

PATENT MARKING OF SYSTEMS

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I. INTRODUCTION

An accused infringer who is found to have infringed a valid claim of a United States patent generally has to pay money damages, and the amount of the damage award is often a function of whether or not the patent owner's own products were marked with the patent number.¹ It is thus unsurprising that some litigants devote substantial energy to whether product markings were required, to whether the products were marked, and to whether the markings were sufficient to satisfy the marking requirement. The fact-findings on such issues can affect damage awards by millions of dollars.²

This article reviews briefly the patent law concepts involved with patent markings, and summarizes the law as it now stands, including the standards for sufficiency of patent marking. The article identifies a large and ever-growing class of products for which no standards have yet been developed in the courts, namely electronic, software, and computer systems having many functional elements, some of

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1. 35 U.S.C. § 287 (1952).

2. The author is aware of several patent cases which, at trial, saw damage amounts vary by hundreds of thousands of dollars depending on whether or not § 287 was considered to have been satisfied; none of the trials is reported. *See, e.g.*, *American Medical Sys. Inc. v. Medical Eng'g Corp.*, 794 F. Supp. 1370 (E.D.Wis. 1992), *cert. denied*, 114 S. Ct. 1647 (1994), in which damages awarded against the infringer ran from either October 15, 1986 or October 28, 1987, depending on whether or not § 287 was considered to have been satisfied. While the Court does not disclose the dollar amount by which the damage award would change depending on that issue, it appears the damages per infringing article sold were about \$2,266 (794 F. Supp. at 1392), so that the number of articles sold by the infringer between the two dates could be multiplied by \$2,266 to arrive at the amount by which the damages would change. The Court does not disclose the number of articles sold by the infringer between those two dates, but the sales of the patent owner during that time were several thousand units, suggesting that the magnitude of the amount of the change of the damages would be several million dollars. The author has also participated personally in a number of patent infringement settlements in which the amount of money changing hands in the settlement was more strongly influenced by marking (or the lack thereof) than by any other single factor.

which are sold separately from the complete system. Finally, the article proposes a marking standard for such systems: where a patent has claims directed variously to an entire system and to sub-parts of the system, it is suggested that the marking obligation should extend to each article sold by the patent owner that responds to any apparatus claim of the patent, and that the consequences for an infringer of a patent owner's failure to mark should apply only to such claims as cover the particular unmarked articles. Finally the article applies the proposed standard to several hypothetical products and patent claims to illustrate its consequences.

II. BACKGROUND

A patent is composed of several parts, including a title, an abstract, a specification, and at least one claim. Most patents also have a drawing in one or more figures.³ Statutory types of patents include utility,⁴ design,⁵ and plant⁶ patents; this article addresses only utility patents, which have a term of seventeen years⁷ from the date of issuance. In this article the term "patent" will generally mean "utility patent".

The holder of a United States patent enjoys the ability to exclude others from making, using, or selling the patented invention during the term of the patent.⁸ That which others are excluded from making, using, or selling is defined by the claim or claims. Any effort to determine whether particular conduct counts as infringement thus necessarily begins with a reading of the claim or claims.

3. The requirement for a drawing is set forth in 35 U.S.C. § 113 and 37 C.F.R. § 1.81, and the drawing is generally composed of several figures: "The drawing must contain as many figures as may be necessary to show the invention; the figures should be consecutively numbered if possible in the order in which they appear." *MANUAL OF PATENT EXAMINING PROCEDURE*, § 608.02(i) (U.S. Patent Office, 1993).

4. A utility patent covers a new, unobvious and useful process, machine, manufacture or composition of matter, 35 U.S.C. § 100 (1952). In everyday usage when one speaks of "getting a patent on an invention," one is most often speaking of getting a utility patent, as distinguished from a plant or design patent.

5. A design patent covers ornamental aspects of an article of manufacture, 35 U.S.C. § 171 (1952).

6. A plant patent covers a new and distinct asexually reproduced variety of plant, 35 U.S.C. § 161 (1952).

7. Under recently proposed enabling legislation for the General Agreement on Tariffs and Trade the patent term will be twenty years from the effective filing date of the patent application, which thus may result in a term after issuance of more or less than seventeen years.

8. A common misimpression is that a patent entitles its owner to make, use, or sell the patented invention, but such is not the case; the only entitlement is excluding others from making, using, or selling, 35 U.S.C. § 271 (1952).

A. *Some background regarding patent claims*

A claim is a single sentence that recites elements of the invention. While the number of claims in a utility patent may be as small as one, most utility patents have several claims. One common type of patent claim is the "apparatus" claim, reciting elements which must be present in an accused device if it is to infringe the claim. Another common type of claim is the "method" or "process" claim,⁹ which recites steps which one would have to perform to infringe. To provide a focus for subsequent discussion, here are some simple examples of claims:

1. An apparatus for duplicating compact disks comprising a central computer, a public switched network, and a plurality of kiosks, the central computer comprising:

- (a) a central data store;
- (b) a central computer processor operatively coupled with the data store; and
- (c) a central computer modem operatively coupled with the central computer processor and with the public switched network; each kiosk further comprising:
 - (d) a kiosk processor;
 - (e) a kiosk modem operatively coupled with the kiosk processor and with the public switched network; and
 - (f) a write-capable compact disk drive.

2. A method of duplicating compact disks in a system comprising a central computer, a plurality of kiosks, and a public switched network, the central computer comprising a central data store, a central computer processor operatively coupled with the data store, a central computer modem operatively coupled with the central computer processor, a plurality of kiosks, each kiosk comprising a kiosk processor, a kiosk modem, and a write-capable compact disk drive, and a switched network communicatively coupling the central computer modem and each kiosk modem, the method comprising the steps of:

- (a) receiving an order for a disk at one of the kiosks;
- (b) transmitting the order via the kiosk processor of one of the kiosks and via the kiosk modem of one of the kiosks to the central processor modem and to the central computer processor; and

9. Process claims are based on 35 U.S.C. § 100, which provides that "[w]hoever invents or discovers a new and useful process . . . or any new and useful improvement thereof, may obtain a patent therefor . . ." And "[t]he term 'process' as defined in 35 U.S.C. § 100, means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." *MANUAL OF PATENT EXAMINING, supra* note 3, at § 706.03(a). In this article the terms "method claim" and "process claim" will be used interchangeably.

(c) transmitting data from the central data store via the central computer modem and the kiosk modem of the one of the kiosks to the compact disk drive thereof.

3. A kiosk comprising:

(a) a processor;

(b) a modem operatively coupled with the processor; and

(c) a write-capable compact disk drive operatively coupled with the modem.

It should be noted that the author is not suggesting that these claims are or would be patentable; they are merely given to illustrate various points in the discussion that follows.¹⁰

Claim 1 is an apparatus claim; under U.S. patent law one may become liable for direct infringement only if one makes, uses, or sells¹¹ apparatus including all of the limitations recited therein.¹² For example, if the apparatus being made, used, or sold omitted the central data store but included all the other limitations of claim 1, then there would be no (direct¹³) infringement.

Claim 2 is a method claim. Mere possession of the apparatus referred to in claim 2 does not constitute infringement; infringement occurs only at such time as the steps recited in the claim are performed. It will thus be appreciated that one can readily imagine apparatus which, if operated in keeping with its instructions, would infringe claim 2 and claim 1, and yet which, if unpowered, would continue to infringe claim 1 but would not infringe claim 2.

Claim 3 is, like claim 1, an apparatus claim. Because every element of claim 3 may also be found in claim 1, it follows that one who infringes claim 1 is automatically also infringing claim 3.¹⁴

It is within the ability of a patent owner, as a matter of litigation strategy, to assert all or less than all of the claims of a patent against an accused infringer. If it is determined by a court that particular conduct infringed more than one asserted claim, the damages result is

10. It is assumed, for sake of discussion, that the claims appear in an issued U.S. patent, from which we may infer that the claims were each found by a patent examiner to be novel, unobvious, and to possess utility, 35 U.S.C. §§ 100-03.

11. 35 U.S.C. § 271 (1952).

12. A complete analysis of claim infringement would treat not only direct infringement but also inducement and contributory infringement as well as infringement under the doctrine of equivalents set forth in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950). In this article the observations and suggestions regarding marking are, for simplicity, described with respect to direct infringement alone.

13. For simplicity, this article treats only direct infringement and ignores contributory infringement and inducement to infringe. Thus the term "infringement" will be used in the balance of this article as a shorthand for "direct infringement".

14. Indeed if the apparatus that infringes claim 1 contains more than one kiosk as set forth in claim 1, then each kiosk will amount to a separate infringement of claim 3.

generally the same as if the particular conduct infringed a smaller number of claims or only one claim; the judicial result is that infringement has occurred as a result of that conduct and damages arising out of that conduct will be awarded in a way that is unaffected by the number of claims infringed by that conduct.¹⁵

This is not to say that for a particular adjudged infringer the damages consequences are the same regardless of which claim or claims are asserted and found to be infringed. For example, if only claim 3 were found to be infringed the damages might relate to a reasonable royalty or lost profits for the kiosk or kiosks that infringe. In contrast if claim 1 were found to be infringed, the damages might relate to a reasonable royalty or lost profits for the entire system, including for example, in addition to the value of the kiosks, the value of the central computer.¹⁶

Having provided some basic background of claim interpretation, the article now turns to the marking provision of the patent law. Section 287 of the Patent Act sets forth a requirement on the patent owner.

Limitation on damages; marking and notice. Patentees, and persons making or selling any patented article for or under them, 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.

III. HISTORY OF THE MARKING REQUIREMENT

The earliest patent statutes imposed no duty on a patent owner to mark articles.¹⁷ All persons were "bound to take notice of their con-

15. This is not to say that there are no consequences of a court finding that particular conduct infringed more than one claim. For example, if in the example from the text an accused infringer were found to have infringed both claims 1 and 3, and if claim 3 were later found invalid, the overall result would be quite different than if only claim 3 had been found infringed and later invalidated.

16. For the purposes of this article it is not necessary to decide whether or not the damages calculation should take into account the value of the public switched network.

17. See generally DONALD S. CHISUM, PATENTS, 20.03 [7] [c] (1994).

tents".¹⁸ The Patent Act of 1842 required the patent owner to mark each product with the date of the patent, and failure to do so would result in a fine of not less than one hundred dollars.¹⁹

The Patent Act of 1861 changed the marking requirement, eliminating the fine for failure to mark and instead establishing a rule much like today's rule, where failure to mark relieves an infringer of liability for conduct prior to the date of actual notice.²⁰ The Patent Act of 1870 left the 1861 marking rule substantially unchanged,²¹ as did the Act of 1927.²² The 1927 Act did, however, change the required mark to the word "patent" and the patent number.²³ The marking provision of the Patent Act of 1952 left the marking requirement largely unchanged except to permit the abbreviation "pat." in place of "patent".²⁴

Jurisprudentially, one is tempted to model the marking requirement of § 287 as setting forth the start of the time from which an infringer's conduct gives rise to damages, namely when the infringer is notified of the patent, either actually through actual notice or constructively through constructive notice by products marked with the patent number. If this model were correct it would be better, as a patent owner, to sell products than not, since selling marked products would start the clock running against all infringers, while actual notice would only start the clock against the party receiving the actual notice.

This model is incorrect, however. The marking requirement, as interpreted by the courts, actually works quite differently. Under § 287, a patent owner who sells no product covered by the patent has the enviable position of accruing damages from the start of an infringer's conduct. The same result obtains if the patent owner sells products covered by the patent and happens to have marked the products with the patent number in a way that satisfies the statute. And indeed the same desirable result obtains if the patent happens to recite only method claims.

But if a patent owner sells a product covered by the patent that has not been marked with the patent in a way that satisfies the statute, then an infringer starts accruing damage liability only from the date of actual notice to the infringer. As will be noted from the language of

18. *Boyden v. Burke*, 55 U.S. (14 How.) 575, 582 (1852).

19. Act of Aug. 29, 1842, ch. 263, § 6, 5 Stat. 543-545 (1842).

20. Act of March 2, 1861, ch. 88, § 13, 12 Stat. 246, 249 (1861).

21. Act of July 8, 1870, ch. 230, § 38, 16 Stat. 198, 203 (1870).

22. Act of Feb. 7, 1927, ch. 67, § 4900, 44 Stat. 1058-59 (1927).

23. *Id.*

24. Act of July 19, 1952, ch. 950, § 287, 66 Stat. 792, 813 (*codified* as amended at 35 USC § 287 (1952)).

the statute, the filing of the patent infringement complaint counts as actual notice; courts also sometimes find actual notice in earlier conduct of the patent owner such as correspondence with the accused infringer.

Thus, § 287 may be thought of as a “gotcha”, a trap for the unwary patent owner who fails to mark a product.

A helpful jurisprudential model for § 287, then, is that of estoppel or reliance: a patent owner who sells a patented product but does not mark it may be understood to have led the public to believe that it is not patented, and thus cannot be heard to complain for damages if a member of the public who has not been given actual notice of the patent chooses to copy the product.

Section 287 may be thought of as offering a potential windfall for the infringer, since the section does not require that the infringer have actually seen or purchased the unmarked device. For the infringer to enter a time period during which no damages accrue (a period which ends only with actual notice), it is enough that others have received the unmarked device.

In the damages phase of a litigation, it will often develop, then, that the sales of infringing goods by an infringer have varying damages consequences, depending on when the sales took place. Suppose that on the day the patent issues the patent owner is not making or selling anything. Starting on that day, sales of infringing articles will give rise to damages. Suppose that on a later date the patent owner starts selling unmarked articles covered by a particular claim of the patent. Starting on that day, sales of articles infringing that claim will not contribute to damages. Suppose that at a later date the patent owner stops making and selling the unmarked articles and now only sells articles bearing a notice complying with the statute. Starting on that day,²⁵ sales of articles infringing that claim will once again contribute to damages.²⁶

From this it will be appreciated that from the point of view of monetary damages and associated proof, it is better as a patent owner never to have sold the patented product than to have sold it, since if no product has been sold, then damages will run from the start of the infringement. If the patent owner has sold the patented product, on the other hand, the patent owner essentially has the unenviable task of

25. Assuming *American Medical Systems* is followed, see *infra* at note 54.

26. The author has seen litigations in which many tens of thousands of dollars of attorneys' fees have been billed by lawyers arguing about dates when marking started or stopped; the conduct of the parties in funding such lawyer activity illustrates how much money can be at stake and how important it is to mark products consistently and in a well-documented way.

providing a negative — that there have been no sales of an unmarked product. Absent such proof the patent owner is only entitled to damages from such date as it can be proven the accused infringer received actual notice, which might be long after the start of the infringement and could be as late as the filing date of the complaint.

The marking requirement presents a second potential trap for the unwary due to the pleading requirements imposed by the courts; to enjoy the benefits of having marked a product, the patent owner must not only mark the product but must also remember to allege, in the complaint, that the product was marked. Correspondingly, for an infringer to enjoy the limitation of damages provided by § 287, there is no requirement that the infringer have pled lack of marking as an affirmative defense.²⁷ Instead it is enough, after the patent owner has rested its proofs, for the accused infringer to point out a lack of proof of marking.²⁸ Lack-of-marking is thus not a defense but a mere limitation of damages.²⁹ Similarly, to enjoy the benefits of having given actual notice prior to suit the patent owner must remember to allege, in the complaint, that actual notice was given.

The requirement that a patent owner must allege marking at trial is not only a trap for the unwary patent owner but also for the unwary accused infringer. For example, if a patent owner fails to allege marking at trial and if the accused infringer notices this and raises the appropriate objections, then the patent owner's failing works to the advantage of the accused infringer. But what if the patent owner's failure to allege marking at trial goes unnoticed by the the accused infringer until after the trial is over? May the accused infringer present the issue (of the patent owner's failure to allege marking at trial) for the first time on appeal, or is that too late? Courts have held that it is too late.³⁰

In order to collect damages for patent infringement occurring prior to suit, the patent owner bears the burden not only of pleading compliance with either the marking requirements or with the specific

27. See generally *Motorola, Inc. v. United States*, 729 F.2d 765 (Fed. Cir. 1984).

28. *Id.*

29. *Id.* But see *Multi-Tech Systems, Inc. v. Hayes Microcomputer Prods., Inc.*, 800 F. Supp. 825 (D. Minn. 1992), *appeal dismissed without op.*, 988 F.2d 130 (Fed. Cir. 1993) in which the court, apparently erroneously, "decline[d] to rule on Hayes Inc.'s motion for summary judgment seeking a declaration that it complied with its marking obligations under 35 U.S.C. § 287 because Multi-Tech [did] not assert improper marking as a defense and therefore, a ruling on that issue [wa]s unnecessary." *Id.* at n. 23.

30. *Weinar v. Rollform Inc.*, 744 F.2d 797, 804 (Fed. Cir. 1984), *cert. denied* 470 U.S. 1084 (1985); *Shiley, Inc. v. Bentley Laboratories, Inc.*, 794 F.2d 1561, 1570 (Fed. Cir. 1986).

notice requirement, but also of proving such compliance.³¹ It is thus important to know what counts as compliance with the marking requirement.

IV. WHERE TO MARK

Where a patented apparatus is a singular article — a mousetrap, a sock, a unitary machine — then there is little room for confusion as to what article is to be marked, and all that remains is to determine what marking will be required with respect to the article. Section 287 makes clear that the article itself is to be marked or, if marking is impossible, then the packaging is to be marked.

The District Court for the Eastern District of Pennsylvania considered the question of whether, in the case of socks, a marking on the sock packaging sufficed. The patent owner had argued that a marking would deface the sock so that the only practical marking would be on the package. The Court held that marking the package did not suffice, and thus that damages only began to accrue from the date of actual notice:

The Court finds that the transfer process [for applying a patent marking] could be used on the foot, sole, or heel of the sock without defacing the article. The Court recognizes that there may be a point where the marking could be so expensive as to be impractical. But [patent owner] has offered no evidence from which the Court could 1) make a determination of what the expense would be, or 2) conclude that the marking of the footsocks would be so expensive as to be prohibitive. The custom of the trade is not a relevant consideration under the statute, and the fact that others do not mark their footsocks does not excuse [patent owner].³²

On appeal, the Court of Appeals for the Third Circuit might have taken sides in the dispute as to whether mere package marking was enough to entitle the patent owner to pre-actual-notice damages, but instead merely offered dicta suggesting an answer in the affirmative:

Based on the record, we make certain assumptions: that the dominant ladies' foot sock trade custom in this country has been to mark the package containing the sock rather than the contents; that in the broad merchandising category of "fashion" hosiery items, the custom of the trade is not to place any markings on the foot hose; and that ladies' foot socks are merchandised through the classic "fash-

31. CHISUM, *supra* note 17, at 20-263-64, *citing* Dunlap v. Schofield, 152 U.S. 244 (1894).

32. Wayne-Gossard Corp. v. Sondra, Inc., 434 F. Supp. 1340 (E.D. Pa. 1977), *aff'd* 579 F.2d 41 (3rd Cir. 1978).

ion" hosiery channels. Assuming these characteristics of the product, we could make a final assumption that marking the package rather than the sock would satisfy the notice requirement of § 287.³³

While the Third Circuit "could [have] ma[d]e a final assumption that marking the package . . . would satisfy the notice requirement of § 287"³⁴, it did not. Instead, it upheld the denial of pre-actual-notice damages but on other grounds, noting that the patent owner had made no proof as to when the package marking had begun, and permitting that perceived deficiency in the record to justify the denial of pre-actual-notice damages.³⁵

Other marking cases include *Sessions v. Romadka*,³⁶ in which the patent owner stamped its patent marking on larger sizes of fastener but not the smaller ones. Holding that "something must be left to the judgment of the patentee"³⁷ in deciding whether to mark the article itself or a label, the Court found it sufficient to label the smaller fastener.

Modern courts have followed *Sessions*. In *Rutherford v. Trim-Tex, Inc.*³⁸ the accused infringer declined to produce documents relating to sales prior to the date of actual notice, arguing that due to allegedly defective product markings (the patent owner had marked the package, not the article itself) such documents would be inadmissible. The court noted that

[i]n *Sessions v. Romadka*, a manufacturer of trunk clasps did not put the patent marking on its smallest size trunk clasp, but rather put the patent marking on the package. The Court did not feel compelled to debate the standards at which point an article becomes too small to mark. The Court held that complying with the alternate provision of the statute, marking of the package, is sufficient compliance because "in a doubtful case, something must be left to the judgment of the patentee." Thus, the Court shows that its primary concern lay not with the standards under which a package may be marked instead of the article, but rather on whether any notice was given to the public by either method of marking listed in the statute.³⁹ [citations omitted]

33. *Wayne-Gossard Corp. v. Sondra Mfg. Co.*, 579 F.2d 41, 43 (3rd Cir. 1978).

34. *Id.*

35. *Id.*

36. 145 U.S. 29 (1892).

37. *Id.* at 50.

38. *Rutherford v. Trim-Tex, Inc.* 803 F. Supp. 158 (N.D.Ill. 1992).

39. *Id.* at 161.

The court concluded that the package marking did satisfy the statute and ordered production of the disputed documents.

Unsurprisingly courts have held that the marking must be legible.⁴⁰ But while the marking must be legible, it need not necessarily be in a place visible to the public. In *Shields-Jetco, Inc. v. Torti*,⁴¹ the court ignored an accused infringer's argument that a notice on an inside wall of a machine failed the statute because it was not visible to the public. The patent owner prevailed on the argument that notice on the inside was justified because use of the machine would have worn away any notice applied to outside of the machine. In another marking case, a marking on a hat was held insufficient to protect a patented hatband.⁴² And in *Creative Pioneer Prods. Corp. v. K Mart Corp.*⁴³ the Court stated that a mere package marking was insufficient if the character of the product was such that a marking on the product would have been a relatively simple matter.

The patent owner who marks a package rather than the covered article itself might give, as justification, that the article did not have enough room for the patent marking, or was not capable of being marked. But if the patent owner places any writing at all upon the article, the patent marking had better be on the article and no excuse will suffice for placing the marking elsewhere. "Where the public finds marking or writings upon the article itself, the public should be able to rely upon the fact that a patent, if it exists, should also be noted with that writing."⁴⁴

V. WHICH ARTICLES MUST BE MARKED?

Suppose a patent owner makes articles, but the articles are not covered by the patent? Using the example of claim 1 above, suppose the patent owner makes only an "apparatus for duplicating compact disks" having many of the elements of claim 1 but lacking the public switched network and the modems; perhaps the apparatus uses dedi-

40. *Trussell Mfg. Co. v. Wilson-Jones Co.*, 50 F.2d 1027 (2d Cir. 1931).

41. 314 F. Supp. 1292 (D. R.I. 1970), *aff'd* 436 F.2d 1061 (1st Cir. 1971).

42. *Lichtenstein v. Phipps*, 168 F. 61, 62 (2d Cir. 1909).

43. 5 U.S.P.Q.2d (BNA) 1841, 1848 (S.D. Tex. 1986).

44. *Rutherford*, 803 F. Supp. at 163, *citing* *John L. Rie, Inc. v. Shelly Bros., Inc.*, 366 F.Supp. 84, 90-91, (E.D. Pa. 1973) (§ 287 strictly construed where patented bag closure device had patent owner's name and address printed on it, thus patent marking on package did not comply with statute); *Creative Pioneer Products Corp. v. K-Mart Corp.*, 5 U.S.P.Q.2d (BNA) 1841, 1847-48 (S.D. Tex. 1987) (patent marking on the tool's package insufficient to comply with statute where the wire stripper tool had other lettering and calibrations embossed on its handle).

cated wiring instead of the public switched network and modems.⁴⁵ Stated differently, what is it about an article that causes the marking requirement to spring into being with respect to that article? The answer is that the only articles that need to be marked are "patented articles". The apparatus lacking the switched network and modems would not require marking; failure to mark it would have no effect on infringers. For example, in a case where an accused infringer had moved for summary judgment that it was not liable for pre-actual-notice damages due to the patent owner's failure to mark its XQ2 conversion kits, the motion was denied because: "The [accused infringer] has not met its burden of proving that the XQ2 conversion kits are patented articles within § 287."⁴⁶

Thus, for an accused infringer to enjoy the limitation of § 287 it is not enough that the patent owner has failed to prove that it marked its articles; the accused infringer must show that the unmarked articles fall within the asserted claims of the patent.⁴⁷ The burdens are distributed, with some to the plaintiff and some to the defendant: the patent owner has the burden of proving that it marked its articles,⁴⁸ while the accused infringer has the burden of proving that unmarked articles fall within the asserted patent claims.

VI. MARKING NON-COVERED PRODUCTS

Suppose a patent owner is about to sell an article and wants to know whether or not to place a patent marking on the product: is there any drawback to marking the product even if the patent owner believes the product is not "covered" by the patent (or at least is not certain that such is the case)?

One potential drawback is that an accused infringer may argue that marking an article with a patent number amounts to an admission regarding the scope of the claims of the patent. If a patent owner has two very similar products, neither of which is covered by the patent, and if one of the products is marked and the other is not, the accused infringer might seize upon the marking as an admission that the prod-

45. Recall that for simplicity this article considers only direct infringement and not, for example, infringement under the Doctrine of Equivalents.

46. *Laitram Corp. v. Hewlett-Packard Co.*, 806 F.Supp. 1294, 1297 (E.D. La. 1992).

47. It is thus possible to imagine situations in which an accused infringer would be torn between two different claim interpretations for claims in suit — a narrow interpretation when the claims are being applied to the accused infringer's own articles, and a broad interpretation when the claims are being applied against the patent owner's unmarked products. The accused infringer would prefer the former so as to reduce the likelihood of its own articles being adjudged to infringe, yet would prefer the latter to increase the likelihood that the unmarked products would be adjudged to be "patented", thus triggering the damages limitation of § 287.

48. See discussion above at section IIB.

uct is covered by that patent, thereby defining the claim scope. The accused infringer could then argue that the other, unmarked, article is also covered by the patent based on the claim scope, in which case its unmarked status would trigger the damages defense under § 287.

No cases have been found discussing the consequences of marking a non-covered product. But consider the difficult situation faced by the patent owner in *Amsted Indus. v. Buckeye Steel Castings Co.*⁴⁹ In that case the patent owner was selling less than all of the patented apparatus, but nonetheless the lack of marking was found to limit damages under 35 U.S.C. § 287. The Court held that because the patent owner was impliedly authorizing its customers to make, use and sell the patented article, and because the patented article was unmarked, the damage limitation under 35 U.S.C. § 287 worked to the benefit of the infringer.

The patent owner in *Amsted*, like any patent owner prior to the date of decision in the case who is selling a component of a patented system, faced a dilemma: whether to mark the component (and perhaps be criticized for misleading the public as to what is covered by the patent) or to leave the component unmarked (and be at risk under 35 U.S.C. § 287). But in *Amsted* the Court of Appeals for the Federal Circuit endorses a middle ground, stating that “[a] marking such as ‘for use under U.S. Pat. No. X,XXX,XXX’ would have sufficed.”⁵⁰

VII. CONSEQUENCES OF MARKING SOME BUT NOT ALL COVERED ARTICLES

Compliance with the statutory duty to mark does not require the marking of every patented article manufactured or sold because such compliance “would be unduly burdensome, if not impossible.”⁵¹ Thus, § 287(a) has been interpreted to require that “substantially all” patented articles made or sold under the patentee’s authority be marked.⁵²

Where a patent owner initially failed to mark substantially all of its articles, but did begin to mark covered articles prior to the infringing conduct of the infringer, will the failure to mark nonetheless give the infringer the benefit of the limitation of § 287? The general rule is that if marking did not start on issuance day, but did precede the start

49. 24 F.3d 178 (Fed. Cir. 1994).

50. *Id.* at 185.

51. *See Lisle Corp. v. Edwards*, 777 F.2d 693, 695 (Fed. Cir. 1985).

52. *In re Yam Processing Patent Validity Litig.*, 602 F.Supp. 159, 168 (W.D.N.C. 1984), cited with approval in *Amsted Indus. v. Buckeye Steel Castings Co.*, 24 F. 3d. 178, 185 (Fed. Cir. 1994).

of the infringer's conduct, then the damages start to run from the infringer's conduct. The only penalty for failure either to mark or serve notice is "limited to denial of damages for infringement at any time prior to compliance with the requirements of the statute."⁵³ Stated differently, a patent owner that discovers that it has failed to mark its covered articles can effect a partial cure of the failure; while damages may turn out to have been lost forever for the period prior to marking, at least the patent owner may be able to start damages running from the date that marking began.

In *American Medical Sys. Inc. v. Medical Eng'g Corp.*,⁵⁴ the Court of Appeals for the Federal Circuit reversed a District Court case in which the patent owner was denied all pre-actual-notice damages due to a three-and-one-half-month marking lapse.⁵⁵ In *American Medical Systems*, the patent issued on July 1, 1986, at a time when apparently the accused conduct was already occurring. The marking did not start until October 15, 1986, three and one half months later. The lawsuit was filed on October 28, 1987, defining the last possible date the accused infringer could claim to have been on actual notice. The District Court labored through lengthy computations leading to the conclusion that "the percentage of unmarked units [shipped between patent issuance and the date the lawsuit was filed] still exceeds 25 percent - hardly insignificant"⁵⁶ and thus that the patent owner "plainly did not comply with the patent marking statute."⁵⁷ Damages were denied for conduct prior to the filing of the lawsuit. The Court of Appeals reversed, holding that

[i]n light of the permissive wording of the present statute, and the policy of encouraging notice by marking, we construe § 287(a) to preclude recovery of damages only for infringement for any time prior to compliance with the marking or actual notice requirements of the statute. Therefore, a delay between issuance of the patent and compliance with the marking provisions of § 287(a) will not prevent recovery of damages after the date that marking has begun. We caution, however, that once marking has begun, it must be sub-

53. *Wm. Bros. Boiler and Mfg. Co. v. Gibson-Stewart Co.*, 312 F.2d 385, 386 (6th Cir. 1963), cited with approval by the Fifth circuit in *Bros, Inc. v. W. E. Grace Mfg. Co.*, 320 F.2d 594, 599 (5th Cir. 1963). See also *Briggs & Co., Inc. v. M. & J. Diesel Locomotive Filter Corp.*, 228 F.Supp. 26, 63-64 (N.D. Ill. 1964), aff'd 342 F.2d 573 (7th Cir. 1965).

54. 6 F.3d 1523 (Fed. Cir. 1993); cert. denied, 114 S.Ct. 1647 (1994).

55. *American Medical Sys., Inc. v. Medical Eng'g Corp.*, 794 F. Supp. 1405 (E.D. Wis. 1992).

56. *Id.* at 1392.

57. *Id.*

stantially consistent and continuous for the party to avail itself of the constructive notice provisions of the statute.⁵⁸

Suppose there is a complete failure to mark, so that damages begin to run only from the date of actual notice. Must the notice come from the patent owner, or is it enough, for damages to begin to run, that the accused infringer have learned of the patent by some other means? And what communication will constitute a notice sufficient to start damages running? The Court of Appeals for the Federal Circuit has held that the communication must come from the patent owner, and that the communication must be notice of infringement, not merely of the existence of the patent. In *Devices for Medicine, Inc. v. Boehl*⁵⁹ the Court stated that “[a]bsent notice, [infringer’s] ‘knowledge of the patents’ is irrelevant. Section 287 requires ‘proof that the infringer was notified of the infringement’.”⁶⁰ In other words, for damages to begin to run, it is not enough that the infringer simply know of the patent, but it must be shown that the infringer knew of the infringement from the patent owner.⁶¹ Following the Federal Circuit in *Boehl*, the *American Medical Systems* court held that damages ran only from the date the patent owner gave notice; knowledge of the patent by other means did not start the clock for damages.⁶²

VIII. MARKING AND METHOD CLAIMS

It is easy enough to imagine placing a patent marking on a tangible item such as a patented machine, manufacture or composition of matter. But how does one place a patent marking on something intangible such as a patented method? The law is that where the patent claims a method only, no marking is required.⁶³ This presumably acknowledges the philosophical difficulty of marking something that is more a verb than a noun.

Some patents have only one claim, but most patents have several claims. When a patent lawsuit is started,⁶⁴ it may involve all claims of

58. *American Medical Systems*, 6 F.3d at 1537.

59. 822 F.2d 1062 (Fed. Cir. 1987), *cited with approval in* *Amsted Indus. v. Buckeye Steel Castings Co.*, 24 F. 3d. 178, 187 (Fed. Cir. 1994).

60. *Devices for Medicine*, 822 F.2d at 1066-67.

61. The notice requirement of § 287 is satisfied where the infringer acknowledges a specific communication to be a notice of infringement. *Amsted Indus. v. Buckeye Steel Castings Inc.*, 24 F.3d. 178, 188 n. 5 (Fed. Cir. 1994).

62. *American Medical Systems*, 794 F. Supp. at 1392.

63. *Wine Ry. Appliance Co. v. Enterprise Ry. Equipment Co.*, 297 U.S. 387 (1936); *followed in* *Bandag, Inc. v. Gerrard Tire Co.*, 704 F.2d 1578 (Fed. Cir. 1983).

64. A patent lawsuit may (and most frequently does) begin with a complaint filed by the patent owner as plaintiff. Not all patent cases begin in this way, however. For example, an accused infringer may file a declaratory judgment action (28 U.S.C. § 2201) against the patent

a patent or less than all of the claims. A claim becomes part of the case in either of two ways — by the action of the patent owner (generally by asserting, in a claim for relief, that the claim is infringed) or by the action of the accused infringer (generally by requesting a declaratory judgment that a claim is un infringed or invalid).

Consider a hypothetical situation involving a patent that contains both a method claim and an apparatus claim.⁶⁵ Assume the patent owner has discovered that someone is infringing both the apparatus claim and the method claim. Assume further that as part of the preparation for filing a complaint against the infringer,⁶⁶ the patent owner discovers that it has sold apparatus covered by the apparatus claim, and that it has failed to mark the apparatus with the patent number pursuant to 35 U.S.C. § 287. Assume further that the patent owner has no reason to think the infringer is aware it is infringing. At this point the patent owner faces a decision as to which claim or claims it will allege in the complaint to have been infringed.⁶⁷

If the patent happened to contain only method claims, then the failure to mark would be of no concern to the patent owner since there is no duty to mark methods. With such a patent, damages would have begun to accumulate starting from the date the patent issued, irrespective of whether marking took place. But the patent in this hypothetical is assumed to have both method and apparatus claims. Since the apparatus claims trigger a duty to mark, and since the articles were not marked (and since it is assumed that the infringer did not receive actual notice), the patent owner faces the prospect of losing all damages for sales prior to the inception of the lawsuit.

Presented with such a fact pattern, a patent owner would be tempted to consider asserting only the method claim, on the theory that if only the method claim is asserted, and since there is no requirement to mark with respect to method claims, then damages could begin to run from the commencement of the infringement. The patent owner would then be making a strategic decision to assert fewer than

owner asking for a finding that a patent is un infringed or invalid; such a case makes the patent owner the defendant.

65. The discussion claims 1-3 above represent both apparatus and method claims, for example.

66. For example, the patent owner will want to be sure that its allegations satisfy FED. R. Civ. P. 11 which requires *inter alia* that the complaint be "well grounded in fact".

67. For example, the patent owner may choose to allege infringement of less than all of the claims by reason of FED. R. Civ. P. 11. Its inquiry prior to filing the complaint may have yielded a reasonable basis for alleging certain of the claims but may not yet have yielded a basis for asserting others of the claims.

all of the claims that are thought to be infringed, so as to maximize the interval of time during which damages would run.⁶⁸

Where a patent has method and apparatus claims, if only method claims were being asserted, arguably there would be no need to mark the apparatus. But where apparatus claims are being asserted, the apparatus would have to have been marked.⁶⁹

One could imagine some patent applicants, during the prosecution of patent applications, consciously choosing only to obtain method claims, and to forgo apparatus claims, so as to be absolutely sure of avoiding any accusation of defective or missing markings under § 287.⁷⁰

IX. MARKING SYSTEMS

The preceding discussion is directly mainly to situations where the question before the court relates to a single article which either does or does not infringe, which either was or was not marked. In recent years, however, it has become commonplace for inventors to seek patent coverage on complicated systems composed of many parts. Many issued patents are directed to systems which are very large, very complex, and in many cases are not all in one place, but instead are dispersed over a wide geographic area. Despite this, the author knows of no court case interpreting the marking requirement of § 287 where the claims to be applied cover complicated or geographically extensive systems. As will be discussed below, it is suggested that the marking requirement be interpreted in this way: where a patent has claims directed variously to an entire system and to sub-parts 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, and the consequences for an infringer of a patent owner's failure to mark should apply only to such claims as cover the particular unmarked articles.

68. Other factors may also influence a patent owner's decision which claims to assert. For example, a claim that is in the case falls within the jurisdiction of the District Court and faces some risk of being invalidated. In contrast, if a claim is not in the case, then it is not within the jurisdiction of the Court and is not exposed to such risk. Such a claim would remain in force even if all the claims in the case were invalidated, and might be asserted in later proceedings against other infringers.

69. *Devices for Medicine*, 822 F.2d at 1066.

70. Alternatively, the applicant may have the opportunity to file one or more divisional applications (35 U.S.C. § 121(1994)) in which case there may be the opportunity to arrange for one of the patents to issue with method claims only, while other patents would have apparatus claims. The method-only patent would be immune from attack on failure-to-mark grounds.

The difficulties presented by complicated or geographically extensive systems in connection with § 287 may be readily illustrated with the hypothetical claims 1 through 3 set forth above.

First consider a patent owner who is preparing to sell a system covered by claim 1, and who wishes to comply with the marking requirement of § 287. Must the patent owner mark the central computer? One kiosk? All of the kiosks?

By analogy to patented articles that are not systems, it appears that there is no requirement for marking every part of a patented system; marking any part of the system should suffice. After all, a patented mousetrap may be made of a dozen parts, and the law has never required that all 12 pieces of a mousetrap each individually be marked with a patent number; instead, one patent marking anywhere on the mousetrap would be considered sufficient. By extension, a marking with respect to the hypothetical claim 1 might be satisfactory if a marking appears on the central computer or on the kiosks.

A system composed of a central computer and a plurality of kiosks presents many opportunities for infringement of claim 1. For example, if the system contains three kiosks (call them A, B, and C) then several subsets infringe: the central computer taken together with A and B infringes, the central computer taken together with A and C infringes, and the central computer taken together with B and C infringes. Arguably the patent owner selling such a system should ensure that *each* subset of the entire system that is covered by the claim should bear a patent marking. Thus, a marking on only one kiosk would not satisfy the requirement that the claimed system be marked, since a subset of the system that does *not* contain the one marked kiosk would nonetheless be covered by the claim and thus require a marking. In the case of claim 1 it appears the simplest way to apply a single marking to be sure of coverage on all infringing subsets is to mark the central computer.

Note, however, that because of the way the hypothetical claims were constructed any system covered by claim 1 is also covered by claim 3, because it contains one or more kiosks of the type covered by claim 3. Does the existence of this claim in the patent compel the patent owner who wishes to comply with § 287 to mark each kiosk? Certainly if claim 3 were asserted in litigation and if articles covered by claim 3 (here, the kiosks) were unmarked, common sense suggests the limitation of § 287 would apply. Thus the patent owner who wanted to retain the flexibility of possibly asserting claim 3 would be sure to mark each kiosk in addition to any other markings made to the system.

Suppose an infringer has made, used, or sold systems covered by claim 1. Note that by definition such a system also infringes claim 3. Suppose further that the patent owner failed to mark the kiosks (thus failing to mark articles covered by claim 3) but only marked the central computer (thus arguably accomplishing the marking of the article covered by claim 1). If the patent owner asserts only claim 1, then will the failure to mark articles covered by claim 3 give the infringer the benefit of the § 287 limitation (with respect to claim 1) even though claim 3 is not being asserted? This article suggests a rule of law that failure to mark an article covered only by an *unasserted* claim, which article is not covered by any asserted claim, would not give the infringer of an *asserted* claim the limitation of § 287.

There are at least two reasons why this proposed rule of law makes sense. First, consider the parallel with the situation where a patent has method and apparatus claims, in which the patent owner might choose not to assert the apparatus claims to sidestep any effort by the infringer to attach significance to an alleged failure to mark. Here it is somewhat analogous for a patent owner who has marked systems that infringe (are covered by) a first claim, but who has failed to mark systems that infringe a second claim, to assert only the first claim and not the second. Again the motive is to sidestep efforts by an infringer to reduce its damages exposure by virtue of a failure to mark.

A second reason this proposed rule of law makes sense stems from the fact that in many ways each of the claims of a patent is distinct from any other claims that may be in a patent.⁷¹ A would-be infringer who wants to investigate a patent for possible infringement concerns cannot, for example, confine the investigation to only certain claims, but has no choice to consider each and every claim, for the simple reason that infringement of any one valid claim (even if all the other claims are un infringed or invalid) gives rise to legal liability and the prospect of injunctive relief. To the extent a would-be infringer would hope to draw an advantage from some failure to mark pursuant to 35 U.S.C. § 287, this hoped-for advantage would have to be considered anew for each claim in the patent. The would-be infringer who already has the burden of investigating each and every claim of a patent for infringement and validity suffers little additional burden if the proposed rule of law were controlling, since all the proposed rule of

71. It is, after all, somewhat arbitrary for two claims to be in the same patent or in distinct patents, since to some extent the applicant could bring about either result more or less at will. By filing a divisional (35 U.S.C. § 121 (1994)) or continuation (35 U.S.C. § 120 (1994)) application, for example, an applicant can arrange for claims to issue in separate patents that enjoy the same effective filing date.

law calls for is the further investigation into whether, for each claim, the patent owner has made or sold an article (here, a system) which (1) is covered by the claim and (2) lacked a marking.

With this proposed rule of law, how does a member of the public determine whether a sufficient patent marking has been placed on a system? For example, if a member of the public wishes to know if a satisfactory marking has been made with respect to claim 1 (that is, a complete system including a central computer and some kiosks), where must the member of the public look? On the proposed rule of law the member of the public would have to look at each element making up a covered system; in this case the marking might be on the central computer and the member of the public would have to look at the central computer to find out the answer.

It might be thought that this proposed rule of law places an undue burden on members of the public — after all, how are they to be expected to learn the contents of a patent marking on a central computer in what might very well be a building that is not even open to the public? But it must be recalled that nothing in § 287 requires that the a patent marking be particularly accessible to the public. Consider, say, a patented nuclear reactor, which is likely to be in a power plant that is not open to the public; so long as the reactor is marked it will deny the infringer a defense under § 287 even though the infringer would have to trespass to see the marking.

To see the reasonableness of this result, consider that the marking pursuant to § 287 is not particularly intended to give actual notice to the public nor to a would-be infringer. It is only supposed to keep an estoppel from coming into existence; if a member of the public were somehow to gain access to the patented reactor then the marking would keep that party from getting the impression that the reactor is unpatented.

Similarly, in the compact disk duplication facility example with respect to hypothetical claim 1, there is no policy goal of accomplishing *actual* notice through the patent marking; it is simply that if a member of the public were to be in the same room with the central computer the marking would dispel the impression that the system is unpatented.⁷²

Suppose on the other hand that the member of the public merely contemplates making kiosks, and not complete systems. For such a

72. Consider, too, the precedent in *Shields-Jetco*, where the court found that a marking inside an article, even though not readily visible, was found to satisfy § 287. See *Shields-Jetco v. Torti*, 314 F. Supp. 1292 (D.R.I. 1970).

member of the public only claim 3 would be of concern⁷³ since kiosks, by themselves, do not infringe claim 1. Thus, it would suffice to look at a kiosk to see whether it bears a patent marking, to determine whether marking under § 287 had been performed with respect to claim 3. If the kiosk had not been marked by its maker, the patent owner, and if claim 3 were asserted by the patent owner, then under the proposed rule of law, the limitation of § 287 would go to the benefit of the infringer.

The estoppel model provides support for this aspect of the proposed rule of law as well. After all, if the member of the public merely proposes to make kiosks and not more, then the event that would contribute to an estoppel would be encountering a kiosk made by the patent owner that lacked a marking.

Suppose the patent owner only sells complete disk-duplication systems (covered by claim 1) and never sells kiosks separately. From a literal reading of § 287 one might think that so long as each system sold bears at least one patent marking (e.g. on the central computer) then the marking requirement would be satisfied and any and all claims of the patent could be asserted with no concern for damage limitations under § 287. After all, each "article" (here, the complete system) has been marked.

It will be appreciated that under the proposed rule of law one marking per "article" (here, one marking per complete system) would not suffice to ensure that all claims could be asserted free of § 287 damage limitations. Instead, the patent owner, before shipping the system, would have to analyze the system to determine whether any of its subparts (in this case, each kiosk) responded to one or more claims. Each subpart that responds to at least one claim would desirably bear a patent marking, regardless of whether or not it forms a part of a larger system that bears a marking elsewhere. Failure to accomplish such a marking leaves the patent owner in the position of being at risk for loss of the ability to collect damages for sale of articles responding to such a claim.

Stated differently, under the proposed rule of law a patent owner would not be able to take several covered "articles" (here, the kiosks that are covered by claim 3) and combine them into one purported article (here, the complete system) and expect to be able to apply a single marking to it in satisfaction of § 287.

From the point of view of a would-be infringer, it becomes important to consider each apparatus claim of the patent individually. If

73. The reader is reminded that for simplicity, this article omits discussion of inducement and contributory infringement.

it can be determined that apparatus covered by any one of the claims lacks a patent marking, then the would-be infringer will presumably avail itself of § 287 in the expectation that damages as to infringement of that particular claim will begin running only upon actual notice.

Thus, the general rule suggested by this article is that § 287 should be interpreted as follows: if an article made by or with the authority of a patent owner responds to any apparatus claim of the patent, the article must be marked if the patent owner is to collect damages without a limitation under § 287 with respect to that patent claim.

Suppose the owner of the hypothetical patent discovers that it has failed to place sufficient markings on the kiosks but has given sufficient markings as to the entire system as covered by claim 1. May the patent owner avoid the consequences of failure to mark the kiosks by the simple expedient of not asserting claim 3 (the kiosk claim) against the accused infringer? The answer according to the proposed rule of law is in the affirmative, keeping in mind that only conduct that infringes claim 1 would contribute to the damage award. Sales of complete systems would contribute to damages, while sales of kiosks alone would not. The patent owner would have to balance the expected damage recovery under an assertion of claim 1 alone (damages for complete systems from the start of infringement) with the expected damage recovery under both claims 1 and 3 (damages for kiosks and complete systems, but only running from the date of actual notice).

The foregoing discussion of the proposed rule of law for patent markings under § 287 as applied to systems speaks only to apparatus claims, but as mentioned above not all claims are apparatus claims: some claims are method claims. It appears the patent owner that discovers it has failed to mark its articles could avoid the limitation of § 287 by the simple expedient of asserting only method claims against an infringer, having made a strategic decision to forgo the recovery that might be available if the apparatus claims were asserted.⁷⁴

X. CONCLUSION

35 U.S.C. § 287 deals with the consequences of the failure of a patent owner to mark articles covered by one or more apparatus claims of the patent. It has not been interpreted by the courts in the context of a system comprised of many parts. This article suggests that where

74. Indeed where no patent marking has been done, one could imagine a patent owner taking the drastic step of disclaiming non-method claims under 35 U.S.C. § 253, with the hope that upon asserting the method claim in litigation the accused infringer would be unable to avail itself of § 287.

a patent has claims directed variously to an entire system and to sub-parts 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, and that the damage limitations available to an infringer apply only to such claims as cover unmarked articles.