THE ADEQUACY OF THE MARK: RAISING THE STANDARD UNDER 35 U.S.C. § 287(A) FOR PATENTED ONLINE SOFTWARE METHODS

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It would be curious then, if an idea, the fugitive fermentation of an individual brain, could, of natural right, be claimed in exclusive and stable property. If nature has made any one thing less susceptible than all others of exclusive property, it is the . . . idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one Inventions then cannot, in nature, be a subject of property.

Thomas Jefferson¹

I. INTRODUCTION

How does one broadcast ownership of property to the public at large? A variety of immediately apparent methods come to mind. For instance, a small, tangible object can be marked with data proclaiming ownership, such as a tag with a name, address and phone number accompanying a piece of luggage. For a much larger piece of property, say a parcel of land, one may use a "No Trespassing" sign.² These are practices consistent with the right of exclusion concept, a mainstay of American property law for centuries.³ The issue, of course, becomes more complex when the property is intangible. Consider the normally abstract rights that intellectual property laws confer: how does a patent holder, for instance, broadcast ownership of a method that cannot actually be seen or felt? How are members of the general public supposed to know that a patented method is, in fact, the patent holder's property? Professor Adam Mossoff argues that patents have evolved from a strict grant of royal prerogative during Queen Elizabeth I's reign to a common-law property right.⁴ Thus, should one apply common-law property doctrine to properly establish patent ownership?

¹ Correspondence from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* THE WRITINGS OF THOMAS JEFFERSON 326, at 333–34 (Albert Ellery Bergh ed., 1905).

Lior Jacob Strahilevitz, *Information Asymmetries and the Rights to Exclude*, 104 MICH. L. REV. 1835, 1856–57 (2006) (noting the existence of "no trespassing" signs posted by California beachfront homeowners trying to own the wet sand behind their homes).

³ *Id.* at 1836.

⁴ Adam Mossoff, *Rethinking the Development of Patents: An Intellectual History, 1550–1800*, 52 HASTINGS L.J. 1255, 1276–78 (2001); *see also* Tom G. Palmer, *Common Property?*, Boston Review, Summer 2002, *available at* http://bostonreview.net/BR27.3/palmer.html (last visited Oct. 4, 2007) (arguing that "ownership" in an intellectual property context connotes only "the right to exclude").

A recent field of scholarship known as virtual property complicates this inquiry.⁵ Charles Blazer argues that virtual property—anything from a website or an email address to a video game character—has not been recognized by courts or legislatures.⁶ Instead of recognizing virtual property as a valid common-law property right, other legal constructs, such as trespass to electronic chattels or copyright infringement, have been used.⁷ Theodore J. Westbrook suggests that "property rights in virtual goods are bound to be recognized or created gradually as society increasingly depends on such rights."8 Take, for instance, a remarkable and startling story that reveals the very tangible value of virtual property: a player of "The Legend of Mir II," a massively multiplayer game in Asia, acquired a virtual sword during game play—the Dragon Sabre after completing an online quest.9 In his computer-generated character form, the player lent the virtual weapon to another, "who, without permission, sold the Dragon Sabre in an online auction for the equivalent of \$870 U.S. Dollars."10 The player, incensed at the loss of his property, filed a theft report with the authorities, yet he was denied any remedy because "Chinese laws did not recognize his virtual goods as a type of property." Left without any other recourse, the player "sought out . . . the virtual thief, and the confrontation culminated with [the player] stabbing [the thief] to death in a 'real world' murder." Allen Chein poses the question, if the action arose in the United States, would common-law property rights or existing intellectual property laws actually recognize the abstract notion of virtual property?¹³ In other words, would existing intellectual property laws transition into a virtual world to protect virtual goods?¹⁴

More importantly, how does an individual broadcast ownership of a hybrid of intellectual property and virtual property? How does one determine

⁵ Charles Blazer, *The Five Indicia of Virtual Property*, 5 PIERCE L. REV. 137, 137–42 (2006) (defining virtual property as being "an email address, a website, a bidding agent, a video game character, or any number of other intangible, digital commodities.").

⁶ *Id.* at 137.

⁷ *Id.* at 138–39.

Theodore J. Westbrook, Owned: Finding a Place for Virtual World Property Rights, 2006 MICH. St. L. Rev 779, 781–82 (2006) (defining virtual property as "computer code that, when processed, mimics some characteristics of real world property, including exclusivity, persistence and transferability.").

Allen Chein, A Practical Look at Virtual Property, 80 St. John's L. Rev. 1059, 1059 (2006).

¹⁰ Id

¹¹ *Id*.

¹² *Id.* at 1059–60.

¹³ *Id.* at 1060–61.

¹⁴ *Id*.

ownership of a patented invention that can only be embodied in computer code on the internet? One is reminded of the countless software business method patents that are embodied in a variety of well-known websites.¹⁵ Consider virtual "shopping cart" technology, Google's various web Amazon.com's search algorithms, Priceline.com's patented "'name-your-price' reverse auctions," eBay's patents directed to general online auctions and sales, FantasySports.com's patents for a method and apparatus of operating a fantasy football game using a computer, and the "method and apparatus for detection of reciprocal interest or feelings and subsequent notification" embodied by online dating web sites such as www.americansingles.com.¹⁶ How one can proclaim ownership of property that forms the juncture between intellectual property and virtual property has recently been an urgent concern to practitioners, scholars and inventors. This is especially so considering the recent U.S. Supreme Court case eBay Inc. v. MercExchange, L.L.C., 17 in which MercExchange sued eBay over patents claiming online auctions embodied solely in an intangible website form.18

For software patents—especially online software patents forged as a combination of intellectual and virtual property—these inquiries are partially addressed by 35 U.S.C. § 287(a), the "Patent Marking Statute" of patent law. ¹⁹ The Patent Marking Statute primarily serves a notice function in patent litigation actions and is an economic trigger that can directly aggrandize or severely limit the amount of damages a patentee may recover in a patent suit. ²⁰

In economic terms, the Patent Marking Statute allows a patentee to utilize "the 'leverage,' afforded by the right to exclude [inherent in a patent], to

J. Christopher Carraway, Why Web Site Operators Must Comply with the Patent Marking Statute and How They Can Do So, INTELL. PROP. L. NEWSL. (Am. Bar Ass'n, Chicago, Ill.), Winter 2006, at 15, available at http://www.abanet.org/intelprop/newsletter/IPL%20Winter%2006.pdf.

Id. at 17–18; see, e.g., Method & Apparatus for Detection of Reciprocal Interests or Feelings & Subsequent Notification, U.S. Patent No. 5,950,200 (filed Jan. 24, 1997) (American Single's online dating patent); Sys. & Methods for Highlighting Search Results, U.S. Patent No. 6,839,702 B1 (filed Dec. 13, 2000) (Google's patent on the highlighting of search terms in web pages returned to browsers over the internet, as provided by Google's toolbar feature); Methods & Apparatus for Using a Modified Index to Provide Search Results in Response to an Ambiguous Search Query, U.S. Patent No. 6,529,903 B2 (filed Dec. 26, 2000) (Google's patent for returning search results to a user over the Internet in response to an ambiguous query).

¹⁷ 126 S. Ct. 1837 (2006).

¹⁸ *Id.* at 1839; *see* Carraway, *supra* note 15, at 18.

¹⁹ Carraway, *supra* note 15, at 15; *see also* 35 U.S.C. § 287(a) (2006).

²⁰ Carraway, *supra* note 15, at 15; *see also* § 287.

enjoy the full value of his invention in the market place."21 First and foremost, however, the Patent Marking Statute is a mandate that requires a patent holder making or selling a product covered by its patent to mark the patent number on the product.²² The purpose behind marking the patented product is to give constructive notice to the infringer that he or she is infringing the product.²³ If patentees fail to comply with the marking requirements of the Patent Marking Statute, then they *cannot* obtain damages for infringement that occurred before the patentees provided notice of the alleged infringement to the accused infringer.²⁴ Therefore, 35 U.S.C. § 287(a) serves both a notice function and an incentive function for patentees to clearly mark their patented products so as to fully exercise the economic value of their patent rights.²⁵ Section 287(a) has also been described as a "forfeiture statute" that sets forth circumstances under which a patentee may not recover otherwise available damages.²⁶ Thus, 35 U.S.C. § 287(a) statutorily limits damages that a patentee can recover in an infringement suit to those acts of infringement occurring after an infringer is given actual or constructive notice of infringement: wherein actual notice is given by the actual filing of an infringement suit by the patentee and constructive notice is established by marking the patented article.²⁷

Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them, or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

Id. (emphasis added).

²¹ Smith Int'l, Inc. v. Hughes Tool Co., 718 F.2d 1573, 1577–78 (Fed. Cir. 1983).

^{§ 287(}a). The statute "does not require marking, but encourages the practice by setting out a potentially harsh consequences [sic] for a patentee's failure to mark." J. Scot Kennedy, Marking and Damages for Patent Infringement, ABTL REP. (Ass'n of Bus. Trial Lawyers, Orange County, Cal.), Spring 2006, at 1, 8.

²³ See Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co., 297 U.S. 387, 397 (1936).

²⁴ § 287(a).

²⁵ § 287(a).

Kennedy, *supra* note 22, at 1.

²⁷ Gart v. Logitech, Inc., 254 F.3d 1334, 1345 (Fed. Cir. 2001); Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1443 (Fed. Cir. 1998).

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It is clear that 35 U.S.C. § 287(a) is a crucial economic tool that can be used as a devastating weapon or an impenetrable defense by either party in a patent infringement suit. In order to comply with the Patent Marking Statute, a patentee need only mark its patented product with the word "patent" or the abbreviation "pat." followed by the patent number. This requirement seems obvious and even trivial for tangible patented articles, such as physical devices, material objects, apparatuses or machines. But how does a patent holder mark an abstract method or patented process? In those situations, there is ordinarily nothing physical or concrete to mark at all. This question is especially complex when applied to the nebulous form of property discussed above: how does one mark a hybrid of intellectual property and virtual property that can only be embodied in website form via abstract and intangible software methods?

In such cases, what, then, must be marked? What can actually be marked? For software inventions, practitioners have suggested marking the splash screens of programs during the program's startup sequence.³⁰ For patented software methods that are embodied primarily in website form, however, what does one mark in a website? Or more accurately, where does one leave a mark in order to comply with the requirements of § 287(a)? Thus, there is still one major question left unaddressed that goes to the very core of the Patent Marking Statute: what, exactly, is an adequate mark? Specifically, what type of standard should be applied under 35 U.S.C. § 287(a) to those forms of property that are hybrids of both intellectual property and virtual property? The current standards set out by the law do not sufficiently address this question.³¹ Although plenty of Federal Circuit jurisprudence speaks to the 35 U.S.C. § 287(a) marking issue, no case has explicitly discussed marking in a website- or software-based context.³² There are several Federal Circuit cases that discuss marking patented methods, and the rationales of those cases have been accordingly applied to websites by analogy.³³

²⁸ § 287(a).

Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc., 246 F.3d 1336, 1353 (Fed. Cir. 2001) (citing Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993)).

Stephen Lindholm, Marking the Software Patent Beast, 10 STAN. J.L. Bus. & Fin. 82, 118 (2005).

³¹ See id. at 117.

³² See id. at 114–18.

See, e.g., Crystal Semiconductor Corp., 246 F.3d at 1353; Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1082–83 (Fed. Cir. 1983).

Recently, two federal district court cases, *Soverain Software LLC v. Amazon.com, Inc.*³⁴ and *IMX, Inc. v. LendingTree, LLC,*³⁵ have specifically addressed the question of marking purely web-based inventions.³⁶ One may believe, then, that the question of adequate marking for the intellectual and virtual property hybrid of website patents has actually been answered. The solution to such an intractable problem, however, is not so easily obtained: the *Soverain* and *IMX* courts did set out certain standards for web-based inventions, but the standards so outlined are wrought with confusion and uncertainty, having been subjected to a wide array of varying interpretations.³⁷

This paper argues for a clearer, stronger and more robust standard under 35 U.S.C. § 287(a) that can be applied to intangible software methods embodied in a pure website form. Therefore, this paper also seeks to fully answer the unanswered question of how to treat this tenuous and newly-formed hybrid of intellectual and virtual property. Underlying this thesis is the central policy of preventing the proliferation of meritless or arbitrary software business method patents, and, in the alternative, encouraging the development of useful and more robust software patents. If the standard under § 287(a) is both raised and clarified, patentees will be wary of patenting needless online software method patents, which are generally detrimental to the current "state of the art" existing for software patents. Specifically, patentees will know that under a stricter § 287(a) standard, they will not be able to realize the full economic value of their patents because their infringement damages will be severely limited. On the other hand, if patentees wish to pursue software patents that can only be embodied online, they know that they will have to clearly and resolutely broadcast ownership of their intellectual and virtual property under a heightened § 287(a) standard, and also ensure that the website embodying that patent is clearly and unambiguously marked.

This, in turn, furthers the development of software technology because it improves the quality of website-based software patents. Furthermore, the Federal Circuit has outlined three major policies behind the Patent Marking Statute of § 287(a): "1) helping to avoid innocent infringement, 2) encouraging patentees to give notice to the public that the article is patented, and 3) aiding

³⁸³ F. Supp. 2d 904 (E.D. Tex. 2005).

³⁵ 79 U.S.P.Q.2d (BNA) 1373 (D. Del. 2005).

³⁶ *Id.* at 1376; *Soverain*, 383 F. Supp. 2d at 908–09.

See Eric L. Lane, Websites as Virtual Product Packaging: Internet Vendors of Downloadable Patented Software May Have a Duty to Mark Their Websites, NYIPLA BULL. (N.Y. Intellectual Prop. Law Ass'n, N.Y., N.Y.), Nov.—Dec. 2006, at 14, 16, available at http://www.nyipla.org/Bulletin/NovDec2006.pdf (pointing out many legal and conceptual gaps left open by the *IMX* decision).

the public to identify whether an article is in fact patented."³⁸ The policies behind § 287(a) will be reinforced, advanced and furthered by having patentees follow a clearer, heightened § 287(a) standard and by ensuring that patentees clearly mark the patent numbers on the websites embodying their patented methods.

The focus of this article is to make patentees, practitioners and the courts collectively aware of the adequacy (or inadequacy) of the mark and to effectively create a clearer and stronger standard under § 287(a), applicable to the emerging intellectual and virtual property hybrid of online software methods. Part II of this article covers a brief history of the Patent Marking Statute, with particular emphasis on the Patent Act of 1842 and the early Supreme Court case Wine Railway Appliance Co. v. Enterprise Railway Equipment Co.39 Part III outlines more recent and relevant Federal Circuit jurisprudence that speaks directly to the issue of patent marking, including the "tangible item" requirement as set out by American Medical Systems, Inc. v. Medical Engineering Corp. 40 Part IV analyzes the Soverain and IMX decisions that have specifically extended the American Medical "tangible item" requirement to websites. 41 IMX has also set out a tenuously defined "sufficiently clear nexus" standard for what constitutes an adequate patent mark on a website. 42 Finally, Part V discusses a policy debate encouraging the courts, and perhaps Congress, to be aware of the adequacy of the mark and to raise the standard under 35 U.S.C. § 287(a) for marking software methods. The policy debate focuses on two economic models. The "incentive rationale" argues that the rights of exclusion under an intellectual and virtual property hybrid will increase the value of that hybrid; therefore patentees will be motivated to meet § 287(a) and satisfy its underlying policies. The "disincentive rationale" argues that patentees of meritless software patents will be discouraged from having to meet a heightened § 287(a) standard, thus weeding out those frivolous patents will lead to more robust software method patents overall.

³⁸ Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1443 (Fed. Cir. 1998) (citations omitted).

³⁹ 297 U.S. 387 (1936).

⁴⁰ 6 F.3d 1523, 1538–39 (Fed. Cir. 1993).

IMX, Inc. v. LendingTree, LLC, 79 U.S.P.Q.2d (BNA) 1373, 1376 (D. Del. 2005); Soverain Software LLC v. Amazon.com, Inc., 383 F. Supp. 2d 904, 909 (E.D. Tex. 2005).

⁴² *IMX*, 79 U.S.P.Q.2d (BNA) at 1376.

II. THE HISTORY OF THE PATENT MARKING STATUTE

The earliest patent statutes did not include a marking requirement.⁴³ As early as 1852, learning which patents covered a certain product required a horseback trip to Washington, D.C. to check the records at the Patent Office, which were likely stored in "shoebox" form, as per Thomas Jefferson's initial information storage model.⁴⁴ As explained in the 1852 Supreme Court case *Boyden v. Burke*,⁴⁵ "patents were public records and all persons were 'bound to take notice of their contents.'"⁴⁶ Congress eventually recognized the sheer inconvenience of such an arrangement, even though there were only approximately 2400 patents issued at that time.⁴⁷ In 1836, relying on one central patent library also proved a mistake when the building burned down, and the patents along with it.⁴⁸

A. The Patent Acts of 1842, 1861 and 1870

Realizing these problems, Congress imposed a duty to mark in the Patent Act of 1842, which required "all patentees and assignees of patents . . . to stamp . . . on each article vended, or offered for sale, the date of the patent." ⁴⁹ If

Lindholm, *supra* note 30, at 113; *see* Jefferson, *supra* note 1.

These paper search files, known as 'shoe files' or 'the shoes' from early days when copies of issued patents were kept in shoeboxes, contained copies of the U.S. patents classified according to the U.S. Classification System. . . . Many references in the shoes contained additional information such as examiner notes and/or color drawings placed there by experienced examiners to assist other examiners working in that technology.

Review of U.S. Patent and Trademark Office Operations, Including Analysis of Government Accountability Office, Inspector General, and National Academy of Public Administration Reports: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary, 109th Cong. 153 (2005) [hereinafter Review of U.S. Patent and Trademark Office] (statement of Ronald J. Stern, President, Patent Office Professional Association). Early examiners also had to "feed the shoes" by keeping the patent files updated with the most recent technical literature. Id.

⁴³ *Nike*, 138 F.3d at 1443.

⁴⁵ 55 U.S. (14 How.) 575 (1852).

⁴⁶ Nike, 138 F.3d at 1443 (quoting Boyden, 55 U.S. (14 How.) at 582).

⁴⁷ U.S. Patent No. 2,400 (issued Dec. 23, 1841).

⁴⁸ KENNETH W. DOBYNS, A HISTORY OF THE EARLY PATENT OFFICES 107–08 (1997), available at http://www.myoutbox.net/popch17.htm. Ironically, the building burned down after it was spared from being razed by British Troops during the War of 1812 in an Invasion of Washington D.C. *Id.* at 108.

⁴⁹ Act of Aug. 29, 1842, ch. 263, § 6, 5 Stat. 543, 544–45 (repealed 1861).

the patentee failed to mark each article, he faced a criminal penalty of a fine "not less than one hundred dollars."⁵⁰ The Patent Act of 1861 abolished the 1842 penal remedy and instead restated the duty to mark as a limitation on the recovery of damages against a defendant who had not been "duly notified of the infringement," which is the standard used today.⁵¹ Like the current Patent Marking Statute, the duty was imposed on "any person" making or vending an article "under protection of letters-patent."⁵² Such a person was to affix the word "patented" along with "the day and year the patent was granted."⁵³ Also, for reasons discussed below, the statute declared that when such marking was impracticable because of "the character of the article patented," the person could affix the notice to a label or package.⁵⁴

The Patent Marking Statute has not changed substantially since 1861; the Patent Act of 1870, for instance, only altered the wording of the 1861 Act slightly.⁵⁵ In the nineteenth century, most inventions were tangible articles that could be marked.⁵⁶ Although at the time patented methods were not as popular as they are now, the Supreme Court still faced issues such as when marking was impracticable for a patented product.⁵⁷ In *Sessions v. Romadka*,⁵⁸ for instance, the plaintiff's patent was directed to a fastener for trunks.⁵⁹ The plaintiff did stamp the appropriate mark on the larger sizes of its fastener; however, it failed to stamp the mark on the smaller sizes of the fastener "on account of the diffi-

in any suit for the infringement of letters-patent by the party failing so to mark the article the right to which is infringed upon, no damage shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued after such notice to make or vend the article patented.

⁵⁰ *Id.* at §§ 5–6, 5 Stat. at 544–45 (repealed 1861); Lindholm, *supra* note 30, at 113 (citing the criminal aspect of the statutory penalty).

⁵¹ Act of Mar. 2, 1861, ch. 88 § 13, 12 Stat. 249 (repealed 1870).

⁵² I.d

⁵³ Id. Also like the modern Patent Marking Statute, the consequences of failure to mark was that:

Id.

⁵⁴ *Id.*

⁵⁵ See Patent Act of 1870, ch. 230, § 38, 16 Stat. 203 (repealed 1927).

⁵⁶ Id. (describing the requirement of anyone "making or vending any patented article"); see also DOBYNS, supra note 48, at 105, for descriptions of the "models of the Patent Office" that were used at this time.

⁵⁷ See Sessions v. Romadka, 145 U.S. 29 (1892).

⁵⁸ Id

⁵⁹ *Id.* at 30.

culty of marking them in such way that the mark would be legible when the catches were japanned or tinned."⁶⁰ The Court noted that it was "not altogether clear that the stamp could not have been made upon the smaller sizes," but upheld the plaintiff's recovery of profits under the 1870 Act because in the Court's view, the plaintiff "complied with the alternative provision" of affixing labels to packages of its trunk fasteners.⁶¹

B. The Patent Act of 1927 and the Wine Railway Case

The Patent Act of 1927 changed the marking requirements slightly; instead of the word "patented" together with the day and the year the patent was granted, the patent owner was required to affix "the word 'patent' together with the number of the patent." Professor Donald S. Chisum notes that giving the patent number "perhaps made it easier for an interested person to obtain a copy of the patent from the Patent Office," but "[o]n the other hand, omission of the day and year made it more difficult for such persons to determine when the patent or patents had expired."

In the 1936 Supreme Court case *Wine Railway Appliance Co. v. Enter- prise Railway Equipment Co.*, 64 the Supreme Court resolved a variety of important concerns under the Patent Marking Statute. 65 The key issue in the *Wine Railway* case was whether an infringer, Enterprise Railway, of a patent for a
"Door Mechanism for Railway Cars" 66 should be held liable for infringement
when the patented device was never made or sold by the patentee. 67 Since the
patentee had never made or sold the device, the first actual notice Enterprise
Railway received from Wine Railway was its filing of the infringement suit in
the District Court. 68 The Sixth Circuit, construing the Patent Marking Statute at
the time, found for the infringer and limited the patentee's recovery of profits to

61 *Id.* at 50–52. Also, the Court gave deference to the patent holder by stating "something must be left to the judgment of the patentee, who appears in this case to have complied with the alternative provision of this act in affixing a label to the packages in which the fasteners were shipped and sold." *Id.* at 50.

⁶⁰ *Id.* at 49–50.

⁶² Act of Feb. 7, 1927, ch. 67, 44 Stat. 1058 (repealed 1952).

⁶³ 7 DONALD S. CHISUM, CHISUM ON PATENTS § 20.03[7][c][i] (Matthew Bender & Co. eds., 2002).

⁶⁴ 297 U.S. 387 (1936).

⁶⁵ *Id.* at 392.

⁶⁶ U.S. Patent No. 1,434, 953 (filed Feb. 2, 1922).

⁶⁷ Enter. Ry. Equip. Co. v. Wine Ry. Appliance Co., 77 F.2d 159, 160 (6th Cir. 1935).

⁶⁸ *Id.* at 159–60.

only those damages after actual notice was given, i.e., the filing of the infringement suit.⁶⁹ The Sixth Circuit reasoned that there was a duty to give notice from "all patentees" and not just from "persons making or vending any patented article"; thus, Wine Railway, even though it did not make or sell the patented article, still had a duty to put the infringer on notice because it was a patentee.⁷⁰ By failing to mark the device, its infringement damages were severely limited to only damages that occurred after filing suit against Enterprise Railway.⁷¹

The Supreme Court reversed the Sixth Circuit decision, finding in favor of Wine Railway and stating that there was no duty to give notice to the infringer *unless* the patentee made or sold articles covered by the patent.⁷² The two relevant holdings of the *Wine Railway* Court are as follows.

1. Preventing Innocent Infringement

The *Wine Railway* Court first indicated that the purpose behind the Patent Marking Statute is the policy goal of "preventing innocent infringement."⁷³ The Court said that this could be accomplished by either marking the patented article or "sending an accusing notice" to the infringer.⁷⁴ As to the specific class of patentees to which this duty applies, the Court examined the statutory construction and reasoned that the duty applied only to patentees who "[make] or [vend] a patented article."⁷⁵ If a "new and different burden" was placed upon "all patentees," including "non-producing patentees," it would "impose on [non-producing patentees] a duty to [notify] the public," which is "impossible of performance" because "no article is made or vended by them."⁷⁶ Thus, the Patent Act of 1927, and the legislative histories of all the Patent Acts preceding it (the Patent Acts of 1842, 1861 and 1870), "require nothing unreasonable of patent-

⁶⁹ *Id.* at 161.

⁷⁰ *Id.* at 160–61.

⁷¹ Id

⁷² Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co., 297 U.S. 387, 395–98 (1936).

⁷³ Id. at 394. This has been echoed in Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1111 (Fed. Cir. 1996), among other cases.

Wine Ry., 297 U.S. at 394. At the time, the notice to the infringer sentence was not codified in the statute.

⁷⁵ Id. at 398. The primary purpose of 35 U.S.C. § 287(a) is to provide information to the public concerning "the status of the intellectual property embodied in an article of manufacture or design" made or sold by a patentee. Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 162 (1989).

⁷⁶ Wine Ry., 297 U.S. at 395–97.

ees" and therefore non-producing patentees, or patentees who do not produce or sell patented goods, have no duty to give actual notice to an infringer.⁷⁷

2. Only "Tangible and Fabricated Articles" Need Be Marked

Second, and more importantly, the *Wine Railway* Court explicitly tried to avoid the situation where "process patents . . . under which nothing has been manufactured may be secretly infringed with impunity." Therefore, the *Wine Railway* Court declared that the Patent Marking Statute applied only to "[t]he idea of a *tangible* article proclaiming its own character," and not to "process patents [or] patents under which nothing has been [physically] manufactured." As a result, the duty to provide notice to the public "by a visible mark" can "only be given in connection with some fabricated article." Thus, the *Wine Railway* Court implies that the marking duty need only be fulfilled for "tangible and fabricated articles," not intangible items, such as process patents.

C. The Aftermath of Wine Railway: The Patent Act of 1952

The final incarnation of the Patent Marking Statute was the Patent Act of 1952, which codified the actual notice to the infringer requirement discussed in *Wine Railway* by stating that the "[f]iling of an action for infringement shall constitute such notice." The 1952 Act also provided that the patentee could substitute the abbreviation "pat." for "patent." **82**

Thus, the development of patent legislation over these different time periods provides some idea of how the duty to mark has evolved from no requirement at all to a requirement that has become more strict and explicit over time. It is safe to say that the development of § 287(a) directly mirrors the technology prevalent in a certain era. In an industrial age where physical articles such as the "Door Mechanism for Railway Cars" were staples of the industry, the law outlined by *Wine Railway*, imposing a duty to mark only "tangible and fabricated" articles, seemed legally appropriate. As technology began to encompass

⁷⁷ *Id.* at 398.

⁷⁸ *Id.* at 395.

⁷⁹ *Id.* (emphasis added).

 $^{^{80}}$ Id.

⁸¹ 35 U.S.C. § 287(a) (2006); Wine Ry., 297 U.S. at 393–94.

⁸² § 287(a).

more abstract inventions, however, the Federal Circuit began to grapple with the problem of what exactly had to be marked under § 287(a).

III. THE FEDERAL CIRCUIT JURISPRUDENCE ON 35 U.S.C. § 287(A) MARKING

Although the Supreme Court tangentially addressed 35 U.S.C. § 287(a) after *Wine Railway*, the Federal Circuit remains the predominant authority on patent marking.⁸³ The Federal Circuit has outlined: 1) the initial burdens a patent holder bears in complying with the Patent Marking Statute (such as a patentee's burden to police licensees of its patent and how many patented articles must be marked); 2) what types of claims a patent contains (either method or apparatus), and what claims actually read on the patented invention at issue, in order to properly decide what is required to be marked under § 287(a); 3) various policy rationales behind the Patent Marking Statute, such as avoiding innocent infringement, encouraging patentees to give notice to the public that an article is patented and aiding the public to identify whether an article is patented and how to comply with those policies; and 4) "alternative marking" methods such as marking the product packaging or affixing a label to the product, if the product itself cannot actually be marked.⁸⁴

A. The Patentee's Burdens in Complying with § 287(a)

The patent holder bears the onus of proving that it has complied with § 287(a) in order to obtain full infringement damages. In other words, the patentee shoulders the burden of pleading and proving adequate marking. Also,

The Supreme Court briefly discussed marking in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 490 (1964), and affirmed the policies underlying the Patent Marking Statute in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 162 (1989). *See also* Cover v. Hydramatic Packing Co., 36 U.S.P.Q.2d (BNA) 1199, 1200 (E.D. Pa. 1995) ("Actual notice of infringement requires an affirmative communication of a specific allegation of infringement by a specific accused device." However, this goes more to the "actual notice" requirement and not the "constructive notice" requirement of patent marking.), *rev'd on other grounds*, 83 F.3d 1390 (Fed. Cir. 1996).

See Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993) (framing the claim issue with this inquiry).

Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1111 (Fed. Cir. 1996).

Sentry Prot. Prods., Inc. v. Eagle Mfg. Co., 400 F.3d 910, 918 (Fed. Cir. 2005). The patentee also bears the burden of proving compliance with the patent statute "by a preponderance of [the] evidence." Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1446 (Fed. Cir. 1998).

the approach in determining adequate marking under § 287(a) must focus on the action of the patentee, not the infringer's knowledge.⁸⁷ In particular, it does not matter if the infringer merely knew about the patent, and it does not matter if notice was given by a third party; the requirement is still that notice must actually be given by the patent holder.⁸⁸

1. The Burden of Policing One's Licensees

The patentee also has the burden of making sure that any licensees of its patent mark their products. Because 35 U.S.C. § 287 applies not only to patentees, but also to persons who make, sell, offer to sell or import "for or under" the patentee, the Federal Circuit has interpreted the "for or under" language to mean that marking is also required by those who are authorized by the patentee to practice the patent, regardless of whether this authority was granted via an express license, an implied license or a covenant not to sue. If a patent holder licenses her patent to another manufacturer, for instance, that manufacturer must mark its products as well. If a licensee fails to mark its products, the patent holder is unable to collect damages from anybody, even if he marks his own products. Thus, the duty and burden is on the patentee to police his licensees.

Compliance with the Patent Marking Statute is also a question of fact. Gart v. Logitech, Inc., 254 F.3d 1334, 1339 (Fed. Cir. 2001).

Lans v. Digital Equip. Corp., 252 F.3d 1320, 1327–38 (Fed. Cir. 2001); see also Devices for Med., Inc. v. Boehl, 822 F.3d 1062, 1066 (Fed. Cir. 1987) ("Absent notice, [an infringer's] 'knowledge of the patents' is irrelevant.").

⁸⁸ *Nike*, 138 F.3d at 1444, 1446.

⁸⁹ Carraway, supra note 15, at 15; see also 35 U.S.C. § 287(a) (2006) (the duty to mark is placed on not only patentees, but "persons making . . . or selling . . . any patented article for or under them.").

Maxwell, 86 F.3d at 1111 (stating "licensees, such as Target, and other authorized parties, such as Target's manufacturers, must also comply" with § 287(a)); see also Amsted Indus. Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 185 (Fed. Cir. 1994) (declaring that "there is no reason why section 287 should only apply to express licensees and not to implied licensees."). The statutory language of "[p]atentees, and persons making or selling any patented article for or under them" includes express and implied licensees, such as the patentee's customers or licensees. Id. at 184.

⁹¹ SRI Int'l, Inc. v. Advanced Tech. Labs., Inc., 127 F.3d 1462, 1469 (Fed. Cir. 1997); Amsted, 24 F.3d at 185.

Lampi Corp. v. Am. Power Prods., Inc., No. 93 C 1225, 2004 U.S. Dist. LEXIS 14049, at *10-*13 (N.D. Ill. July 22, 2004) (granting summary judgment on § 287(a) when patentee failed to police its licensees and failed to provide evidence that licensees marked); accord Tulip Computers Int'l B.V. v. Dell Computer Corp., 262 F. Supp. 2d 358, 362 (D. Del. 2003) ("A patent owner bears responsibility to ensure that 'licensees . . . and other authorized par-

This burden has been alleviated somewhat by subsequent rulings stating that patentees need only exercise "reasonable efforts" to ensure that their licensees or other unrelated third parties practicing the patent are complying with the marking requirements of § 287(a).⁹³

2. The Patentee Must Mark All Patented Articles

Under the Patent Marking Statute, the patentee must also mark *all* of its "patented articles" in order to recover maximal damages for infringement. However, a de minimis threshold exception to this requirement has been carved out by the case law: a patentee need only make sure that its marking is "substantially consistent and continuous" in order to comply with the Patent Marking Statute. To clarify the term "substantially consistent and continuous," some courts have viewed the de minimis threshold as the small amount left unmarked after a "majority" percentage of goods have been marked. The Federal Circuit in *Nike, Inc. v. Wal-Mart Stores, Inc.* and *American Medical*, however, has also clarified the "substantially consistent" standard by stating that full compliance with the Patent Marking Statute was not achieved until the patentee "con-

ties . . . comply' with Section 287(a)."); Loral Fairchild Corp. v. Victor Co. of Japan, 906 F. Supp. 813, 816–17 (E.D.N.Y. 1995) (granting summary judgment for same reasons).

E.g., Clancy Sys. Int'l v. Symbol Techs., Inc., 953 F. Supp. 1170, 1173 (D. Colo. 1997) (stating that third party's failure to mark was "not chargeable" to the patentee). For instance, the Federal Circuit has been more flexible with the marking duty when licensees further contract to third parties, as long as the patent holder made the requisite "reasonable efforts" to assure marking compliance. Maxwell, 86 F.3d at 1112.

E.g., Maxwell v. K Mart Corp., 880 F. Supp. 1323, 1336 (D. Minn. 1995) (stating that "[a]n implied de minimis exception" exists for patent marking); Hazeltine Corp. v. Radio Corp. of Am., 20 F. Supp. 668, 671–72 (S.D.N.Y. 1937) (stating "that there must be marking of every patented article sold – subject, of course, to the implied exception of de minimis, as, for example, failure by mistake to mark a few articles in hundreds of thousands made and sold might not, I venture, be ground for refusing [a damages judgment]"); accord Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1537 (Fed. Cir. 1993) (marking "must be substantially consistent and continuous in order" to comply with the statute); Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1444, 1446 (Fed. Cir. 1998) (using the same standard).

The percentages range from 85–95%. Imagexpo, LLC v. Microsoft Corp., 299 F. Supp. 2d 550, 554 (E.D. Va. 2003) (finding a triable issue of fact as to whether sufficient products were marked when the patentee submitted that it had marked approximately 85% of its products); *see also* Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1112 (Fed. Cir. 1996) (holding that sufficient evidence supported the jury's finding of compliance where 95% of the product was marked even where millions of unmarked products were sold).

⁹⁶ 138 F.3d 1437 (Fed. Cir. 1998).

sistently marked substantially all" of the patented products, and was no longer distributing unmarked products. 97

However, noncompliance with this quantity-marking requirement occurs when a patentee omits a mark from a substantial number of its patented products. 98 Obviously, noncompliance would occur if marking omissions exceed the small number set by the de minimis threshold.

B. Classifying The Patent: Do Method or Apparatus Claims Cover The Invention?

In order to determine what must actually be marked, The Federal Circuit has looked to the types of claims a patent contains. Claims form the metes and bounds of the patented invention, and they can be either method claims directed to a process, or apparatus claims directed to a physical apparatus. Most patents include both types of claims. In a situation where a patent has both method and apparatus claims, the American Medical court held that "to the extent that there is a tangible item to mark," a party is obligated to mark its product in order to avail itself of § 287(a).99 If a patent contains only method claims, there is no marking duty under § 287(a) because there is actually nothing to mark. This is a partial extension of the Wine Railway precedent. 100 Finally, if a patent has both method and apparatus claims, but the patentee chooses to assert only the method claims from the patent in the lawsuit, then there is no marking duty under § 287(a). This is a "purely method" exception that is carved out of the usual American Medical "tangible item" rule, and is embodied in the case of Hanson v. Alpine Valley Ski Area, Inc. 101 Each of these three situations is addressed below in detail.

The Federal Circuit has also literally clarified the standard by stating that once marking has begun for a patented article, it must be "substantially consistent and continuous." *Id.* at 1446; *Am. Med.*, 6 F.3d at 1537.

E.g., Calmar, Inc. v. Emson Research, Inc., 850 F. Supp. 861, 868 (C.D. Cal. 1994) (stating that "adequately marking a patented product only on occasion, and not as a matter of routine, is insufficient to support a finding of compliance with section 287(a)").

⁹⁹ Am. Med., 6 F.3d at 1538–39 (Fed. Cir. 1993).

Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc., 246 F.3d 1336, 1353 (Fed. Cir. 2001); Am. Med., 6 F.3d at 1538.

¹⁰¹ 718 F.2d 1075, 1083 (Fed. Cir. 1983).

1. American Medical: A "Tangible" Item Must Be Marked

A patent containing both method claims and apparatus claims triggers the § 287(a) marking duty if there is a "tangible item" that can be marked. **

Marking Medical specifically held that:

Where the patent contains both method and apparatus claims . . . to the extent that there is a tangible item to mark by which notice of the asserted method claims can be given, a party is obliged to do so if it intends to avail itself of the constructive notice provisions of section 287(a). 103

American Medical involved a patent that included apparatus claims directed to a fluid-filled prosthetic device, as well as method claims directed to making and sterilizing the fluid-filled prosthetic device. The trial court in American Medical relied on Devices for Medicine, Inc. v. Boehl, in concluding, "where there are both product and method claims being claimed infringed, the patentee must mark the product." Even though the invention at issue asserted both method and apparatus claims, however, the District Court left unclear whether the marked product, which could embody intangible method claims in addition to tangible apparatus claims, had to be "tangible." The Federal Circuit was not convinced by the patentee's attempt to distinguish Boehl, and it outlined the "tangible item" rule by stating that where a patent contains both apparatus and method claims, a patentee must mark a "tangible item" to the

¹⁰² Am. Med., 6 F.3d at 1538–39; Carraway, supra note 15, at 16.

¹⁰³ Am. Med., 6 F.3d at 1538–39.

The specific asserted patent was Method & Apparatus for Packaging a Fluid Containing Prosthesis, U.S. Patent No. 4,597,765 (filed Dec. 27, 1984) ("A method and apparatus for packaging a fluid containing prosthesis adapted to be implanted in a sterile condition involves filling a closable, permeable fluid containing housing within the prosthetic device with a fluid."). The fluid-filled prosthetic device was commonly used for "penile prostheses." *Am. Med.*, 6 F.3d at 1527. American Medical's prosthesis was known as "Hydroflex" and Medical Engineering Corporation's prosthesis was called the "Flexi-Flate." *Id.*

¹⁰⁵ 822 F.2d 1062 (Fed. Cir. 1987).

Am. Med. Sys., Inc. v. Med. Eng'g Corp., 794 F. Supp 1370, 1391 (E.D. Wis. 1992). Also, in *American Medical*, both method and apparatus claims were being asserted. *Id. Boehl* held that because the method claims were directed to use of the claimed product—a medical device—by selling the product unmarked, the patentee could not recover full damages under § 287(a). *Boehl*, 822 F.2d at 1066. The Federal Circuit found the holding of *Boehl* persuasive, and found patentee American Medical's distinction or distinguishing of *Boehl* "meaningless." Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993).

extent that there is a tangible item to mark, by which notice of the asserted method claims can be given.¹⁰⁷

There are a number of Federal District court cases that have followed the "tangible item" rule of *American Medical* in requiring the patentee to mark a "tangible item" when the patent at issue contains both apparatus and method claims. In *Halliburton Services v. Smith International Inc.*, ¹⁰⁸ the court held that marking was required for a "tangible" drill bit because it was covered by a patent having method claims directed to designing the drill bit, and apparatus claims directed to the specific drill bit designed by that method. ¹⁰⁹ Further, in *Broadcom Corp. v. Agere Systems, Inc.*, ¹¹⁰ the court clarified that the "tangible item" test for marking under § 287(a) applies only when an article that embodies a patented invention is placed in commerce; whether or not an article embodies a patented invention only if it would literally infringe a claim in the patent. ¹¹¹

Finally, in *Loral Fairchild Corp. v. Victor Co. of Japan*,¹¹² marking was required for a charge coupling device because the asserted patent included both product claims as well as method claims describing particular methods of operating the charge coupling device.¹¹³ As is explored below, some courts have used the "tangible item" rule to impose a marking requirement for software embodied in an online form. Software, in general, has been treated as "tangible."¹¹⁴

Am. Med., 6 F.3d at 1538–39.

¹⁰⁸ 317 F. Supp. 2d 719 (E.D. Tex. 2004).

¹⁰⁹ *Id.* at 725–26.

¹¹⁰ No. 04–2416, 2004 U.S. Dist. LEXIS 18163 (E.D. Pa. Sep. 8, 2004).

This factual inquiry is a two-step process. *Id.* at *11-*12. The court must first construe the claims of the patent in order to determine what the patent covers. *Id.* Then, the court must examine the "tangible" article sold by the patentee to determine if it falls within the claim's description. *Id.* If the answer to the second question is "yes," then the patentee's tangible product or article is a "patented article" within the meaning of § 287(a) and must be marked. *Id.* The court stated that "whether an article is covered by a particular patent is a question that must be proven; it cannot be assumed by this Court." *Id.*; *accord* AT&T Corp. v. Microsoft Corp., 290 F. Supp. 2d 409, 412 (S.D.N.Y. 2003) (analyzing the Patent Marking Statute when patentee failed to mark products containing components embodying a patent claiming a voice processing method).

¹¹² 906 F. Supp. 813 (E.D.N.Y. 1995).

¹¹³ *Id.* at 816–17.

The Federal Circuit has stated that computer software should be treated like any other tangible invention; however, it has not been clarified in "what way," and has never answered the question of how software can be marked as a tangible item. Minton v. Nat'l Ass'n of Sec. Dealers, 336 F.3d 1373, 1378 (Fed. Cir. 2003); Lindholm, *supra* note 30, at 96–98.

2. No Duty to Mark Exists for a Purely Method Patent

When a patent contains only method claims, there is no duty to mark under § 287(a).115 The reason the Patent Marking Statute does not apply to purely method-based inventions is that, ordinarily, where the patent claims are directed only to a method or process, there is nothing to mark. This concept is an extension of the Wine Railway precedent, which tried to avoid the situation where "process patents and patents under which nothing has been manufactured may be secretly infringed with impunity."117 Wine Railway supported the notion that inventions embodying processes need not be marked because there is no manufactured or "fabricated article" embodying that process. 118 The Federal Circuit has clearly declared that § 287(a) is inapplicable and no duty to mark exists when a patent contains only method claims and is directed to a purely method-based invention. In Bandag, Inc. v. Gerrard Tire Co., 119 for instance, the patented invention at issue was a "Tire Recapping Process." The Bandag court concluded that the language of § 287(a) clearly applied only to a "patented article," and that it was "settled in the case law that the notice requirement of this statute does not apply where the patent is directed to a process or method."121 In Crystal Semiconductor Corp. v. TriTech Microelectronics Corp. International, Inc., 122 the asserted patent was directed to a "method for using clock technology to control electrical noise" in order to reduce or eliminate the effect of electrical noise in integrated circuit analog-to-digital converter chips. 123 Because the clock technology patent had only method claims, the Federal Cir-

Bandag, Inc. v. Gerrard Tire Co., 704 F.2d 1578, 1581 (Fed. Cir. 1983) (citing Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co., 297 U.S. 387, 397 (1936)).

Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993); Crystal Semi-conductor Corp. v. Tritech Microelectronics Int'l, Inc., 246 F.3d 1336, 1353 (Fed. Cir. 2001).

See discussion supra pt. II.B.2.; Wine Ry., 297 U.S. at 395.

¹¹⁸ Wine Ry., 297 U.S. at 395.

¹¹⁹ 704 F.2d 1578 (Fed. Cir. 1983).

Bandag, 704 F.2d at 1579 (noting that Goodyear "used the Bandag method in its operation" and retreaded "a number of tires . . . in an average day"). Specifically, the relevant patent was Tire Recapping Process, U.S. Patent No. 3,236,709 (filed Oct. 4, 1962).

¹²¹ Bandag, 704 F.2d at 1581 (emphasis added).

¹²² 246 F.3d 1336 (Fed. Cir. 2001).

Method for Reducing Effects of Electrical Noise in an Analog-to-Digital Converter, U.S. Patent No. 4,746,899 (filed Oct. 7, 1986). This patent disclosed a method where a first clock signal samples the analog input voltage while a separate, delayed clock signal activates operation of the digital circuit. Because activation of the digital circuit is thus offset in time from the analog sampling, the activation signal does not interfere with the analog sampling, or vice versa. *Crystal Semiconductor*, 246 F.3d at 1343.

cuit concluded that "the notice provisions of § 287(a) [did] not apply."¹²⁴ The *Crystal Semiconductor* court declared: "The law is clear that the notice provisions of section 287 do not apply where the patent is directed to a process or a method."¹²⁵ Thus, the rule for purely method patents is clear and remains controlling precedent.¹²⁶ The application of this rule to software methods may have interesting results, as the question arises: are not software patents, by nature, purely method based?¹²⁷ If that is the case, does software need to be marked at all under the rule outlined by *Bandag* and *Crystal Semiconductor*? What is there to mark for an algorithm? This rule can thus prove useful to those who oppose marking software altogether.

3. Both Types of Claims, But Only Method Claims Asserted

There remains a third area of Federal Circuit law that combines the two previously discussed areas of law. Essentially, it can be described as a "purely method" exception carved out of the broader *American Medical* "tangible item" rule.

Recall that the *American Medical* "tangible item" rule applies to any and all patents that contain both apparatus and method claims. That is, if a patentee has a patent with both apparatus and method claims, that patentee must mark its product under § 287(a) to the extent that there is a tangible item to mark. The Federal Circuit case *Hanson v. Alpine Valley Ski Area, Inc.*, 128 however, established that even if a patentee has a patent containing both apparatus and method claims, if the patentee chooses to assert *only* the method claims by stating that the alleged infringer infringed *only* the method claims, then there is no duty to mark under § 287(a). 129

¹²⁴ Crystal Semiconductor, 246 F.3d at 1353.

¹²⁵ *Id.* (citing Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993)).

See State Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1074 (Fed. Cir. 2003) (affirming the propriety of a jury instruction that stated marking was not required for a patent that contains only method claims).

Assuming that the software patent contains no apparatus claims.

¹²⁸ 718 F.2d 1075 (Fed. Cir. 1983).

¹²⁹ Id. at 1083. Interestingly enough, the Hanson case precedes the American Medical case, and is still good law because it precedes the formation of the "tangible item" rule. Also, because a later Federal Circuit panel decision (e.g., American Medical) cannot overrule or contradict an earlier Federal Circuit panel decision (e.g., Hanson), Hanson still remains strong and relevant law that carves a "purely method" exception into American Medical's "tangible item" rule. Newell Cos. v. Kenney Mfg. Co., 864 F.2d 757, 765 (Fed. Cir. 1988) (citing that a later Federal Circuit decision cannot overrule or contradict an earlier one).

In *Hanson*, the asserted patent was directed to a "method and apparatus for making snow used in winter sports." The patent contained claims to an efficient artificial snowmaking device—an advanced machine with a propeller that would turn water droplets into ice nuclei with air turbulence—and also to a method for using the device to make artificial snow. Even though the patent had both apparatus and method claims, however, the Federal Circuit held that § 287(a) did not apply because the patentee asserted only the method claims, and the only claims found to be infringed in the case were claims 1, 2 and 6 of the Hanson patent drawn to "the method of forming [and] distributing snow upon a surface." Thus, because only the method claims were infringed, the patent was treated as a pure method patent, and the court cited *Bandag* in declaring that § 287(a) does not apply to a patent directed to a process or method. 133

Thus, *Hanson* effectively carved out a pure method "exception"—the rule followed by cases such as *Bandag* and *Crystal Semiconductor* establishing no duty to mark under § 287(a)—out of the "tangible item" holding of *American Medical* as applied to patents having both apparatus and method claims. Such a standard could prove interesting in a software context where a manufacturer decides to assert only the method claims of a software patent in an infringement suit.¹³⁴ If a court can be convinced that *Hanson* applies to just the method claims of a software patent, then the question of whether there is a § 287(a) duty to mark software arises. If there is such a duty, what must actually be marked?¹³⁵

Prior to Hanson's invention, snow was made by mixing water and compressed air, and ejecting the combination under high pressure from a nozzle. The water froze and, by combining with water in the air, produced snow crystals. This method required a considerable amount of energy to compress the air, and the nozzles frequently froze. Hanson's patent disclosed a new method of making snow. As the magistrate explained, rather than relying on compressed air, "the Hanson process discharges water into a hub mounted in the center of a spinning propeller. The water is then fragment into droplets by the propeller blades generating spontaneous ice nuclei."

Id. at 1076. The efficiency of Hanson's snowmaking system was "at least five to seven times as energy efficient as the prior art compressed method." *Id.*

¹³⁰ Hanson, 718 F.2d at 1076.

¹³¹ *Id.* at 1076–77.

¹³² *Id.* at 1083.

¹³³ Id

Assuming the software patent also contains apparatus claims directed to a machine or a computer as well.

As can be viewed later, the cases of Soverain Software LLC v. Amazon.com, 383 F. Supp. 2d 904 (E.D. Tex. 2005) and IMX, Inc. v. LendingTree, LLC, 79 U.S.P.Q.2d (BNA) 1373 (D.

C. The Nike Policy Trifecta: Complying With the Purposes Behind § 287(a)

The Federal Circuit case *Nike, Inc. v. Wal-Mart Stores, Inc.*, ¹³⁶ outlined three policy purposes behind the § 287(a) Patent Marking Statute: "(1) helping to avoid innocent infringement, (2) encouraging patentees to give notice to the public that an article is patented, and (3) aiding the public to identify whether an article is patented,"¹³⁷ or helping the public ascertain "the status of the intellectual property embodied in an article of manufacture or design."¹³⁸ Thus, in order to ascertain compliance with these policies, a patentee must make sure they are complying with the various marking requirements of § 287(a).¹³⁹ First and foremost, a patentee must make sure general members of the public can find, read and sufficiently understand the patent marking ("patent" or "pat." along with the patent number) on the product. In *Allen Engineering Corp. v. Bartell Industries, Inc.*, ¹⁴⁰ the Federal Circuit emphasized the importance of making sure "interested members of the public" are able to discern and understand the patent mark. ¹⁴¹ The court held that a sticker affixed to the product complied with

Del. 2005) skirt this issue and avoid these questions by relying on the *American Medical* "tangible item" test—by doing so, they do not need to address the questions raised by either the *Hanson* exception or the situation where a patent is directed to a purely method-based invention.

^{136 138} F.3d 1437 (Fed. Cir. 1998).

¹³⁷ *Id.* at 1443.

Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 162 (1989). Another one of the purposes behind § 287(a), which likely can be encompassed into the third purpose, was to solve "the problem of having unmarked products in the marketplace." Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1537 (Fed. Cir. 1993). A purpose that bolsters purposes (1)–(2), is "to give patentees the proper incentive to mark their products and thus place the world on notice of the existence of the patent." Laitram Corp. v. Hewlett-Packard Co., 806 F. Supp. 1294, 1296 (E.D. La. 1992).

[&]quot;[A] patentee seeking to give notice to the public that an item is patented is required by Congress to mark it according to a specific list of acceptable methods as detailed in 35 U.S.C. § 287." Delta & Pine Land Co. v. Sinkers Corp., 177 F.3d 1343, 1355–56 (Fed. Cir. 1999). These include marking the article with the word "patent" or the abbreviation "pat." along with the patent number. 35 U.S.C. § 287(a) (2006). In addition, courts have approved the practice of using the word "one or more" followed by a list of patents, although the only decisions on the issue were prior to the enactment of the current patent laws. *See*, *e.g.*, Chi. Pneumatic Tool Co. v. Hughes Tool Co., 192 F.2d 620 (10th Cir. 1951); United States v. Gen. Elec. Co., 82 F. Supp. 753, 817 (D.N.J. 1949) ([T]he "one or more" form of notice was "a practice often restored to when multiple patents expiring at different times covered several objects and cannot be said to have deceived the public.").

¹⁴⁰ 299 F.3d 1336 (Fed. Cir. 2002).

¹⁴¹ *Id.* at 1356.

§ 287(a) even though it contained a typographical error. The Federal Circuit in *Allen Engineering* stated that a typographical error does not prevent "interested members of the public from discerning the number of a patent alleged to protect an article," and therefore the patentee still complied with § 287(a). Also, the *Allen Engineering* court emphasized that "[t]hose sufficiently interested in the patents covering the [product] would have no difficulty discerning—and indeed would be hard pressed not to discern—the actual patent number from the sticker." This means that in order to gauge the patentee's compliance with § 287(a), the objective standard is the "interested member of the public" or "those sufficiently interested in the patent." Thus, the adequacy of the mark is measured through this objective lens in order to determine whether or not the patentee is complying with the *Nike* policy trifecta and honestly broadcasting patent ownership of his invention. 146

D. Alternative Marking of the Patented Article

The Patent Marking Statute also provides "alternative marking provisions" by stating that "when, from the character of the article, [marking the article with "patent" or "pat." along with the patent number] can not be done," complying with the Patent Marking Statute and giving notice to the public can be accomplished "by fixing to [the patented article], or to the package wherein one or more of [the patented article] is contained, a label containing a like notice." Recall the discussion in the 1892 U.S. Supreme Court case *Sessions v. Romadka*, where the Court allowed a manufacturer of trunk fasteners to put the patent marking on the package because the fasteners were too small to

¹⁴² Id. The typo was a misplaced semicolon. "Specifically, instead of reading '4,046,484; 5,108,220," the sticker read '4,046,4845; 108,220." Id. (noting the first "5" of the second patent was grouped at the end of the first patent).

¹⁴³ *Id*.

¹⁴⁴ *Id.*

¹⁴⁵ Id.

Although not directly related to the discussion in this paper, the "False Marking Statute" of 35 U.S.C. § 292(a) (2006) covers the use of the marks "patent applied for" and "patent pending," and provides for a civil fine of \$500 per offense if an article is "falsely marked." Specifically, "when an . . . article is marked with the word 'patent' or any word or number that imports that the article is [in fact] patented," when the article is not in fact covered by at least one claim of the patent, "and such [false] marking is for the purpose of deceiving the public," a fine of \$500 per offense is triggered. Clontech Labs., Inc. v. Invitrogen Corp., 406 F.3d 1347, 1352 (Fed. Cir. 2005).

¹⁴⁷ 35 U.S.C. § 287(a) (2006).

¹⁴⁸ 145 U.S. 29 (1892).

mark.¹⁴⁹ The Court allowed the patentee to comply with the "alternative marking provisions" of the Patent Marking Statute by marking the package, because "in a doubtful case, something must be left to the judgment of the patentee."¹⁵⁰ The *Sessions* holding, in allowing compliance vis-à-vis the "alternative" marking provisions of § 287(a), has been interpreted by several cases, but they have all required a showing of impossibility in marking the actual article.

1. The Stryker Case

For instance, in *Stryker Corp. v. Intermedics Orthopedics, Inc.*,¹⁵¹ the court found that the patentee did not comply with § 287(a) because it failed to mark either the device (a surgical implant) or the product packaging, and also failed to insert something such as a label with the patent marking within the packaging of the product.¹⁵² Patentee Stryker Corp. argued that it was not feasible to mark the actual surgical implant, so it instead placed the patent notice in product literature "which was then freely distributed to surgeons, nurses, hospital personnel, and anyone that asked for them, *separately from* the . . . devices themselves."¹⁵³ The court held that the specific method of providing notice was "insufficient" under § 287(a), "as a matter of law," because if the court approved of the patentee's method of marking by distributing literature with the patent mark, then:

... a patent owner could place an advertisement of the patented product in a newspaper or a trade journal which refers to the patent mark, and thereby meet the marking requirements of the statute without [ever] having to mark the product's packaging. This is a result the statute [§ 287(a)] does not envision. ¹⁵⁴

¹⁴⁹ *Id.* at 49–50; see discussion supra pt. I.A.

¹⁵⁰ Sessions, 145 U.S. at 50–52.

¹⁵¹ 891 F. Supp. 751 (E.D.N.Y. 1995), *aff'd*, 96 F.3d 1409 (Fed. Cir. 1996).

¹⁵² *Id.* at 832; Lane, *supra* note 37, at 16.

¹⁵³ *Id.* at 829–30.

¹⁵⁴ Id. at 830. Further remarking that the evidence of record did not show that the product packaging was marked, "[n]or was there any evidence offered at the trial by the plaintiff that . . . other literature containing the patent marking was placed in the packaging of the [product] that was distributed to vendors and end-users." Id. at 829–30.

2. The Calmar Case

Similarly, in Calmar, Inc. v. Emson Research, Inc., 155 the court found that the patentee did not comply under § 287(a), even though the patentee could have used the alternative marking provisions and marked material accompanying each individual patented article. 156 Patentee Calmar, Inc. did not mark its patented pump sprayers, nor did it mark the shipping cartons in which the pumps were shipped, nor the labels on the cartons. 157 Calmar argued that it satisfied § 287(a) by marking "fact sheets" that were "routinely left with actual and prospective customers upon delivery of ... product samples and ... on occasion," included with shipments of sample pumps to such customers. 158 The court found this "insufficient" to comply with § 287(a) because the Patent Marking Statute requires "either marking the patented article itself or, at least, including something with the packages in which the patented articles are shipped which would indicate the article's patent number." The Calmar court stated that "[b]oth the clear language of § 287(a) and relevant case law indicate that merely marking some literature [i.e., 'fact sheets'] associated with a patented article is insufficient to satisfy the marking requirements of the statute."¹⁶⁰

3. Other Alternative Marking Cases

There are a series of other cases that discuss the "alternative marking" provision of § 287(a), but they usually involve situations where a patentee has failed to comply with the Patent Marking Statute by not marking the product when he could have, or by practicing an insufficient marking method that does not qualify as either marking the product packaging or attaching a label to the packaging with the patent mark.¹⁶¹ There have been a number of cases, how-

¹⁵⁵ 850 F. Supp. 861 (C.D. Cal. 1994).

¹⁵⁶ *Id.* at 867–68.

¹⁵⁷ *Id.* at 867.

¹⁵⁸ Id. at 868.

¹⁵⁹ *Id.*

¹⁶⁰ Id

See Metrologic Instruments, Inc. v. PSC, Inc., No. 99–4876 (JBS), 2004 U.S. Dist. LEXIS 24949, at *59–69 (D.N.J. Dec. 13, 2004) (citing that marking the package of a patented bar code scanner with a label stating "See User's Guide for Patent Coverage" was insufficient as a matter of law); Creative Pioneer Prods. Corp. v. K Mart Corp., 5 U.S.P.Q.2d (BNA) 1841, 1848 (S.D. Tex. 1987) ("[T]he character of the product was such that a marking on the product would have been a relatively simple matter. Therefore, marking the packaging . . . is insufficient to commence the period for the recovery of damages.").

ever, which have held that a patentee's marking method was in compliance with the "alternative marking" provisions of § 287(a); this indicates that it is not always a difficult standard to meet, since the only requirement is that a patentee must either mark the product packaging or affix a label to the product.¹⁶²

The discussion of "alternative marking" methods is significant because it can be analogously applied to websites that accompany a patented software product. A computer program per se may not be patented, although it may be copyrighted; instead, software programs must "be claimed as a process, . . . an article of manufacture, . . . or . . . a machine." ¹⁶³ Especially considering the wide variety of ways in which software can be claimed (e.g., as a computer-readable medium, a data signal, a graphical user interface (GUI) or an application programming interface (API)), does one just mark the material most closely associated with each of these data objects?¹⁶⁴ Further, software patents often contain an embodiment that includes software running on a computer; if such is the case, then what must be marked?¹⁶⁵ If we analogize to the product packaging and affixed label of the "alternative marking" provision of § 287(a), does that mean that one should mark the computer-readable medium (i.e., a CD-ROM) or the computer code in which the software patent is embodied in order to comply with the Patent Marking Statute?¹⁶⁶ Additionally, since many software methods are embodied solely in online form on a website, should one forget about re-

See Bergstrom v. Sears, Roebuck & Co., 496 F. Supp. 476, 495 (D. Minn. 1980) (holding patentee in compliance with § 287(a) when patentee regularly marked fireplace grate with hang tangs inscribed with the patent number); Saf-gard Prods., Inc. v. Serv. Parts, Inc., 491 F. Supp. 996, 1010 (D. Ariz. 1980) (patentee complied with § 287(a) by affixing the patent mark to packages containing its patented automotive radiator caps, and ""[gave] notice to the public," even though radiator caps may be small and difficult to mark); Nicholson v. Bailey, 182 F. Supp. 509, 511–12 (S.D. Fla. 1960) (patentee complied with § 287(a) when he sold trees covered by a plant patent, and accompanied those sold trees with an affixed metal tag).

Julie E. Cohen & Mark A. Lemley, Patent Scope and Innovation in the Software Industry, 89 CAL. L. REV. 1, 20 (2001); Dennis S. Karjala, The Relative Roles of Patent and Copyright in the Protection of Computer Programs, 17 J. MARSHALL J. COMPUTER & INFO. L. 41, 67–68 (1998).

Daniel W. McDonald et al., Software Patent Litigation, at 3–4 (April 2006), http://www.abanet.org/litigation/committees/intellectual/roundtables/0406_outline.pdf.

Kennedy, *supra* note 22, at 10.

The court in *Soverain Software LLC v. Amazon.com, Inc.*, 383 F. Supp. 2d 904, 908 (E.D. Tex. 2005) assumed that the "media" (CD-ROM) upon which the software was delivered and the code comprising the software satisfied § 287(a). A software vendor may also choose to mark the startup "splash" screen of its products, which Adobe does with its Acrobat Reader and other products.

cordable media, such as a CD-ROM, and try to figure out how or where to mark a website?¹⁶⁷

Since software is often packaged and sold on the shelves of stores, it may be easy and somewhat obvious under the previously discussed "alternative marking" cases to simply mark the product packaging of a software box product. Wendors have included other relevant legal notices with their software packaging, so why can they not just mark their packages with patent numbers? The issue becomes thornier for software that can only be downloaded or software that is embodied purely in website form. Marking, in those cases, could then appear in a drop box along with other legal notices or information, or on a splash screen during startup of the software. But for a website, there seems to be an infinite number of pages or locations where a patent marking could be placed. Therefore, it may be difficult to define a website embodying a piece of software as an accompanying package or label under the prior case law, because

Labeling and user notification requirements in the agreement are ridiculous. I understand their desire to "spread the word" about their patent, but they're telling me that I have to provide far more info on their ownership of the patent that they require in the docs/packaging of modem manufacturers and other users of LZW. Fair is far. A blurb in the online help and docs should be sufficient; a "non-defeatable" splash screen at startup is going too far.

Michael C. Battilana, The GIF Controversy: A Software Developer's Perspective (June 20, 2004), http://www.cloanto.com/users/mcb/19950127giflzw.html.

Steven Lindholm has suggested that "[t]he literal reading of § 287(a) states that an 'article' must be marked unless for physical reasons it is impossible to do so." Lindholm, *supra* note 30, at 117. Since a CD-ROM is the article of a software program, "a literal reading of the law ... would therefore seem to say that the disk itself must be marked with each patent used. Once software is installed, [however,] the software must continue to be marked, as [the] hard drive" embodies the patented software. *Id.* However, "[i]t is practically impossible ... to ensure the marking of a hard drive" because that would require the impractical result of the user disassembling his computer and putting a sticker on his hard drive. *Id.* at 118.

James Soong mentions that enterprise software, software granted by license by companies, "does not sit on store shelves with packaging available for potential inspection by all." James W. Soong, *Patent Damage Strategies and the Enterprise License: Constructive Notice, Actual Notice, No Notice*, 2005 DUKE L. & TECH. REV. 2, ¶ 12 (Feb. 1, 2005), *available at* http://www.law.duke.edu/journals/dltr/articles/2005dltr0002.html. This is contrasted to "off-the-shelf consumer software for purchase by virtually anyone." *Id.* at ¶ 5.

See, e.g., Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1150 (7th Cir. 1997) (involving the packaging contents surrounding a box with software); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1448 (7th Cir. 1996) (noting that packaging stated a license was enclosed in the software CD-ROM, although the user viewed a click-through license).

Soong, *supra* note 168, at ¶ 8. Interestingly enough, when policies were announced governing the LZW algorithm inherent in the GIF graphic standard, some comments included:

it would be a dynamic and constantly changing package.¹⁷¹ As is observed in the next section, the cases *Soverain* and *IMX* begin to grapple with these complex software marking issues, and attempt to pin down exactly what must be marked on a website, to the extent that a website can even be marked at all.

IV. MARKING PATENTED ONLINE SOFTWARE METHODS: THE SOVERAIN AND IMX DECISIONS

The specific issue of marking software has yet to be addressed by the Federal Circuit.¹⁷² Therefore, when the issue of marking patented online software methods arose in the district courts, a rule had to be crafted out of pre-existing Federal Circuit law pertaining to marking patented articles. Because of this, the legal holdings created by the *Soverain* and *IMX* decisions have some gaps that may be addressed by pre-existing Federal Circuit law. The holdings of the two cases is discussed below, followed by detailed legal critiques using relevant Federal Circuit cases as well as general marking policy perspectives. An empirical survey of websites marking their patents is then taken, with an attempt at quantifying the website marking test set out by *Soverain* and *IMX*.

A. Soverain Software LLC v. Amazon.com, Inc.

Soverain Software LLC ("Soverain") is a Chicago, Illinois based software manufacturer that "provides e-commerce software and services for enterprises, focusing on the publishing, news syndicate and digital content industries." Because of Soverain's focus on e-commerce software for use by mul-

¹⁷¹ See IMX, Inc. v. LendingTree, LLC, 79 U.S.P.Q.2d (BNA) 1373 (D. Del. 2005). A website through which the patented product is "accessed" as the "legal equivalent" of product packaging is a compelling comparison, but must overcome the difficulties that product packaging is often static, unchanging and a concrete object that can be labeled with a patent number whereas a website, on the other hand, is a dynamic and constantly evolving medium with many different pages. Furthermore, once product packaging is marked, a consumer can readily view the mark. Hopefully, a website can be marked in the same way so that viewing the mark is as unavoidable as viewing the mark on a package.

However, in Minton v. National Assiociation of Securities Dealers, 336 F.3d 1373, 1378 (Fed. Cir. 2003), the court implied that computer software should be treated like any other tangible invention; however this was in a purely 102(b) "on-sale" context. See also Lindholm, supra note 30, at 116.

Soverain – About Us, http://www.soverain.com/asp/about/ (last visited Oct. 8, 2007) (noting that "Soverain's flagship product Transact is a time-tested, robust e-commerce system which supports multiple storefront/merchant configurations.") The mission of Soverain is to "develop and support the e-commerce technology that was pioneered by Open Market," a supplier of enterprise content management and delivery application software to enable organiza-

tiple merchants, it acquired three patents from Open Market, Inc., all of them pertaining to "a network-based sales system that includes a buyer computer, a merchant computer, a payment computer, and a virtual shopping cart" that allows for "item selection and payment to be processed over a network." In January 2004, Soverain filed an infringement action against Amazon.com and Gap, Inc., alleging infringement of those three patents in the United States District Court for the Eastern District of Texas—a court noted among patent litigators as a patent "rocket docket." In early 2005, the case against Gap, Inc. was dismissed after a settlement, but the allegations of infringement by Amazon.com remained. Amazon.com then moved for partial summary judgment claiming that, under § 287(a), Soverain was not entitled to pursue infringement damages because it failed to present constructive notice—through marking—of Amazon.com's alleged infringement until the infringement suit was filed, and because Soverain and its licensees failed to comply with the Patent Marking Statute.

The Eastern District of Texas granted Amazon.com's motion for partial summary judgment.¹⁷⁸ All three patents contained method, apparatus and system claims, which can be construed as apparatus claims.¹⁷⁹ Specifically, the method claims were directed to a "method of operating a 'shopping cart computer' to store a virtual shopping cart for customers operating a buyer computer

tions to use the internet to optimize interactions with their site visitors. *Id.* Open Market essentially supplied their patented technology to Soverain. Open Market, Inc. Information, http://www.business.com/directory/computers_and_software/software_applications/open_market, inc/profile/ (last visited Oct. 8, 2007).

The three specific patents were: 1) Internet Server Access Control & Monitoring Sys., U.S. Patent No. 5,708,780 (filed June 7, 1995); 2) Network Sales Sys., U.S. Patent No. 5,909,492 (filed June 18, 1997), which was a continuation of the third patent; and 3) Network Sales Sys., U.S. Patent No. 5,715,314 (filed Oct. 24, 1994). Soverain Software, LLC v. Amazon.com, Inc., 383 F. Supp. 2d 904, 906 (E.D. Tex. 2005).

¹⁷⁵ See, e.g., The Patent Prospector, The Eastern District of Texas (Sept. 24, 2006), http://www.patenthawk.com/blog/2006/09/the_eastern_district_of_texas.html (last visited Oct. 8, 2007) (citing Julie Creswell, So Small a Town, So Many Patent Suits, N.Y. TIMES, Sept. 24, 2006, available at http://www.nytimes.com/2006/09/24/business/24ward.html).

¹⁷⁶ Carraway, *supra* note 15, at 17.

Soverain, 383 F. Supp. 2d at 906–07. I'd like to emphasize here that limiting a patentee to pre-suit damages is a severe economic detriment to the patentee because the patentee's damage award is significantly, if not completely, reduced.

¹⁷⁸ Id at 911

Carl Oppedahl, *Patent Marking of Systems*, 11 SANTA CLARA COMPUTER & HIGH TECH. L.J. 205, 226–27 (1995) (In "a patent [that] has claims directed variously to an entire system and to subparts of the system, the marking obligation should extend to each article sold by the patent owner that responds to any apparatus claim of the patent.").

connected [to] the Internet," and the system claims were directed to the same "shopping cart" technology, but in the context of a "network-based sales system" comprising multiple tangible computers. Therefore, Soverain asserted both method and apparatus claims against Amazon.com, alleging that Amazon.com infringed these claims by operating websites that included the ubiquitous "shopping cart" feature, which is widely prevalent on e-commerce websites today. [18]

There are two main parts to the *Soverain* holding that are worth analyzing: (1) whether Soverain's licensees complied with the Patent Marking Statute, when the asserted patents contained both method and apparatus claims; and (2) whether a website is a "tangible item" that must be marked under the rule imposed by *American Medical*.¹⁸²

1. Soverain's Licensees & Patents with Both Method and Apparatus Claims

Amazon.com argued that Soverain did not ensure that its licensees complied with the Patent Marking Statute. Soverain's licensees operated websites and did not put a mark on their websites pointing to Soverain's patents. In response to Amazon.com's contention, however, Soverain stated that its licensees were only practicing the method claims from its asserted patents, and, therefore, under the *Bandag* holding, the marking requirement was inapplicable because there is nothing to mark for a patent directed purely to a process or method. The *Soverain* court, however, rejected that argument and stated

Carraway, *supra* note 15, at 17. Thus, it is reasonable to assume the "system" in the system claim comprised multiple "apparati:" the computers in this case. Among the tangible computers in the system was "a 'shopping cart computer' (such as a web server) for storing products in a virtual shopping cart connected to *buyer computers* [(the computers used by customers)] for sending messages to the shopping cart computer corresponding to a buyer's selection of products for inclusion in the shopping cart." *Id.*

Soverain, 383 F. Supp. 2d at 909. An interesting analysis of the shopping cart feature can be found at Wikipedia, Shopping Cart Software, http://en.wikipedia.org/wiki/Shopping cart software (last visited Oct. 8, 2007).

¹⁸² *Soverain*, 383 F. Supp. 2d at 909.

Although the court remarks that Soverain had thirty-two licensees, Soverain contended that it only had two—"Raptor" and "Intershop." *Id.* at 908–09.

¹⁸⁴ Id at 909

Id. Recall the "no duty to mark" rule for purely method patents discussed *supra* Section III.B.2. The *Bandag* case involved a patentee who asserted a patent directed to a method to recap or retread tires, and hence there was no duty to mark under § 287(a). Bandag, Inc. v. Gerrard Tire Co., 704 F.2d 1578, 1579–80 (Fed. Cir. 1983).

that because the asserted patents in this case included both method and apparatus claims, the "tangible item" rule of *American Medical* had to be applied. 186

Assuming that Soverain did have a duty to mark under *American Medical*, imposing the requirement on Soverain to police its licensees and ensure that its licensees complied with the Patent Marking Statute is consistent with Federal Circuit law. ¹⁸⁷ Even under the "reasonable efforts" deference courts sometimes give to patentees in policing its licensees, Soverain still should have made sure its licensees properly marked its patented products, especially considering the fact that Soverain argued that there were really only two licensees of its patents. ¹⁸⁸ Thus, this aspect of the *Soverain* case is not in contention. What could be debated, however, is the *Soverain* court's decision to apply the *American Medical* "tangible item" rule to websites, which still leaves many questions unanswered. ¹⁸⁹

2. The *Soverain* Holding: A Website is a "Tangible Item"

First, the *Soverain* court pointed out that all the asserted patents at issue contained both method and apparatus claims. Then, the court invoked the *American Medical* "tangible item" rule, citing that "[w]hen dealing with a patent that includes method and apparatus claims, a tangible item that can be marked is required to be marked in order to comply with the Patent Marking Statute," to "the extent that there is a tangible item to mark by which notice of the asserted method claims can be given." The *Soverain* court then concluded that a "website can be marked" because it is a tangible item under *American Medical*. 192

The *Soverain* court based that decision, however, on evidence that a website could be marked; Amazon.com specifically submitted screen shots of websites that included patent notice and also showed that the company that

Soverain, 383 F. Supp. 2d at 908.

¹⁸⁷ *Id.*; see also supra notes 89–93.

Soverain, 383 F. Supp. 2d at 908; see Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1112 (Fed. Cir. 1996) (describing the "reasonable efforts" deference courts give to patentees in policing their licensees); Carraway, supra note 15, at 19.

¹⁸⁹ *Soverain*, 383 F. Supp. 2d at 908.

[&]quot;The '780 patent claims 1, 4, 5; '314 patent claim 39; and '492 patent claims 5, 16, 18 are method claims, and the '780 patent claims 32, 40; '314 patent claim 34; '492 patent claims 1, 15, 17 are apparatus claims." *Id.* at 909 (emphasis added).

¹⁹¹ *Id*.; Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993).

¹⁹² *Soverain*, 383 F. Supp. 2d at 909.

owned Soverain's patents before transferring them to Soverain required one of its licensees to include a patent mark in the website's "legal notices" section.¹⁹³

Patent holder Soverain attempted to argue that a website was an intangible object that could not be marked, which the court read as an improper attempt at defining "an item's status as tangible or intangible," as distinct from the question as to "whether [an item could] be marked." The *Soverain* court then reached the conclusion that the term "tangible item" as used in *American Medical* must be defined as "those items that can be marked," and "intangible items" as "those that cannot be marked." Thus, the *Soverain* court was able to directly apply the *American Medical* "tangible item" rule because the asserted patents contained both method and apparatus claims and because the court determined that websites were actually tangible items that could be marked. 196

Yet, such a simple and succinct conclusion seems too good to be true. The holding of the *Soverain* court leaves open many unaddressed questions.¹⁹⁷ First, the court ignores the potential application of *Hanson v. Alpine Valley Ski Area, Inc.*¹⁹⁸ Recall that in *Hanson,* even though the asserted patent contained both method and apparatus claims, the patentee was not required to mark under § 287(a) because he asserted *only* the method claims in the suit, and, therefore, the patent was treated as a purely method-based invention for which § 287(a) was inapplicable.¹⁹⁹ Although the patents at issue in *Soverain* contained both method and apparatus claims, the *Soverain* court made the assumption that patent holder Soverain wished to assert *both* types of claims in the suit.²⁰⁰ Soverain asserted that Amazon.com infringed all three of its patents *overall,* but never pointed to specific claims.²⁰¹ Considering the fact that the patents were primarily method-based, involving a software method of operating an electronic "shopping cart" over a network of buyer and shopping cart computers, Soverain could have made it clear that it was asserting *just* the method claims of its patents

¹⁹³ Id

Id. The Soverain court went on to note that such a "position contradicts the purposes of the marking requirement." Id.; see discussion supra pt. III.C (discussing the Nike policy trifecta).

¹⁹⁵ *Id*.

¹⁹⁶ L

¹⁹⁷ *Id.* at 904.

¹⁹⁸ 718 F.2d 1075 (Fed. Cir. 1983).

Id. at 1082; see discussion supra pt. III.B.3.

²⁰⁰ Soverain, 383 F. Supp. 2d at 909.

²⁰¹ *Id.* at 906.

ents.²⁰² In that case, if Soverain cited the *Hanson* case, it might have won and the partial summary judgment motion might not have been granted for Amazon.com.²⁰³ Because the *Soverain* court relied only on the *Bandag* case, however—which was the clear hard-and-fast rule declaring that there is no duty to mark where a patent is directed solely to a method—it narrowed its holding to just that legal conclusion.²⁰⁴ Thus, future patentees of online methods will easily be able to circumvent the *Soverain* holding by asserting *just* the method claims of their software patents—a simple strategy considering the fact that most software patents are composed mainly of method claims in the first place.²⁰⁵ Also, this attempt to skirt the *Soverain* holding is strengthened and even justified by the *Hanson* holding, a Federal Circuit case that has precedence in the Eastern District of Texas. Thus, a software patentee needs only to cite the *Hanson* case in a brief or motion in order to eviscerate its duty to mark under § 287(a).²⁰⁶

Another legal gap left open by the *Soverain* holding is how or where, exactly, a website is to be marked. Of course, the *Soverain* court held that a website is a "tangible item" that *can* be marked under *American Medical* and, therefore, it must be marked under § 287(a).²⁰⁷ Yet nowhere in the opinion does the court mention how to properly or adequately mark a website. The only evidence the *Soverain* court relied on in fashioning its rule was the set of screen shots, submitted by Amazon.com, of websites that included patent notices, often in a website's "legal notices" section.²⁰⁸ This is of no help, however, because screen shots do not reveal to a patentee exactly what constitutes proper patent

²⁰² Id.

²⁰³ *Id.* at 911.

²⁰⁴ *Id.* at 909.

LEE A. HOLLAAR, LEGAL PROTECTION OF DIGITAL INFORMATION chp. 5, § VI (2002), available at http://digital-law-online.info/lpdi1.0/index.html ("Software-based inventions can be claimed in a straightforward manner using method claims, where the elements of the claims are the steps of the method performed by the new software technique.").

Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075 (Fed. Cir. 1983). Another, albeit less persuasive way to get around the *Soverain* holding is to argue against the Federal Circuit case behind it, *American Medical*. Because the Federal Circuit so far has really only applied the *American Medical* "tangible item" rule to actual, "physical" tangible items (medical devices), one could make the argument that because the Federal Circuit itself has never extended the "tangible item" rule to software, a district court should not extend the "tangible item" rule to software. *See Soverain*, 383 F. Supp. at 909; Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538–39 (Fed. Cir. 1993). Since the *Soverain* and *IMX, Inc. v. LendingTree, LLC*, 79 U.S.P.Q.2d (BNA) 1373 (D. Del. 2005) decisions have issued, however, this becomes a much harder argument to make.

²⁰⁷ *Soverain*, 383 F. Supp. 2d at 909.

²⁰⁸ *Id.*

marking. Obviously, a website can be edited—since it is composed of text-based html code—to list a patent number. This is such a simple conclusion that one wonders why the *Soverain* court went through all the trouble to hold that a website "can be marked." Of course, a website can be marked; neither party ever doubted this, since all marking requires is editing a website to list the word "patent" or "pat." along with the patent number. The pressing issue then becomes *how* a website can be marked. The *Soverain* court did not reach that issue because Soverain simply did not mark its website. Thus, the court's decision turned more on whether or not there is a duty to mark a website. The more complex and compelling question is really the adequacy of the mark, and therefore courts have a duty to address this issue when applying the *American Medical* "tangible item" rule. The more complex and compelling the adequacy of the mark, and therefore courts have a duty to address this issue when applying the *American Medical* "tangible item" rule.

Consequently, a software patentee is again presented with a manner in which it can avoid the Soverain holding: by placing its patent mark in an obscure and hard-to-reach page of its website. By so doing, the patentee satisfies the "website must be marked" rule. 212 At the same time, however, the question arises as to whether the patentee is satisfying § 287(a), or the polices, purposes and goals underlying the statute. If a patent mark is hidden behind layers of links, it is certainly arguable that innocent infringement can still occur, that the Allen Engineering case's interested public would not be put on notice of the patent²¹³ and that the public would not be apprised that a patent even *existed* for the technology embodied on a website. A consumer surfing Amazon.com or Barnesandnoble.com, for instance, often does not realize that the "shopping cart" technology she is using is covered by a myriad of different patents. Thus, the rule set out by Soverain is insufficient in furthering the policy goals behind § 287(a) and does not address what constitutes "adequate" marking. Soverain rule starts the inquiry and directs the courts to where they must go, because it sets out the requirement that a website must be marked under Ameri-

²⁰⁹ See 35 U.S.C. § 287(a) (2006).

²¹⁰ Soverain, 383 F. Supp. 2d at 909.

Id. at 909. Soverain also leaves open the applicability of a wide range of "Alternative Marking" cases in addressing the "adequacy of the mark," but this is a major issue implied by IMX. See IMX, 79 U.S.P.Q.2d (BNA) at 1373.

²¹² See Soverain, 383 F. Supp. 2d at 904 (holding "patentee was required to mark websites in order to comply with the marking statute").

²¹³ See Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1356 (Fed. Cir. 2002) ("A manifestly obvious typographical error that does not prevent interested members of the public from discerning the number of a patent alleged to protect an article does not result in a failure to mark.").

can Medical—but it does only that. The IMX case takes the next step in fleshing out the Soverain rule.

B. IMX, Inc. v. LendingTree, LLC

Because the *IMX* case took place after *Soverain* was decided, it had the benefit of looking at what had been previously accomplished in the existing jurisprudence related to software-marking. It is worth mentioning at this point that another hole the *Soverain* case left open was the applicability of "alternative marking" cases—cases which stated that, where marking a product is impractical, the product packaging or a label affixed to the product can be marked.²¹⁴ The *IMX* court suggested the application of "alternative marking" law by comparing a website embodying patented software to product packaging that can be marked.²¹⁵ Further, the *IMX* court added substance to the initial rule established in *Soverain* by addressing how a website must be marked in order to be considered an adequate mark. To gauge the adequacy of the mark, the *IMX* court created the "sufficiently clear nexus" requirement.²¹⁶

IMX, Inc. ("IMX") is a Houston, Texas based software vendor that manufactures "software solutions for the mortgage industry" and "offers a comprehensive suite of workflow tools that enable mortgage lenders and originators to communicate and conduct business...online." LendingTree, LLC ("LendingTree") is also a player in the mortgage industry, and holds itself out as an "online lending and realty services exchange" that "connect[s] consumers" with a network of realtors who work directly for the company. Consumers

²¹⁴ See discussion supra pt. III.D. Recall that this line of cases extends from the 1892 Supreme Court case of Sessions v. Romadka, 145 U.S. 29 (1892), and involves everything from fact sheets in medical device boxes to putting tags on trees.

See Lane, supra note 37, at 16.

A sufficiently clear nexus must be established between the marking notice of the patent and the portion of the website embodying the patented invention. *IMX*, 79 U.S.P.Q.2d (BNA) at 1376; Kennedy, *supra* note 22, at 10–11.

²¹⁷ IMX, About Us, http://corp.imx.com/corp/about_us.asp (last visited Oct. 8, 2007). As will be discussed later, the "About Us" page will be of significance because it is the only way interested members of the public can learn about the patent, and in order to get to the patent information, a user must click through pages of links to reach the marking notice. The "About Us" page clearly emphasizes that IMX uses "internet technology," and "IMX's innovative and patented pricing technology delivers . . . advanced web-enabled distribution channels for lenders." *Id.*

LendingTree, About LendingTree, http://www.LendingTree.com/stm3/aboutlt/default.asp (last visited Oct. 8, 2007). In contrast to the IMX "About Us" page, LendingTree makes its intellectual property immediately clear, not only by listing the patents at the bottom of the

can use the LendingTree website to find a loan or a home. Consumers can use the IMX website to find a loan or a home, as well, but it also incorporates "portals" for use by "Brokers"²¹⁹ and "Lenders."²²⁰ IMX obtained a patent, which issued on November 30, 1999, directed to an "Interactive Mortgage and Loan Information and Real-Time Trading System."²²¹ On November 24, 2003, IMX filed a patent infringement action against LendingTree in the United States District Court for the District of Delaware.²²² In response, like the defendant in *Soverain*, LendingTree filed a motion for partial summary judgment to limit IMX's remedies to only pre-suit damages under § 287(a), or to only the infringement occurring after the suit was filed.²²³

Judge Susan L. Robinson granted LendingTree's motion for partial summary judgment against IMX.²²⁴ From 1997—the date IMX's patent was

provides a method and system for trading loans in real time by making loan applications, such as home mortgage loan applications, and placing them up for bid by a plurality of potential lenders. A transaction server maintains a database of pending loan applications and their statuses; each party to the loan can search and modify that database consistent with their role in the transaction, by requests to the server from a client device identified with their role.

Id. at col. 2 ll. 12–20.

page, but also by listing relevant trademarks ("REALTORS") and service marks ("When Lenders Compete, You Win"). *Id.*

²¹⁹ IMX, Broker Home, http://broker.imx.com/broker home.asp (last visited Oct. 8, 2007).

²²⁰ IMX, Lender Home, http://lender.imx.com/lender_index.asp (last visited Oct. 8, 2007).

IMX, 79 U.S.P.Q.2d (BNA) at 1374. The patent at issue is Interactive Mortgage & Loan Info. & Real-Time Trading Sys., U.S. Patent No. 5,995,947 (filed Sept. 12, 1997). The '947 patent, as stated in its "Summary of Invention,"

²²² *IMX*, 79 U.S.P.Q.2d (BNA) at 1374.

²²³ Carraway, supra note 15, at 17–18. This strategy was also used with success by the defendant in Soverain, Amazon.com. Id. Here I have to emphasize again why it is considered such a detriment to the patentee if he is only limited to pre-suit damages, and not to the full range of damages that occurs before an infringement action is filed against the alleged infringer. Because the '947 patent issued in 1999, IMX normally would be able to collect damages from LendingTree's alleged infringement from seven years back. However, no notice to LendingTree was provided until the infringement suit was filed in November of 2003. In that case, if LendingTree succeeds in granting its motion for partial summary judgment, damages for IMX are limited starting from 2003, which cuts down the infringement time by three years, drastically reducing the damages award a patentee may acquire. Hence, a limit to pre-suit damages severely harms a patentee's ability to fully enjoy and appreciate the economic value of his patent, because his damage award is so significantly reduced.

²²⁴ IMX, 79 U.S.P.Q.2d (BNA) at 1373. However, that did not end IMX's efforts to pursue a legal remedy. IMX subsequently filed a motion for reconsideration of the judge's ruling, reflected in IMX, Inc. v. LendingTree, LLC, No. Civ. 03–1067–SLR, 2006 U.S. Dist. LEXIS 551 (D. Del. Jan. 10, 2006). There is a string of IMX, Inc. cases that has followed, but each

granted—to 2000, IMX distributed copies of the IMX Exchange software to its broker customers via CD-ROM.²²⁵

In March 2000, IMX began using a web-based version of the IMX Exchange software, where the patented software was made available to customers via the Internet rather than distributing copies of the software to customers via CD-ROM. ... The home page of the IMX website (http://www.imx.com) contains links to three main sections: http://broker.imx.com (the 'Broker Sechttp://lender.imx.com 'Lender (the Section'), http://corporate.imx.com (the 'Corporate Section'). In order for broker customers to access and run the IMX Exchange software, they must access the Broker Section of the IMX website and enter a user name and password from the login screen in the Broker Section. Similarly, in order for lender customers to access and run the IMX Exchange software, they must access the Lender Section of the IMX website and enter a user name and password from a login screen of the Lender Section.²²⁶

Although the CD-ROMs—distributed from 1999 to 2000—were not marked, the website was marked.²²⁷

In order to access the website's marking, a user first clicks the Corporate Section and is taken to a "Welcome to IMX" page that describes the company and states that, "IMX's patented pricing technology was developed using Java and runs in an Oracle/Sun environment." On a sidebar, there is a series of links, one of which is entitled "Product Information," while on the top of the page, there is another purple link to "About Us."

Loan brokers use the IMX Exchange software to, among other things, input loan applications on behalf of borrowers, transmit those loan applications to the Exchange, and retrieve bids on those loan applications from lenders who participate in the Exchange. Lenders use the IMX Exchange software to, among other things, search for and place bids on loan applications of interest that are stored in the Exchange.

case involved patent issues unrelated to marking such as willful infringement. *See*, *e.g.*, IMX, Inc. v. LendingTree, LLC, 469 F. Supp. 2d 203 (D. Del. 2007); IMX, Inc. v. LendingTree LLC, 469 F. Supp. 2d 194 (D. Del. 2007); IMX, Inc. v. LendingTree, LLC, No. Civ. 03–1067–SLR, 2006 U.S. Dist. LEXIS 284 (D. Del. Jan. 6, 2006); IMX, Inc. v. LendingTree, LLC, 405 F. Supp. 2d 479 (D. Del. 2005).

²²⁵ *IMX*, 79 U.S.P.Q.2d (BNA) at 1374.

²²⁶ Id.

Id.

 $^{^{227}}$ Id

IMX, Corporate Home, http://corp.imx.com/corporate home.asp (last visited Oct. 8, 2007).

Id. Naturally, one may think to click on "Product Information" to find patent marking information for IMX's products. However, the patent marking information is not located there, but is instead located in the "About Us" section. About Us, *supra* note 217. This somewhat

the user is taken to another page with a link on a sidebar entitled "Patent." Upon clicking the "Patent" link, the user finally views a page stating: "IMX Exchange was awarded a patent in late 1999 for our unique loan information and real-time trading system" along with a "Patent Press Release" and a copy of the patent in PDF format.²³⁰

The "Patent Press Release" identifies the IMX patent by its patent number. One of the confusing aspects of the IMX webpage is that one would expect to find the patent marking information on the "Product Information" page. Upon accessing the "Product Information" page, however, no patent information is mentioned; only product data is listed under the headings of "Lender Solutions" and "Broker Solutions." Under "Lender Solutions" there is an explanation for "IMX Exchange for Lenders" and an explanation for "Private Label for Lenders."

There are three main parts of the *IMX* holding that bear scrutiny: 1) application of the *American Medical* tangible item requirement to websites;²³⁴ 2) websites as potential product packaging; and 3) the establishment of the "sufficiently clear nexus" requirement for an adequate website mark.

1. Is a Website Really an *American Medical* "Tangible Item"?

Similar to patent holder Soverain in *Soverain Software*, *LLC v. Amazon.com*, *Inc.*, ²³⁵ IMX attempted to argue that its patent was not a "patented arti-

confusing arrangement was factored in when the *IMX* court established the "sufficiently clear nexus" requirement. *IMX*, 79 U.S.P.Q.2d (BNA) at 1376.

²³⁰ IMX Patents, http://corp.imx.com/corp/about_us/patents.asp (last visited Oct. 8, 2007). The links to the press release and patent are titled "Patent Press Release" and "Click here to view patent," respectively. *Id*.

Press Release, IMX, IMX Exchange Receives Patent for Interactive Loan Trading (Jan. 25, 2000), *available at* http://corp.imx.com/corp/newsroom/press/00 01 25.asp.

²³² IMX, Product Information, http://corp.imx.com/corp/product_info.asp (last visited Oct. 8, 2007).

²³³ Id. Even though the '947 patent is not mentioned, under the "Private Label for Lenders," IMX states: "Using patented technology, IMX's Private Label allows wholesale lenders to connect and transact business with their approved brokers on the Internet." Id. This notice becomes important in the court's "sufficiently clear nexus" analysis. IMX, 79 U.S.P.Q.2d (BNA) at 1376. The notice is insufficient as it is not under "IMX Exchange for Lenders." Id.

Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1537 (Fed. Cir. 1993).

²³⁵ 383 F. Supp. 2d 904 (E.D. Tex. 2005).

cle."236 IMX did not try to use the Bandag, Inc. v. Gerard Tire Co. 237 decision, however, to argue that its invention was directed to a pure method. Instead, IMX claimed that the patented invention was a system that allowed "unique interactivity' to occur remotely over the internet," and "[a]lthough [this] patented system [was] made up of ... discrete components" such as a "database and the transaction server" via the Internet, no one actually "physically view[ed]" any of these components at any time, and "[t]hus, marking either of these components would not serve the public interest notice function of Section 287."238 IMX also attempted to emphasize how the entire IMX Exchange technology was "intangible" and could not really be seen, and thus the website was not a patented article, and IMX had no duty to mark.²³⁹ The *IMX* court rejected this argument, applying the Wine Railway Appliance Co. v. Enterprise Railway Equipment Co.²⁴⁰ rule stating that "marking 'can only be given in connection with some fabricated article," and then outlining the language under the American Medical "tangible item" rule stating that where a patent has both apparatus and method claims, "to the extent that there is a tangible item to mark," a party is obligated to mark the patented article in order to avail itself of § 287(a).241

Finally, the *IMX* court reasoned that because "the commercial embodiment of the patented invention, the 'IMX Exchange' system, [was] currently accessed and used through the IMX website," the website was "intrinsic to the patented system," and therefore "constitute[d] a tangible item to mark by which notice of the asserted method claims can be given" under *American Medical*.²⁴² The *IMX* court then made a brief reference to the *Soverain* case in concluding that IMX had a duty to mark.²⁴³

This aspect of the *IMX* holding, however, is subject to interpretation and attack, since it contains some legal inconsistencies. The *IMX* court explicitly

²³⁶ *IMX*, 79 U.S.P.Q.2d (BNA) at 1375.

²³⁷ Bandag, Inc. v. Gerard Tire Co., 704 F.2d 1578 (Fed. Cir. 1983).

IMX, 79 U.S.P.Q.2d (BNA) at 1375. Under the theory proposed by Carl Oppedahl—where a system is directed to apparatus claims, and "a patent has claims directed variously to an entire system and to subparts of [that] system, the marking obligation should extend to each article sold by the [patentee] that responds to any apparatus claim of the patent"—this position made by IMX would clearly fail. Oppedahl, supra note 179, at 225–27.

²³⁹ *IMX*, 79 U.S.P.Q.2d (BNA) at 1375–76.

²⁴⁰ Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co., 297 U.S. 387 (1936).

²⁴¹ IMX, 79 U.S.P.Q.2d (BNA) at 1375–76 (quoting Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1538–39 (Fed. Cir. 1993)).

²⁴² *Id.* at 1376.

²⁴³ *Id.*

stated that "the IMX website itself is not the patented invention."²⁴⁴ This line of reasoning, according to Eric Lane, "appears to be a misapplication" of the American Medical "tangible item" decision.²⁴⁵ In American Medical, the "tangible item" at issue was an article produced by the method claims of the asserted patent. 246 Specifically, the American Medical language states that "both apparatus and method claims" of the fluid-filled prosthetic device "were asserted and there was a physical device produced by the claimed method that was capable of being marked."247 Because the American Medical court found that the "patented article"—the fluid-filled prosthetic device—was actually *produced* by a method in the asserted patent, it stated that the patentee had a duty to mark under § 287(a). Therefore, it can be reasoned that the *American Medical* holding only requires a "tangible item" to be marked that actually *embodies* the claims of the patent, such as a fluid-filled prosthetic device produced by the claimed method, not just any tangible item tenuously linked to the claimed invention.²⁴⁸ As such, IMX seems to be a direct contravention of that rule because the IMX court expressly and specifically acknowledged that "the IMX website itself is not the patented invention."249 Therefore, because the American Medical "tangible item" holding can be interpreted as applying only to patented inventions or "tangible items" embodied by the claims of the patent, IMX's website is not such a tangible item within the meaning of American Medical, and so the IMX court misapplied the American Medical holding in requiring IMX to mark its website.

Thus, this is one compelling reason to nullify *IMX*. Although, from the facts of the case, the court did specifically mention that the website was *not* the patented invention, whether or not "a patentee's website is the patented invention" and is "embodied by the patent's claims" appears to be a case-by-case determination. The issue was never reached in *Soverain* because the court focused on the activities of Soverain's licensees and Soverain's ability to ensure

Id. (emphasis added). The IMX court admitted that "IMX does not make or sell the computer components through which its patented system is processed, and . . . the IMX website itself is not the patented invention." Id.

²⁴⁵ Lane, *supra* note 37, at 15.

²⁴⁶ Id.; see also discussion supra pt. III.B.1. Recall that the American Medical case involved a fluid-filled prosthetic device for "penile prostheses," where the asserted patent at issue contained apparatus claims for the actual fluid-filled prosthetic device and method claims directed to making and sterilizing that device. Am. Med., 6 F.3d at 1539.

²⁴⁷ Am. Med., 6 F.3d at 1539 (emphasis added); Lane, supra note 37, at 15.

²⁴⁸ Lane, *supra* note 37, at 15–16.

²⁴⁹ *IMX*, 79 U.S.P.Q.2d (BNA) at 1376 (emphasis added).

²⁵⁰ Id

that its licensees complied with the marking provisions of § 287(a).²⁵¹ Even though the determination was made as to whether Soverain's licensees' websites were embodied by the patent claims, however, the court was distracted by the seductively simple logic of declaring that a "website can be marked," after viewing screen shots of patent marking by Amazon.com.²⁵²

The main point is that the extension of the *American Medical* precedent to websites, forged in *Soverain* and furthered by *IMX*, remains unclear and vague. If the rule can be attacked by the very case that it was based on, then the rule must be made clearer and stronger. The primary point of contention in extending the *American Medical* "tangible item" rule to websites is that the rule can be extended to websites *only if* the website both embodies the claims of the patent and is a patented invention. Thus, the *American Medical* "tangible item" rule requires this qualification; it cannot just be applied as judges see fit. It appears that the judges in *Soverain* and *IMX* ignored this qualification of the rule and decided it was fitting to apply it to a website because, on the surface, anyone can intuitively conclude that a website can and should be marked.

2. Websites as Product Packaging

Even if the *IMX* extension of the *American Medical* "tangible item" rule to websites is invalidated, there is another way to interpret website marking that is in accordance with case law pertaining to "alternative marking" methods.²⁵³ Recall that § 287(a) spells out a provision where marking the patented article is impractical; one may choose instead to mark the product packaging or affix a label along with the packaging or the product.²⁵⁴ These "alternative marking" methods have been affirmed by the 1892 Supreme Court case *Sessions v. Romadka*,²⁵⁵ as well as a number of district court cases.²⁵⁶ The district court cases

Soverain Software LLC v. Amazon.com, Inc., 383 F. Supp. 2d 904, 909–11 (E.D. Tex. 2005).

²⁵² *Id.* at 909.

See discussion supra pt. III.D.1–3; see also Lane, supra note 37, at 16.

[&]quot;[W]hen, from the character of the article, [marking the article with "patent" or "pat." along with the patent number] can not be done," complying with the Marking Statute and giving notice to the public can be accomplished "by fixing to [the patented article], or to the package wherein one or more of [the patented articles] is contained, a label containing a like notice." 35 U.S.C. § 287(a) (2006).

²⁵⁵ 145 U.S. 29 (1892).

See also Bergstrom v. Sears, Roebuck & Co., 496 F. Supp. 476, 494 n.9 (D. Minn. 1980) (holding patentee in compliance with § 287(a) when patentee regularly marked fireplace grates with hang tags inscribed with the patent number); Saf-Gard Prods., Inc. v. Serv. Parts, Inc., 491 F. Supp. 996, 1010 (D. Ariz. 1980) (patentee complied with § 287(a) by affixing the

Calmar, Inc. v. Emson Research, Inc. 257 and Stryker Corp. v. Intermedics Orthopedics, Inc. 258 held that the patentees' efforts in attempting to comply with alternative marking were insufficient. These cases merely clarify to the patentee, however, that the standard is not a hard one to meet—the only thing that must be done is that either the packaging must be marked or a label must be affixed along with the package or product.²⁵⁹

In IMX, even though the court stated that the website was not the patented invention, it left open the possibility that, according to Eric Lane, "the website through which the patented product is accessed" could very well be "the legal equivalent of product packaging, which would require marking under the statute."260 This is supported by the fact that counsel for IMX raised the product packaging issue during trial.²⁶¹ Also, because the *IMX* court found that the website was a "point of public access" to the patented software, and because a user of the IMX Exchange software cannot access the web-based version of the patented product without first viewing the IMX website, a website essentially serves as product packaging because it is a type of unavoidable accompaniment to the patented product, like a label or insert included with a product's packaging or the product packaging itself.²⁶² Thus, because a website may be viewed

patent mark to packages containing its patented automotive radiator caps, and gave notice to the public, even though radiator caps were small and difficult to mark); Nicholson v. Bailey, 182 F. Supp. 509, 512-13 (S.D. Fla. 1960) (patentee complied with § 287(a) when he sold trees covered by a plant patent, and accompanied those sold trees with an affixed metal tag).

⁸⁵⁰ F. Supp. 861, 867-68 (C.D. Cal. 1994).

⁸⁹¹ F. Supp. 751, 829 (E.D.N.Y. 1995).

Id.; Calmar, 850 F. Supp. at 867–68.

Lane, supra note 37, at 16. It is also interesting to note that counsel for IMX brought up the product packaging issue, as the IMX court acknowledged the argument that the website was just a "way in which parties to a loan transaction obtain a service that IMX provides using its patented method" and the website was "not a patented article, nor [was] it a package containing a patented article." IMX, Inc. v. LendingTree, LLC, 79 U.S.P.Q.2d (BNA) 1373, 1375 (D. Del. 2005). However, counsel for IMX argued that it was not a package containing an article in order to avoid any duty to mark under § 287(a), because a duty to mark is indeed imposed on the packaging of an article that actually can be marked when the marking of the actual article is infeasible or "can not be done." 35 U.S.C. § 287(a) (2006); IMX, 79 U.S.P.Q.2d (BNA) at 1375.

IMX, 79 U.S.P.Q.2d (BNA) at 1375-76.

Id. at 1376. Eric Lane also posits the argument that the "linkage of the website with the software could also render it the equivalent of a product insert that accompanies each patented product," and the "IMX decision could stand on this [Alternative Marking] ground as well." Lane, supra note 37, at 16. However, the "product insert" that Lane suggests would have to be included in every invention in order to comply with § 287(a), and cannot be like

as product packaging accompanying the "patented product" of an online software method, the marking provisions of § 287(a) would clearly extend to websites, and therefore the general "duty to mark a website" holding of both *IMX* and *Soverain* could be more clearly established as relevant and controlling law. Hopefully, a Federal Circuit court in the near future will reach such a holding.

Thus, if the Federal Circuit were to hold that websites are equivalent to product packaging, it would clear up much of the confusion surrounding the applicability of the *American Medical* "tangible item" rule to websites. Comparing websites to product packaging is a more clear and consistent test, and the determination of whether a website sufficiently qualifies as product packaging varies less from case-to-case than asking whether a website embodies the claims of the patent. Indeed, the determination that a website is equivalent to product packaging is a simple and logical decision that can be established a majority of the time. Therefore, if the jurisprudence pertaining to patent marking clearly and resolutely wishes to extend the duty to mark to websites, the Federal Circuit should affirm the "alternative marking" rule underlying *Sessions* instead of relying on the *American Medical* "tangible item" rule. Such an approach would be the most consistent and logically sound way of affirmatively establishing a duty to mark an online software method.

3. The Sufficiently Clear Nexus

The final aspect of the *IMX* holding is a minor one, but it attempts to clarify *where* exactly a website should be marked. As can be readily seen from the facts of the *IMX* case, the patent marking information was removed from the home page by several layers of links.²⁶³ Not only was the marking information remote, but also the succession of links that needed to be clicked to reach the patent number was disorienting, obscure and difficult to follow.²⁶⁴

In the IMX case, patent holder IMX argued that it complied with the marking requirements of § 287(a) by including access to its patent on its website. The IMX court, in addressing whether this was "adequate marking," posed the question of "whether such access provides sufficient notice to pass muster under the statute" of § 287(a), and then announced the sufficiently clear

the "fact sheet" in *Calmar*, which was provided to some customers and *occasionally* shipped in packages containing its pumps. *Calmar*, 850 F. Supp. at 868.

²⁶³ *IMX*, 79 U.S.P.Q.2d (BNA) at 1374–75.

²⁶⁴ Id

²⁶⁵ *Id.* at 1376.

nexus standard: "The court concludes that [IMX] has not provided a sufficiently clear nexus between the '947 patent and the patented 'system." 266

In other words, a "sufficiently clear nexus" must be established between the patent and the portion of the website embodying the patent. The *IMX* court concluded that, on the two website pages where IMX patents were mentioned, the term "IMX Exchange" referred to the corporate entity, not the patented IMX Exchange System; that is, on those two pages, the patented technology is described as a "unique loan information and real-time trading system." Whenever "patented technology' [was] mentioned in connection with IMX products," however, the website data referred to "patented *pricing* technology' or 'patented technology' for the 'Private Label for Lenders' product, as opposed to the [patented] 'IMX Exchange for Lenders' product." Thus, because of this confusing labeling arrangement, the *IMX* court concluded that "IMX . . . failed to give the public adequate notice that its 'IMX Exchange' system [was] protected by the '947 patent."

Although it appears that the "sufficiently clear nexus" requirement only extends to situations where there could be confusion as to what patented product is covered, future courts may decide to use it in deciding where exactly to mark a website. In those situations, the portion of the website embodying the patented technology must be marked in order to properly establish the sufficiently clear nexus between the patent and the website embodying the patent. In the case of the *IMX* court, because the "IMX Exchange" system technology was embodied in a specific part of the website that did not discuss the patent information, the sufficiently clear nexus requirement was not met.²⁷¹ What this may mean for other patentees wishing to adequately mark their websites is that it must first be determined what webpage embodies the claims of the patent. If such a page exists, then that page must be marked. It is good policy in general, however, to mark a page close to the home page or start page of a site in order to properly provide notice to "interested members of the public," ²⁷² and to make sure that the public knows that the website is, indeed, covered by a patent.

²⁶⁶ Id.

²⁶⁷ *Id.*; Kennedy, *supra* note 22, at 10–11.

²⁶⁸ *IMX*, 79 U.S.P.Q.2d (BNA) at 1376.

²⁶⁹ *Id.*

²⁷⁰ *Id.*

²⁷¹ Id

Allen Engineering's Corp. v. Bartell Industries, Inc., 299 F.3d 1336 (Fed. Cir. 2002).

C. A Brief Empirical Survey of Existing Websites

Since *Soverain* and *IMX* appear to be the first judicial decisions on the subject of marking, current websites embodying patented software methods should be made aware of the duty to mark. J. Christopher Carraway examined some websites that appear to be in compliance with the marking requirements, and some websites that do not appear to comply.²⁷³ Carraway suggests three main tips for owners of patents or patent applications involving websites. First, "[m]ark your web site if you practice the patents," and if you do mark it, then be sure to put the patent mark on every page of your site, the home page, or a page closely associated with the home page—such as an easily accessible legal page.²⁷⁴ If you make a legal page, make it as closely tied as possible to your home page.²⁷⁵ Second, require your licensees to mark their websites, which was a crucial requirement in *Soverain*.²⁷⁶ For instance, one good way to do this would be to actually put a marking "provision" in the license that is presented to the licensee.²⁷⁷ Third, if a marking problem arises, "consider asserting *only*

Carraway, supra note 15, at 18. Carraway cites that A9.com, a subsidiary of Amazon.com, located at http://www.a9.com complies with the Patent Marking Statute by putting a patent notice on its "Conditions of Use" page of its web site. A9, Conditions of Use, http://www.a9.com/-/company/tou.jsp (last visited Oct. 8, 2007). Carraway also mentions and the owned Spark Amazon.com dating sites (http://www.americansingles.com, http://www.collegeluv.com, and http://www.jdate.com) all seem to be in compliance with § 287(a). Carraway, supra note 15, at 18. However, among the websites he lists that do not appear to comply are Priceline.com, Google.com, Fantasysports.com, and MercExchange.com. Id. However, since his survey, Priceline.com and Mercexchange.com now appear to comply with the marking duty. See Priceline.com, http://www.priceline.com/ (last visited Oct. 8, 2007): MercExchange.com, http://www.mercexchange.com (last visited Oct. 8, 2007).

²⁷⁴ Carraway, *supra* note 15, at 18–19.

Id. at 18. For marking the websites, Carraway also suggests to use the "one or more" method approved by several courts, as well as to regularly save cached copies of marked websites for future litigation purposes. Id. at 18–19.

²⁷⁶ *Id.* at 19.

²⁷⁷ Id. The patentee should follow up with the licensees and use "reasonable efforts" to assure compliance. Id. "A licensor should [also] establish a system for documenting its efforts to monitor compliance, [i.e.,] logging dates and results of checking licensees' Web sites," should litigation later arise. Id.

method claims in litigation,"²⁷⁸ as in the Federal Circuit case *Hanson v. Alpine Valley Ski Area, Inc.*²⁷⁹

Asserting *only* the method claims in litigation, if it arises, is an especially compelling strategy. Since the patentees in both *Soverain* and *IMX* asserted both types of claims in their suits, they left the avenue open for trying the *Hanson* approach. Furthermore, because *Hanson* is controlling and relevant Federal Circuit precedent, it may be given more authority than the tenuous "duty to mark" website requirement as held by the district courts in *Soverain* and *IMX*.

V. TOWARDS A CLEARER AND STRONGER 35 U.S.C. § 287(A) STANDARD

A duty to mark the virtual and intellectual property hybrid of patented online software methods should exist. This duty would serve the underlying policies of § 287(a) and encourage the development of more robust software patents. The current duty to mark online methods is unclear and ambiguous. As pointed out previously, the standard set out by *Soverain* and *IMX* is laden with legal gaps and subject to attack by a variety of different Federal Circuit holdings. Therefore a much clearer, stronger and more robust standard under § 287(a) is necessary. A clearer and more definite standard under § 287(a) as applied to websites embodying patented software methods will be beneficial to the public because of two main economic models: the Incentive Rationale, which encourages the exercise of "rights of exclusion" for hybrid property and furthers the policies underlying § 287(a), and the Disincentive Rationale, which leads to more robust software patents.

A. The Incentive Rationale: Hybrid Rights of Exclusion & the Nike Policy Trifecta

The Incentive Rationale harkens back to Thomas Jefferson's notion that an invention cannot ever truly be the "subject of property" because individuals

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²⁷⁸ *Id.* (emphasis added).

⁷¹⁸ F.2d 1075 (Fed. Cir. 1983). Because *Hanson* is still controlling Federal Circuit law, patentees can take advantage of this holding by asserting just the method claims of their patent. In that situation, one can nullify the duty to mark under § 287(a).

Among the inconsistencies are: 1) by asserting just method claims, *Hanson* can be used to easily overcome the duty to mark; 2) *American Medical* only holds that a tangible item that is embodied by the patent need be marked, so if a website is not the patented invention, no duty to mark applies; 3) the "Alternative Marking" product packaging cases serve as a much clearer standard; and 4) where marking, under the sufficiently clear nexus standard, is vague.

may possess ideas only as long as they keep those ideas to themselves.²⁸¹ Intellectual property has value, and it will have even more value if we do not disclose its valuable ingenuity and can prevent others from using it.²⁸² Thus, by exercising a basic "right to exclude" for any type of property—be it virtual property, intellectual property or a hybrid of the two—we are able to intrinsically increase that property's value.²⁸³ But then the question becomes: how do we broadcast our inherent "right to exclude?" Recall the examples provided in the Introduction for posting a "No Trespassing" sign on a piece of real property to put others on notice of ownership. The immediately apparent answer to the question of how to broadcast one's right to exclude is patent marking. Patent marking makes patents stronger economic instruments, allowing patentees to enjoy the full market benefits of their inventions by inducing litigation in a competitive technological market.²⁸⁴ Thus, patent marking allows one to exercise basic "rights to exclude" that increase the value of a patent, which, in turn, serves as a strong market incentive for patentees to obtain patents in the first place.²⁸⁵ Thus, the Incentive Rationale presents this strong motivation for a patentee to obtain a patent and to comply with whatever "marking" requirements are necessary in order to fully appreciate the maximum economic value of that patent. If patentees were presented with a clearer and stronger patent marking standard under § 287(a) with this incentive as a motivating factor, the policy rationale behind § 287(a)—summarized in the *Nike* policy trifecta²⁸⁶—would be

See Jefferson, supra note 1, at 333–34.

See Dan L. Burk & Mark A. Lemley, Policy Levers in Patent Law, 89 VA. L. REV. 1575, 1600–07 (2003) (arguing the value of the "prospect theory," where a patent prospect increases the efficiency of an investment in innovation by excluding competition, and a "competitive innovation" theory that spurs innovation in a marketplace).

See Westbrook, supra note 8, at 806–07 (arguing that a "recognition of a duty on the part of [a] developer to protect" rights of virtual property intrinsically bolsters the value of virtual property); see also Blazer, supra note 5, at 139–40 (buttressing the idea that virtual property has significant economic value by virtue of analogy to traditional property rights such as rights to exclude and values added by other users).

John R. Allison et al., *Valuable Patents*, 92 GEO. L.J. 435, 440–45 (2004) (arguing the proposition that the most precious, useful, and financially valuable patents are the ones that get litigated in court; thus, this is something that speaks to the economic value of being able to exercise the exclusion right in the overall regulatory system of patent law).

²⁸⁵ *Id.* at 461.

[&]quot;The marking statute serves three related purposes: (1) helping to avoid innocent infringement, (2) encouraging patentees to give notice to the public that the article is patented, and (3) aiding the public to identify whether an article is patented." Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1443 (Fed. Cir. 1998). Another way this third element of the *Nike* policy trifecta may be stated is helping the public ascertain "the status of the intellectual".

significantly furthered.²⁸⁷ Of course, advancing these three compelling policy goals greatly benefits the public good by reinforcing patent rights.

1. Helping to Avoid Innocent Infringement

A clearly marked patent helps avoid innocent infringement—a policy goal established as early as 1936 by the *Wine Railway* precedent.²⁸⁸ Thus, an adequately marked website can accomplish this by making sure that the patent marking is easily and readily seen. As such, the current "sufficiently clear nexus" standard of the *IMX* rule must be clarified to mention that a website marking must be visible on (or close to) the home page of a website. Furthermore, the duty to mark must be more clearly established in the Federal Circuit case law; extending the *American Medical* "tangible item" holding to websites is tenuous and vague, and oversimplifies the issue by making too many assumptions. Instead, "alternative marking" cases, which are firmly rooted in the 1892 Supreme Court case of *Sessions v. Romadka*, ²⁸⁹ should be used to establish the duty to mark websites, or should at least be used to bolster the *American Medical* "tangible item" rationale. Therefore, by ensuring that patentees *clearly* know that there is a duty to mark, and making sure that they *clearly* mark in an easy-to-find location on the website, innocent infringement will be averted.

2. Encouraging Patentees to Give Public Notice of a Patent

Patentees of online software methods must also make sure the public is put on notice that their websites actually are embodied by patented technol-

property embodied in an article of manufacture or design." Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 162 (1989).

Bonito Boats, 489 U.S. at 162. Another one of the purposes behind § 287(a), which likely can be encompassed into the third purpose, was to solve "the problem of having unmarked products in the marketplace." Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1537 (Fed. Cir. 1993). A purpose that bolsters the first and second purposes "is to give patentees the proper incentive to mark their products and thus place the world on notice of the existence of the patent." Laitram Corp. v. Hewlett-Packard Co., 806 F. Supp. 1294, 1296 (E.D. La. 1992).

Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co., 297 U.S. 387, 394 (1936); see also Motorola, Inc. v. United States, 729 F.2d 765, 772 (Fed. Cir. 1984) (citing with approval the Wine Railway policy goal of avoiding innocent infringement through clearly marked patents).

²⁸⁹ 145 U.S. 29 (1892).

ogy.²⁹⁰ Often, many consumers on sites such as Amazon.com do not realize that they are using patented methods, because methods cannot actually be seen or felt. Thus, the duty to mark websites should *not* rely on the distinction between a pure method, as in *Bandag, Inc. v. Gerrard Tire Co.*²⁹¹ and *Crystal Semiconductor Corp. v. Tritech Microelectronics International, Inc.*,²⁹² and a "tangible item," as in *American Medical Systems, Inc. v. Medical Engineering Corp.*²⁹³ Instead, websites should be viewed as product packaging that should always be marked, regardless of whether they embody method or apparatus claims. This approach will also make the duty to mark websites impervious to the *Hanson v. Alpine Valley Ski Area, Inc.*²⁹⁴ approach, which patentees can currently use to skirt the duty to mark entirely.

3. Aiding the Public in Identifying the Status of a Patent

Aiding the "interested public," as discussed in *Allen Engineering Corp.* v. Bartell Indus., Inc., ²⁹⁵ to identify whether an article is patented, and helping them determine the status of intellectual property in an article of manufacture or design, creates a more efficient economy with more informed consumers. ²⁹⁶ Again, users of online software methods often do not realize that the websites they are using are actually patented. Thus, the sufficiently clear nexus requirement of *IMX*, Inc. v. LendingTree, LLC²⁹⁷ must be heightened in order to ensure that all patentees mark their websites (as do sites such as Americansingles.com or Priceline.com), by placing relevant patent information on every page, the home page or a page closely associated with the home page. The duty to mark should also not be based on the American Medical "tangible item" precedent because, like *IMX*, the website is often a point of public access for the consumers when they use the patented technology. Hence, the website is more fittingly an unavoidable accompaniment to the patented software method, similarly to the way product packaging or a label is an unavoidable accompaniment to a pat-

Amsted Indus. Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 185 (Fed. Cir. 1994); Am. Med., 6 F.3d at 1537.

²⁹¹ 704 F.2d 1578 (Fed. Cir. 1983).

²⁹² 246 F.3d 1336 (Fed. Cir. 2001).

²⁹³ 6 F.3d 1523 (Fed. Cir. 1993).

²⁹⁴ 718 F.2d 1075 (Fed. Cir. 1983).

²⁹⁵ 299 F.3d 1336 (Fed. Cir. 2002).

²⁹⁶ Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 162 (1989).

²⁹⁷ 79 U.S.P.Q.2d (BNA) 1373, 1376 (D. Del. 2005).

ented device. Therefore, the *Sessions v. Romadka*²⁹⁸ "alternative marking" standards should be used to mark home pages and make a patent mark on a home page as visible as it is on a package or a product insert.

B. The Disincentive Rationale: In the Name of Better Software Patents

The Disincentive Rationale attempts to discourage patentees from obtaining needless, meritless or wasteful software "business method" patents such as Amazon.com's One-Click patent.²⁹⁹ Preventing the proliferation of those essentially "bad" patents increases the quality of software patents overall. How does the Disincentive Rationale work? If the standard under § 287(a) is elevated, it will invariably be a harder standard to circumvent. Thus, it will be more difficult for a software patentee to get the full economic benefit of its patent under § 287(a) because, by failing to meet a higher § 287(a) standard, infringement damages would be limited to only pre-suit damages.³⁰⁰ Therefore, the rationale is this; if patentees cannot receive the full economic benefit of their patents under a clearer and stronger § 287(a) standard, why would they even bother to go through the trouble of applying for a patent in the first place? The burdens of prosecution and patent procurement will not be worth the trouble to a patentee who will not even be able to enjoy the maximum economic leverage of a patent complying with § 287(a). Thus, this serves as a disincentive and discourages the veritable mass of patentees in the marketplace attempting to patent meritless online software methods.

Therefore, the Disincentive Rationale can aptly be described by a filter metaphor: in the massive and growing stream of software patents, the Disincentive Rationale essentially "weeds" or "filters out" the meritless patents, but retains the robust and worthwhile patents. Because of this process, the good patents are reinforced, the bad patents are eliminated and the general quality of software patents is improved.³⁰¹ By bolstering the state of the art for software patents, better and more robust software patents will be created, which, in turn, benefits the public by advancing technology.

A Stanford University Computer Science & Engineering class offers a chronological critique of the Amazon.com One-Click Patent. See Amazon One-Click Shopping, http://cse.stanford.edu/class/cs201/projects-99-00/software-patents/amazon.html (last visited Oct. 8, 2007).

²⁹⁸ 145 U.S. 29 (1892).

³⁰⁰ See Allison et al., supra note 284, at 440–42.

³⁰¹ See Burk & Lemley, supra note 282, at 1604–07.

VI. CONCLUSION

The present duty to mark patented online software methods embodied in website form is vague and undeveloped. The holdings established by the *Soverain* and *IMX* courts stand on shaky ground because pre-existing Federal Circuit and Supreme Court law offers clearer and more resolute marking standards. Thus, we presently need a clearer and stronger standard under 35 U.S.C. § 287(a) for patentees of online software methods to follow. Raising the bar of the Patent Marking Statute and making practitioners, patentees and courts aware of the adequacy of the mark is critical not only in furthering the compelling policies underlying § 287(a), but also in generating better software technology for the benefit of our economy, our legal system and the consuming public.