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An Attribution Right for Patented Inventions

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Cover Page Footnote

The author gratefully acknowledges the outstanding assistance of Leah Rupp Smith, who provided a wealth of background information as well as considerable food for thought in the preparation of this article.

AN ATTRIBUTION RIGHT FOR PATENTED INVENTIONS

John T. Cross¹

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INTRODUCTION

The United States patent and copyright statutes both trace their roots to the same constitutional provision: Article I's "Intellectual Property Clause."² And yet, despite this common origin, today's patent and copyright statutes differ in many ways. Patents and copyrights vary significantly in duration,³ the method by which one obtains protection,⁴ and even the basic nature of protection.⁵ These variations reflect a general perception that the

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² U.S. CONST. art. I, § 8, cl. 8.

³ Compare 17 U.S.C. §§ 302–04 (2006) (copyright term), with 35 U.S.C. §§ 154–56, 173 (2006) (patent term).

⁴ Compare 17 U.S.C. § 302 (process of obtaining copyrights), with 35 U.S.C. § 111 (process of obtaining patents).

⁵ Compare 17 U.S.C. § 501 (copyright infringement), with 35 U.S.C. § 271 (patent infringement).

processes of invention and authorship are qualitatively different.⁶

The United States' accession to the Berne Convention⁷ introduced one additional difference in the scope of the rights afforded authors and inventors. Authors—at least those who produce works of visual art—are now entitled to a set of “moral rights.”⁸ These rights, set out in the Visual Artists Rights Act of 1990 (“VARA”)⁹ include a right of attribution, which allows the author to claim authorship of the works she¹⁰ has produced, and a right of integrity, which allows the author to prevent any alteration or mutilation of the work that might affect her reputation or honor.¹¹ Unlike the copyright, the moral right is inalienable, and survives the sale of the work to another.¹²

United States patent law, by contrast, contains no litigable moral rights.¹³ Instead, the Patent Act affords inventors only “economic” rights.¹⁴ In many cases, the rights inherent in the patent will give the owner a sufficient economic benefit. Moreover, the leverage of a patent can serve as a back-door way to obtain moral rights, making a separate grant of rights arguably unnecessary.¹⁵ If a given inventor wants attribution, for example, he could in theory insist on such attribution when licensing his rights to another.

⁶ The most important of the specific claimed differences between authorship and invention will be explored in Part II of this article.

⁷ Berne Convention for the Protection of Literary and Artistic Works, July 24, 1971, 1161 U.N.T.S. 30 [hereinafter Berne Convention]. The Convention has been revised several times. References in this article are to the 1971 Paris Text.

⁸ The Berne Convention provides:

Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.

Id. at art. 6bis(1).

⁹ 17 U.S.C. § 106A.

¹⁰ English pronouns distinguish between the genders. Rather than bemoan this fact, this article uses this feature of the English language to its advantage. Throughout this article, authors of copyright works will be referred to in the feminine, while inventors of patentable inventions will be referred to in the masculine.

¹¹ 17 U.S.C. § 106A(a) (“Rights of Attribution and Integrity”). Note that VARA is not the only source of moral rights in United States law. Section 43(a) of the Lanham Act (the federal trademark law) also provides both a version of the right of attribution and a right of integrity, at least in situations where a product is sold or offered for sale in commerce. 15 U.S.C. § 1125(a) (2006). While the attribution right was significantly limited—at least with respect to works of authorship—by the Supreme Court in 2003, the Lanham Act right still applies in some situations. *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 37 (2003). State laws may also provide moral rights. See generally John T. Cross, *Reconciling the “Moral Rights” of Authors with the First Amendment Right of Free Speech*, 1 AKRON INTELL. PROP. J. 185, 200–04 (2007). This article will concentrate mainly on VARA rather than these other forms of moral right-like laws.

¹² 17 U.S.C. § 106A(e) (transfer and waiver of right).

¹³ See generally 35 U.S.C. § 261 (2006). Again, as noted *supra* note 11, other laws may also provide limited moral rights.

¹⁴ See 35 U.S.C. § 261.

¹⁵ On the other hand, an inventor cannot always use the leverage of a patent to exact a moral rights promise from the buyer of a product incorporating the invention. See *infra* text accompanying note 83.

Of course, there is one obvious reason why the United States grants moral rights to some authors, but not to inventors. By virtue of its accession to the Berne Convention, the United States is under a duty to provide moral rights to copyrighted works.¹⁶ No similar treaty obligation exists for patented inventions.

But duty aside, is there any fundamental reason why moral rights should be available only to authors? After all, many copyright owners could in theory use the legal monopoly afforded by copyright as a way to bargain for moral rights, and yet the Copyright Act still provides those rights separately. Could the same arguments used to justify moral rights in works of authorship also be used to justify granting similar rights for inventions? Or, are the differences in the creative processes of authorship and invention so different that they warrant disparate treatment? This article attempts to answer these questions. Answering them, however, requires an excursion into the scholarship of discovery and creativity.

Part I of this article discusses whether moral rights even make sense in the context of inventions. It concludes that the basic notion of moral rights in inventions is actually less radical than it may seem. However, it also points out that the right of *attribution* makes the most obvious sense in the context of inventions. Accordingly, this article discusses only attribution.

Part II addresses the most common arguments for treating authors and inventors differently in granting a moral right of attribution. The disparity stems from different views of the motives underlying, and processes involved in, the two forms of creation. As Part II will demonstrate, however, these alleged differences actually reflect stereotypes of authorship and invention. Most of these stereotypes are not supported by actual evidence, at least not in all cases. Others, even if supported by fact, provide no meaningful justification for different moral rights treatment.

After debunking the reasons for treating authorship and invention differently, Part III briefly discusses what a right of attribution for patented inventions¹⁷ might actually look like. As with moral rights in copyright, the right should remain in the inventor even after assignment or licensing of the patent. It should be enforceable by a private right of action, much like the copyright right. However, an inventor's right to insist on attribution need

¹⁶ See *supra* text accompanying note 8. Berne Convention Article 6*bis*, quoted *supra* in note 8. Note that another leading intellectual property treaty dealing with copyright does not contain a duty to afford moral rights. While the important World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS") basically incorporates the requirements of Berne, it explicitly *excludes* any obligation to provide moral rights. Agreement on Trade-Related Aspects of Intellectual Property Rights art. 9(1), Apr. 15, 1994, 1869 U.N.T.S. 299, 33 I.L.M. 1197.

¹⁷ This article focuses primarily on patented inventions. For reasons that will be discussed more fully in Part III, extending the right to *unpatented* inventions presents serious practical difficulties. See *infra* text accompanying notes 100 and 101.

not be absolute. It could apply only when another person wrongfully claims that he or a third party is responsible for the invention. On the other hand, if that other person makes no representation concerning inventorship, express or implied, there is no compelling reason to allow the inventor to force the other person to attribute.

I. MORAL RIGHTS FOR INVENTORS?

At first, the very idea of granting moral rights in inventions may seem farfetched. Virtually all of the debate concerning these rights has focused on the author and the authorial process.¹⁸ Nothing in the international treaty system dealing with invention requires nations to provide moral rights to inventors.¹⁹ Nor have any of the leading industrialized nations elected to provide such rights to inventors in their domestic laws.²⁰

And yet, while moral rights *laws* may not exist, moral rights notions are not entirely foreign to the world of invention. Consider the United States Patent Act. This statute requires most patent applications to be made by, and name, the actual inventor—even if the inventor has assigned the right to the patent itself to another.²¹ While this provision is not directly enforceable by the inventor, it nevertheless reflects a notion that accurate attribution is important, even in the realm of invention.

Similarly, professional norms in the sciences themselves have quite strict rules governing attribution of inventorship.²² While these norms differ among various fields, they are usually taken quite seriously. An article or patent application that omits the name of an inventor, or includes someone not actively involved in the invention, may well lead to a heated dispute among the parties involved. These disputes provide the fodder for many university grievances.

A second reason it may seem odd to discuss moral rights for inventors stems from the fact that we tend to think of moral rights as a “package.” The Berne Convention, for example, entitles authors to both a

¹⁸ There is a rich discourse concerning moral rights in U.S. law. Some of the more informative sources include: ROBERTA ROSENTHAL K WALL, *THE SOUL OF CREATIVITY* 1–4 (2010); Jane Ginsburg, *The Right to Claim Authorship in U.S. Copyright and Trademarks Law*, 41 HOUS. L. REV. 263, 281, 286–87 (2004); Justin Hughes, *The Personality Interest of Artists and Inventors in Intellectual Property*, 16 CARDOZO ARTS & ENT. L.J. 81, 81, 96 (1998); Ilhyung Lee, *Toward an American Moral Rights in Copyright*, 58 WASH. & LEE L. REV. 795, 798–99 (2001); Susan P. Liemer, *Understanding Artists' Moral Rights: A Primer*, 7 B.U. PUB. INT. L.J. 41, 41–42 (1998); and Burton Ong, *Why Moral Rights Matter: Recognizing the Intrinsic Value of Integrity Rights*, 26 COLUM. J.L. & ARTS 297, 297–98 (2002).

¹⁹ See generally *Copyright and Related Rights (Neighboring Rights)*, WORLD INTELL. PROP. ORG., http://www.wipo.int/wipolex/en/results.jsp?countries=&cat_id=11 (last visited Mar. 17, 2012).

²⁰ See generally *id.*

²¹ See 35 U.S.C. §§ 111(a)(1)–(b)(1), 261 (2006).

²² Catherine L. Fisk, *Credit Where It's Due: The Law and Norms of Attribution*, 95 GEO. L.J. 49, 81–82 (2006).

right of attribution and a right of integrity.²³ Not all of this package translates readily to the realm of invention. While attribution (and the companion right of non-attribution set out in VARA, which allows the author to prevent false attribution of works the author did *not* create) could readily apply to inventions, it is far more difficult to conceive of how a right of integrity, or the VARA right to prevent “destruction,”²⁴ would apply. Given the mechanism of the patent laws, where the invention is described in a set of claims approved by the Patent and Trademark Office rather than embodied in a fixation as in copyright, rights of integrity and destruction present almost metaphysical problems.²⁵ Moreover, a right of integrity might unduly hinder improvements to inventions, raising serious policy concerns not usually present in copyright law. Because of these conceptual and policy concerns, as well as space limitations, this article will concentrate exclusively on the right of attribution. Some of the same arguments will also apply to the corollary moral right of “non-attribution,” which gives an author the right *not* to be named as the author of a work she did not produce. However, this article will not consider rights such as integrity and destruction. To be clear, however, this article is not saying that rights such as integrity cannot be justified. It merely postpones that question for another day.

In brief, a right of attribution in inventions is not as farfetched as it may initially seem. But whether such a right *should* be created is another matter. Even though notions of attribution may already exist in the sciences and engineering, there may be other reasons not to create enforceable rights similar to those enjoyed by some authors. The next section explores whether the justifications for a right of attribution in authorship also apply to inventions.

II. WHY MORAL RIGHTS LAW TREATS AUTHORS AND INVENTORS DIFFERENTLY

Moral rights are a relatively new phenomenon in United States law. The United States resisted granting moral rights to authors for a number of years.²⁶ Indeed, the issue of moral rights was one of the leading obstacles to

²³ See *supra* note 8.

²⁴ An author has the right to prevent destruction of any works of “recognized stature.” 17 U.S.C. § 106A(a)(3)(B) (2006).

²⁵ To elaborate, the scope of a patented invention is set out in the claims. A violation of the right of integrity would occur only if someone either invented something that performed the same function in a different way or produced a similar product but altered the way it works. As neither of these products would infringe the patent, it could easily impede the progress of technology if the patent owner could nevertheless recover for violation of a right of integrity. The right of destruction is even more difficult to comprehend. As the invention exists in the claim, it is literally impossible to “destroy” it.

²⁶ See, e.g., *Vargas v. Esquire, Inc.*, 164 F.2d 522, 523–27 (7th Cir. 1947) (rejecting a common-law attribution claim by an artist who had assigned his copyright. The court in its reasoning noted that the United States had not yet adopted moral rights.). Based in part on cases like *Vargas*, state legislatures actually began to provide moral rights well before Congress acted. See Cross, *supra* note 11, at 203–04

the United States' accession to the Berne Convention, as that treaty obligates its members to provide a limited set of moral rights to authors.²⁷ Even after accession, the United States has been slow in implementing protections for moral rights. VARA, which Congress enacted to implement the Berne requirement, applies only to a small set of authors who produce "work[s] of visual art," such as paintings and sculpture.²⁸

While the United States' view on moral rights for authors may be at odds with worldwide norms, its position on moral rights for inventors is perfectly orthodox. As noted in the prior section, no major nation provides any moral rights for inventions.²⁹ Indeed, it seems that few have even considered whether moral rights might be inappropriate in patent law.

The long-running (and ongoing) debate in the United States concerning moral rights for authors has at least one useful by-product. That debate has spawned a wealth of literature discussing whether authors should have moral rights. Some of this literature has also explored whether similar arguments might justify moral rights for inventors. Almost without exception, the answer has been a resounding "no."³⁰ Typically, the argument against moral rights for inventors will cite basic differences in both the processes of authorship and invention, and between authors and inventors themselves.³¹ The unique nature of the authorial process contains certain features that justify the grant of a unique set of moral rights. Because the process of invention lacks these features, the argument continues, moral rights are inappropriate, or at least unnecessary.³²

On their face, these arguments seem convincing. There is often considerable evidence cited in support. And yet, this evidence tends to be one-sided. There is often impressive data dealing with authors and their process of creation. But when the analysis turns to inventors, there is less hard evidence. Instead, the discussion often simply makes general statements reflecting a fairly stereotypical view of the inventive process. A better reasoned approach would need to consider two additional facets. First, it should consider evidence concerning the creative process underlying invention, to determine whether the claimed differences between invention

n.98, for a list of these statutes. However, many of these state laws will be preempted by VARA. *Id.* at 205-14.

²⁷ See *supra* note 8; *Waiver of Moral Rights in Visual Artworks*, LIBR. OF CONGRESS (Oct. 24, 1996), available at <http://copyright.gov/reports/exsum.html>. See generally Robert C. Bird & Lucille M. Ponte, *Protecting Moral Rights in the United States and the United Kingdom: Challenges and Opportunities Under the U.K.'s New Performances Regulations*, 24 B.U. INT'L L.J. 213, 213 (2006).

²⁸ 17 U.S.C. § 106A(a)-(b) (providing that only the author of a work of visual art is entitled to the rights set out in VARA); see also 17 U.S.C. § 101 (definition of a "work of visual art").

²⁹ See *supra* Part I, specifically text accompanying note 20.

³⁰ KWALL, *supra* note 18, at 79. One notable exception is Professor Fisk, who demonstrates the importance of attribution in the sciences. See Fisk, *supra* note 22, at 51.

³¹ See, e.g., Jeanne C. Fromer, *A Psychology of Intellectual Property*, 104 NW. U. L. REV. 1441, 1466-67 (2010); KWALL, *supra* note 18, at xiii.

³² Roberta Rosenthal Kwall, *Originality in Context*, 44 HOUS. L. REV. 871, 871 (2007).

and authorship are real. Second, even when differences do exist, it is important to consider whether those differences really justify different moral rights treatment.

Authorship and Invention: General Comments

No one doubts that there are some clear differences between authorship and invention. Most obviously, the *fruits* of the two processes are typically very different. Inventions are useful products, processes, or compositions of matter.³³ Copyright works are not—indeed cannot be—functional, but instead are intended as an expression of an idea.³⁴ However, insofar as the moral rights calculus is concerned, the nature of the end product is not what matters. Instead, the focus is—or at least should be—on the *process* that produces the creation. After all, it is the supposed differences in the creative processes that underlie the moral rights debate.

At a high level of abstraction, authorship and invention are actually not that different. Both involve creativity, the act of producing something new. Moreover, recent studies have demonstrated that there are core features common to the process of human creation, regardless of whether we might label that creation authorship or invention. In one influential book, Professor Mihaly Csikszentmihalyi identifies five basic stages that occur in all creative acts: preparation, incubation, insight, evaluation, and elaboration.³⁵ While these need not always occur in strict linear progression—Professor Csikszentmihalyi describes how the process often involves “loops” of evaluation followed by additional refinement—they nevertheless are phases common to virtually all successful creations.

Authors and inventors also share certain personality traits; traits that at times set the authors and inventors apart from the rest of society. Both are open to experience, and flexible in their thinking.³⁶ Both have considerable drive and ambition to excel in their chosen field.³⁷ Both can achieve that excellence in part due to an enhanced capability to focus, to shut out external distractions.³⁸ On the other hand, both tend to be somewhat removed from society, and are often described as independent,

³³ 37 C.F.R. § 501.3(d) (2011).

³⁴ 17 U.S.C. § 102(b) (2006). However, this distinction between the realm of the functional and that of the expressive often is fairly gray. Software, for example, clearly performs a function, but can be copyrighted. Similarly, the designs of useful objects qualify for a form of patent even though they perform no function other than to appeal to the aesthetic.

³⁵ MIHALY CSIKSZENTMIHALYI, *CREATIVITY: FLOW AND THE PSYCHOLOGY OF DISCOVERY AND INVENTION* 79–80 (1996); see also Fromer, *supra* note 31, at 1463 (reducing analysis to four stages: “preparation, incubation, illumination, and verification”); Steven S. Kan, *The Efficient Boundary of Invention and Authorship*, 19 DEPAUL J. ART TECH. & INTELL. PROP. L. 235, 241 (2009) (discussing how the “workflow” involved in both types of creativity is the same).

³⁶ ROBERT W. WEISBERG, *CREATIVITY: UNDERSTANDING INNOVATION IN PROBLEM SOLVING, SCIENCE, INVENTION, AND THE ARTS* 490 (2006).

³⁷ *Id.*

³⁸ CSIKSZENTMIHALYI, *supra* note 35, at 58.

aloof, introverted, and unfriendly.³⁹ They are also often more sensitive than society at large.⁴⁰

But acknowledging these high-level similarities between authorship and invention does not necessarily undermine the arguments against granting moral rights in inventions. Even if the basic processes share certain features, there may also be qualitative differences. In other words, even if both authorship and inventorship involve characteristics such as insight, the *nature* of that insight could differ in a way that could affect the issue of moral rights. Most of the arguments distinguishing authorship from invention focus on these supposed qualitative differences.

At the risk of oversimplification, the claimed distinctions between authorship and invention can be distilled into six basic points. However, all of these alleged differences are based on a somewhat stereotypical view of authorship and invention. Like most stereotypes, the stated characteristics may not apply to all authors and inventors. More fundamentally, however, most of the stereotypes concerning inventors are simply not borne out by the evidence. The processes of authorship and invention share certain characteristics. If most inventors share a given characteristic with authors, and that characteristic warrants a grant of an attribution right, then the case for granting at least some form of attribution right to inventors becomes stronger. This section will discuss the six stereotypes in turn, and show why they do not justify the disparate treatment.

Stereotype 1: Unlike authors, inventors do not inject their personality into the creative process.

Creating a work of art or literature can be an intensely personal process. In many cases, the author creates because of a desire to express her own observations about the world around her. While many of these observations may be objective, the expression of these observations will often reflect the author's inner feelings and emotional state about what she observed. Because of these personal reflections, the end product contains a great deal of what Professor Kwall calls the "artistic soul."⁴¹

This injection of the author's persona into her work has been stated in a number of different ways.⁴² Indeed, it is the primary justification for most of the moral rights.⁴³ Moral rights in works of authorship reflect this

³⁹ WEISBERG, *supra* note 36, at 490. Professor Csikszentmihalyi disputes this notion, suggesting that authors and inventors tend to be at the extremes of both extroversion and introversion. CSIKSZENTMIHALYI, *supra* note 35, at 65–66.

⁴⁰ CSIKSZENTMIHALYI, *supra* note 35, at 73.

⁴¹ KWALL, *supra* note 18, at 15.

⁴² See, e.g., Fromer, *supra* note 31, at 1500; Hughes, *supra* note 18, at 85–87, 90; Liemer, *supra* note 18, at 43.

⁴³ See Liemer, *supra* note 18, at 42–44. This concept does not, however, underlie the *droit de suite*, which gives the author who has sold a work the right to a percentage of the price if the work is later

integration of the person and the work. Failing to acknowledge the author's contribution to the work impairs the reader's ability to recognize the intense author-work personal connection, causing harm to the author. Similarly, allowing others to alter or destroy the work will have a direct and possibly detrimental effect on the author's personal reputation and sense of self-worth. The personal nature of the interest also helps explain why moral rights cannot be assigned to another, as any such assignment would falsely link a different person with the work.

Professor Fisk explores a related, but different, personality issue when she discusses how preserving the personal connection between the author and her work serves a "humanizing function."⁴⁴ Authorship is communication. There is a value in having society understand that there is a flesh-and-blood human behind every work of authorship. At the very least, that understanding helps potential infringers understand that their acts may cause harm to actual people, not merely corporate copyright owners.⁴⁵

Of course, the personality stereotype does not always accurately describe authors. Some authors create to fulfill a personal passion, and in so doing inject much of themselves into a work. But many others, perhaps most, create to make money. These latter authors will often produce what they think society wants to see or hear, not what they strive to express.⁴⁶ In addition, many works are by their very nature objective rather than subjective. Not all books are novels. Copyright also protects the most uninspired how-to manual, provided it has the requisite originality. By the same token, VARA would apply to a work of visual art even if it was purely representational.

The standard paradigm, then, does not always accurately describe authors. But does it describe inventors? After all, behind every invention lies an individual, or group of individuals, who developed something new. While the creation itself may be different, it is nevertheless the product of individual human ingenuity.

The scientific method is typically portrayed as a process of detachment. Unlike the paradigmatic author, who is personally invested in her work, the inventor is viewed as approaching the problem through the cold lens of logic and reason.⁴⁷ Invention focuses on external stimuli and

resold to another. Michael B. Reddy, *The Droit De Suite: Why American Fine Artists Should Have the Right to a Resale Royalty*, 15 LOY. L.A. ENT. L.J. 509, 509–10 (1995). The *droit de suite* has not proven all that popular throughout the world. *Id.* at 510–11. In the United States, only California has a limited version of the right. *Id.*

⁴⁴ Fisk, *supra* note 22, at 65–67.

⁴⁵ *Id.*

⁴⁶ Hughes, *supra* note 18, at 112. Moreover, as Professor Hughes has pointed out, there is a widely-held notion in the arts that works that contain too much of the author's persona are typically not well-received. *Id.*

⁴⁷ See Fromer, *supra* note 31, at 1442, 1446–48.

does not take into account personal and emotional considerations.⁴⁸ Emotion and personal preferences threaten to distort this objective view and skew the results of the scientific inquiry. While the inventor may invest as much of his time into his creation as does the artist, he does not, as is commonly perceived, invest his persona.

But like most stereotypes, this portrayal of the inventor often proves inaccurate. Scientific inquiry does not deal exclusively with objective facts. Instead, in many cases there will be multiple ways to solve a problem. While the problem itself may be external and impersonal,⁴⁹ the particular way an inventor chooses to deal with a problem reflects a great deal about not only the society and times in which the inventor lives, but also the inventor's own personality. In this way, the invention *does* reflect the inventor's individual personality.⁵⁰ Injection of the inventor's personality does not diminish the effectiveness of the invention but may affect the inventor's choice of solution.⁵¹

Thus, the personality argument fails to prove much. Not all authors inject their personality into their work. Conversely, many inventions *do* reflect aspects of the inventor's personality. Even assuming for the sake of argument that works of authorship are more likely to contain an element of personality, there is no justification for denying altogether an attribution right for inventors. At best, the personality argument could justify a system that allocates attribution rights only to those works and inventions that contain personality elements—a rule that would prove almost impossible to apply in practice.

Stereotype 2: Authors need to express, inventors do not.

The second stereotype is closely related to the first. However, because it involves qualitatively different justifications for moral rights, it warrants a separate discussion. As the first stereotype recognizes, works of authorship contain elements of the author's personality. In addition, however, the author will often use the work as a means of *expressing* those inner feelings to others.⁵² Therefore, even if many inventions do include

⁴⁸ *Id.* at 1446.

⁴⁹ Even this statement is an overly simplistic stereotype. As will be discussed *infra*, some of the greatest innovations stem from the recognition of new problems. The problems an inventor happens to recognize may well stem from inner personality traits.

⁵⁰ See also WEISBERG, *supra* note 36, at 55 (pointing out that depending on the personality of the inventor, an invention may have very different specifics or a significantly different impact).

⁵¹ One fascinating story reflecting the importance of personality is the long-running feud between Edison and Tesla over direct versus alternating current electricity. See Dieter Daniels, *Artists as Inventors and Invention as Art: A Paradigm Shift from 1840 to 1900*, in ARTISTS AS INVENTORS/INVENTORS AS ARTISTS 19, 39–53 (Dieter Daniels & Barbara U. Schmidt eds., 2008) (discussing the vastly different personalities of the two inventors and the role personality may have played); see also JOHN H. LIENHARD, *THE ENGINES OF OUR INGENUITY: AN ENGINEER LOOKS AT TECHNOLOGY AND CULTURE* 45 (2000) (also discussing this feud).

⁵² Fromer, *supra* note 31, at 1468.

similar personal characteristics of the inventor, if the inventor does not use the invention as a means of communication, a right of attribution for inventors may not be necessary.

Authorship undoubtedly involves expression. Even if the work will never be shown to others, an author's words, music, paintings, sculptures, or even architectural plans serve as a medium of expressing the author's thoughts. Moreover, the author is driven by an inner *need* to express her thoughts. That inner desire to put ideas into words, symbols, or notes, as opposed to the economic reward of copyright, motivates a great deal of authorship. As many others have pointed out, Anne Frank almost certainly had no thought of profit when she penned her diary. Similarly, many authors produce works without any intent of exhibiting them to the public.

The expressive character of authorship is also an important justification for moral rights. The right of attribution (and its companion non-attribution) helps to ensure that the author's own messages are associated with her. That association serves two goals. First, and most obviously, it ensures the author receives reputational credit. However, the association may also benefit the public by enhancing the accuracy of the underlying message. After all, knowing the author of a message can affect the message's meaning, at least if the reader/listener knows something about the author or her circumstances. A right of integrity serves a similar purpose, helping to prevent unintended changes in the work that may distort the author's intended message.⁵³

Admittedly, the amount of personal expression in authorship may be exaggerated. Professor Hughes has pointed out that several well-known artists dismiss the suggestion that their works include personal expression.⁵⁴ Nevertheless, because at least some authors create because of a desire to express themselves, that expression may provide a reason to distinguish authors from inventors in moral rights law. The common view of inventors is that they do not create to express themselves. Rather, inventors act either because they hope to turn a profit, or because of a zeal and passion for resolving a particular perceived problem.⁵⁵ In either case, the argument is that, denying inventors a right of attribution will have little effect on the inventor's decision about whether and what to invent.

Like the personality stereotype, however, the expression stereotype is overly simplistic. First, just as some famous artists claim there is no personal expression in their work, some inventors argue that the need to

⁵³ See Cross, *supra* note 11, at 246–49. This feature also helps explain why the integrity right is limited to changes that affect reputation. See *id.*

⁵⁴ Hughes, *supra* note 18, at 112.

⁵⁵ See generally Simon Penny, *Bridging Two Cultures: Toward an Interdisciplinary History of the Artist-Inventor and the Machine-Artwork*, in ARTISTS AS INVENTORS/INVENTORS AS ARTISTS, *supra* note 51, at 143, 143 (discussing passion); Fromer, *supra* note 31, at 1447–48.

express themselves *does* spur inventive activity. A 2010 New York Times article analyzing the process of invention noted that inventors often indicate that they invent because of a “need to express themselves, to leave their mark and to communicate and connect with others not by talking or writing, but by building stuff.”⁵⁶ In other words, while the musician communicates through sound and the painter on canvas, the inventor communicates using the medium of the invention itself. John H. Lienhard, a retired professor of mechanical engineering and history and noted commentator on inventing, agrees that invention is self-expressive and is not always done for profit or patent.⁵⁷

Second, inventors do not only express objective notions in their inventions. To the extent inventorship, like authorship, is infused with the personality of the inventor, an invention will express something about the inventor who created it. Thus, not only do authorship and invention both involve expression, both may involve the same sort of individualistic expression thought to justify a right of attribution. As a result, this stereotype likewise does not provide sufficient justification for denying *in toto* a moral right of attribution to inventors.

Stereotype 3: Inventors and authors deal differently with problems.

Another claimed difference between invention and authorship involves the approach to problems. Creativity is fundamentally concerned with problems. A person’s creative juices begin to flow from “a sense that there is a puzzle somewhere, or a task that needs to be accomplished. Perhaps something is not right, somewhere there is a conflict, a tension, a need to be satisfied.”⁵⁸ But some claim that the way the two fields deal with problems is quite different. The focus of invention is on *solving* existing problems. Authors, by contrast, tend to find and identify *new* problems, especially those involving “personal and emotional themes to express in his or her work.”⁵⁹

First, assuming for a moment that this difference exists, it is unclear how it is supposed to affect the issue of a moral right of attribution. There is no a priori reason why a person deserves more credit for identifying a hitherto unnoticed problem than for solving a longstanding problem. Both the discovery and resolution of problems are valuable creative activity, and success in either endeavor reflects well on the person involved.

⁵⁶ Amy Wallace, *Behind the Many Faces of Innovation*, 2010, N.Y. TIMES, Dec. 25, 2010, www.nytimes.com/2010/12/26/business/26proto.html.

⁵⁷ John H. Lienhard, *Invention, A Dangerous Guest: Do You Really Want Creative People in Your Organization?*, ENGINES OF OUR INGENUITY, <http://www.uh.edu/engines/dangerousguest.htm> (last visited Mar. 19, 2012).

⁵⁸ CSIKSZENTMIHALYI, *supra* note 35, at 95.

⁵⁹ Fromer, *supra* note 31, at 1500.

Second, and equally important, what evidence there is suggests the claimed difference between authors and inventors does not actually exist, at least not in all or even most cases. Not all authors create new problems. Again, not all books are novels. A significant amount of literature is dedicated to solving, rather than identifying, problems. Other forms of writing, such as legal scholarship, may involve both problem identifying and problem solving.

Conversely, on the inventorship side, studies of the nature of the inventive process demonstrate there is a significant amount of problem finding in sciences. As one study put it, a great inventor is often distinguished by his “ability to find new problems that no one else even sees. The conventional view of inventors is, they’re good at solving problems. It’s really *finding* problems.”⁶⁰ For example, James Watt’s invention of his steam engine was the direct result of his identification of a problem in the then-existing models.⁶¹ Another example from everyday life is the invention of the 3M Post-it notes, in which an attempt to produce a super-adhesive glue failed in its initial purpose, but resulted in a product that many never realized they needed prior to its invention. In these cases, and others like them, the inventors’ contributions included identifying a previously undetected societal need as much as it did solving that need.

In short, the problem-finding/problem-solving stereotype suffers from many of the same defects as the personality and expression stereotypes. While it may be true in some cases, it does not approach anything resembling a general rule. Moreover, unlike the personality argument, it is unclear why those who find problems—be they authors or inventors—should have any greater entitlement to an attribution right than those who solve problems.

Stereotype 4: Authorship and invention are bound by different sorts of constraints.

The prior stereotype relates in some ways to the fourth. Whether they are solving problems or finding new ones, inventors are dealing with the real world. Therefore, their work is subject to externally-imposed constraints. No matter how creative, an invention that flouts the laws of nature is of no use to society, and does little for the reputation of the inventor.⁶² Authorship, by contrast, is far less limited by external

⁶⁰ Jerry Adler, *Inside the Mind of an Inventor*, NEWSWEEK, Oct. 24, 2004, (emphasis in original) (quoting Evan I. Schwartz), available at www.thedailybeast.com/newsweek/2004/10/24/inside-the-mind-of-an-inventor.html.

⁶¹ See WEISBERG, *supra* note 36, at 582.

⁶² See generally Penny, *supra* note 55, at 143. Of course, many famous inventions have defied what were then perceived as the rules of nature. Powered flight was long considered impossible, but the Wright Brothers nevertheless found a way to accomplish it. The problem in cases of this sort is that people’s perceptions of the constraints were incorrect.

constraints. While some constraints exist—the fixed number of notes in the traditional chromatic scale, or concepts that cannot be easily described in existing words—creative authors can often find ways to escape those fetters. The author Lewis Carroll, for example, simply made up words to represent some of the new concepts he wanted to discuss. Similarly, modern music sometimes employs tones lying between the notes of the traditional twelve-note chromatic scale.⁶³ The primary constraints on the bounds of creativity in authorship come not from the outside world, but from the internal boundaries of an author's imagination.

External constraints may also result in a crucial difference in the creative process in authorship and inventorship. Scientific research is often portrayed as entirely objective, focusing on externally verifiable facts. Authorship, by contrast, is not constrained by the external, measurable world, and accordingly involves greater creativity. Moreover, while art finds inspiration in the real world, that inspiration tends to involve "emotions like love and anxiety, events like birth and death, the horrors of war, and a peaceful afternoon in the country."⁶⁴

Unlike the prior two stereotypes, this stereotype *does* accurately distinguish most authorship from invention. However, the distinction is really of no great import to the issue of a moral right of attribution. If there are two equally creative acts, one of which worked within external constraints, and the other outside, why should the creator of the latter be more entitled to credit? Indeed, in many ways managing to achieve creativity while working within external limitations is worthy of greater recognition than working in a world free of those constraints.

The constraints stereotype is also tied to the personality stereotype in another way. An additional argument for affording attribution to the creator of the work bound only by imagination is that the author's imagination is itself a component of her personality. By contrast, the constraints that bind the inventor are universals, not particular to the inventor. But like the personality stereotype, the notion of imagination is not as clear-cut a distinction as it might seem. The author's imagination undoubtedly reflects the author's personhood. But as discussed above, the inventor also draws from his inner core—and from his imagination—when selecting among various available options. Moreover (although it is unclear whether or how this affects the question of moral rights), there is often a sense of the aesthetic in a particular inventor's solution. In the scientific

⁶³ The *means* of producing these notes has existed for centuries. Many classical instruments, such as the violin and trombone, can produce non-step tones. However, only in recent times has any significant amount of music been composed that explicitly made use of these tones. Even though authors can work around some of the constraints, certain natural principles still impose limits. Continuing with the example of music, the inability of the human ear to distinguish very close tones poses a form of external constraint on the composer.

⁶⁴ CSIKSZENTMIHALYI, *supra* note 35, at 85.

world, it is not uncommon to see inventions described as “elegant” or similar subjective terms. These descriptions reflect that different inventions reflect personal choices made by the inventor, and that not all these choices are deemed of equal worth, *even if they “work” as well*. Therefore, if attribution rights recognize the personal element, they should exist whenever that personal element is present, even if the creativity happens to be bound by real-world external limitations.

Stereotype 5: Authors and inventors derive different economic benefits from their reputation.

While the stereotypes outlined above are the main justification for moral rights, many also suggest that the rights provide economic benefit to authors. Professor Fisk, for example, has argued that the right of attribution can serve a sort of “branding” function.⁶⁵ If the author receives attribution for her earlier work, she may develop a reputation that enhances the value of her later works.⁶⁶ Similarly, an author who produces low-quality work will develop a bad reputation, which may make it more difficult to sell later works.⁶⁷ This reputational benefit (or harm) works in conjunction with the copyright, providing additional economic benefits to authors who produce works desired by the market.

The rights of non-attribution and integrity can be justified by like arguments. If low-quality works are wrongly associated with the author, the author’s reputation will diminish, which may decrease the demand for works she actually did produce. Similarly, if one of the author’s works is distorted, people may gain an erroneous perception of the author’s talents, which will affect demand.⁶⁸

Even if the preceding four stereotypes prove unavailing, the different treatment of moral rights in authorship and invention could still be justified by the secondary economic considerations. In the case of works of authorship, these arguments are fairly direct. Moral rights protect the author’s reputation. The author’s reputation can enhance the demand for her later work—and therefore the price at which she can sell that work. For this argument to justify the lack of an attribution right for inventors, it must be the case that reputation is less important in the realm of useful inventions

⁶⁵ Fisk, *supra* note 22, at 62.

⁶⁶ *Id.* at 51.

⁶⁷ *See id.* at 61–62. Professor Fisk lists four functions of attribution: a reward for future creativity, a form of discipline that punishes bad work, a branding function, and a humanizing function. *Id.* at 56–67. It is unclear, however, whether the third really differs qualitatively from the first two.

⁶⁸ *See* Berne Convention, *supra* note 8, at art. 6*bis*. In this respect, it is useful to note that in both the Berne Convention and VARA, the integrity right incorporates notions of attribution. Under both provisions, a distortion or mutilation of the work is actionable only if it affects the author’s honor or reputation. *Id.*; 17 U.S.C. § 106A(a)(3)(A) (2006). If people know the alteration was made by someone else, the alteration would have no effect on the author’s reputation, and accordingly not be actionable.

than it is in the arts and literature.

The economic arguments concerning reputation take two different forms. The first, and more extreme, is that inventors care far more about profit than they do about reputation. The second acknowledges that reputation is important to inventors, but that reputation has a qualitatively different economic impact on inventors than it does on authors.

The argument that inventors care mainly about profit, not reputation, is surprisingly prevalent. But as anyone who has dealt with inventors will attest, it is also patently false. Inventors do care about their reputation as inventors, and they care deeply. Inventorship is a great source of pride to many inventors.⁶⁹ In my own dealings with inventors at my university, I have found that many inventors are every bit as concerned with being acknowledged as the inventor of their creation than with any income stream that their invention may generate. Being omitted from the list of authors on an article, or list of inventors on a patent application, is a deeply personal insult.⁷⁰ This attitude also underlies the professional codes that deal with the question of inventorship, referenced in Part I of this article.⁷¹

But caring about one's reputation as an inventor is not alone enough of a reason to grant a legal right to protect that reputation, at least under an economic analysis. The second economic argument against granting a right of attribution to inventors is that the economic benefits of reputation are qualitatively different for authors and inventors. While reputation plays an important role in determining the ultimate profit earned by an author, so the argument goes, it has a far less significant effect on the inventor's income stream. If so, there may be no economic justification for enacting a law designed to ensure the inventor receives credit.

At a gut level, it seems obvious that reputation is more important in the area of copyright. Take the following, purely non-scientific experiment. In the case of your favorite books and films, how often can you name the author? Now consider your favorite products, such as your mobile phone. Can you name any of the inventors responsible for bringing that product to you?

In one sense, reputation does typically play less of a role in the demand for inventions than it does in the demand for works of authorship. The difference stems in part from the different ways in which people value creations. The value of an invention turns primarily on its effectiveness in doing what it is designed to do. In many cases, that effectiveness can be determined by objective measures. Moreover, that being measured tends to

⁶⁹ Fisk, *supra* note 22, at 54.

⁷⁰ *See id.*

⁷¹ *See supra* text accompanying note 18.

be the same for all potential buyers. While a few famous inventions are known by the names of their inventors—Professor Fisk cites the Salk polio vaccine, Fermat’s theorem, and others⁷²—most inventors are not known to the consuming public. Accordingly, the price a buyer is willing to pay for an invention turns far more on the efficacy of the invention than on the inventor’s reputation.

The value of copyright works, by contrast, is far more subjective and idiosyncratic. A given work may have wildly different value from reader to reader. You may hate a book that I love. Unless the reader takes the time to observe the work itself—a fairly easy task in the case of a painting, far more time-consuming in the case of a book, symphony, or film—the reader cannot determine with certainty how much the work is worth to him. Therefore, potential buyers of copyright works are far more likely to use the author’s reputation as a proxy to estimate the value of the work.⁷³ In this way, reputation plays a greater role in establishing the price of copyright works than it does for inventions.

However, this difference between authors and inventors may be offset by another equally important difference in the economic models that prevail in the worlds of science and authorship. The economic argument for intellectual property rights rests on the premise that the level of creative activity is directly proportional to the compensation a creative person receives. But “compensation” involves more than sales of the creative product to buyers. For many authors, the primary—if not sole—compensation comes from the sale of their works. Many inventors, by contrast, hold salaried positions with corporations and universities. “Entrepreneurial” inventors like Thomas Edison are, notwithstanding the prominent role attributed to them in policy discussions, the exception rather than the rule.⁷⁴ Admittedly, an inventor’s total compensation can turn on his ability to invent new and useful things. But licensing patents is only part of the compensation package. The inventor also continues to earn his salary.

In addition, in many of the sciences, compensation also depends on one’s ability to obtain grants and other outside funding. Even if these grants are not paid as income, they may benefit a researcher by allowing him to, for example, “buy” his way out of other obligations (such as teaching courses in the university environment). The ability to attract outside funding is also an increasingly important consideration in determining salary increases and in finding a new and higher-paying position at a different

⁷² Fisk, *supra* note 22, at 84.

⁷³ Of course, the author’s reputation is not the only proxy. Potential buyers also rely on the opinions of friends and third-party reviews of the work in deciding whether to observe the work.

⁷⁴ The same observation may also be made about numerous works of authorship, including the lion’s share of law review articles. The vast majority of articles are written by faculty members and attorneys, both of whom have a “day job” providing a source of income other than the article.

institution.

Understanding this difference in economic models helps one understand that reputation is important in the sciences, but in a different way. As demonstrated above, reputation may not be as important in determining what buyers will pay.⁷⁵ However, it can be highly important in helping the inventor obtain and keep a high-paying position with an employer. Moreover, a scientist's reputation for past invention can prove highly influential in the grant-application process. Reputation therefore *does* prove of significant economic benefit to the inventor. While it is impossible to say whether the effect of reputation on total compensation is more, less, or the same as in authorship, any difference is one of degree rather than kind. Therefore, to the extent a moral right of attribution helps a creator preserve reputation, it should be available to inventors as well as authors.

Stereotype 6: Copyright provides insufficient leverage to authors.

The sixth stereotype is also economic in nature. Unlike the fifth, it takes as a given that reputation has economic value. Instead, it focuses on the author's ability to protect her reputational interest by private ordering arrangements. If a person has the ability to protect her interest by contract, there is far less justification for a new law imposing that protection.

In theory, moral rights are usually unnecessary. An author or inventor who creates may qualify for a copyright or patent. While copyrights and patents differ in many of their particulars, both do give the owner significant control over the use of the creation. If the owner wants to be attributed, she can in theory simply impose a duty to attribute as a condition to granting others the right to use the creation.

The sixth stereotype suggests this option is not realistic for authors. The argument takes several different forms. Some argue that authors as a class tend to lack either bargaining power or business acumen (or both) and will accordingly be unable to strike a deal that protects their interests.⁷⁶ In addition to being patronizing, the argument cannot withstand close scrutiny. True, many authors lack the training, and in many cases, the temerity, to bargain effectively. Others lack sufficient financial resources to hire counsel to bargain on their behalf. On the other hand, there are also

⁷⁵ In the case of works of visual art, the reputation of the author or inventor may also be important to the *buyer*. Many works of authorship are acquired for collection and possible resale. In many cases, the value of the work will depend a great deal on the value of the author's reputation. However, to the extent this is true, it suggests the current law is just backwards. If attribution is economically valuable to the buyer, then buyers will tend to provide that attribution anyway, in order to benefit from the reputational value. The main exception to this incentive is when the buyer can falsely attribute the work to some other author with an even better reputation.

⁷⁶ These arguments even crop up in the legislative history of VARA. See, e.g., H.R. REP. NO. 101-514, at 18 (1990), *reprinted in* 1990 U.S.C.C.A.N. 6915, 6928.

numerous authors who can and do bargain effectively, at least where compensation is at issue. Not all of these authors are well-established in their field.

Moreover, there is no reason to think that inventors, as a class, have any greater training or business sense that would allow them to bargain more effectively. In fact, in some ways inventors are in a worse bargaining position than authors. Because of the comparatively high novelty and non-obviousness requirements in patent law, it is far more difficult for an inventor to obtain a patent than it is for an author to obtain a copyright.⁷⁷ Obtaining a patent involves a long and expensive process, while copyright vests automatically when the work is fixed.⁷⁸ Therefore, many inventors go to the bargaining table with an invention that may be of questionable patentability or may not qualify for a patent at all. Such an inventor will have a difficult time even bargaining for compensation, much less a duty to provide attribution.

There is, however, one situation in which copyright does prove an inadequate tool for negotiating a duty to attribute. Interestingly, this situation usually involves the “works of visual art” protected by VARA. While many have criticized Congress’s decision to limit the Copyright Act’s moral rights to works of visual art, in many ways that decision makes good economic and policy sense. Unlike books, music, film, and other copyrighted works, paintings and sculptures tend to exist and be distributed in one or a few “originals”⁷⁹ rather than in copies. Moreover, because buyers want to “own” the original, works of visual art are ordinarily purchased outright, rather than licensed like most other copyrighted works. While the difference between a sale and a license is often gray and of questionable significance, it does have one very important ramification. A licensor may include a wide range of use restrictions in the license. A seller, by contrast, cannot do the same in a contract for sale. Because of rules governing restraints on alienation, most state laws would hold unenforceable any attempt by the seller to insist in the sales contract that the buyer provide attribution.⁸⁰ Therefore, even if the author of a work of visual art has business savvy and a favorable bargaining position, she is typically *legally*

⁷⁷ 35 U.S.C. §§ 102–103 (2006) (novelty and non-obviousness).

⁷⁸ 17 U.S.C. § 302 (2006).

⁷⁹ The term “original” is not a term of art in copyright law. That act speaks only of copies, not originals. Nevertheless, the notion that some sorts of works—mainly works of visual art—are distributed in one or a limited number of copies was a very important consideration in defining the scope of VARA. H.R. REP. NO. 101-514, at 12 (1990), *reprinted in* 1990 U.S.C.C.A.N. 6919, 6922. The legislative history also suggests that this limit on copies also means that more of the author’s personality is likely to be infused in the work. *Id.* The truth of that statement is not immediately obvious.

⁸⁰ Moreover, any state law that would enforce such a provision could well be preempted by federal copyright law. The buyer of a copyrighted work has the right to distribute it to others notwithstanding the copyright. 17 U.S.C. § 109(a). A state law that attempted to place conditions on such transfer could be found to interfere with the buyer’s rights under § 109.

incapable of leveraging her copyright ownership into a right of attribution.⁸¹ Arguably, the problems these authors face are sufficiently unique to warrant special treatment.

For some authors, copyright is an inadequate means to bargain for attribution. These are roughly the same group of authors protected by VARA.⁸² But even this more limited argument does not warrant a per se rejection of moral rights for inventors. Admittedly, patent rights exist in ideas, not in physical objects. Unlike paintings, patented products and processes tend to be distributed in copies, not in unique originals. But some inventors may actually find themselves in the same position as a painter or sculptor. An inventor who produces the machine or composition of matter covered by his patent will often want to sell the product to a buyer. Once that sale takes place, the doctrine of patent exhaustion would allow the buyer to use and resell the machine or composition to another.⁸³ Thus, while the patent owner will still retain the rights to the patent and can limit the buyer's ability to reproduce the product or process, he has no right to force the buyer to attribute him in the buyer's ordinary use of the product, or even on resale. Any attempt to impose such a condition in the initial sales contract would face serious issues of preemption.

In addition, even if inventors as a class are better able to use the patent to exact a duty to attribute, that difference does not warrant different moral rights treatment. As currently structured, VARA does not fundamentally alter the relationship between covered authors and society. All it does is create a default rule that attribution must occur. But that right can be waived.⁸⁴ As a result, whether attribution is owed will still depend on the actual contract negotiations. Provided that any right of attribution given to inventors would similarly be subject to waiver, the net result of such a right would simply be to establish a default bargaining position. If patent licensees for some reason found the obligation to attribute unacceptable, they could either demand a waiver or offer a lower price.

In short, none of the six stereotypes provides adequate justification for an absolute rule denying attribution rights to inventors. Inventors, like

⁸¹ Of course, the author could always refuse to sell to others. For many authors, however, this is not an economically viable option. Another option would be to license, rather than sell, the work. However, because the concept of ownership is important to buyers, negotiating a license might prove difficult, and could reduce the total income to the author.

⁸² The correlation is admittedly imperfect. Not all works distributed in "originals" are subject to VARA. For example, VARA categorically excludes works made for hire. 17 U.S.C. § 101 (defining "work of visual art").

⁸³ See generally *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008). The doctrine of patent exhaustion is analogous to the first sale rule in copyright established by 17 U.S.C. § 109. Compare *id.* at 625, with 17 U.S.C. § 109. In patent, however, the rule is not set out in the statute, but has instead been developed in the courts. See *Quanta*, at 625 (discussing development of the doctrine).

⁸⁴ 17 U.S.C. § 106A(e) (allowing for waiver of the author's moral rights, provided the waiver is in a writing signed by the author).

authors, often do inject their personality into their inventions and use those inventions as a means of communicating those personality elements. While the process of invention does differ in some respects from authorship in that it includes more objectivity and is bound by external, real-world parameters, those differences are of little relevance to the issue of moral rights. Finally, just as in the case of authors, a moral right of attribution could prove of significant economic benefit to inventors, albeit in a different way. Therefore, if the United States' legal system is going to afford moral rights to authors, it should at least consider a parallel right for inventors who produce patented inventions.

III. THE PARAMETERS OF AN ATTRIBUTION RIGHT FOR INVENTORS

Part II of this article made the case for a moral right of attribution for inventors. This part will explore what such a right might look like. While the attribution right set out in VARA might provide a useful model, an attribution right for inventors could also be based on a different model.

The VARA attribution right has several distinct features. First, it is inalienable, although it can be waived.⁸⁵ Second, it ordinarily extends for the life of the author, not the full term of the copyright.⁸⁶ Third, while the VARA right covers "misattribution" (as well as wrongful attribution of works *not* created by the author), it may not cover a simple case of failure to attribute. Each of these features will be discussed in turn.

Alienability and Waiver. The rules governing alienability and waiver of attribution of an invention should be identical to the standards set out in VARA. The attribution right should be waivable, but not assignable. A bar on assignability serves two ends. First, it protects the holder of the right. If authors or inventors can transfer the right, they routinely *will* when they license the work or invention because the more economically powerful licensee will insist on transfer of the moral rights as a matter of course. This admittedly paternalistic argument is somewhat undermined by VARA, which freely allows waiver of the right. There is no need to be more paternalistic toward inventors.

A ban on alienability also protects society, or at least those members of society who encounter the work or invention. An attribution right helps society connect the creator with the fruits of her creative activity. Of course, that function of attribution is severely compromised by the rule allowing waiver, because, unless society sees the creator's name in connection with the product, they will be unable to make that association. Here, however, there is no need for the rule governing an inventor's attribution right to be stricter than VARA. As demonstrated above, the ability to associate the

⁸⁵ *Id.*

⁸⁶ 17 U.S.C. § 106A(d).

creator with the product is more important to society-at-large in the context of authorship because of society's tendency to use authorship as a proxy for quality.⁸⁷ While reputation also has economic benefit to inventors, the audience is more likely to be employers and funding agencies.⁸⁸ But the inventor already knows and has a means of communicating directly with these entities. Therefore, as long as the inventor retains the right to claim inventorship himself—which would be the case in situations of waiver, but not in those of complete assignment—the inventor can fully utilize the reputational benefits flowing from his prior inventions.

Term. Moral rights under VARA last for the life of the author.⁸⁹ This term is far shorter than the life of a copyright, which in the case of an individual author is now the life of the author plus seventy years.⁹⁰ The term of a patent is far shorter, extending for either twenty years following the effective date of the application, in the case of utility patents,⁹¹ or fourteen years from the date of grant for design patents.⁹² Should the shorter term of a patent affect the term of the inventor's attribution right? Conceivably, the attribution right could remain in force only as long as the patent.

A better solution, however, would be to provide an attribution right for the inventor's life. The vastly different terms for copyrights and patents reflect various considerations relevant to the different worlds of works and inventions. Chief among these considerations is the perception that as a general matter, society suffers a greater loss from the inability to utilize useful inventions than it does from being unable to copy books or other forms of authorship. However, these considerations have little, if anything, to do with a moral right of attribution. A duty to attribute in no way impairs society's ability to gain access to and use either works or inventions. All it requires is attribution. As a result, there is no pressing need to terminate that right at any given date. While a perpetual right is in theory possible, the life term set out in VARA seems as good a compromise as any. A life term would allow the inventor to take full advantage of the reputational benefits attributable to his inventive activity, while not forcing people to engage in a laborious search into history to ascertain who invented something that they now want to produce or sell.

⁸⁷ See *supra* text accompanying notes 73–74.

⁸⁸ See *supra* text accompanying notes 73–74.

⁸⁹ 17 U.S.C. § 106A(d)(1). If there are multiple authors, the moral rights remain in force until the last of the authors dies. *Id.* § 106A(d)(3).

⁹⁰ 17 U.S.C. § 302(a).

⁹¹ 35 U.S.C. § 154(a)(2) (2006). The statute also allows for extension of the term if the inventor's ability to market the product is delayed by the need to obtain regulatory approval. *Id.* § 155.

⁹² *Id.* § 173.

Misattribution vs. non-attribution. The attribution provision in VARA simply gives the author “the right . . . to claim authorship.”⁹³ This terribly vague phrase creates several problems of interpretation.⁹⁴ One of the ambiguities involves the scope of the right. The right is clearly violated in cases of *misattribution*, when someone else wrongfully takes credit for the author’s work, or attributes authorship to some third party.⁹⁵ It is less clear, however, whether the right extends to cases of *non-attribution*, where the defendant makes no representations at all concerning authorship. Defendant in such a situation has not lied, but has merely failed to mention the real author. The legislative history contains vague language indicating the right “assur[es authors] their right[] to recognition” and establishes a “right to be identified.”⁹⁶ It also discusses how attribution “promotes the public interest by increasing available information concerning artworks and their provenance.”⁹⁷ However, no court has yet ruled on a case of mere non-attribution.⁹⁸

A similar issue may well arise in connection with an attribution right for inventors. In fact, because information about the inventor is often less important to the consuming public than information about authors, cases of mere non-attribution may actually comprise a higher percentage in the area of inventions than for works of authorship. Parties selling patented items rarely provide any information concerning the inventor of the item being sold.⁹⁹

However, regardless of how courts ultimately rule under VARA, there is no need to extend the attribution right for inventors to cases of non-attribution. The reasons again relate to the different economic model that governs invention. While reputation is important to inventors, reputation to the public-at-large is of only secondary concern.¹⁰⁰ As long as the seller does not make a false claim of authorship (that is, misattribute), there is little

⁹³ 17 U.S.C. § 106A(a)(1)(A).

⁹⁴ For example, one court has held that, unlike the case of the rights of integrity and destruction, no damages are available for violation of the attribution right. *Mass. Museum of Contemporary Art Found., Inc., v. Büchel*, 593 F.3d 38, 53–55 (1st Cir. 2010). Instead, the sole remedy is an injunction. *Id.* at 55. The court reached this conclusion based on an inconsistency in the statutory language dealing with the various rights. *Id.* at 53–55.

⁹⁵ 17 U.S.C. § 106A(a)(1); see *Landrau v. Betancourt*, 554 F. Supp. 2d 102, 111 (D.P.R. 2007).

⁹⁶ H.R. REP. NO. 101-514, at 14 (1990), reprinted in 1990 U.S.C.C.A.N. 6915, 6924.

⁹⁷ *Id.* (quoting *Visual Artists Rights Act of 1989: Hearing on H.R. 2690 Before the Subcomm. on Courts, Intellectual Property, and the Admin. of Justice of the H. Comm. of the Judiciary*, 101st Cong. 82 (1989) (statement of Jane C. Ginsburg, Assoc. Professor of Law, Columbia Univ. Sch. of Law)).

⁹⁸ In fact, almost all VARA cases deal with integrity and destruction rather than attribution. This does not necessarily mean attribution is not important to authors. Instead, it may simply reflect that there is an economic incentive to name the author of a work of visual art. Fisk, *supra* note 22, at 51, 62. By acknowledging the actual author, a person displaying or selling the work will gain the benefit of any reputation that the author may have. *Id.*

⁹⁹ Of course, if the seller provides the patent number, the buyer has the information needed to determine the name of the inventor. However, it is highly doubtful that many potential buyers take the time to look up the name of the inventor prior to purchase.

¹⁰⁰ See *supra* text accompanying notes 62–66.

harm to society and only minor harm to the inventor, in failing to receive credit. The inventor would remain free to claim credit in connection with employment and grant writing.

One final note concerning the practicalities of the attribution right warrants mention. In some ways, an attribution right in patented inventions might actually prove easier to administer than the right under VARA. VARA's limitation to works of visual art, while much maligned, does afford one enormous practical advantage. Works of visual art are discrete, identifiable objects, not the ephemeral work we normally think of in copyright. As a result, it is comparatively easy to identify the person or people responsible for producing that object. Identifying the author of a story or composition, by contrast, can be much more difficult. Given that numerous people may contribute, directly or indirectly, to a given work, discovering the author of an ordinary copyright work is a task akin to, in the words of Justice Scalia, a "search for the source of the Nile."¹⁰¹

In some respects, patented inventions are more like works of visual art than they are other copyrighted works. Although intangible, patented inventions are intangible, they are discrete, carefully-defined intangibles. The scope of the patent is defined by the claims approved in the patent instrument.¹⁰² This feature of patent law has two benefits. First, because the patent document will name the actual inventor, ascertaining the identity of who to attribute will ordinarily be fairly straightforward. Second, because the invention is discrete and specifically defined, issues concerning inventorship should rarely arise. A person should be required to attribute only when that person markets or otherwise holds out to others an invention that includes one of the claims set out in the patent instrument. Therefore, as long as the attribution right is limited to patented inventions, it should actually be easier to apply than the parallel right set out in VARA.

CONCLUSION

This article argues that most of the reasons supporting a moral right for authors apply also to inventors. Therefore, Congress should consider enacting a statute providing such a right. The easiest way to implement the right would be to include it in the Patent Act, tying it to patented inventions. In most respects, the right could mirror the attribution right that already exists in VARA.

Admittedly, the odds of such a right actually being enacted in the near future are surely quite slim. Unlike the case of authors, the United States is under no treaty obligation to provide an attribution right to inventors. Nor has there been any real clamor for such a right from

¹⁰¹ *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 36 (2003).

¹⁰² 35 U.S.C. § 112 (2006).

inventors themselves. And because no other major industrialized nation affords moral rights to inventors, U.S. research does not suffer from any competitive disadvantage because of the lack of an attribution right.

The main goal of this article is not to bring about immediate change. Instead, it is to plant a seed. This article's real purpose is to point out that the processes of authorship and invention are not as different as commonly assumed. This realization has a number of consequences, both in the area of moral rights and other facets of intellectual property law. By recognizing that both authorship and invention involve a similar form of creativity, the entire legal system governing that creativity can be structured more rationally.