Vanderbilt Journal of Entertainment & Technology Law

Volume 11 Issue 4 Summer 2009

Article 5

2009

Patenting Games: Baker v. Selden Revisited

Shubha Ghosh

Follow this and additional works at: https://scholarship.law.vanderbilt.edu/jetlaw



Part of the Intellectual Property Law Commons

Recommended Citation

Shubha Ghosh, Patenting Games: Baker v. Selden Revisited, 11 Vanderbilt Journal of Entertainment and Technology Law 871 (2021)

Available at: https://scholarship.law.vanderbilt.edu/jetlaw/vol11/iss4/5

This Article is brought to you for free and open access by Scholarship@Vanderbilt Law. It has been accepted for inclusion in Vanderbilt Journal of Entertainment & Technology Law by an authorized editor of Scholarship@Vanderbilt Law. For more information, please contact mark.j.williams@vanderbilt.edu.

Patenting Games: Baker v. Selden Revisited

Shubha Ghosh*

ABSTRACT

Patents are meant to protect the functional aspects of an invention. But patents, particularly patents on processes or methods, can cover non-functional, or expressive, activity. This Article explores this possibility in the context of patents covering games of various types. Patents on games can cover the actual play or use of a game with consequent implications for user-generated content produced by playing games. The Article documents this possibility in the area of fantasy sports and video games and proposes two solutions. The first solution relies on the Federal Circuit's recent decision in In re Bilski. which restricts the patenting of processes that produce social transformations, and explores the implications of this case for patents on games. The second solution draws on the Supreme Court's decision in Baker v. Selden, a precedent associated with restrictions on copyrightable subject matter that purported to establish a boundary between patent and copyright. Consequently, the precedent has implications for patentable subject matter as well as for copyrightable subject matter. The Article concludes that the precedent of Baker v. Selden excludes functional subject matter from copyright protection and non-functional, or expressive, subject matter from patent protection. Therefore, patents on processes should not extend to the non-functional uses of the invention, such as the actual playing of a game by users of a patented game.

Professor of Law and Honorary Fellow, The University of Wisconsin Law School, and Associate Director, Institutes for Studies in Transformational Entrepreneurship, The University of Wisconsin, Madison. J.D, Stanford, 1994; M.A., Ph.D., The University of Michigan, 1988; B.A., Amherst College, 1984. The author would like to thank participants at the 2008 User-Generated Content, Social Networking and Virtual Worlds Roundtable at Vanderbilt University Law School for reactions and comments. Thanks in particular to Scott Boone and Jerry Reichman, who served as constructive commentators, and to Steven Hetcher, who organized the event.

TABLE OF CONTENTS

I.	GAMES, USERS, AND INTELLECTUAL PROPERTY	872
	A. Game Play	873
	B. The Baker Court's Analysis	874
II.	GAMING PATENTS IN ACTION	
	A. Fantasy Sports-Related Case Law	877
	B. Fantasy Games and the First Amendment	880
	C. Patents in Fantasy Sports Games	881
III.	DOCTRINAL DEVELOPMENTS IN PATENTABLE SUBJECT	
	MATTER AND THE RELEVANCE OF BAKER V. SELDEN	887
	A. Patentable Subject Matter	887
	B. The Legacy of Baker v. Selden	
TV	CONCLUSION	897

I. GAMES, USERS, AND INTELLECTUAL PROPERTY

Games defy categorization. They are a source of recreation and a break from the utilitarian and dreary. They are also incredibly functional, serving as therapy, as tools to delve into ourselves, and as means to create community, organization, and camaraderie. Games can be experiments, methods of accumulating data to test models of human behavior, psychology, and epidemiology. Ends in and of themselves as well as means to various ends, games play many roles. They may, perhaps, be the defining paradigm for how we live our lives, structure our societies, and establish our relationships. Moreover, with games intersecting more with virtual worlds and traditional games moving online, the law must be able to reconcile virtual play and performance, as well as preserve the traditional values of play within virtual environments.

With all of these roles that games play, it is not surprising that they also test the boundaries of intellectual property law. This Article is about the relationship between patent and play. It explores those boundaries by addressing the question of patentable subject matter in light of recent Federal Circuit decisions and the U.S. Supreme Court precedent of Baker v. Selden, which dealt with the boundaries between patent and copyright. My particular focus is on the expansion of patents in the field of gaming and their effect on the actual playing of the game, specifically on activity generated by users as opposed to that generated by machines. Patent claims, which

define the legal metes and bounds of the patent owner's right to exclude, are drafted in the field of gaming to cover actual game play, thereby giving the patent owner the right to enjoin the playing of a game. This scope of patent rights contrasts with copyright, which largely does not cover the live performance of a work. The potential strength of patent rights, as compared to copyrights, is the focus of this Article. How can patent rights be limited so that they leave the actual playing of a game—the source of user-generated activity and content—unrestricted by intellectual property law? Recent Federal Circuit case law and the U.S. Supreme Court's reasoning in Baker, I argue, offer the answer to this question.

A. Game Play

Playing a game is a live performance and does not fall under copyrightable subject matter.² The rules of a game, however, are functional and procedural, and therefore could arguably be protected by patent law.³ By freeing games from copyright protection, intellectual property law allows players to participate in games as performances.⁴ If play is turned into commercial property, then the performance of a game becomes an audiovisual work that can be copied, transmitted, and adapted for a fee.⁵ Furthermore, some players become celebrities whose personalities can be marketed,

^{2.} See, e.g., Baltimore Orioles, Inc. v. Major League Baseball Players' Ass'n, 805 F.2d 663 (7th Cir. 1986) (examining copyrightability of the live performance of a baseball game and ownership of a recorded broadcast); Morissey v. Proctor & Gamble Co., 379 F.2d 675, 678 (1st Cir. 1967) (addressing the noncopyrightability of beauty pageant proceedings); Prod. Contractors, Inc. v. WGN Cont'l Broad.Co., 622 F. Supp. 1500, 1503 (N.D. Ill. 1985) (addressing the noncopyrightability of a Christmas parade).

^{3.} See, e.g., Board Game Apparatus, U.S. Patent No. 2,026,082 (filed Aug. 1, 1935) (issued Dec. 1935) (covering rules for Monopoly board game). For an analysis of the patenting of game rules and their relationship to copyright, see Pamela Samuelson, Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection, 85 Tex. L. Rev. 1921, 1943-45 (2007).

^{4.} See, e.g., Julie Cohen, The Place of the User in Copyright Law, 74 FORDHAM L. REV. 347, 372-73 (2005) (analyzing the role of play in users transforming and working with expressive works). For the classic analysis of play and games, see JOHAN HUIZINGA, HOMO LUDENS 76 (1944) (noting that, unlike play, law focuses on stability and fixation, but does include elements of play in certain contexts such as litigation); ROGER CAILLOIS, MAN, PLAY & GAMES 54 (Meyer Brash trans., 1961) (building on Huizinga's proposition by creating a taxonomy of games to include games of competition, games of chance, games of simulation, and games of vertigo).

^{5.} See Baltimore Orioles, Inc., 805 F.2d at 671 (discussing broadcast rights in games).

branded, and franchised.⁶ All these moves permit the commercialization of the underlying free and open play. More strikingly, the intellectual property rights that are created permit the extension of the underlying game into the marketplace, creating an aesthetic heralded by autograph signings, Super Bowl parties, camaraderie at sports bars, and the exhilaration of fans collecting memorabilia. Unprotected play on the field translates into play that can be bought and sold in the marketplace as payment by players reveal and raise the value of the commoditized game.

My argument in this Article is that patenting games changes this dynamic by potentially turning the once-unprotected performance of a game into a commoditized asset that itself can be bought, sold, and restricted. Copyright law protects images that are captured in movies, but leaves unprotected the exhilaration, the adrenaline rush, and the exuberance of the actors and the audience. Patents on games. however, will potentially protect the rush of performance unless policymakers draw a line regarding the enforcement of game patents. My specific concern is that patents on methods of playing may interfere with the performance of games. While live performances are not protected by copyright law, they can be protected by patent law. Consequently, patent ownership of gaming can constrain the rights of game users. As I describe in greater detail in Part II, contemporary patenting strategies in the gaming industry have extended protection to the live play of the game as well as ergonomic gaming technologies. such as the Wii and other interactive devices. In this way, live performances become proprietary under patent law in ways that they could not be under copyright law. This Article presents the current status of patents on games and offers a critique that is intended as a guide for how gaming patents should be enforced.

B. The Baker Court's Analysis

As I demonstrate, the policy issues raised by gaming patents parallel those raised over a hundred years ago in the famous copyright case *Baker v. Selden.*⁷ At issue in that case was the copyrightability of an accounting book, a controversy that allowed the U.S. Supreme Court to pontificate on the boundary between patent and copyright law and between utilitarian and aesthetic works. The analysis of the Court in *Baker* has been integrated into modern copyright law

^{6.} See id. at 675 (discussing right of publicity claims of baseball players); see also C.B.C. Distrib. and Mktg., Inc. v. Major League Baseball Advanced Media, L.P., 505 F.3d 818, 823-24 (8th Cir. 2007) (discussing right of publicity rights of baseball players).

^{7. 101} U.S. 99 (1879).

through Section 102(b) of the Copyright Act of 1976, which excludes methods, systems, and processes from copyright protection.⁸ Paralleling the doctrinal development of Section 102(b) is the evolution of copyrightable subject matter, including functional and utilitarian items such as computer software, databases, statutes, boat hulls, and architectural works. Throughout this evolution, courts have attempted to keep the distinctions made originally in *Baker* alive while recognizing the market realities of the creative process through judicious application of the case's holding.⁹

While copyright excludes processes, methods, and systems from copyrightable subject matter, patent law categorizes them as one type of patentable invention under the broad heading of "process" in Section 101 of the Patent Act.¹⁰ As gaming technology has advanced to include realistic simulations of live gaming performance, patent law has kept pace by extending process patents over various aspects of game play. These gaming process patents are the concern of this Article because they interfere with the live performance of games, traditionally left free from the restrictions of intellectual property law. Unlike copyright law, however, patent law does not exempt live performances from protection. In fact, process patents can include the live. unrecorded enactment of events. 11 Consequently, I propose a limitation on process patents that interfere with game playing. Since Baker imposes a distinction between patent law and copyright law by removing systems, methods, and processes from the domain of copyright law,12 the line drawn by the U.S. Supreme Court in Baker between patent and copyright should be read as a limitation on patent law as well. As I propose in Part III, the Court's concern in Baker was that copyright ownership would interfere with use and practice of a field if copyright law protection extended to methods, processes, and systems. This same concern of interference with use and practice should inform how we understand the scope of patent protection for processes as well.

This concern, within the scope of process patents, has been the recent focus of judicial scrutiny, though not in the context of *Baker*. The Federal Circuit has revitalized the doctrine of patentable subject

^{8. 17} U.S.C. § 102(b) (2000).

^{9.} For a history of *Baker v. Selden*, see Pamela Samuelson, *The Story of Baker v. Selden: Sharpening the Distinction Between Authorship and Invention, in INTELLECTUAL PROPERTY STORIES* 159-93 (Jane C. Ginsburg & Rochelle Cooper Dreyfuss eds., 2005).

^{10. 35} U.S.C. § 101 (2000).

^{11.} See, e.g., Method of Putting, U.S. Patent No. 5,616,089 (filed Mar. 29, 1996) (issued April 1, 1997).

^{12.} See Samuelson, supra note 9.

matter in response to criticisms that patents are too broad and encroach on traditionally non-proprietary domains, such as business methods or regulatory techniques. The court recently addressed the meaning of patentable processes in its In re Bilski decision, which seems to narrow the scope of processes that can be patented. This important doctrinal development, which I discuss in greater detail in Part III, affects the patentability of games and qualifies my reliance on the analysis in Baker as the solution to the problem of game patents intruding on game play. Nonetheless, there are several questions left unanswered by the Federal Circuit's decision in Bilski, and therefore the U.S. Supreme Court's reasoning in Baker is still important in determining the scope of patent rights. Furthermore, the reasoning of Baker may strengthen the reasoning of the Bilski majority and justify even more scrutiny of process patents, particularly in the field of gaming.

The argument in this Article develops these issues as follows: Part II presents several examples of patenting games. Part III analyzes game patents in light of intellectual property theory and policy, particularly the legacy of *Baker*. Part IV carries forth the metaphor of gaming by presenting doctrinal strategies to mitigate some of the concerns I raise regarding game patenting.

II. GAMING PATENTS IN ACTION

Patents on toys and games date back to the nineteenth century in the United States. These patents include the famous Monopoly board game from 1935, 15 as well as its predecessor, the Landlord game from 1904. 16 These patents typically cover the gaming apparatus itself—the board, the dice, and other items that facilitated the game play—as well as the rules of the game. By contrast, European patents in the field of gaming have covered the apparatus, but have excluded the rules of the game. 17 Modern U.S. patents in the gaming area have continued the pattern of covering both apparatus and game rules. 18

^{13.} In re Bilski, 545 F.3d 943, 963 (Fed. Cir. 2008) (stating that transformations of public or private legal obligations not patentable subject matter).

^{14.} *Id*.

^{15.} See Board Game Apparatus, U.S. Patent No. 2,026,082 (filed Aug. 31, 1935) (issued Dec. 1935).

^{16.} U.S. Patent No. 748,626 (filed Mar. 23, 1903) (issued Jan. 5, 1904).

^{17.} See WILLIAM CORNISH & DAVID LLEWELYN, INTELLECTUAL PROPERTY: PATENTS, COPYRIGHT, TRADE MARKS, AND ALLIED RIGHTS 210 (5th ed. 2003) (citing precedent holding that rules of a game are not patentable, whereas equipment for a game is patentable).

^{18.} See discussion infra Part II.C.

There has been one important development: as gaming technology made it possible to simulate real performance of a game, U.S. patents expanded to cover methods for simulating real-time play as well as gaming moves.¹⁹ Patents on performing games potentially preempt live performances of games that they do not typically cover.

In this Part, I will provide some background in regards to these issues, using cases to illustrate. Although the case law is not extensive, the one published opinion that relates to patenting games indicates the potential problems raised by these patents and proposes possible solutions.²⁰ In addition, a seminal decision involving the First Amendment in the context of fantasy games provides a broader perspective on the intersection of intellectual property and gaming, with consequential limitations on establishing property rights on games.²¹

A. Fantasy Sports-Related Case Law

In 2002 the U.S. Court of Appeals for the Federal Circuit decided a case relating to fantasy sports, Fantasy Sports Properties, Inc. v. Sportsline. Com, Inc.²² At issue in the case was a patent on "computerized statistical football games" that was issued in 1990 and assigned to a fantasy sports football company that owned a paid website to facilitate play.²³ The assignee sued Yahoo!, ESPN, and Sportsline for each operating their own computerized games with enhancement software that infringed the 1990 patent.²⁴ The court affirmed a finding of non-infringement against Yahoo! and ESPN, but reversed the finding of non-infringement against Sportsline, the distributor of the enhancement software.²⁵

The first claim of the 1990 patent covered a computer program for setting up a fantasy football league.²⁶ It was based upon an actual football game consisting of the following elements: (1) a means for setting up football franchises, (2) a means for drafting actual football

^{19.} See discussion infra Part II.C.

^{20.} Fantasy Sports Prop., Inc. v. Sportsline.com, Inc., 287 F.3d 1108, 1111-12 (Fed. Cir. 2002) (discussing patent at issue).

^{21.} C.B.C. Distrib. & Mktg., Inc. v. Major League Baseball Advanced Media, L.P., 505 F.3d 818, 820 (8th Cir. 2007).

^{22.} See supra note 20, at 1120.

^{23.} Computerized Statistical Football Game, U.S. Patent No. 4,918,603 (filed Aug. 1, 1988) (issued Apr. 17, 1990).

^{24.} Fantasy Sports Prop., 287 F.3d at 1111.

^{25.} Id

^{26.} Computerized Statistical Football Game, U.S. Patent No. 4,918,603 (filed Aug. 1, 1988) (issued Apr. 17, 1990).

players, (3) a means for selecting starting players, (4) a means for trading football players, and (5) a means for scoring performances of players based upon actual game scores so that franchisees can calculate a composite score automatically.²⁷ The first claim also states that the scores in the last element are for quarterbacks, running backs, and pass receivers in one group, kickers in another, and that these players receive bonus points.²⁸ The central legal issue in Fantasy Sports was the interpretation of the "bonus points."

According to the prosecution history on which the district and appellate courts relied, the patentee added the feature of bonus points in order to overcome a patent rejection based on a prior art publication.²⁹ This publication described a game in which additional points were added for distance scoring and total yardage.³⁰ The court construed the limitation to mean any "bonus points in addition to normal points for scoring play," and found that the patentee had disclaimed any additional points added for distance scoring and total Based on this construction, Yahoo! was not infringing vardage.31 because its game did not allow for additional points except for those based on total vardage.³² Similarly, ESPN's game did not allow bonus points at all. The Federal Circuit affirmed both of these rulings.³³ But the court reversed the district court's findings that Sportsline's game was not infringing; while its software allowed users to customize the game to include bonus points, the game itself as distributed did not include the bonus points as a limitation on the patent.³⁴ Therefore, there were questions of fact as to whether Sportsline's game was infringing.

While the gaming patent at issue in Fantasy Sports was not infringed upon, the broader context of the case illustrates problems with patents on games more generally. Fantasy sports games are a large and pervasive activity in the United States and Canada with over 29.9 million participants.³⁵ The games are well-organized with a national organization that governs play and establishes standards for

^{27.} Id.

^{28.} Id.

^{29.} Fantasy Sports Prop., 287 F.3d at 1112.

^{30.} Id. at 1115.

^{31.} Id.

^{32.} Id. at 1116.

^{33.} Id.

^{34.} Id. at 1117.

^{35.} Fantasy Sports Industry Grows to a \$800 Million Industry With 29.9 Million Players, EMEDIAWIRE, July 10, 2008, http://www.emediawire.com/releases/2008/7/emw1084994.htm.

the leagues.³⁶ Furthermore, a lot of fantasy sports play is done privately or in associations that may be outside the purview of private or governmental regulation. Given the wide range of involvement in fantasy sports, the potential broad scope of patents on fantasy sports may interfere with the rights of users. Admittedly, the patent at issue here, like several similar patents, covers only computer-based fantasy sports.³⁷ This limitation would exclude much of the fantasy league play outside the reach of the patent—the play that occurs through paper or other non-electronic media. However, if the organizer implements play through a computer by, for example, using a website or even a spreadsheet, there is a question of whether the game is computerized and therefore infringing. Hence, the ambiguity of the patent's scope may have troubling implications for actual play.

The court's approach in Fantasy Sports illustrates one way to deal with the potential reach of the patent. By strict construction of "bonus points," combined with judicious application of prosecution history to narrow its interpretation, the court narrowed the scope of the patent to prevent a broad reach for infringement claims.³⁸ At the same time, however, the Federal Circuit's reversal opened the door for a wide range of claims based on how the game's actual players define bonus points. The Federal Circuit's decision found a matter of factual dispute in Sportsline's argument that the game cannot programmed by users to allow the bonus points that would infringe Fantasy Sports' claims.³⁹ The court stated that this limitation on users was not clear from the record and that there was the possibility that the software would in fact allow users to modify the game in a way that would infringe.⁴⁰ As a result, the case illustrates how closely courts might construe design decisions in patents involving fantasy sports, especially when the games are interactive and can be modified by users, a practice that is becoming more popular across game genres. For example, a Playstation 3 game released in 2008, Little Big Planet, features user-created game levels that can be published and shared among players.⁴¹ Moreover, the intellectual property issues

^{36.} See Fantasy Sports Association, http://www.fantasysportsassociation.org/ (last visited Mar. 19, 2009); Fantasy Sports Trade Association, http://www.fsta.org/ (last visited Mar. 19, 2009).

^{37.} See, e.g., Interactive Fantasy Lottery, U.S. Patent No. 6,656,042 (filed Mar. 26, 2001) (issued Dec. 2, 2003).

^{38.} See supra note 20, at 1116.

^{39.} Fantasy Sports Prop., 287 F.3d at 1119.

^{40.} Id

^{41.} Cyndy Aleo-Carreira, Is Sony Censoring Little Big Planet's User-Generated Content?, INDUSTRY STANDARD, Nov. 18, 2008, http://www.thestandard.com/news

involved with these kinds of creations are already a subject of discourse, particularly in the context of the virtual world Second Life, which is created nearly entirely by the players.⁴²

B. Fantasy Games and the First Amendment

treatment of simulated, or fantasy, games under intellectual property law was also at issue in the Eighth Circuit case C.B.C. Distribution and Marketing Inc. v. Major League Baseball, which illustrated the reach of the First Amendment to protect creators and distributors of fantasy sports.43 The case originated from a licensing agreement between CBC and Major League Baseball (the League) that permitted CBC to run several fantasy sports games on its web site.44 After a few years, the League and CBC terminated their arrangement, and the license was given to someone else who would run the games under the trademarks and authorization of the League. 45 However, CBC continued to use player data and names in its games. 46 The Major League Baseball Players Association brought a claim against CBC for violation of the players' right of publicity, and the League intervened, alleging that CBC was violating a "no-use and no-contest provision" of its original contract. 47 The district court ruled in favor of CBC, holding, first, that its First Amendment rights to use sports statistics and names trumped the publicity rights of the Second, the district court found that the contract was players.48 preempted by the Constitution, which favors the use of ideas not protected by intellectual property laws.⁴⁹ The Eighth Circuit affirmed both rulings, following the district court on the First Amendment issue but taking a different course with respect to the contract On the contract claims, the appellate court adopted a claims.50 technical contract argument, finding that the League was in breach of

^{/2008/11/18/}sony-censoring-little-big-planets-user-generated-content (noting that there are already an estimated 84,000 user-created levels).

Greg Lastowka, User-Created Content and Virtual Worlds, 10 VAND. J. ENT. & TECH. L. 893, 910 (2008); see also, e.g., Cory Ondrejka, Escaping the Gilded Cage: User-Created Content and Building the Metaverse, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 158-79 (Jack M. Balkin & Beth Simon Noveck eds., 2006).

C.B.C. Distrib. & Mktg., Inc. v. Major League Baseball Advanced Media, L.P., 505 F.3d 818 (8th Cir. 2007).

Id. at 820-21. 44.

Id. at 821. 45.

^{46.} Id.

Id.47.

Id. 48.

Id.

^{49.}

Id. at 824. 50.

the contract, and therefore CBC was excused from performance on the contract.⁵¹ One judge dissented on the contract point (while agreeing with the First Amendment analysis).⁵²

Although it does not address a question of patent law, the decision's broad application to First Amendment law and principles as well as its reference to constitutional intellectual property issues has implications for the intellectual property protection of fantasy sports more broadly. There is an open question of whether the First Amendment might protect various aspects of game play: whether the games involve the invocation of ideas associated with the players such as their names or statistics, and whether they involve other expressive dimensions of the game.⁵³ Furthermore, the court's strict construction of the contract in *C.B.C. Distribution*, much like the strict construction of the patent at issue in *Fantasy Sports*,⁵⁴ illustrates how other courts might view intellectual property claims that attempt to enjoin the playing of these games. Even if these cases reflect the idiosyncrasies of the particular courts that decided them, the arguments in these opinions are useful in predicting the outcome of future cases.

C. Patents in Fantasy Sports Games

Two cases do not indicate a trend, and do not provide enough material to build a doctrinal cathedral. Nonetheless, it is useful to predict how these decisions might work in other cases involving patents on fantasy sports games. To develop this point more fully, consider the twenty-two patents at issue in *Fantasy Sports*. These citing patents are listed in the following table.

^{51.} Id. at 825.

^{52.} Id. at 826.

^{53.} For a discussion of whether the First Amendment protects functional speech that is potentially the subject of patent protection, see Dan L. Burk, *Patenting Speech*, 79 TEX. L. REV. 99, 150-51 (2000) (exploring the potential First Amendment limits on patented protection of digital expression, and by extension other functional speech, through a fair use doctrine).

^{54.} See 287 F.3d 1108, 1117-18 (Fed. Cir. 2002).

A SAMPLE OF PATENTS COVERING GAMES (1991-2008)				
TYP	Title	DATE ISSUED (NUMBER)		
Actual play	Seasonal game	Feb. 25, 1992 (5090735)		
Actual play	Systems and methods for providing multiple user support for shared user equipment in a fantasy sports contest application	Feb. 21, 2006 (7001279)		
Actual play	Method of conducting a fantasy sports game	Dec. 30, 2003 (6669565)		
Computer	Interactive game system and method	May 28, 1991 (5018736)		
Computer	Interactive contest system	Nov. 23, 1993 (5263723)		
Computer	Electronic football game	June 30, 1998 5772512)		
Computer	Method and system for automatic running of tournaments	Jan. 5, 1999 (5855516)		
Computer	Interactive contest system	Oct. 26, 1999 (5971854)		
Computer	Electronic game system, method of managing and regulating said system	Sept. 12, 2000 (6117011)		
Computer	Method and apparatus for gaming in a series of sessions	Dec. 26, 2000 (6165071)		
Computer	Device, method and storage medium for displaying penalty kick match cursors in a video soccer game	Aug. 28, 2001 (6280323)		

Computer	Simulated baseball game	Sept. 18, 2001 (6292706)
Computer	Fantasy Internet sports game	Apr. 16, 2002 (6371855)
Computer	Method and apparatus for interactive real time distributed gaming	Jan. 11, 2005 (6840861)
Computer	Gaming award techniques	Oct. 10, 2006 (7118479)
Computer	Interactive professional wrestling fantasy contest system	Dec. 4, 2007 (7303472)
Depicting real play	Method and apparatus for broadcasting live events to another location and producing a computer simulation of the events at that location	Mar. 20, 2001 (6204862)
Depicting real play	Representing sub-events with physical exertion actions	May 13, 2008 (7373587)
Wagering	Data analysis system	Aug. 25, 1998 (5797796)
Wagering	System and method for predicting the outcome of college football games	Aug. 29, 2000 (6112128)
Wagering	Interactive fantasy lottery	Dec. 2, 2003 (6656042)
Wagering	Systems and methods for facilitating a wager	Apr. 29, 2008 (7364509)

Spanning the period from 1991 to 2008, these patents cover a range of inventions in the area of gaming. Thirteen of these patents describe the use of a computer or some physical medium for interaction among players or for distributed play across a computer network.⁵⁵ These patents are potentially troubling to the extent that

^{55.} See supra Table: A Sample of Patents Covering Games (1991-2008) (listing patents in the table with "computer" parenthetical in first column entry).

they are interpreted as enjoining user modifications or enhancements that simulate real play, as in *Fantasy Sports*.

A computerized version of a non-virtual game, such as football or baseball, perhaps does not interfere with the real playing of these games. However, there is a concern that as more play becomes virtual, these patents might interfere with the values of game play, such as user engagement and interactivity.⁵⁶ For those who emphasize the negative effects of virtual play—mainly that it impinges on "real" social interactions⁵⁷—such patents might have the positive effect of raising the costs of virtual play and thereby promoting real play. Perhaps this shift would be beneficial, but there is concern about whether patent law should be used to further promote what some consider "good" types of play.

Of greater concern are the patents that cover in-person social interactions. Four of the twenty-two citing patents cover some form of wagering, such as the patent on "Systems and Methods for Facilitating a Wager." These patents potentially affect real-world gambling activity that accompanies game playing. For example, the last of these four patents covers the use of a computer to input and assess wagers. While the computer medium might seem like a limitation, the claims could potentially cover situations where a real-world bookie stores and pays bets using a Blackberry or a desktop computer. Another of these four patents, "System and Method for Predicting the Outcome of College Football Games," is not limited to computers. Its first claim reads:

A system for predicting the outcome of college football games comprising, in combination:

means for entering a season game number for two competing college football teams:

means for entering a number of returning starting players for each of the two competing college football teams;

^{56.} See, e.g., ROBERT D. PUTNAM, BOWLING ALONE: THE COLLAPSE AND REVIVAL OF AMERICAN COMMUNITY 177-78 (2000) (expressing concern that interactions on the Internet would lead to balkanization and social isolation).

^{57.} See, e.g., Albert C. Lin, Virtual Consumption: A Second Life for Earth?, 2008 BYU L. REV. 47, 107-09 (2008) (noting a potential dark side to virtual relationships that may counter the new types of social interactions that virtual worlds permit); Alexandra Alter, Is This Man Cheating on His Wife?, WALL St. J., Aug. 10, 2007, at W1 (noting possible negative effects of virtual relationships on non-virtual relationships).

^{58.} Systems & Methods for Facilitating a Wager, U.S. Patent No. 7,364,509 (filed May 24, 2004) (issued Apr. 29, 2008).

^{59.} Id.

means for predicting a winner of a college football game based on the number of returning starting players for each of the two competing college football teams. 60

"[M]eans-plus-function claiming" potentially covers prediction performed purely mentally, without the use of any physical medium.⁶¹ Means-plus-function claims are construed in terms of means that are disclosed in the specifications and equivalents. The specifications of this patent, however, do not disclose a computer or some physical medium as the preferred embodiment.⁶²

In addition, the remaining two of the wagering patents do not limit embodiments to computers or physical media. The patent entitled "Data analysis system" claims methods of predicting future play based upon past performance and, on its face, would also cover mental predictions. 63 Similarly, "Interactive fantasy lottery" covers an interactive gambling situation among many players and would cover computer-assisted play as well as live play.⁶⁴ While some may find patents promoting gambling morally reprehensible, my concern is a different one. Patents that interfere with real game play should not be permitted. By granting the patentee the right to exclude others from using the invention, the government is permitting individuals to potentially enjoin the playing of a game. This potential interference creates a conflict with an expressive activity that both goes outside the goals of the patent system and impinges on non-intellectual property values.

There are two other categories of inventions covered by these twenty-two patents that further illustrate my concerns. One covers the real playing of a game. Another is the category of patents that cover the broadcast of a game through simulation. This category includes two patents: (1) "Method and apparatus for broadcasting live events to another location and producing a computer simulation of the events at that location," and (2) "Representing sub-events with physical exertion actions." These patents cover the simulation of play in virtual environments by translating real-world play into computerized media. Although these patents could not be used to

^{60.} System & Method for Predicting the Outcome of College Football Games, U.S. Patent No. 6,112,128 (filed June 8, 1999) (issued Aug. 29, 2000).

^{61.} *Id*.

^{62.} See id.

^{63.} See Data Analysis System, U.S. Patent No. 5,797,796 (filed Oct. 28, 1996) (issued Aug. 25, 1998).

^{64.} See Interactive Fantasy Lottery, U.S. Patent No. 6,656,042 (filed Mar. 26, 2001) (issued Dec. 2, 2003).

^{65.} U.S. Patent No. 6,204,862 (filed June 9, 1997); U.S. Patent No. 7,373,587 (filed Apr. 13, 2000).

enjoin actual play since they cover the simulation, the inventions describe ways to capture real play in a way that can be commoditized.

The remaining three of the twenty-two citing patents do cover real play. The 1992 patent entitled "Seasonal Game" covers the methods of playing fantasy versions of the playoffs of major sporting leagues. Once again, the invention is not limited to any physical embodiment and therefore could cover a wide range of simulated gaming that can be embodied through different types of machines and gaming devices. Finally, the patents entitled "Method of conducting a fantasy sports game" and "Systems and methods for providing multiple user support for shared user equipment in a fantasy sports application" each cover methods for conducting fantasy sports games and therefore could potentially enjoin actual gaming activity.

My concern, however, is with the use of patents in a way that interferes with real play. The argument is that playing itself is an expressive act, one that captures human autonomy and social interaction. Copyright excludes live performances, such as actual game play, from its domain.68 Patents, however, come very close to covering live performances. The two cases discussed in this Part illustrate the treatment of play under intellectual property law.⁶⁹ The Federal Circuit's decision in Fantasy Sports illustrates how strictly gaming patents can be construed, as well as how such patents can be used to limit user modifications of a game, which itself is part of the play. 70 The Eighth Circuit's decision, on the other hand, demonstrates how expressive values can be used as a limitation on intellectual property rights.⁷¹ The patents discussed in this Part, admittedly a small sample from a large population, show the scope of patenting activity and the potential pitfalls for users. In Part III, I analyze how patent law, judiciously applied, can limit the effects of patents on games and protect players.

^{66.} U.S. Patent No. 5,090,735 (filed Apr. 26, 1991).

^{67.} U.S. Patent No. 6,669,565 (filed Feb. 5, 2001); U.S. Patent No. 7,001,279 (filed Aug. 20, 2002).

^{68.} See, e.g., Baltimore Orioles, Inc. v. Major League Baseball Players' Ass'n, 805 F.2d 663 (7th Cir. 1986) (examining copyrightability of the live performance of a baseball game and ownership of a recorded broadcast); Morissey v. Proctor & Gamble Co., 379 F.2d 675, 678 (1st Cir. 1967) (addressing the noncopyrightability of beauty pageant proceedings); Prod. Contractors, Inc. v. WGN Cont'l Broad.Co., 622 F. Supp. 1500, 1503 (N.D. Ill. 1985) (addressing the noncopyrightability of a Christmas parade).

^{69.} C.B.C. Distrib. & Mktg., Inc. v. Major League Baseball Advanced Media, L.P., 505 F.3d 818 (8th Cir. 2007); Fantasy Sports Prop., Inc. v. Sportsline.com, Inc., 287 F.3d 1108 (Fed. Cir. 2002).

^{70.} See Fantasy Sports Prop., Inc., 287 F.3d at 1117-19.

^{71.} See supra text accompanying notes 50-51.

III. DOCTRINAL DEVELOPMENTS IN PATENTABLE SUBJECT MATTER AND THE RELEVANCE OF BAKER V. SELDEN⁷²

As mentioned earlier, copyright law does not cover live performance, such as the actual play of a game. While this result is established in the fixation requirement under copyright law,73 the principle represents, in part, the freedom to engage in activity outside the purview of the law. For example, copyright law also excludes live performances from the derivative work or reproduction right held by the copyright owner. The recording of a live performance is protected by copyright, but if a group of enthusiastic and imaginative people watch or listen to the recording and act out the performance captured in the recording, that act is not copyright infringement (unless such performance is deemed to be public or constitute a derivative work).74 In other words, play can occur without copyright infringement, and the expressive values of play can be enjoyed without legal interference.

Patent law should also respect such personal freedom and not enjoin users from engaging in play. But as I maintained in the previous Part, the patenting of various dimensions of gaming can potentially impinge on the values of play.75 In the next section, I will analyze two legal principles that can limit patent rights on games: patentable subject matter and the aesthetics-function distinction.

A. Patentable Subject Matter

Although in desuetude for almost two decades as a limitation on patentability, the doctrine of patentable subject matter has recently made a resurgence in the courts, with the U.S. Supreme Court nearly reviving the doctrine in 2006 and the Federal Circuit giving the doctrine more bite in several 2007 decisions.⁷⁶ The new contours of patentable subject matter can place some limitations on patenting games to protect users.

^{72.} 101 U.S. 99 (1879).

^{73.} See, e.g., United States v. Moghadam, 175 F.3d 1269, 1273-74 (11th Cir. 1999) (discussing implications of the fixation requirement for live performances).

See, e.g., Lil' Joe Wein Music, Inc. v. Jackson, No. 06-20079-CIV, 2006 WL 5428227, at * 6 (S.D. Fla. 2006) (finding that chanting of a copyrighted rap song was not copyright infringement), aff'd, 245 F. App'x 873 (11th Cir. 2007).

See supra text accompanying notes 68-71. 75.

See Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124 (2006) (per curiam); In re Comiskey, 554 F.3d 967 (Fed. Cir. 2009); In re Bilski, 545 F.3d 943 (Fed. Cir. 2008); In re Nuijten, 500 F.3d 1346 (Fed. Cir. 2007).

The patentable subject matter doctrine excludes certain categories of invention as undeserving of patenting because the categories are contrary to the goals of the patent system.⁷⁷ Some academics and policymakers have proposed immoral subject matter, or other potentially harmful subject matter, as being outside the patent system's structure of rewards and incentives.⁷⁸ As a practical matter, however, agencies and courts have found it difficult to define these categories with any precision.⁷⁹ For example, exclusion of software proved difficult as computer programs became integrated into hardware and became impossible to distinguish from other machines that had been traditionally protected by patents.⁸⁰ Furthermore, the legislative history, endorsed by the U.S. Supreme Court, extended patentable subject matter to "anything manmade under the Sun," a poetic way of saying "everything."⁸¹

Nonetheless, the Federal Circuit, associated with an expansive notion of patentable subject matter in noteworthy cases such as *State Street v. Signature Financial*, 82 has recently struggled to find some limitations on what can be excluded from patenting as a threshold matter. This watershed holding was a response to concerns that patentable subject matter had expanded too broadly to include questionable items that have contours too difficult to draw within definable and meaningful patent scope. 83 One tactic that the Federal Circuit has taken is to read the Patent Act's definition of "patent subject" narrowly, which under Section 101 includes "process, machine, manufacture, or composition of matter," or "improvement thereof." In *In re Nuijten*, the court used this language to hold that an electronic signal was not patentable subject matter, as it was not a process, machine, manufacture, or composition of matter. 85

Nonetheless, a strict construction of the statute could potentially narrow the scope of patentable subject matter. In a

^{77.} See In re Bilski, 545 F.3d at 951 (setting forth statutory categories of patent-eligible subject matter).

^{78.} See, e.g., Margo A. Bagley, Patent First, Ask Questions Later: Morality and Biotechnology in Patent Law, 45 Wm. & MARY L. REV. 469 (2003).

^{79.} See, e.g., In re Bilski, 545 F.3d at 959-61 (describing problems with adopting a categorical approach for non-patentable subject matter).

^{80.} See, e.g., Diamond v. Diehr, 450 U.S. 175, 191-92 (1981).

^{81.} See, e.g., Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980) (quoting S. REP. NO. 82-1979, at 5 (1952); H.R. REP. NO. 82-1923, at 6 (1952)).

^{82.} See State St. Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998).

^{83.} *Id.* at 1373 (discussing patentable subject matter as an issue of statutory limitations on scope of patenting).

^{84. 35} U.S.C. § 101 (2000).

^{85. 500} F.3d 1346 (Fed. Cir. 2007).

companion case to In re Nuiten, the Federal Circuit narrowed patentable subject matter through a judicially created doctrine known as the "mental steps doctrine," which limits patentable subject matter to inventions that have a physical embodiment.86 Processes, for example, that are purely mental would be excluded from the reach of the patent law. The Federal Circuit's decision In re Comiskey illustrates this doctrine in action.87 Comiskey sought to patent a The invention described purely human method of arbitration.88 interaction and did not invoke a physical embodiment (although the patentee unsuccessfully argued that the use of pencil and paper constituted a physical embodiment of the method).89 The Federal Circuit upheld the United States Patent and Trademark Office's (USPTO) rejection of the application under the mental steps doctrine. 90 While this doctrine appears to be a judicious way to limit patenting to physical embodiments, the rule could potentially artificially force inventors to create physical embodiments, such as computer or machine-based applications that may not truly be inventive, as a way to sidestep the rule. Nonetheless, In re Comiskey shows that the Federal Circuit is concerned with limiting the scope of patentable subject matter.

This focus was reinforced by the Federal Circuit granting en banc review of the USPTO's rejection of an application for a method of hedging financial risk by Bilski.⁹¹ On October 30, 2008, the Federal Circuit issued a groundbreaking opinion affirming the rejection of the claims.⁹² The court, relying extensively on U.S. Supreme Court precedent in the area of software patents,⁹³ adopted a "machine-ortransformation" test for determining when a claimed process is patentable subject matter.⁹⁴ Under this test, a process is patentable subject matter if it is either implemented in a machine or is a physical transformation.⁹⁵ In applying this test to the claims at issue in *Bilski*, the court found that there was no machine implementation and

^{86.} See Gottschalk v. Benson, 409 U.S. 63, 67 (1972).

^{87.} See In re Comiskey, 554 F.3d 967 (Fed. Cir. 2009).

^{88.} Id. at 970.

^{89.} Id. at 972-73.

^{90.} Id. at 980.

^{91.} In re Bilski, 545 F.3d 943 (Fed. Cir. 2008).

^{92.} Id.

^{93.} Id. at 952.

^{94.} *Id.* at 956.

^{95.} *Id.* at 961-62.

concluded that the mere shifting of legal obligations or economic risk does not constitute a physical transformation.⁹⁶

The Federal Circuit's articulation of when a transformation does not constitute patentable subject matter is revealing. The court rejected the patentability of Bilski's method of hedging the risk of commodity prices because the method was not machine-implemented and because the method did

not transform any article to a different state or thing. Purported transformations or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances. Applicants' process at most incorporates only such ineligible transformations. 97

This newly articulated test has implications for non-machineimplemented gaming patents that apply to mental processes, such as Such methods do not entail a physical transformation. Instead, they constitute the type of abstract transformations of business relationships that are not patent-eligible. The decision in Bilski reduces patent-eligible processes to those that entail a physical transformation, one that is captured through some physical medium or that occurs through a machine.98 Read this way, gaming patents would be available for the tools of gaming (gaming apparatus such as boards or dice, for example, or their modern electronic equivalent) or to the rules of the game that are embodied in a physical media. The legal limitation parallels the fixation requirement of copyright law, which limits copyrightable subject matter to that which is recorded in a tangible medium. 99 Consequently, live performances are excluded from patent protection much like they are excluded from copyright protection.

The Federal Circuit's decision in *Bilski* signals some likelihood that the U.S. Supreme Court will grant review of the Federal Circuit's decision. This prediction is based on the fact that the Court granted review in the case of *Laboratory Corp. v Metabolite* in 2006. At issue in *Metabolite* was a patent on a diagnostic tool that could, as one

^{96.} Id. at 963-64.

^{97.} Id. at 963.

^{98.} *Id.* at 962-63 (analyzing the contours of transformation and adopting analogies to physical transformations).

^{99.} See, e.g., Baltimore Orioles, Inc. v. Major League Baseball Players' Ass'n, 805 F.2d 663 (7th Cir. 1986); Morissey v. Proctor & Gamble Co., 379 F.2d 675, 678 (1st Cir. 1967); Prod. Contractors, Inc. v. WGN Cont'l Broad.Co., 622 F. Supp. 1500, 1503 (N.D. Ill. 1985).

^{100.} See Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124 (2006) (per curiam).

of its elements, correlate deficiencies of certain enzymes with a vitamin B-12 deficiency.¹⁰¹ Academics and practitioners anticipated that the Court would make a pronouncement on the scope of patentable subject matter and the mental steps doctrine.¹⁰² Instead, the Court concluded that certiorari had been improvidently granted, letting stand the lower court's ruling on infringement.¹⁰³ Justice Breyer, joined by Justices Stevens and Souter, authored a strong dissent, arguing that certiorari had been proper and that the patent was invalid as unpatentable subject matter.¹⁰⁴ Specifically, Justice Breyer was concerned with a patent that covered mental activity, namely establishing a mathematical correlation.¹⁰⁵ The strength of Justice Breyer's dissent and the additional scrutiny by the Federal Circuit in *Bilski* point to a good chance that the U.S. Supreme Court will rule on the question of patentable subject matter soon.

What can we glean about patentable subject matter as a possible limitation on gaming patents? To the extent that the mental steps doctrine has been revived, one might predict that patents on predictive activity, such as the wagering patents described above, may be outside the scope of patentable subject matter. Wagering is arguably a mental activity, and patents that cover wagering not embodied in a computer or other physical medium should, and will likely, be invalidated like the arbitration patent in Comiskey. 106 Furthermore, method patents that cover the playing of a game should also be invalidated to the extent that playing is seen as a mental This last premise, however, is the difficult linchpin of the argument against patentable subject matter. The playing of a game is not a purely mental activity. It involves physical motion as well as thought. Consequently, computer embodiments of play would likely pass muster as patentable subject matter. However, patents on what I call "actual play" may be suspect as not falling under statutory subject matter. The Federal Circuit's decision against Nuijten might support such a holding on the grounds that physical play is not a process, machine, manufacture, or composition of matter. But that conclusion would require a strict construction of the statute.

^{101.} Id. at 125

^{102.} See, e.g., Jeffrey Kuhn, Patentable Subject Matter Matters: New Uses For An Old Doctrine, 22 BERKELEY TECH. L.J. 89, 90-91 (2007) (providing background on the Lab. Corp. dispute).

^{103.} See Lab. Corp. of Am. Holdings, 548 U.S. at 127.

^{104.} Id. at 128.

^{105.} Id.

^{106.} See In re Comiskey, 554 F.3d 967 (Fed. Cir. 2009).

Patentable subject matter is an evolving doctrine, and definitive conclusions of its effects on patenting games will depend on the meaning of transformation, as articulated in the recent Federal Circuit decision in $Bilski.^{107}$ Nonetheless, we can see that there is some limitation on patents in the gaming area and should develop arguments that will build on the incipient case law.

B. The Legacy of Baker v. Selden 108

The Federal Circuit's decision in *Bilski* arguably resolves the concerns over gaming patents presented in this Article. But those seeking even stronger prophylactic measures, or a foundation for the limiting principles articulated in Bilksi, a U.S. Supreme Court decision from 1880 may serve as an important limitation on patent rights. 109 Baker v. Selden involved a copyright, owned by Selden, on a book that presented a method for conducting accounting. 110 The book contained instructions on accounting as well as ledgers and forms with which to practice the art. 111 Baker had distributed a copy of the book that included the ledgers and forms.¹¹² While the lower courts found against Baker, the U.S. Supreme Court held that copyright protection did not extend to the ledgers and forms depicted in Selden's book. 113 At the narrowest of levels, Baker has been read to mean that copyright does not extend to blank forms. 114 But the decision sets out fundamental policies in copyright law, policies that are also relevant in patent law.

The Court presented an important distinction between copyright and patent law. Copyright, the Court states, protects expressive elements of a work, while patent law protects functional or useful elements. This distinction goes beyond subject matter like software. Baker stands for the proposition that there is a difference between the subject matter of copyright and that of patent, and that this difference, very broadly, rests on the difference between

^{107.} See In re Bilski, 545 F.3d 943 (Fed. Cir. 2008).

^{108. 101} U.S. 99 (1879).

^{109.} Id.

^{110.} Id. at 99-100.

^{111.} Id. at 100.

^{112.} Id.

^{113.} Id. at 106.

^{114.} See, e.g., Am. Dental Ass'n v. Delta Dental Plan Ass'n, 126 F.3d 977, 981 (7th Cir. 1997).

^{115.} See Baker, 101 U.S. at 102-03.

aesthetics and functionality.¹¹⁶ Copyright law, as I show below, has used this distinction to remove certain types of functional expression from the domain of copyright protection. *Baker* excludes certain types of aesthetic expression from the domain of patent protection. This issue will be addressed first by showing where *Baker* stands under modern copyright law and, second, by showing the implications for patent law.

The holding of *Baker* has been codified in Section 102(b) of the Copyright Act, which excludes a list of items from copyright protection. This list includes such items as ideas, methods of operation, processes, and other functional expression. Although Section 102(b) does list quite a number of exclusions for copyrightable subject matter, the case law does not provide an extensive analysis of these numerous items. 119

The primary legacy of Baker, however, is in the principle informing the application of Section 102(b): copyright allows the owner to prevent unauthorized uses of the expression, but not any uses described in the work. 120 For example, if I read a book about origami. I can practice origami without infringing the book's copyright. The book is intended to teach readers how to practice origami, and therefore I am allowed to practice the art taught without violating copyright law. Note that this protection of the user is not a matter of implied license. The protection comes from recognizing that the practice of the art is not within the scope of copyright. implication is a broad one, but also a subtle one. This principle limits copyright protection to the form in which ideas, methods, or processes are described, but never to the idea, method, or process itself. Baker, Selden's copyright on the accounting book did give Selden any right in the practice of accounting, including the use of forms. 121 Copyright protection does not extend to methods, systems, or

^{116.} See Pamela Samuelson, Why Copyright Law Excludes Systems and Processes from the Scope of Protection, 85 TEX. L. REV. 1921, 1927-28 (2007) (noting that the holding of Baker excluded useful arts from copyright protection, which does cover expressive works).

^{117. 15} U.S.C. § 102(b) (2000).

^{118.} *Id*.

^{119.} See Samuelson, supra note 3, at 1945.

^{120.} See Baker, 101 U.S. at 106 ("Surely the exclusive right to this practical use was not reserved to the publisher by his copyright of the [work].").

^{121.} *Id.* ("The very object of publishing a book on science or the useful arts is to communicate to the world the useful knowledge which it contains. But this object would be frustrated if the knowledge could not be used without incurring the guilt of piracy of the book.").

processes, all of which are the basis for using the practice described in the accounting books.

Throughout the Copyright Act, the holding and reasoning of Baker has wide application, most notably in the area of software copyright. In a typical suit for copyright infringement, the plaintiff has to separate the functional elements of the software from the nonfunctional elements and demonstrate infringement of the latter. 122 Anyone is free to copy the functional elements—those elements that are present to allow the software to operate. I have described this separation as the line between functionality and aesthetics, but of course that terminology is misleading since functional expression can be deemed aesthetic under the appropriate theory of beauty. Perhaps a better way to understand the distinction was how the Court in Baker did it, recognizing that there are different types of expression and different types of uses of works. 123 Copyright law does not permit the owner to control all types of uses and all types of expression. Instead, there are classes of uses and expressions, labeled functional, that are exempt from copyright protection. 124 What this class entails is a matter of practical determination.

Since the Court in *Baker* was drawing a distinction between patent and copyright, distinguishing them in terms of functionality and uses, it seems that *Baker* offers a lesson in patent law as well as in copyright law. Unlike copyright law, which codifies the holding of *Baker* in section 102(b), Congress has not provided an analogous codification in patent law. But nonetheless, the U.S. Supreme Court's reasoning in *Baker* teaches us the implications for patent law. Just as with copyright, so with patent: there is a class of uses—call them nonfunctional—to which patentable subject matter does not extend. This class of uses places a limitation on the processes a patent can cover. They comprise the negative space of the *Baker* decision.

I propose the following statement to describe the implication of the holding of *Baker* for patent law: patentable subject matter does not include expressive activity that is non-functional or aesthetic. This statement has immediate application to the patents on games that I have analyzed in this Article. It may have a broader application as well, but I leave the exploration of the breadth of this interpretation to future research. In the context of games, patents should not extend to mental activities or to activities that constitute the playing of the

^{122.} See, e.g., Computer Assoc. Intern., Inc. v. Altai, Inc., 982 F.2d 693, 703 (2d Cir. 1992) (citing Baker v. Selden in the context of a filtration test).

^{123.} See Baker, 101 U.S. at 106

^{124.} See Samuelson, supra note 9.

game. Patents are limited to functional aspects of the game, such as the hardware, or to processes that are independent of play, such as scoring or the representation of play through broadcast or graphical media. By drawing this distinction, the law respects the separation that the Court recognized over one hundred and fifty years ago in *Baker* and that Congress has codified in copyright law. In this way, the boundaries between two statutory fields are respected and proper protection is given to the expressive values associated with playing.

A comparison with the treatment of game patents in Europe under the European Patent Convention supports the interpretation of Baker advocated here. In Europe, patents on games are looked upon with scrutiny analogous to that applied to software and business method patents. 125 While patents on gaming tools are recognized. patents on gaming rules and play are generally not allowed. 126 This exception is based on the idea that patents should apply to the "technical arts," or inventions that have industrial application. 127 In Bilski, the Federal Circuit rejected such categorical exclusions (articulated in the United States as a technological arts exclusion) on the grounds that what constitutes technology is ever changing and ambiguous.128 More broadly, the Federal Circuit eschews any categorical exclusion for patentable subject matter, such as exclusions for business methods, on similar grounds. 129 Instead, the Federal Circuit has adopted a functional approach to excluding certain types of subject matter, illustrated by its definition of physical transformation or machine implementation. 130 While the physical transformation test may have some bite, by excluding transformations that are merely legal or social, the machine implementation requirement may have no valence whatsoever. Consequently, the scope of gaming patents in the United States may be quite broad, even after the Bilski decision.

Hence, my proposed interpretation of *Baker* as a restriction on patentable subject matter as well as on copyrightable subject matter may provide a means to supplement the *Bilski* holding and perhaps even clarify it. As if drawing a line between patent and copyright, *Baker* seems to relegate aesthetic subject matter to the domain of copyright and functional subject matter to the domain of patent. However, since much subject matter is mixed, including the accounting book in *Baker*, this narrow reading is not viable. More

^{125.} See CORNISH & LLEWELYN, supra note 17.

^{126.} Id.

^{127.} Id.

^{128.} See In re Bilski, 545 F.3d 943, 960 (rejecting a technological arts test).

^{129.} *Id.* at 960-61 (rejecting categorical exclusion for business methods).

^{130.} Id. at 961.

importantly, Baker is not simply about allocating subject matter to particular fields of intellectual property, but more broadly concerns subject matter that is excluded from intellectual property protection across the various regimes. The Court's concern in Baker is with the scope of intellectual property protection and its effects on the use of the protected subject matter.¹³¹ The tension is that patent law does give the patentee the right to exclude others from using the protected subject matter while the copyright holder has the right to exclude only specified uses (copying, adapting, performing publicly, displaying publicly, distributing, and digitally audio-transmitting). 132 The Baker decision, however, suggests that we must be wary about how broadly these limitations on use are read. 133 Patents on processes, systems, and methods, in light of Baker, should not interfere with the practice of the arts to which those apply. A patent on the accounting methods at issue in Baker should be narrowly construed to those specific protected processes, methods, and systems.

Understood another way, Bilski's holding relates to the interpretation of "process" in Section 101 of the Patent Act. 134 However, Baker is much broader and relates to the meaning of the words "Inventors" and "Discoveries" in Article One, Section 8, Clause 8 of the U.S. Constitution. 135 If the Court in Baker is declaring that processes, systems, and methods do not constitute "Writings" or the subject matter of "Author[ship]" and that these items are instead the provenance of "Inventor[ship]" and constitute "Discoveries," then the decision invites us to dig more deeply into the relationship between inventorship and authorship. Are these mutually exclusive categories. such that all subject matter is the product of either inventorship or authorship, and never both? More realistically, it seems that some subject matter may not be the provenance of either. Trademarks would be the classic example, in light of the U.S. Supreme Court's own Live performances would be another example. iurisprudence. 136 Clearly excluded from copyright law, live performances, as a subset of the broader category of use, should also be excluded from patent law. In this way, Baker can be read as an implicit limitation on what uses the patent owner can prevent based on the scope of what the patent owner has actually invented.

^{131.} Baker v. Seldon, 101 U.S. 99, 105-106 (1879).

^{132.} See supra text accompanying notes 117-19

^{133.} Baker, 101 U.S. at 106.

^{134. 35} U.S.C. § 101 (2000).

^{135.} U.S. CONST. art. I, § 8, cl. 8.

^{136.} Trade-Mark Cases, 100 U.S. 82, 93-94 (1879) (holding that trademarks are not writings under Article I, Section 8, Clause 8 of the U.S. Constitution).

It is important to note that my argument here has implications beyond gaming. If I am correct that Baker, when applied to patent law, places a limitation on what uses can be prevented by the patentee, my argument would apply to other activities beyond game playing, such as research. More to the point, my argument can be understood as reinforcing the distinction between using tools and learning about those tools. The tool's patentee can prevent the former use, but the latter is protected as an experimental use. In the context of gaming, patents can extend to certain gaming tools but not to the underlying gaming activities that are involved in a particular game. The argument here is that these limitations on the scope of the patent right follow from the decision of Baker, which on its surface seems to be solely a limitation on copyright. But the Court has stated that the case is about the relationship between copyright and patent;¹³⁷ therefore, it is logical that the Court's reasoning has implications for patent law. In light of the Federal Circuit's recent attention to patentable subject matter, this inquiry seems even timelier.

IV. CONCLUSION

This Article focused on patents on games and gaming and their potential conflict with the actual playing of games by users. potential conflict between ownership rights and use mandates the need for limitations on the scope of patents. Such limits can be found in the doctrine of patentable subject matter, especially in light of the recent revival of that doctrine by the Federal Circuit, which has limited patentable processes under its machine-or-transformation test. But my analysis has also focused heavily on Baker v. Selden, an old chestnut of intellectual property case law that, among other things, drew the line between copyright and patent. Although it is a case about copyright subject matter. I have argued that Baker also speaks to the scope of patentable subject matter. Specifically, I asserted that patentable subject matter should not interfere with aesthetic activity such as gaming and play, much like copyrightable subject matter should not interfere with function and use. Since the Court's decision in Baker pertains to constitutional limits on intellectual property, my argument for limits on gaming patents is grounded not only in the statutory analysis of the federal circuit, but also in constitutional analysis.

My concern over the scope of patents on gaming also reflects a balance in intellectual property between machine recordings and live performances. Copyright law statutorily covers only fixations of performances and not performances themselves. Patent law does not have a similar statutory limit and so, absent some legal limitations, patents could cover live human activity. But this Article has urged such a limitation by relying on an analysis of patentable subject matter. Patents that cover the actual performance of a game or other forms of expression should be suspect for the reasons articulated in this Article. If the realm of live, unrecorded play has escaped capture by copyright law, then that special realm should remain unclaimed as patent law expands its boundaries.