

PATENT PROTECTION FOR PERFORMANCE TECHNIQUES

Karina Yuen Wong

INTRODUCTION

In the entertainment industry,¹ intellectual property law grants individuals exclusive rights to their works so that they may recoup the costs associated with developing and marketing artistic talent and producing creative works, such as movies, plays, and musicals. Members of the industry may include performing artists, writers, producers, directors, investors, and distributors. To these individuals, copyrights may be the most familiar type of intellectual property right because it offers exclusive rights to the works with which they are most familiar – choreography, sound recordings, lyrics, musical compositions, screenplays, performances, and audiovisual works.² Certain types of creative works like performance techniques, however, may not be fully protected by copyright.

Performance techniques play a significant and valuable role in the entertainment industry. Musical genres are often associated with particular combinations of performance techniques and individual performing artists are often recognized for unique performance techniques. Performance techniques may include methods for producing particular dance moves,³ methods for controlling an individual's vocal chords,⁴ methods for use of particular props or instruments,⁵ or methods for creating illusions on stage.⁶ These techniques are intellectual property, similar or closely related to choreography, sound recordings, lyrics, musical compositions, performances, and audiovisual works – all of which are traditionally protected by copyrights. Performing artists may be interested in other areas of intellectual property law, like patent law, that offer stronger protection of intellectual property rights and capture aspects that are not covered by copyright.

This paper explores the possibility and effects of allowing patent protection for performance techniques. Beginning with a brief review of intellectual property, Part I discusses

¹ See e.g. http://en.wikipedia.org/wiki/List_of_entertainment_industry_topics (describing "entertainment industry" as "the commercially popular performing arts, especially musical theatre, vaudeville, comedy, film, and music).

² 17 U.S.C. § 102 (2006) (providing a list of categories of copyrightable works).

³ See e.g. <http://www.wikihow.com/Moonwalk> (giving step-by-step instructions for how to do Michael Jackson's "Moonwalk").

⁴ See e.g. <http://www.wikihow.com/Do-Harsh-Death-Metal-Vocals> (giving step-by-step instructions for how to do a death growl, a vocal technique commonly used by death metal bands).

⁵ See e.g. <http://www.wikihow.com/Do-Guitar-Moves> (giving instructions for a number of entertaining moves involving a guitar but not related to strumming the strings).

⁶ See e.g. U.S. Patent No. 5,255,452 (filed Dec. 14, 1977) (claiming "[a] system for engaging shoes with a hitch means to permit a person standing on a stage surface to lean forwardly beyond his or her center of gravity in a stable manner . . ."). This is Michael Jackson's patent for a shoe designed to create the visual effect seen in the music video for his song "Thriller."

(1) the policy reasons supporting exclusive rights for different types of intellectual property (2) the subject matter protected under each type of intellectual property, (3) the requirements for obtaining protection, and (4) the scope and duration of the rights. Part II follows with a hypothetical scenario that illustrates three categories of performance techniques: (1) techniques that involve bodily movements with the use of a known prop or instrument, and (2) techniques that involve bodily movements with the use of a novel instrument, and (3) techniques that involve only bodily movements without the use of any props.

Next, Part III provides a patentability analysis of each of the three categories by evaluating the relevant facts from the hypothetical scenario. An analysis is provided for each category, and each analysis begins with a discussion of whether that category of performance technique falls within patentable subject matter. The analysis continues with an evaluation of whether that particular category of performance technique is likely to satisfy the utility, novelty, nonobviousness, and disclosure requirements. Each analysis concludes with a discussion of policy reasons for or against the patentability of that category of performance technique.

Finally, this paper concludes that patent protection for performance techniques should be determined according to the policies that justify the privileges associated with exclusive rights.

I. A COMPARISON OF PATENTS, COPYRIGHTS, TRADEMARKS, AND TRADE SECRETS

In the United States, intellectual property rights are granted to individuals in the form of patents, copyrights, trademarks, and trade secrets. For each of these four types of intellectual property, this section briefly introduces the policy reasons supporting exclusive rights, the subject matter protected, requirements for obtaining rights, and scope and duration of the exclusive rights protected. Because this paper focuses on the patent protection for performance techniques, this part begins with a more detailed discussion of patent law.⁷ Copyrights, trademarks, and trade secrets are subsequently discussed in less detail and in contrast with patents.

A. Patents

The Constitution provides that "Congress shall have the power . . . to promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."⁸ Congress enacted the Patent Act⁹ to promote the progress by granting inventors exclusive rights in their inventions or discoveries for a limited period of time.¹⁰

⁷ The discussion of patent law is limited to utility patents for the purpose of this paper. Design patents and plant patents are two other categories of patents that will not be discussed in this paper.

⁸ U.S. Const. art. I, § 8, cl. 8.

⁹ 35 U.S.C. §§ 1-376.

¹⁰ See *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 100 (2d Cir. 1951) (associating "writings" with

1. Policy Reasons Supporting Patent Rights

The main purposes of the patent system is to encourage and support innovation, to "promote[] disclosure of inventions to stimulate further innovation and to permit the public to practice the invention once the patent expires."¹¹ By granting exclusive rights to individual inventors, the patent system allows inventors to reap the fruits of their labor and recoup their investment. Consider, for example, a company that spends a great deal of money investing in research and development for a more efficient automobile fuel-injection system. Most of the costs are associated with developmental testing to determine how to maximize efficiency while maintaining low manufacturing costs. Once the system is completed and sold, competitors may easily copy the system and immediately implement it in their own vehicles. The company loses the competitive edge that would have allowed it to recoup its investment. Patent laws allow the company to maintain that competitive edge by granting the company a monopoly, an exclusive right to make, use, and sell¹² the particular technology that it invented. Patent laws also encourage competition, however, by limiting duration of the monopoly.¹³ Once the patent expires, competitors are free to use the technology and are encouraged to make improvements to that technology¹⁴ – improvements that in turn may be patentable as well.¹⁵

Through its requirements, patent laws balance the benefits given to individuals with the burden on society.¹⁶ Subject matter, novelty, and nonobviousness requirements prevent individuals from claiming monopoly rights over subject matter already belonging to the public.¹⁷

"authors" and "discoveries" with "inventors"). *See also* Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 ("[T]he patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time.").

¹¹ *Vornado Air Circulation Sys., Inc. v. Duracraft Corp.*, 58 F.3d 1498, 1507 (10th Cir. 1995) ("First, patent law seeks to foster and reward invention; second, it promotes disclosure of inventions to stimulate further innovation and to permit the public to practice the invention once the patent expires; third, the stringent requirements for patent protection seek to assure that ideas in the public domain remain there for the free use of the public." (citing *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 262 (1979))); *see also* *Bonito Boats v. Thunder Craft Boats*, 489 U.S. 141, 151 ("[T]he ultimate goal of the patent system is to bring new designs and technologies into the public domain through disclosure.").

¹² 35 U.S.C. § 271.

¹³ *See Vornado*, 58 F.3d at 1507-08 ("[P]atents operate by temporarily reducing competition. They create monopolies to reward inventors who invent 'things which are worth to the public the embarrassment of an exclusive patent.'" (citing *Graham v. JohnDeere Co.*, 383 U.S. 1, 9 (1966) (quoting Thomas Jefferson, author of 1793 Patent Act))). Although competition ultimately may be enhanced by the increased product supply that results from operation of the patent law, the system's more obvious objective is to give the public the benefits of technological progress.").

¹⁴ *See supra* note 11.

¹⁵ 35 U.S.C. § 101 (providing that patents may be granted for "any new and useful improvement" of a process, machine, manufacture, or composition of matter).

¹⁶ *See Bonito Boats*, 489 U.S. at 151 ("The attractiveness of such a bargain, and its effectiveness in inducing creativeness in inducing creative effort and disclosure of the results of that effort, depend almost entirely on a backdrop of free competition in the exploitation of unpatented designs and innovation. The novelty and nonobvious requirements of patentability embody a congressional understanding, implicit in the Patent Clause itself, that free exploitation of ideas will be the rule, to which the protection of a federal patent is the exception.").

¹⁷ *Aronson v. Quick Point Pencil Co.*, 440 U.S. at 262 (1979) ("[T]he stringent requirements for patent protection seek to assure that ideas in the public domain remain there for the free use of the public").

Furthermore, disclosure requirements ensure that patented inventions are clearly and particularly disclosed so as to provide fair notice of the specific subject matter being claimed.¹⁸ Disclosure requirements also prevent inventors from claiming more than what they deserve by screening out patents that are overly broad.¹⁹ Thus, although patents offer strong protection for exclusive rights, those rights come with stringent requirements.

2. Patentable Subject Matter

The Patent Act provides protection for "any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof."²⁰ For nearly thirty years, the Supreme Court was silent on the issue of patentable subject matter.²¹ In 1980, *Diamond v. Chakrabarty*,²² the Supreme Court noted that Congress intended patentable subject matter to include "anything under the sun that is made by man."²³ The Court also stated, however, that "laws of nature, physical phenomena and abstract ideas"²⁴ are not patentable because "[s]uch discoveries are manifestations of nature, free to all men and reserved exclusively to none."²⁵ Shortly after *Chakrabarty*, the Court addressed patentable subject matter again in 1981, *Diamond v. Diehr*,²⁶ where it discussed the limits for a patentable "process."²⁷ Since 1981,

¹⁸ 35 U.S.C. § 112 (requiring that the specification of a patent "contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same."). See also *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (discussing the importance of disclosure requirements and noting that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." (citation omitted)).

¹⁹ See ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS*, 27 (LexisNexis 4th ed. 2007), ("There are essentially two constraints on the breadth of claims you can draft. An inventor cannot claim (i) anything within the mass of publicly available information – what patent practitioners call 'the prior art'; or (ii) anything beyond the actual discoveries of the inventor.").

²⁰ 35 U.S.C. § 101.

²¹ Between 1981 and 2008, the Supreme Court did not hear any cases regarding patentable subject matter. In 2006, the Supreme Court had an opportunity to address patentable subject matter, granted certiorari on *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124 (2006) but later dismissed the appeal as improvidently granted. See *Petition for Writ of Certiorari, Bilski v. Doll*, 2009 WL 226501, *33 (2009) (No. 08-964). For the first time since 1981, the Supreme Court will be issuing an opinion regarding patentable subject matter in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), cert. granted, 129 S.Ct. 2735 (June 1, 2009)(No. 08-964).

²² 443 U.S. 303 (1980) (finding a new bacterium to be patentable where the bacterium has "markedly different characteristics from any found in nature and one having the potential for significant utility").

²³ *Id.* at 309.

²⁴ *Id.* (following previous case law and stating as examples of discoveries not patentable: newly discovered minerals in the earth, newly discovered wild plants, Einstein's law $E=mc^2$, and Newton's law of gravity).

²⁵ *Id.* (citation omitted).

²⁶ 450 U.S. 175, 175-76 (1981) (finding a rubber curing process to be patentable although the process used a mathematical formula but the patent applicant did "not seek to patent a mathematical formula, but instead [sought] protection for a process of curing synthetic rubber")

²⁷ *Id.* at 182-83, n.7 ("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted, and not for the result or effect itself. It is when the term process is used to represent the means or method of producing a result that it is patentable, and will include all methods or means which are not effected by mechanism or mechanical combinations." (citing *Corning v. Burden*, 56 U.S. 252, 261 (1854)); *Diehr*, 450 U.S. at 182-83 (A process is "an act, or series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of

the Supreme Court has largely left subject matter issues in the hands of the United States Court of Appeals for the Federal Circuit.

In the last few years, however, patentable subject matter has become a hotly debated topic. The debate focuses on the patentability of claims for processes. Most recently, in *In re Bilski*,²⁸ the Federal Circuit held that the machine-or-transformation test is the "governing test"²⁹ for limiting the patentability of processes.³⁰ The Supreme Court granted certiorari to determine whether the Federal Circuit's test unnecessarily narrows the scope of patent protection for process or method patents.³¹ The Supreme Court's decision will have a direct impact on business method patents³² like *Bilski*'s, but may also have a general impact on the patentability of all methods and processes, including performance techniques.

Although *In re Bilski* specifically concerns a method for doing business, the Federal Circuit's machine-or-transformation test directly affects the patentability of performance techniques. In *In re Bilski*, the Federal Circuit explained that a process, even one that involves physical steps, will not be patentable, unless it satisfies the machine-or-transformation test.³³ The third category of performance techniques, those that involve only bodily movements, would clearly fail the test. Therefore, the arguments surrounding the patentability of business methods are particularly relevant to the patentability of performance techniques.

In determining the appropriate limits of patentable subject matter, many of the arguments are based on textual interpretation and policy. One textual argument is that the term "useful arts" means "technology"³⁴ and that "the patent system is meant to protect *technology*, rather than pure

machinery." (citing *Cochrane v. Deener*, 94 U.S. 780, 78-88 (1877)).

²⁸ 545 F.3d 943 (Fed. Cir. 2008).

²⁹ *Id.* at 956.

³⁰ *Id.* at 954 (interpreting language from previous Supreme Court decisions and holding that a process is patentable "if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.").

³¹ *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), *cert. granted*, 129 S.Ct. 2735 (June 1, 2009)(No. 08-964). The questions presented include: 1. Whether the Federal Circuit erred by holding that a "process" must be tied to a particular machine or apparatus, or transform a particular article into a different state or thing ("machine-or-transformation" test), to be eligible for patenting under 35 U.S.C. § 101, despite this Court's precedent declining to limit the broad statutory grant of patent eligibility for "any" new and useful process beyond excluding patents for "laws of nature, physical phenomena, and abstract ideas." 2. Whether the Federal Circuit's "machine-or-transformation" test for patent eligibility, which effectively forecloses meaningful patent protection to many business methods, contradicts the clear Congressional intent that patents protect "method[s] of doing or conducting business." 35 U.S.C. § 273. Petition for Writ of Certiorari, *Bilski v. Doll*, 129 S.Ct. 2735 (filed Jan. 28, 2009)(No. 08-964).

³² A process or method patent is a patent that claims an invention as a series of steps or acts. 35 U.S.C. § 100 ("The term 'process means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter or material."). Thus, a business method is quite literally "a method for doing business," *see e.g. In re Bilski*, 545 F.3d at 1002, n. 4, or a series of steps or acts for completing a business transaction. Examples include "accounting methods, financial instruments, or financial service techniques." MERGES & DUFFY, *supra* note 19, at 178 (discussing the economic rationale for business method patents).

³³ *In re Bilski*, 545 F.3d at 964.

³⁴ *See* MERGES & DUFFY, *supra* note 19, at 177 (quoting Professor John Thomas' article supporting a rule against

concepts; and . . . technology . . . surely does not encompass business methods."³⁵ The third category of performance techniques are subject to the same criticism – that they are not related to technology and, thus, do not fit within the realm of "useful arts." A counterargument is that the term "useful arts" is stated broadly to avoid inhibiting patent protection for unknown future advances.³⁶ Thus, to exclude business methods from patent eligible subject matter is to impose an additional requirement on "processes" that is not applied to the other statutory categories of manufactures, machines, and compositions of matter.³⁷ Judge Rader argues, in his dissent in *In re Bilski*, that statutory language of section 101 sets forth "broad categories of patent eligible subject matter, and condition[s] patentability on the characteristics, not the category, of the claimed invention."³⁸ He would have affirmed the denial of Bilski's patent, however, on the basis that it claimed an abstract idea. Therefore, Judge Rader's interpretation of the Patent Act would leave room for the patentability of performance techniques because, absent the machine-or-transformation test and any limiting interpretations of "useful arts," a performance technique that involves only bodily movements, or physical steps, would be patentable if it satisfies the other requirements for patenting.

A number of economic policy arguments³⁹ against business method patents are also relevant to the discussion of patentability of performance techniques.⁴⁰ One such argument is that business method patents are not needed because "[b]usiness innovations, by their very nature, provide a competitive advantage and thus generate their own incentives."⁴¹ Another argument is that business method patents are not needed "to secure an adequate return on at least some investments in research and development."⁴² Because the costs of developing business methods

business method patents: "We have good reason to doubt whether such innovations [business methods] lie within the 'useful arts,' the constitutional stricture concerning patentable subject matter. . . . [I]t is unlikely that the Framers saw every created thing as encompassed within it. They undoubtedly contemplated the industrial, mechanical and manual arts of the late eighteenth century, in contrast to the seven 'liberal arts' and the four 'fine arts' of classical learning." (citing John R. Thomas, *The Patenting of the Liberal Professions*, 40 B.C. L. REV. 1139 (1999)).

³⁵ MERGES & DUFFY, *supra* note 19, at 177 (discussing some of the traditional rationale implied in older cases that barred patents for business methods). See also *In re Bilski*, 545 F.3d at 1000-01 (Dyk, J., concurring) ("[B]y mandating that patents advance the useful arts, the Constitution explicitly limited patentability to the process today called technological innovation." (citing *In re Comiskey*, 499 F.3d 1365, 1374 (Fed. Cir. 2007)). In a concurring opinion, Judge Dyk, joined by Judge Linn, argues that the drafters of the Patent Act did not intend for "processes for organizing human activity" to be patentable and "that the only processes that [are] patentable [are] processes for using or creating manufactures, machines, and compositions of matter." *In re Bilski*, 545 F.3d at 972-74 (Dyk, J., concurring) (discussing the history of the Patent Act and reasoning that the statute should be interpreted in the context of the time when it was enacted, 1793, and the English practice of the time).

³⁶ *In re Bilski*, 545 F.3d at 977 (Newman, J., dissenting).

³⁷ *Id.* at 977-78, 990 (Newman, J., dissenting).

³⁸ *Id.* at 1011 (Rader, J., dissenting).

³⁹ See generally MERGES AND DUFFY, *supra* note 19, at 177-81 (discussing economic rationales against business method patents).

⁴⁰ The arguments are highlighted here to bring attention to the general considerations involved with determining the appropriate limitations for patentable subject matter. Due to the limited scope of this paper, the full discussion of the counterarguments is not provided. For an in-depth discussion of the policy reasons and other arguments regarding the limitations of patentable subject matter see *In re Bilski*, 545 F.3d and all the dissents and concurrences.

⁴¹ *In re Bilski*, 545 F.3d at 1005 (Mayer dissenting).

⁴² MERGES AND DUFFY, *supra* note 19, at 179.

are generally less than those required for developing innovative products, businesses may be able to reap sufficient reward in a short period of time, making the standard twenty-year patent term⁴³ unnecessary.⁴⁴ Finally, business methods are too "expensive" to society."⁴⁵ Patents grant exclusive rights to individuals to encourage disclosure, but most business methods are practiced in public regardless of whether a patent is granted.⁴⁶

Just as businesses have alternative incentives for developing innovative business methods, performing artists also have incentive to develop performance techniques even without patents. The success of a performance artist depends on the artist's ability to entertain and attract an audience, and this creates the strongest incentive to develop innovative and unique performance techniques. Granting the artist exclusive rights to a particular performance technique, even for a limited period of twenty years, may produce great additional benefit to the artist by preventing others from using that technique. If the technique becomes popular, the artist could charge a high premium for any performances, or even license the performance rights. Similar to business method patents, the costs of developing performance techniques is likely much lower than those required for developing innovative products. Thus, the benefit to the individual artist may be extremely disproportionate to the time and money invested into developing the technique. Furthermore, patent protection for performance techniques does nothing to further the goal of public disclosure. Performance techniques are inherently public in nature because the value of a performance technique lies in its ability to entertain an audience. Therefore, patents are not necessary to induce disclosure.

3. *Requirements for Patents*

The Patent Act requires that every patented invention be useful,⁴⁷ novel,⁴⁸ and

⁴³ 35 U.S.C. § 154(a)(2).

⁴⁴ *In re Bilski*, 545 F.3d at 1005 (Mayer dissenting) ("Business method patents, unlike those granted for pharmaceuticals and other products, offer rewards that are grossly disproportionate to the costs of innovation. In contrast to technological endeavors, business innovations frequently involve little or no investment in research and development."); *see also*, MERGES AND DUFFY, *supra* note 19, at 178 (noting that the argument that costs of creating innovative financial services and instruments is rising, but that empirical support is lacking so far).

⁴⁵ 545 F.3d at 1006 (Mayer dissenting) ("Instead of providing incentives to competitors to develop improved business techniques, business method patents remove building blocks of commercial innovation from the public domain."). *See also* MERGES AND DUFFY, *supra* note 19, at 180 (comparing the costs of business method patents with the traditional benefits that society gets from patents).

⁴⁶ Rochelle Cooper Dreyfuss, *State Street or East Street: Is Patenting Business Methods Good for Business*, in U.S. INTELLECTUAL PROPERTY LAW AND POLICY, 1, 29 (Hugh Hansen ed. 2006) ("Businesses are conducted in the public, making them easily reverse engineered. Since there is no need to induce disclosure, the rationale explaining patents on most processes is not applicable. But even though the public nature of the use raises the possibility of copying, the free rider rationale is also inapposite, for business competition does not have the same bites as product competition. For products, lead time is always somewhat truncated in that the first mover must use some of it to educate consumers about the product and its use. In some cases, the first mover may also need government approval before the product can be marketed at all. In contrast, business methods can be taught to employees in private; the moment when they are revealed is the moment when they start earning returns.")

⁴⁷ *See* MERGES AND DUFFY, *supra* note 19, at 207 (discussing "utility" as requirement based on the statutory language of sections 101 and 112 of the Patent Act, mainly that the invention)

⁴⁸ 35 U.S.C. § 102 (a), (e), and (g).

nonobvious,⁴⁹ and that the invention be fully disclosed.⁵⁰ The utility requirement ensures that an invention have "specific" and "substantial" utility.⁵¹ This requirement is usually easily satisfied.⁵² The novelty requirement ensures that patent protection may only be granted for inventions that were not previously known or used by others.⁵³ The nonobviousness requirement may be the most difficult to satisfy because precludes patent protection for subject matter that "would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."⁵⁴ Together, the novelty and nonobviousness requirements prohibit individuals from claiming exclusive rights to that which already belongs to the public.⁵⁵ Finally, a patent applicant must fully disclose the invention in a specification that enables "any person having ordinary skill in the art" (PHOSITA) to practice the invention.⁵⁶ The specification must include claims that describe clearly and particularly the subject matter to be patented.⁵⁷

Patent applications are thoroughly examined by patent examiners at the United States Patent and Trademark Office (USPTO).⁵⁸ For each application, a patent examiner conducts a

⁴⁹ 35 U.S.C. § 103.

⁵⁰ 35 U.S.C. § 112. (requiring that every patent specification "contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same" and that every patent "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."). *See also Phillips*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (discussing the important role of the specification in claim construction).

⁵¹ *See In re Fisher*, 421 F.3d 1365, 1371 (Fed. Cir. 2005) (requiring a patent application disclose a use that is "specific" in that it is "not so vague as to be meaningless," and that the asserted use be "substantial" in that it has "significant and presently available benefit to the public.").

⁵² *See Juicy Whip, Inc. v. Orange Bang, Inc.*, 185 F.3d 1364, 1366 (Fed. Cir. 1999) ("The threshold of utility is not high: An invention is "useful" under section 101 if it is capable of providing some identifiable benefit.").

⁵³ *See Bonito Boats*, 489 U.S. at 148 ("The novelty requirement is presently expressed in 35 U.S.C. §§ 102 (a) and (b) . . . [which] operate in tandem to exclude from consideration for patent protection knowledge that is already available to the public."). *See MERGES AND DUFFY*, *supra* note 19, at 358-59 (distinguishing between subsections (a), (e), and (g), the novelty provisions, and subsections (b), (c), and (d), the statutory bars).

⁵⁴ 35 U.S.C. § 103. *See Bonito Boats*, 489 U.S. at 150 ("The nonobviousness requirement extends the field of unpatentable material beyond that which is known to the public under § 102, to include that which could readily be deduced from publicly available material by a person of ordinary skill in the pertinent field of endeavor.")

⁵⁵ *See Bonito Boats*, 489 U.S. at 150 ("Taken together, the novelty and nonobviousness requirements express a congressional determination that the purposes behind the Patent Clause are best served by free competition and exploitation of either that which is already available to the public or that which may be readily discernible from publicly available material.").

⁵⁶ 35 U.S.C. § 112. *See also In re Wands*, 858 F.2d 731, 8 U.S.P.Q.2d 1400 (Fed. Cir. 1988) (describing enablement as a requirement that the specification teach a PHOSITA "to make and use the invention without undue experimentation" and setting forth the factors to be considered in determining whether undue experimentation would be required).

⁵⁷ 35 U.S.C. § 112.

⁵⁸ *See generally MERGES AND DUFFY*, *supra* note 19, at 49-53 (describing the patent prosecution process as one that involves "a series of negotiations between the examiner and the inventor . . . The process is helped by the specialization of the examiners, who are assigned to a particular technology . . . [T]he examiner might reject the claims in the application . . . [t]he applicant is entitled to have each application considered twice before final rejection . . ."); *see also infra* notes 143 & 146.

prior art⁵⁹ search of all registered patents and patent applications, as well as nonpatent literature.⁶⁰ The examiner may reject one or all of the claims of an application based on failure to meet any of the requirements described above.⁶¹ Due to the amount and complexity of work involved with examining patents,⁶² patent prosecution is generally costly and requires the help of qualified patent attorneys or patent agents.

4. *Scope and Duration of Patent Rights*

Patents grant the exclusive rights to make, use, offer to sell, or sell a patented invention⁶³ and infringers are strictly liable for violation of any of the exclusive rights. A patent typically extends for twenty years from the date of issue.⁶⁴ To succeed on a claim for infringement, a patentee must prove that an alleged infringer violated one of the specific exclusive rights⁶⁵ and that the infringing product includes every element of the patented invention, either literally or equivalently.⁶⁶ "[P]atent infringement is a strict liability offense."⁶⁷ In other words, an alleged infringer would not have a valid defense by proving independent creation or lack of knowledge as to the existence of a patent.⁶⁸ Innocent infringers may be subject to lesser liability than willful infringers,⁶⁹ but will likely be enjoined from future infringing use of the patented invention.⁷⁰

⁵⁹ "Prior art," as it is used in §103 of the Patent Act, generally refers to all information that existed before a critical date, which is the date that the relevant patent application is filed or the relevant date of invention. *See MERGES AND DUFFY, supra* note 19, at 360.

⁶⁰ *See infra* note 146.

⁶¹ *See supra* note 58.

⁶² *See supra* note 58.

⁶³ 35 U.S.C. § 271(a).

⁶⁴ 35 U.S.C. §154(2).

⁶⁵ 35 U.S.C. § 271. (providing exclusive rights to make, use, offer to sell, sell, or import).

⁶⁶ *See Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562 (Fed. Cir. 1991) ([T]he essence of [the 'all elements rule'] is that to prove infringement, every element in the claim must be found in the accused device either literally or equivalently."); *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 374 (1996) ("Victory in a patent infringement suit requires a finding that the patent claim covers the alleged infringer's product or process, which in turn necessitates a determination of what the words in the claim mean.") (citations omitted); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39-40 (1997) (holding that the doctrine of equivalents "should be applied . . . on an element-by-element basis" and discussing the "function-way-result" and "insubstantial differences" test as both appropriate for determining equivalence).

⁶⁷ *In re Seagate Tech., LLC*, 497 F.3d 1360, 1368 (Fed. Cir. 2007). *See also MERGES AND DUFFY, supra* note 19, at 781. ("Note that the statute does *not* require any proof of *access* to the inventor's work or any *intent* to infringe. Both are irrelevant; the first because even independent creation is an infringement (unlike copyright law, where access is required and independent creation is a defense), and the second because the right to exclude does not depend upon the infringer's state of mind. The second point, you may recognize, is consistent generally with the law or property, where a mistake as to ownership is no defense to a trespass action.")

⁶⁸ *See MERGES AND DUFFY, supra* note 19, at 781.

⁶⁹ *See Knorre-Bremse Systeme Fuer Nutz Ahrzeuge GMBH v. Dana Corp.*, 383 F.3d 1337, 1342 (Fed. Cir. 2004) (en banc) (discussing treble damages under § 284 and attorneys fees under § 285 as appropriate remedies for willful infringement).

⁷⁰ *See eBay v. MercExchange, L.L.C.*, 547 U.S. 388, 391-94 (2006) (holding that the traditional four-factor test for permanent injunctions also applies to patent infringement cases and that permanent injunctions may issue in accordance with the principles of equity, but that injunctions should not automatically follow a finding of infringement and validity).

Thus, patents provide the strongest protection for intellectual property because the nature of the right is most similar to real property rights.⁷¹

One of the few exceptions to liability is physicians' immunity,⁷² which grants immunity to medical practitioners and related health care entities for the use of medical or surgical procedures.⁷³ This exception only applies to "pure procedure" patents⁷⁴ and does not excuse liability for infringement of any procedure involving the use of a patented machine, manufacture, composition of matter, or infringement of a biotechnology patent.⁷⁵

B. Copyrights

The Copyright Act⁷⁶ shares its constitutional basis with the Patent Act.⁷⁷ Copyrights promote the progress of the useful arts by granting authors⁷⁸ certain exclusive rights in their "writings," or creations, for a limited period of time.⁷⁹ The Copyright Act gives broader meaning to "writings" than the plain text of the statute,⁸⁰ and extends protection to all "original works of

⁷¹ MERGES AND DUFFY, *supra* note 19, at 781 (comparing patent rights with property rights, "where a mistake as to ownership is no defense to a trespass action.").

⁷² 35 U.S.C. §287.

⁷³ Note that this exception is not a defense for infringement but merely excuses liability for physicians and health care entities. Thus, an owner for a patent for a pure medical procedure may still recover damages from a competitor for indirect infringement. *See* 104 CONG. REC. H11865 (daily ed. September 28, 1996) (conference agreement). ("The provision included in this conference agreement precludes the filing of civil action for damages or injunctive relief against a medical practitioner licensed by the State to provide the medical activity or related health care entity who performs a medical activity that would otherwise constitute an infringement or inducement to infringe under 35 U.S.C. 271(a) or (b) for patents issued after its enactment.").

⁷⁴ *See* CONG. REC. S12023 (daily ed. September 30, 1996) (statement of Sen. Frist); *see also* 104 CONG. REC. H8276 (daily ed. July 24, 1996) (statement of Rep. Ganske) (referring to the Heimlich maneuver as an example of a medical procedure that is not and should not be patented). "Pure procedures" generally refers to methods that involve only human bodily movements. *See e.g.* Carl A. Kukkonen, III, *Be a Good Sport and Refrain from Using my Patented Putt: Intellectual Property Protection for Sports Related Movements*, 80 J. PAT. & TRADEMARK OFF. SOC'Y, 808, 822-27 (November 1998) (discussing uncertainty and nonrepeatability of human motion as issues related to patents claiming only human movements and comparing sports moves to medical procedures where both involve pure procedures are discovered in the normal course of practice).

⁷⁵ *See* 104 CONG. REC. H8278-79 (daily ed. July 24, 1996) (statement of Rep. Ganske) ("[A]ll presently patentable machinery and devices for treating and diagnosing disease will remain patentable; all presently patentable biologic products will remain patentable; all presently patentable new uses for nonpatentable drugs and biological products will remain patentable.").

⁷⁶ 17 U.S.C. §§ 1-1332 (2006).

⁷⁷ *See Alfred Bell*, 191 F.2d at 100. (discussing the origins of the patent statute and the copyright statute and the basis for Congressional authority to regulate both).

⁷⁸ *See Feist Publ'ns, Inc. v. Rural Tel. Serv.*, 499 U.S. 340, 346 (1991) (defining "author" as 'he to whom anything owes its origin; originator; maker').

⁷⁹ *See Feist*, 499 U.S. at 346 (1991) ("The source of Congress' power to enact copyright laws is Article I, § 8, cl. 8, of the Constitution, which authorizes Congress to 'secur[e] for limited Times to Authors ... the exclusive Right to their respective Writings.'"); *see also* *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 56 (1884) (differentiating between copyrights and patents, the former being exclusive rights granted to author and the latter being exclusive rights granted to inventors).

⁸⁰ *Feist*, 499 U.S. at 346 (recognizing the broad constitutional scope of the term "writings").

authorship fixed in a tangible medium of expression."⁸¹

1. Policy Reasons for Copyrights

The policy reasons supporting copyrights are similar to those supporting patent rights. Both bodies of law aim to reward, compensate, and encourage individuals for contributing their inventions or creations to society.⁸² The benefit provided to such individuals is essentially a monopoly over the right to use their works so that they may recoup the costs of their investments, whether those investments include time, labor, money or other resources.⁸³ In exchange, the public benefits from having access to the inventions and creations.⁸⁴ After a limited period of time, the inventions and creations are said to enter the public domain and anyone may use the inventions and creations without permission from the original inventor or author.⁸⁵ Public policy limits the protection of patents and copyrights such that neither type of protection may extend to what already exists in the public domain.⁸⁶

2. Copyrightable Subject Matter

The subject matter of copyright protection is limited to "original works of authorship,"⁸⁷ which includes, for example, literary works, musical works, dramatic works, choreographic works, motion pictures, audiovisual works, and sound recordings.⁸⁸ Copyright protection does not extend, however, to "any idea, procedure, process, system, method of operation, concept, principle, or discovery."⁸⁹ This directly contrasts with the subject matter protected by patents⁹⁰ –

⁸¹ 17 U.S.C. §102(a).

⁸² See *Twentieth Century Music Corporation v. Aiken*, 422 U.S. 151, 156 (1975) (discussing the scope of copyrights as a balance between providing motivation for creative work and "promoting broad public availability of literature, music, and the other arts."). Note, however that "copyright law, like the patent statutes, makes reward to the owner a secondary consideration." *Mazer v. Stein*, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered." (quoting *United States v. Paramount Pictures*, 334 U.S. 131, 158 (1948))).

⁸³ See *Pfaff*, 525 U.S. at 63 ("[T]he patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time.").

⁸⁴ See *Pfaff*, 525 U.S. at 63 (discussing public disclosure of inventions as the main purpose of patent law); *Aiken*, 422 U.S. 151 at 156 (discussing the importance of "broad public availability of literature, music and other arts.").

⁸⁵ *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 33-34(2003) ("The rights of a patentee or copyright holder are part of a 'carefully crafted bargain,' under which, once the patent or copyright monopoly has expired, the public may use the invention or work at will and without attribution.") (internal citation omitted).

⁸⁶ See *Bonito Boats*, 489 U.S. at 150-51 (discussing the public policy behind patent protection and identifying the novelty and nonobviousness requirements as prohibiting patent protection for that which is already available to the public); *Feist*, 499 U.S. at 348 (finding "facts . . . may not be copyrighted" because they "are part of the public domain available to every person.")

⁸⁷ 17 U.S.C. §102(a).

⁸⁸ *Id.*

⁸⁹ 17 U.S.C. §102(b).

⁹⁰ The plain texts of the Acts seem to indicate that subject matter protected by one is excluded from protection by the

"any new and useful process, machine, manufacture, or composition of matter."⁹¹ Just as patent protection does not extend to abstract ideas,⁹² copyright protection may cover only a particular expression of an idea, but not the idea itself.⁹³

3. *Requirements for Copyright*

Compared to patent requirements, the requirements for a valid copyright are relatively simple and easy to satisfy. Copyright subsists from the moment that an original work is fixed in a tangible medium of expression.⁹⁴ A work is created when it is fixed in a material object "from which the work can be perceived, reproduced, or otherwise communicates."⁹⁵ Originality only requires independent creation and a minimal level of creativity.⁹⁶ Registration is not required for a valid copyright, but is a prerequisite for filing a copyright infringement claim in a federal court.⁹⁷ Unlike the USPTO, the Copyright Office does not perform a search for related works, but merely screens material for copyrightable subject matter and administrative filing

other. In practice, however, the issue is not so clearly defined. *See e.g. Alfred Bell*, 191 F.2d 99 at 102 (explaining that the formula for a medicinal mixture may be patented and also described in a book, which may be copyrighted, the copyright granting only the exclusive rights to printing and publishing the book and the patent granting exclusive rights to make, use, and sell the mixture itself).

⁹¹ 35 U.S.C. §101.

⁹² *See Diehr*, 443 U.S. at 309 (stating that "laws of nature, physical phenomena and abstract ideas" are not patentable subject matter).

⁹³ *See Feist*, 499 U.S. at 349-50 (discussing the idea/expression dichotomy, stating that "copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work."); and William Tucker Griffith, *Beyond the Perfect Score: Protecting Routine-Oriented Athletic Performance with Copyright Law*, 30 CONN. L. REV. 675, 695 (1998) (discussing the idea/expression dichotomy and using figure skating as an example where a particular move such as a camel back spin is an idea, but a skating routine comprising multiple moves is an expression: "In terms of figure skating, the various moves involved in a skating performance constitute unprotectible 'ideas.' However, one may compose a composition of those ideas to form a routine. An expressive form of those ideas is created once the entire expression is reduced to a tangible form – i.e., a skater performs the routine with simultaneous recording thereof, or the routine is notated into written form. Thus, while the individual camel spin may not be protected due to its form as an 'idea,' an entire skating routine comprising multiple 'ideas' is an expression of a protectable work of authorship.").

⁹⁴ 17 U.S.C. §102.

⁹⁵ 17 U.S.C. §101. *See also* *Matthew Bender & Co., Inc. v. West Publ'g Co.*, 158 F.3d 693, 702-03 (2d Cir. 1998) (discussing the meaning of fixation as it relates to copies and works of authorship).

⁹⁶ *Feist*, 499 U.S. at 345 ("Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.").

⁹⁷ 17 U.S.C. § 411(a) ("[N]o civil action for infringement of the copyright in any United States work shall be instituted until preregistration or registration of the copyright claim has been made . . ."). *See also* *Gaiman v. McFarlane*, 360 F.3d 644, 654-55 (7th Cir. 2004) ("The significance of registration is that it is a prerequisite to a suit to enforce a copyright. More precisely, an application to register must be filed, and either granted or refused, before suit can be brought. . . . All that is important in this case is that it is no more the purpose of registration to start statutes of limitations running than it is the purpose of the copyright notice itself to do so."). Interestingly, a litigant may file a civil action for infringement even if registration is refused as long as the applicant serves a complaint on the Register of Copyrights with notice of refusal and has satisfied the other administration requirements for registration: deposit of a copy of the work being registered, application form, and filing fees. 17 U.S.C. § 411(a).

requirements.⁹⁸ The process mainly serves the purpose of record keeping.⁹⁹

A performance technique may be protectable by copyright as choreography, which may be defined as "a related series of dance movements and patterns organized into a coherent whole."¹⁰⁰ Copyright would not protect, however, standard movements or exercises such as jumping jacks or walking steps,¹⁰¹ nor "*functional* physical movements such as sports games, exercises, and other ordinary motor activities do not represent the type of authorship intended to be protected under the copyright law."¹⁰² These limitations suggest that performance techniques comprising of discrete moves or actions may be considered ideas rather than expressions.¹⁰³

4. *Scope and Duration of Copyrights*

Copyrights generally grant exclusive rights to reproduce, prepare derivative works, distribute, publicly perform, and publicly display.¹⁰⁴ Copyright typically lasts for "the life of the author and 70 years after."¹⁰⁵ The duration of copyrights is one of the main advantages over the limited twenty-year term granted for patents. The exclusive rights under copyright, however, are subject to a number of statutory limitations,¹⁰⁶ most of which are based on public policy.

To prove infringement, a copyright owner must prove ownership of a valid copyright and that an infringer actually copied, reproduced, prepared a derivative work from, distributed, publicly performed, or publicly displayed original elements of the copyrighted work.¹⁰⁷ The basic elements of copyright infringement are not so different from those of patent infringement. Defenses to copyright infringement, however, are quite different. Notably, independent creation is "a complete defense to copyright infringement."¹⁰⁸ Thus, an alleged infringer of copyright may defend a suit by proving that the allegedly infringing work was created without knowledge of the copyrighted work.¹⁰⁹ Fair use¹¹⁰ is also a defense to infringement of copyrighted works. An

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ See COMPENDIUM II OF COPYRIGHT OFFICE PRACTICES, § 450.03(a) (1984).

¹⁰¹ *Id.* See also 2 WILLIAM F. PATRY, PATRY ON COPYRIGHT, § 3:96 (Thomson West 2007) ("Examples of standard choreography without sufficient originality to qualify for protection include jumping jacks and walking; ballroom, social, and folk dance steps; runway modeling; cheerleader routines; sports plays; basic martial arts movements; and exercise programs, such as standard aerobics, gymnastics, and hydroaerobics.").

¹⁰² *Id.* (quoting Copyright Office Choreography Guide Letter 1) (emphasis added).

¹⁰³ See *eg.* PATRY, *supra* note 101, §3:96; Griffith, *supra* note 93, at 695, n. 117 (classifying as unprotectible ideas individual sports moves such as "Magic Johnson's behind-the-back pass, Pele's bicycle kick, or Wayne Gretzky's slapshot."); *id.* at 698 (comparing routine-oriented athletic performance to pantomimes and choreographic work).

¹⁰⁴ 17 U.S.C. §106.

¹⁰⁵ 17 U.S.C. §302(a).

¹⁰⁶ See *e.g.* 17 U.S.C. §§107-112, 117, 119, 121, 122 (providing limitations to rights based

¹⁰⁷ *Feist*, 499 U.S. at 361. See also *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946) (recognizing that copying may be proved by defendant's admission or by circumstantial evidence of access and substantial similarity)

¹⁰⁸ PATRY, *supra* note 101, §3:30 (discussing the role of independent creation as a defense as opposed to a requirement for originality); compare *supra* note 96.

¹⁰⁹ See *Alfred Bell*, 191 F.2d at 103 ("[W]e have often distinguished between the limited protection accorded a copyright owner and the extensive protection granted a patent owner. So we have held that 'independent

alleged infringer may claim fair use as a complete defense to copyright infringement by proving that the use was "for purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research."¹¹¹

Overall, the exclusive rights granted under patents are more absolute than the exclusive rights granted through copyrights. Because independent creation and fair use are not defenses available to patent infringers, patent law provides stronger protection for intellectual property rights. Patent rights are also more absolute because they are not subject to the numerous statutory exceptions provided under copyright law.

C. Trademarks

Trademark law exists mainly for the benefit of consumers by protecting consumers from deceptive practices and to encourage competition between businesses so as to increase quality and value of products.¹¹² Thus, Congress' regulates trademarks under the authority of the Commerce Clause.¹¹³ The Lanham Act provides a federal right to trademark protection for "any word, name, symbol, or device, or any combination thereof...used by a person . . . to identify and distinguish his or her goods . . . and to indicate the source of the goods."¹¹⁴ Thus, the subject matter protected by trademarks includes any word, name, symbol, or device.¹¹⁵ State statutory and common law provide similar and overlapping protection.¹¹⁶ The requirements for a valid trademark are that the mark is actually used on or in connection with goods in commerce and that the mark actually identifies and distinguishes the goods. Inherent in the requirement that a mark identifies and distinguishes goods is the requirement that the mark is distinct.¹¹⁷ The scope

reproduction of a copyrighted work is not infringement,' whereas it is vis a vis a patent."); *see also Arnstein*, 154 F.2d at 468 ("If evidence of access is absent, the similarities must be so striking as to preclude the possibility that plaintiff and defendant independently arrived at the same result.").

¹¹⁰ *See Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577-94 (1994) (declaring that one purpose of the fair use doctrine is to "permit[] and require[] courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster," and providing a practical application of the four statutory factors laid out in 17 U.S.C. § 107).

¹¹¹ 17 U.S.C. §107.

¹¹² *See Hanover Star Milling Co. v. Metcalf*, 240 U.S. 403, 412 ("The redress that is accorded in trademark cases is based upon the party's right to be protected in the good will of a trade or business. The primary and proper function of a trademark is to identify the origin or ownership of the article to which it is affixed.").

¹¹³ U.S. Const. art. I, § 8, cl. 3.

¹¹⁴ 15 U.S.C. § 1127. Service marks and trade dress are not discussed in this paper.

¹¹⁵ Protectable subject matter extends broadly to include sounds such as NBC's three chimes, Coca-Cola's bottle shape, the scent of plumeria blossoms on sewing thread. *See Qualitex Co. v. Jacobson Prod. Co., Inc.*, 514 U.S. 159, 161-62 (1995) (giving examples of the broad "universe of things" that the Lanham Act encompasses and holding that use of green-gold color on pads for dry cleaning presses may be protected as a trademark so long as the color satisfies the statutory requirement that it be used to identify and distinguish goods).

¹¹⁶ *See* 3 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION §22:1 (4th ed. 2009) ("In most states, courts have held that the state trademark common law and statutes on trademark law are to be given the same meaning and interpretation as the mainstream principles of common law and federal trademark law.").

¹¹⁷ *See Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 9-11 (1976) (holding that generic marks and merely descriptive marks are not eligible for registration; describing a generic mark as "one that refers . . . to the genus or which the particular product is a species" and a merely descriptive mark one that "conveys an immediate

of protection provided for trademarks is limited to the right to exclude others from the use of a mark in commerce on or in connection with particular goods or services where the use is "likely to cause confusion, or to cause mistake, or to deceive."¹¹⁸ Unlike the duration of a patent or copyright, the duration of a trademark is potentially unlimited.¹¹⁹

A performance technique is not likely protectable as a trademark to the extent that a performing artist claims that consumers associate the performance technique with that performing artist. Musical compositions are commonly allowed as trademarks for goods, but courts have been reluctant to recognize a musical composition as trademarks for the song itself or the person performing it.¹²⁰ Similarly, a performance technique may be recognized as a trademark for goods or service, but not as a trademark for a performing artist.¹²¹

D. Trade Secrets

Trade secret protection varies from state to state because no federal statute governs this type of intellectual property. All states recognize the tort of misappropriation of trade secrets,¹²² but the precise statement of the cause of action varies from state to state.¹²³ A trade secret is

idea of the ingredients, qualities or characteristics of the goods"; and holding that any trademark may *become* generic, and therefore subject to cancellation, if at any time the mark "becomes the common descriptive name of an article or substance."); *In re Oppedahl & Larson LLP*, 373 F.3d 1171, 1173-74 (Fed. Cir. 2004) (holding that descriptive marks may become registrable if they acquire distinctiveness or secondary meaning).

¹¹⁸ 15 U.S.C. §1114.

¹¹⁹ *Boston Prof'l Hockey Assoc. v. Dallas Cap & Emblem*, 510 F.2d 1004, 1014 (5th Cir. 1975) ("The copyright laws are based on an entirely different concept than the trademark laws, and contemplate that the copyrighted material, like patented ideas, will eventually pass into the public domain. The trademark laws are based on the needed protection of the public and business interests and there is no reason why trademarks should ever pass into the public domain by the mere passage of time.")

¹²⁰ *See Oliviera v. Frito-Lay, Inc.*, 251 F.3d 56, 60-63 (2d Cir. 2001) (acknowledging that musical compositions may be eligible as a symbol or device to identify goods or services, but holding that trademark law does not "accord to a performing artist a trademark or service mark in her signature performance" where the performing artist claimed that use of her performance in a potato chip commercial falsely implied her endorsement of the goods under 15 U.S.C. § 1125(a)). The *Oliviera* court noted that use of an artist's "persona" may amount to false implication of endorsement, and that the interests of fairness do not necessitate expansion of trademark rights because the law offers performing artists other protections including copyright and contracts. *Id.* at 61.

¹²¹ *See e.g.* *Kukkonen*, *supra* note 74, at 818 (discussing the possibility of trademark protection for sports moves and providing an example of how a famous wrestling move may be used as a trademark for a product like Slim Jim beef jerky, but the creator of the wrestling move would not likely have a cause of action against another wrestler using the move in a match because such activity would not be "endorsing or otherwise associated with a product"). *Kukkonen* suggests that copyright, right of publicity and trademark offer only "minimal to moderate protection for sports related moves, and that patent laws offer broader protection. *Id.* at 819. His article focuses on a patent entitled "Method for Putting," U.S. Patent No. 5,616,089 (filed Mar. 29, 1996), *id.* at 821, n. 82, suggesting that a patent for golf move would be nearly impossible to enforce given the difficulty involved with policing golf courses and driving ranges. *Id.* at 829.

¹²² By 2006, Wyoming was the only jurisdiction that had not "given specific legislative or judicial recognition to a tort cause of action for misuse of trade secret." *See* HENRY H. PERRITT, JR. TRADE SECRETS: A PRACTITIONER'S GUIDE § 1:5 (2d ed. & Supp. 2009). In *Briefing.com v. Jones*, 126 P.3d 928, 936 (Wyo. 2006), the Supreme Court of Wyoming adopted the cause of action as stated in the Restatement (Third) of Unfair Competition, §§ 39-45.

¹²³ *See* PERRITT, *supra* note 122, § 1:5 ("Lawyers and judges dealing with trade secret misappropriation disputes can look to multiple sources of law to resolve the disputes. These sources include the Uniform Trade Secrets Act, the Restatement of Unfair Competition, the Restatement of Torts, federal law, other types of intellectual property law,

generally "information that is (1) used in business, (2) that is secret, and (3) that gives a competitive advantage to the person with knowledge of it."¹²⁴ The owner of the trade secret must also take affirmative steps to maintain the secrecy of the information.¹²⁵ Failure to do so extinguishes trade secret protection.¹²⁶ Because secrecy is one of the essential elements of maintaining a trade secret¹²⁷ and most performance techniques must be used in public, most performance techniques would not be protectable as trade secrets.¹²⁸

II. HYPOTHETICAL SCENARIO

The following hypothetical scenario is based on a typical performance by Blue Man Group.¹²⁹ Descriptions of the scenes and instruments are modified to provide a clear and simplified illustration of three categories of performance techniques: (1) techniques that involve bodily movements with the use of a known prop or instrument, and (2) techniques that involve bodily movements with the use of a novel instrument, and (3) techniques that involve only bodily movements without the use of any props.

The lights dim. A silence sweeps the audience. The music booms as the lights begin to flash. Three men appear on stage, fully dressed in black, faces and hands painted in blue.¹³⁰ Each is carrying a long fiberglass pole.¹³¹ They begin to swing the poles, playing musical riffs on them that accompany background music from turntables.¹³² Using poles of varying lengths and thicknesses, the three men create enough different musical notes to compose a song.¹³³ The lights dim again at the end of the act.

In the next act, a spotlight reveals the three men. Two are holding large assemblies of

and general policy objectives.")

¹²⁴ See PERRITT, *supra* note 122, § 1:2.1.

¹²⁵ See PERRITT, *supra* note 122, § 4:1.

¹²⁶ *Id.*

¹²⁷ See PERRITT, *supra* note 122, § 1:2.1.

¹²⁸ See *Bonito Boats*, 489 U.S. at 155 ("Trade secret law provides far weaker protection in many respects than the patent law.") (quoting *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 489-490 (1974) ("The public . . . [is] free to discover and exploit the trade secret through reverse engineering of products in the public domain or by independent creation.")).

¹²⁹ <http://www.blue-man.com/about/whatis> ("Blue Man Group is a creative organization dedicated to creating exciting and innovative work in a wide variety of media. Blue Man Group is best known for their wildly popular theatrical shows and concerts which combine music, comedy and multimedia theatrics to produce a totally unique form of entertainment. The blissful party atmosphere created at their live events has become the trademark of a Blue Man Group experience.").

¹³⁰ This is an illustrative description inspired by the author's experience of a Blue Man Group performance. The description is not intended to be an exact description of any of the Group's actual performances.

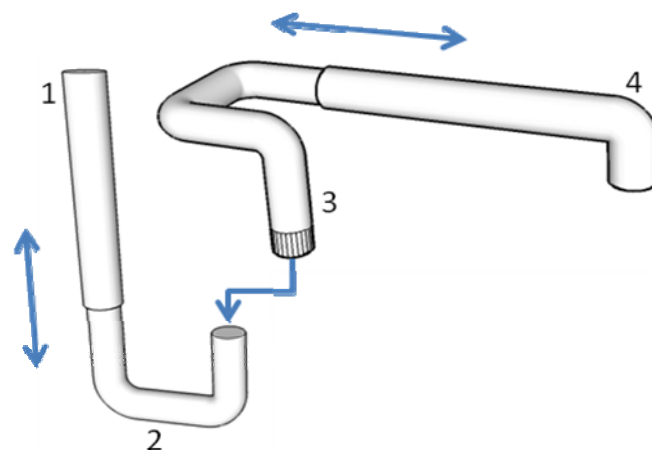
¹³¹ See <http://www.blue-man.com/experience/instruments> (describing various instruments used by Blue Man Group, including the "Airpole" – boat antennae made from fiberglass). See also http://pit5.com/music/Blue_Man_Group/main (describing various instruments that Blue Man Group has used in past performances).

¹³² *Id.*

¹³³ *Id.*

PVC pipe that are approximately six inches in diameter and the third man is holding a set of drum sticks. Each of the PVC pipe assemblies consist of two sections of pipe that are "slidingly"¹³⁴ connected such that one pipe slides freely along a length of the other. Each of the four sections of pipe includes bends that are strategically placed to allow the men to connect the two assemblies so as to form a single assembly on stage.¹³⁵ Once assembled, the third man strikes an end section as the other men move the sections methodically to create different pitches by changing the overall length of the tube assembly. The instrument resonates with different pitches as the men continue to reposition the sections. Figure 1 above illustrates such an instrument having four sections and shows the orientation of the sections.

FIGURE 1. ILLUSTRATION OF AN INSTRUMENT COMPRISING OF PVC PIPES¹³⁶



In the final scene, the three men lead the audience in performing typical "rock concert movements."¹³⁷ One man starts by raising one hand up in a fist and moving his fist up and down by alternating between straightening and bending his arm and matching the rhythm of the music. The audience follows. The next man introduces a second movement, alternating between bending and straightening his legs at the knees according to the rhythm of the music. The audience follows while continuing to perform the first movement. The third man introduces a third movement, nodding his head according to the rhythm of the music. The audience follows this movement, while continuing to perform the first and second movements.

¹³⁴ A common term used in drafting patents to describe a connection where two components slide against each other in operation. *See e.g.* Wear Protection for Musical Wind Instruments, U.S. Patent App. No. 10/685,133 (filed Oct. 14, 2003) ("A wear protection device of claim 1 wherein: at least one section of a musical instrument, which section during normal operation of the musical instrument may come into contact with another section of the musical instrument, has an end point with a groove capable of *slidingly* receiving the interface insert and wherein the interface insert protrudes beyond the end point of the section of a musical instrument.").

¹³⁵ Based on a musical instrument used by Blue Man Group. *See* http://pit5.com/music/Blue_Man_Group/main (describing the "Drumbone").

¹³⁶ Figure 1 is based on Blue Man Group's Drumbone.

¹³⁷ Blue Man Group uses this term in a performance entitled, "The Complex Rock Tour Live." *See* <http://www.bluman.com/about>.

Suppose that this performance is unique with respect to the performers' unconventional use of fiberglass poles and PVC pipes as instruments. They worked together to experiment with the lengths and thicknesses of the fiberglass poles, so as to achieve the correct tonal pitches that would come together to make music. They also invested a lot of time and energy into determining the exact lengths of PVC pipes needed to create different pitches, and how the pipes could be bent and twisted to be formed into compact units, so as to form an instrument. They also discovered how to bend those pipes so as to accommodate use on stage, and even transportation from location to location for performances in various locations. Their innovative ideas and performances have gained them nationwide fame. Critics rave about their creative and unconventional use of industrial articles as instruments.

III. ANALYSIS

This part of the paper analyzes the patentability of each of the three categories of performance techniques: (1) techniques that involve bodily movements with the use of a known prop or instrument, and (2) techniques that involve bodily movements with the use of a novel instrument, and (3) techniques that involve only bodily movements without the use of any props. The analysis for each category discusses whether the technique is patentable subject matter under the Federal Circuit's machine-or-transformation test, whether the technique would have been patentable prior to Federal Circuit's decision in *In re Bilski*, and whether the technique *should* be patentable as a matter of policy.

A. Patent Protection for Category 1 Performance Techniques: Techniques That Involve Bodily Movements and Use of a Known Prop or Instrument

The first category of performance techniques is represented in the hypothetical scenario by the performers' use of long fiberglass poles to produce a musical compilation.¹³⁸ A claim for this "Method For Using a Fiberglass Pole As a Musical Instrument" may be as follows:

1. A method for creating musical riffs, the method comprising the steps of:
 - an individual standing in an upright position;
 - the individual firmly grasping with both hands, a first end of a long, fiberglass pole, the fiberglass pole having the first end and a second end;
 - the individual holding the fiberglass pole in a position perpendicular to the plane of a surface on which the individual is standing, the second end of the fiberglass pole at a higher elevation than the first end of the fiberglass

¹³⁸ See *supra* Part II, p. 16.

pole;

the individual swiftly lowering the second end of the fiberglass pole until the fiberglass pole is in a position approximately parallel to the plane of the surface on which the individual is standing; and

the individual swiftly raising the second end of the fiberglass pole until the fiberglass pole is in a position perpendicular to the plane of a surface on which the individual is standing.¹³⁹

The method may be patentable subject matter under § 101 of the Patent Act as a "new use of a known . . . manufacture."¹⁴⁰ Although fiberglass is known to be used for boat antennae¹⁴¹ and a variety of other applications,¹⁴² a method for using fiberglass poles as musical instruments may be patentable as a new use.¹⁴³ Furthermore, the method satisfies the Federal Circuit's machine-or-transformation test because the method is "tied to a particular . . . apparatus,"¹⁴⁴ the apparatus being the fiberglass poles.

The other patent requirements may also be satisfied. The novelty requirement bars patenting if the invention – here, the invention is "A Method For Using a Fiberglass Pole As a Musical Instrument" – "was known or used by others"¹⁴⁵ at any time prior to the date of invention. Thus, if any other individual had previously swung a fiberglass pole swiftly to create sounds, their method would not be patentable. A patent examiner, however, would have to present evidence of this prior use. Such may be somewhat difficult to find considering the vagueness of the language in the claim. The examiner may have difficulty determining appropriate search terms to complete a sufficiently thorough search of the USPTO's database of

¹³⁹ This is a hypothetical claim drafted by the author to facilitate the patentability analysis for this section. The language and structure of the claim are based on basic requirements in the Manual of Patent Examining Procedures and typical patents for methods. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, MANUAL OF PATENT EXAMINING PROCEDURE § 608.01(m) (8th ed., 5th rev. 2008) (hereafter referred to as "MPEP") ("Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.") (internal citations omitted).

¹⁴⁰ 35 U.S.C. § 100 ("The term 'process means process, art or method, and *includes a new use of a known process, machine, manufacture, composition of matter or material.*") (emphasis added).

¹⁴¹ Blue Man Group originally used boat antennae made from fiberglass as "airpoles." *See supra* note 130.

¹⁴² *See e.g.* <http://en.wikipedia.org/wiki/Fiberglass> ("Uses for regular fiberglass include mats, thermal insulation, electrical insulation, reinforcement of various materials, tent poles, sound absorption, heat- and corrosion-resistant fabrics, high-strength fabrics, pole vault poles, arrows, bows and crossbows, translucent roofing panels, automobile bodies, hockey sticks, surfboards, boat hulls, and paper honeycomb. It has been used for medical purposes in casts. Fiberglass is extensively used for making FRP tanks and vessels. Fiberglass is also used in the design of Irish stepdance shoes.")

¹⁴³ *See MPEP, supra* note 139, § 2112.02 ("The discovery of a new use for an old structure based on unknown properties of the structure might be patentable to the discoverer as a process of using.")

¹⁴⁴ *In re Bilski*, 545 F.3d at 956. *See also supra* note 33 and accompanying text.

¹⁴⁵ 35 U.S.C. § 102(a). *See also supra* note 53.

patents and patent applications, all publications,¹⁴⁶ and even the internet.¹⁴⁷

If a patent examiner cannot find a prior art reference¹⁴⁸ that anticipates¹⁴⁹ the invention, the examiner could, alternatively, deny the application on the basis of obviousness – that the invention would have been "obvious . . . to a person having ordinary skill in the art."¹⁵⁰ An argument based on obviousness may be supported by two or more prior art references¹⁵¹ – for example, one reference describing a method for creating sounds by swinging a pole and another reference that describes use of fiberglass in musical instruments. The argument would be that a PHOSITA¹⁵² – in this case, perhaps a musician or someone who makes musical instruments – would have found the method to be obvious in light of prior knowledge that poles can be used as musical instruments and that fiberglass is known to be used in making musical instruments.

Suppose that the patent examiner cannot find prior art references that anticipate or render the method obvious, or that the inventors are able to convince the patent examiner that their method is sufficiently novel and nonobvious. Would the claim also satisfy the enablement requirement? The claim fails to provide a measure of the strength and speed actually required to elicit a sound from moving the pole, but considering the simplicity of the method, the claim likely enables a PHOSITA to figure out how to use the method without "undue experimentation." Thus, the possibility of a patent being issued, despite the simple nature of the method, might be better than expected.¹⁵³ Then, anyone who swings a fiberglass pole and

¹⁴⁶ See MPEP, *supra* note 139, § 904 ("The examiner . . . searches the prior art as disclosed in patents and other published documents, i.e., nonpatent literature (NPL). Any document used in the rejection of a claim is called a reference.").

¹⁴⁷ See MPEP, *supra* note 139, § 904.02 (allowing patent examiner to perform internet searches, but providing guidelines for property practice).

¹⁴⁸ A prior art "reference" is any document that would trigger one or more of the statutory bars in section 102 of the Patent Act. See MERGES AND DUFFY, *supra* note 19, at 360; see also *supra* note 59 (defining "prior art");

¹⁴⁹ *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) ("Anticipation . . . requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

¹⁵⁰ 35 U.S.C. § 103(a). See also *supra* note 54.

¹⁵¹ Examples of typical language used to deny claims based on obviousness may be found in patent prosecution files (file wrappers) at <http://portal.uspto.gov/external/portal/pair>. In an office action issued on June 1, 2006 for a non-final rejection in the application for "Method of Holding a Putter and Putting a Golf Ball, U.S. Pat. No. 7,261,652 (filed Jan. 30, 2004) (issued Aug. 28, 2007), a patent examiner rejected claim 3 "under 35 U.S.C. 103(a) as being unpatentable over Collins in view of Shioda (US 2004/0166956) . . . [I]t would have been obvious to one of ordinary skill in the art to hold the Collins club with a grip such that the club passes between the index finger and the ring finger of the target hand in view of Shioda who teaches that such a grip . . . provides additional stability to a golfer during his swing."

¹⁵² See *supra* note 56 and accompanying text.

¹⁵³ Consider, for example, U.S. Pat. No. 7,261,652, see *supra* note 146, which claims as its first claim "[a] method of a player holding a golf club with a target side hand and a second hand, such golf club having a shaft, a shaft top having an end face, a club head attached to said shaft, and at least one location on said shaft for gripping the club, said method comprising: pressing said end face of said shaft top against the player's armpit or area at the front of shoulder of the arm of the target side hand; with the target side hand, grasping one of said at least one location for gripping; and grasping with a second hand, or resting all or a portion of said second hand against, one of said at least one location for gripping." In an office action dated June 1, 2006 for a non-final rejection, the claim was initially rejected for lack of novelty, but the patent finally issued. The language of this claim is broad enough, like the language of the hypothetical claim, to encompass a wide range of motions.

produces a sound will be liable for patent infringement. An innocent infringer, one with no intent to infringe and no actual knowledge of the patent, would have no defense against liability.¹⁵⁴ Although one infringing use would not likely result in significant monetary damages, the patentee would have the right to enjoin anyone from swinging a fiberglass pole in the air to create a sound.

Under current patent law, this first category of performance techniques certainly falls within patentable subject matter and, in terms of novelty and nonobviousness, the method is one that is on par with recently issued patents.¹⁵⁵ Several policy reasons as discussed in Part I.A.2, however, go against the patenting of this method. First, the invention would not contribute any significant development in technology.¹⁵⁶ Second, the cost of developing this technique was likely minimal, and thus a patent is not necessary for the inventors to recoup their costs.¹⁵⁷ So the cost to society – possibility of unexpected liability for harmless movements – is disproportionately high. Third, the incentive for disclosure is irrelevant. Anyone could easily figure out how to perform the technique and the value of the technique is purely in its ability to entertain an audience.¹⁵⁸

Granting a patent for a method that involves basic human bodily movements using a commonly available apparatus would monopolize a broad range of movements. Judge Mayer argues that business method patents subject individuals to "unexpected potential infringement liability for everyday conversations and commercial interactions."¹⁵⁹ Similarly, a patent for a performance technique involving only basic bodily movements and something as common as a fiberglass pole would subject individuals to unexpected liability. In this example, restriction of the public right is not justified by any benefits that the public may receive from the disclosure of a method for creating sounds by swinging a fiberglass pole.

B. Patent Protection for Category 2 Performance Techniques: Techniques That Involve Bodily Movements and Use of a Novel Instrument

The second category of performance techniques is also patentable subject matter and is more likely to satisfy the novelty and nonobviousness requirements. The second category is represented in the hypothetical scenario by the performers' use of a musical instrument made of PVC pipes.¹⁶⁰ The inventions in this instance are the instrument itself and the method for using the instrument. A hypothetical apparatus claim for this instrument may be drafted as follows:

¹⁵⁴ See *supra* text accompanying note 64.

¹⁵⁵ See *supra* note 148.

¹⁵⁶ See *supra* notes 34-35 and accompanying text.

¹⁵⁷ See *supra* notes 43-44 and accompanying text.

¹⁵⁸ See *supra* note 46 and accompanying text.

¹⁵⁹ *In re Bilski*, 545 F.3d at 1008 (Mayer, J., dissenting) ("To the extent that business methods are deemed patentable, individuals can face unexpected potential infringement liability for everyday conversations and commercial interactions. Implicit in the Patent Clause itself is the understanding that free exploitation of ideas will be the rule, to which the protection of a federal patent is the exception." (citing *Bonito Boats*, 489 U.S. at 151)).

¹⁶⁰ See *supra* Part II, pp. 16-17.

1. A musical instrument comprising of:

a first section having a first end and a second end, a length between 20 inches and 24 inches, an inner surface, and an outer surface, the inner surface being concentric with the outer surface, an inner diameter and an outer diameter, the inner diameter being between 5 and 6 inches and the outer diameter being $\frac{1}{4}$ inch greater than the inner diameter;

a second section having a first end and a second end, a length between 30 inches and 36 inches, an inner surface, and an outer surface, the inner surface being concentric with the outer surface, an inner diameter and an outer diameter, the inner diameter being $\frac{1}{4}$ inch less than the outer diameter of the first section, and the outer diameter being $\frac{1}{4}$ inch greater than the inner diameter of the second section;

the second section having a first bend and a second bend, each bend having a radius of 90 degrees;

a third section having a first end and a second end, a length between 40 inches and 46 inches, an inner surface, and an outer surface, the inner surface being concentric with the outer surface, an inner diameter and an outer diameter, the inner diameter being the same diameter as the inner diameter of the first section, and the outer diameter being $\frac{1}{4}$ inch greater than the inner diameter of the third section;

the third section having a first bend, a second bend, and a third bend, each bend having a radius of 90 degrees;

a fourth section having a first end and a second end, a length between 30 inches and 36 inches, an inner surface and an outer surface, the inner surface being concentric with the outer surface, an inner diameter and an outer diameter, $\frac{1}{4}$ inch greater than the outer diameter of the third section, and the outer diameter being $\frac{1}{4}$ inch greater than the inner diameter of the fourth section;

the fourth section having a bend, the bend being 90 degrees;

the second end of the first section being slidingly connected

to the first end of the second section;

the second end of the second section being slidably connected to the first end of the third section;

the second end of the third section being slidably connected to the first end of the fourth section; and

the first section, second section, third section, and fourth section being made of PVC.¹⁶¹

As can be seen by comparing the language of this hypothetical claim for the musical instrument to the hypothetical claims for the first¹⁶² and third¹⁶³ categories of performance techniques, this apparatus claim may be stated more clearly with more detail, albeit using more words. Using specific measurements, or even ranges of measurements, the invention may be described with sufficient particularity to distinguish it from prior art. Novelty and nonobviousness may be more easily satisfied because the claim can be drafted with more detail so as to avoid the scope of prior art. The claim may even be amended during the prosecution process until it is sufficiently narrow in scope.

When reading this claim side-by-side with Figure 1,¹⁶⁴ the claim may seem to sufficiently "enable"¹⁶⁵ a PHOSITA to "make or use"¹⁶⁶ the instrument. Upon closer inspection, however, the claim fails to specify the location of the bends, the lengths and orientation of the portions between the bends, and the extent to which the connecting ends of the sections overlap. The claim may be easily amended with additional measurements to sufficiently describe the instrument.

The "bodily movement" portion of the second category of performance techniques would be drafted as a method claim that is dependent¹⁶⁷ on the first claim as follows:

2. A method for playing the musical instrument of claim 1, the method comprising the steps of:

a first individual holding the first section and the second section of the musical instrument of claim 1;

¹⁶¹ This is a hypothetical claim drafted by the author to facilitate the patentability analysis for this section. The claim likely does not satisfy the technical drafting requirements outlined in the Manual of Patent Examination Procedures, but merely serves to give a vague illustration of how the apparatus may be described as a claim.

¹⁶² See *supra* Part III.A.

¹⁶³ See *infra* Part III.C.

¹⁶⁴ See *supra* Part II, p. 17.

¹⁶⁵ See *supra* note 56.

¹⁶⁶ See *supra* note 56.

¹⁶⁷ See MPEP, *supra* note 139, § 608.01(n) ("One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application.").

a second individual holding the third section and the fourth section of the musical instrument of claim 2;

a third individual holding two wooden drumsticks;

the first individual sliding the first section back and forth along the second end of the second section, while maintaining the second section in a substantially static position;

the second individual sliding the fourth section back and forth along the second end of the third section, while maintaining the third section in a substantially static position;

the third individual striking the second section with the drumsticks, alternating strikes, so as to create an audible sound; and

the first individual and the second individual continuing to slide the first section and the fourth section while the third individual continues to strike the second section with the drumsticks in a rhythmic pace so as to create different sounds.¹⁶⁸

In the patentability analysis for the first category, the novelty and nonobviousness requirements depend solely on the method or technique for using the instrument, rather than on the instrument itself. Here, the novelty and nonobviousness of the method or technique depends on the novelty and nonobviousness of the instrument. In other words, if the instrument is novel and nonobvious, then any method or technique for using the instrument is also novel and nonobvious. This is because the instrument is stated as an element of the claim for the method or technique. If the instrument is *not* novel and nonobvious, then the method or technique will fall into the first category of performance techniques.

In contrast to the claim in Part III.A, the performance technique here is described with more clarity and more limitations. The scope of protection is limited to movements that involve the use of an apparatus that is specifically described. When compared with the language in the claim in Part III.A (e.g. *firmly* grasping, *swiftly* lowering), the measurements and material specifications provided in the apparatus claim also offer more tangible standards for determining liability for infringement. People are much less likely to stumble upon unexpected liability for infringement of a patented method for using a musical instrument, which was developed over a

¹⁶⁸ This is a hypothetical claim drafted by the author to facilitate the patentability analysis for this section. The claim likely does not satisfy the technical drafting requirements outlined in the Manual of Patent Examination Procedures, but merely serves to give a vague illustration of how the method may be described as a claim.

period of time and perfected after experimentation.¹⁶⁹

Allowing patents for Category 2 performance techniques, like the one described in the second claim of this section, is consistent with patent law policy. The three men invested time and effort into developing a new instrument.¹⁷⁰ Their use of PVC pipes is creative and innovative and the resulting instrument is a product that can be manufactured by others. Their invention also contributes to the development of musical instruments by inspiring others to make use of nonconventional materials. By disclosing the specifications for the instrument, the inventors are sharing the fruit of their labor – the time and money that they invested into developing a finished product. Granting patents for performance techniques that involve the use of novel instruments encourages individuals to develop innovative and useful products, thus contributing to the economy and serving the main purpose of the Patent Act.

C. Patent Protection for Category 3 Performance Techniques: Techniques That Involve Bodily Movements Without the Use of Any Props

Under current patent law, the third category of performance techniques is not patentable subject matter. The third category is represented in the final scene of the hypothetical scenario.¹⁷¹ Consider a hypothetical claim for the technique described:

1. A method for entertaining an audience, the method comprising of the steps of:

a first individual performing a first movement by raising one hand up in a fist and moving said fist up and down by alternating between straightening and bending an arm in a rhythmic beat;

the first individual pointing to an audience so as to indicate to the audience to follow the first movement;

a second individual performing a second movement by alternating between bending and straightening both of the second individual's legs in a rhythmic beat matching the rhythmic beat of the first movement;

the second individual pointing to the audience so as to indicate to the audience to follow the second movement; a third individual performing a third movement by nodding the third individual's head in a rhythmic beat matching the rhythmic beat of the first movement;

¹⁶⁹ See *supra* Part II, p. 18.

¹⁷⁰ See *supra* Part II, p. 18.

¹⁷¹ See *supra* Part II.

the third individual pointing to the audience so as to indicate to the audience to follow the third movement.¹⁷²

As discussed in Parts I.A.1 and I.A.2, the Federal Circuit's recent holding in *In re Bilski*¹⁷³ significantly changes the scope of patentable subject matter. Under the machine-or-transformation test, processes that are not "tied to a particular machine or apparatus. . . or . . . transform[] a particular article into a different state or thing."¹⁷⁴ Performance techniques in the third category do not involve use of a machine or apparatus, but a question remains as to whether movement of a human body would satisfy the second part of the test – transformation of an article. In *In re Bilski*,¹⁷⁵ the Federal Circuit commented that "even a claim that recites 'physical steps' but neither recites a particular machine or apparatus, nor transforms any article into a different state or thing, is not drawn to patent-eligible subject matter."¹⁷⁶ Accordingly, the Federal Circuit would likely hold that a claim for a performance technique involving only bodily movements is a claim that merely recites physical steps, and not one that transforms any article. Consequently, the third category of performance techniques is not patentable subject matter under current patent law.¹⁷⁷

The fate of patentable subject matter is still uncertain, however, because the Supreme Court granted certiorari to review the Federal Circuit's decision. One of the issues on review is that the Federal Circuit's machine-or-transformation test goes against Congressional intent to allow "broad statutory grant of patent eligibility."¹⁷⁸ Based on the broad statutory definition of "process,"¹⁷⁹ *Bilski* argues that the only exclusions from patentable subject matter are laws of nature, natural phenomenon, abstract ideas.¹⁸⁰ If the Supreme Court agrees with *Bilski*, then Category 3 performance techniques would likely fall within patentable subject matter.

Suppose the Supreme Court decides that patentable subject matter may include pure processes¹⁸¹ so long as they are not laws of nature, natural phenomenon, or abstract ideas. The third category of performance techniques could escape rejections based on patentable subject matter, but novelty and nonobviousness requirements may bar most Category 3 techniques. Consider the hypothetical claim above and compare it with the popular childhood game "Simon

¹⁷² This is a hypothetical claim drafted by the author to facilitate the patentability analysis for this section. The language and structure of the claim are based on basic requirements in the Manual of Patent Examining Procedures and typical patents for methods. *See* MPEP, *supra* note 139, § 608.01(m).

¹⁷³ 545 F.3d 943.

¹⁷⁴ *In re Bilski*, 545 F.3d at 954.

¹⁷⁵ 545 F.3d 943.

¹⁷⁶ *Id.* at 961.

¹⁷⁷ *But see* Kukkonen, *supra* note 71, at 821-22 (discussing several claims that were allowed despite having only minimal reference to an apparatus).

¹⁷⁸ *See supra* note 31.

¹⁷⁹ The Patent Act defines a process as "process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter or material." 35 U.S.C. §100. *See also supra* note 27.

¹⁸⁰ Transcript of Oral Argument at 3, *Bilski v. Doll*, No. 08-964 (argued Nov. 9, 2009).

¹⁸¹ *See supra* note 74.

Says."¹⁸² A patent examiner might not be able to prove that every step of the hypothetical claim was previously performed in a game of Simon Says, thus precluding a rejection for lack of novelty under §102(a). The claim could and should be rejected, however, under §103 for being obvious in light of Simon Says.

The policy reasons for denying patent protection for business methods and the first category of performance techniques also apply to this last category of performance techniques. First, patent protection is not a necessary incentive for performing artists to develop entertaining performance techniques.¹⁸³ A familiar example of a performance technique that involves only bodily movement is Michael Jackson's "Moonwalk."¹⁸⁴ If Michael Jackson had patented that technique, would it have prohibited Vanilla Ice from performing the "Running Man"?¹⁸⁵ Perhaps performers like Michael Jackson and Vanilla Ice deserve credit for being creative and providing entertainment to society, but they have also reaped substantial rewards for their work. Patent protection is also unnecessary incentive for less well-known or less successful artists. Such artists are likely seeking every opportunity to perform in hopes of building recognition. Thus, they benefit from showing off unique talents and techniques to as many people as possible.

The cost of developing techniques that involve only bodily movements is minimal. Investments likely include time and energy, possibly the cost of special training, but a technique learned from someone else would not likely be patentable anyways. The only benefit to society is entertainment, but society already pays for that benefit through ticket sales, recordings, and other merchandise. Allowing patent protection for bodily movements would further subject individuals to unexpected liability. Patent protection for performance techniques involving only bodily movements is a cost to society that is not justified by any of the benefits that it confers.

CONCLUSION

The patent system exists to encourage innovations that would contribute to economic development. Without patent protection, pharmaceutical companies and manufacturers would have difficulty recouping costs for developing new products or improving existing products. In contrast, singers, dancers, musicians, actors, and actresses are motivated by their desire to be creative, to entertain, and, in some instances, by desire for fame and fortune. Their success is

¹⁸² See e.g. http://en.wikipedia.org/wiki/Simon_says (describing the children's game as one that involves one individual performing a move and other individuals subsequently imitating that move).

¹⁸³ See e.g. Jeffrey A. Smith, *It's Your Move—No It's Not! The Application of Patent Law to Sports Moves*, 70 U. COLO. L. REV. 1051 (1999) (suggesting that public welfare may be better served if Congress initiates categorical denial of subject matter such as sports moves, an area where innovation is likely to occur "regardless of the incentives provided by patent law").

¹⁸⁴ See <http://www.inthe80s.com/80sdance.shtml> ("Moonwalk. You move one foot backwards keeping all your foot on the floor while your static foot has its heel raised. Keep changing foots. It shud [sic] look as if you are walking forward but the floor is pulling you back.").

¹⁸⁵ See <http://www.inthe80s.com/80sdance.shtml> ("The Running Man. Also known as The Vanilla Ice, you take a step forward, then slide that foot back, immediately placing the next foot forward. Repeat while moving your bent arms forward and back (together). When done quickly, you'll look as though you're 'running.' If you want to get really fancy, you can pivot on one foot so that you're facing in the other direction and do it all over again.").

generally measured by their popularity, the degree of recognition that they receive from peers, the revenue that they generate through live and recorded performances. Patent protection is an unnecessary incentive to induce development of new techniques for entertaining. Therefore, patent protection should be limited to inventions that contribute enough value to society to justify high costs involved with granting exclusive rights to patents.

In conclusion, under current patent law, patent protection is available *and* justified for performance techniques that involve bodily movements and the use of a novel instrument. Although patent protection is also available for performance techniques that involve bodily movements and the use of a known prop or instrument, such protection is not justified in many cases. Finally, patent protection is rightfully excluded for performance techniques that involve only bodily movements.