medway (London: Taylor & Francis, 1994): 67–78, 69.
53. *Ibid.*
54. 517 U.S. 370 (1996).
55. David L. Schwartz, "Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases," *Michigan Law Review*, 107 (2008): 223–84; David L. Schwartz, "Courting Specialization: An Empirical Study of Claim Construction Comparing Patent Litigation Before Federal District Courts and the International Trade Commission," *William & Mary Law Review*, 50 (2009): 1699–1737.
56. For example, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 736 (2002); *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 481 (1974); and *Sinclair & Carroll Co., Inc. v. Interchemical Corp.*, 325 U.S. 327, 331 (1945).
57. *Brenner v. Manson*, 383 U.S. 519, 534 (1966): "[I]n light of the highly developed art of drafting patent claims so that they disclose as little useful information as possible — while broadening the scope of the claim as widely as possible — the argument based upon the virtue of disclosure must be warily evaluated."
58. But see Lisa Larrimore Ouellette, "Do Patents Disclose Useful Information?," *Harvard Journal of Law and Technology*, 25 (2012): 531–593 (arguing that in some instances patents are useful to at least some technicians); Jeanne C. Fromer, "Patent Disclosure," *Iowa Law Review*, 94 (2009): 539–606 (arguing that optimally patents should be a source of technical disclosure); and Sean B. Seymore, "The Teaching Function of Patents," *Notre Dame Law Review*, 85 (2010): 621–69 (the same).
59. *In re Gay*, 309 F.2d 769, 774 (1962).
60. Mark A. Lemley, "The Myth of the Sole Inventor," *Michigan Law Review*, 110 (2012): 709–60, 746; Timothy R. Holbrook, "Possession in Patent Law," *SMU Law Review*, 59 (2006): 123–76, 142–3; Douglas Lichtman, "Substitutes for the Doctrine of Equivalents: A Response to Meurer and Nard," *Georgetown Law Journal*, 93 (2005): 2013–32, 2023, n. 42.
61. 35 U.S.C. §112 (2009).
62. Dan L. Burk and Mark A. Lemley, "Is Patent Law Technology Specific?," *Berkeley Technology Law Journal*, 17 (2002): 1155–1206, 1190.
63. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994) ("Claims speak to those skilled in the art.").
64. Janice Mueller, "A Rich Legacy," *Journal of the Patent and Trademark Office Society*, 81 (1999): 755–65, 758–9 (quoting remarks of Federal Circuit Judge Giles Rich).
65. Seymore, "Teaching Function of Patents," 626–7.
66. For example, Robin Feldman, *The Role of Science in Law* (New York, NY: Oxford University Press 2009), 176–84 (advocating "plain language" patent claims).
67. Kenneth W. Dobyns, *The Patent Office Pony: A History of the Early Patent Office* (Fredericksburg, VA: Sergeant Kirkland's, 1997) 193.
68. Cf. Dan L. Burk, "The Role of Patent Law in Knowledge Codification," *Berkeley Technology Law Journal*, 23 (2008): 1009–34, 1012 (arguing that "many familiar provisions of the patent statute may be viewed as incentives for codification of otherwise tacit knowledge").
69. A detailed discussion of the controversies associated with this claiming format goes beyond the scope of this article, but stated briefly, the format engenders questions as to whether protection extends only to the product of the process, or whether the process itself is swept up into the scope of the claim. *Abbott Labs v. Sandoz*, 566 F.3d 1282 (Fed. Cir. 2009).
70. For example, Marc R. Poirier, "The Virtue of Vagueness in Takings Doctrine," *Cardozo Law Review*, 24 (2002): 93–191, 154.
71. Bazerman, *Edison's Light*, 102–3 (arguing that patents comprise Austinian speech acts); also Charles Bazerman, "Systems of Genre and the Enactment of Social Intentions," in *Genre and the New Rhetoric*, ed. Aviva Freedman and Peter Medway (London: Taylor & Francis, 1994): 79–101, 84–5 (the same).

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